

Revised Comprehensive Norms for an Expanded Halstead-Reitan Battery: Demographically Adjusted Neuropsychological Norms for African American and Caucasian Adults

Professional Manual

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Chapter 1

INTRODUCTION

This manual describes a normative system designed to assist clinicians and researchers in their interpretation of the tests in an expanded Halstead-Reitan Neuropsychological Test Battery. A major purpose of this system is to improve neurodiagnostic accuracy by providing simultaneous corrections for four demographic variables that relate significantly to test performance: age, education, sex, and Caucasian as well as African American ethnicity. Another purpose of the system is to convert raw scores on diverse tests to standard scores, all of which have the same distribution in groups of neurologically normal adults.

The ability to convert raw test scores to demographically corrected scores has a number of advantages for the neuropsychologist. First, it facilitates comparisons of an individual's test results with normal expectations based on that person's demographic characteristics. For example, the fact that a patient's raw test score is below average for the general adult population does not mean that it is a poor score for persons at all levels of age and education. The score may be above average in comparison to some adult samples and in the "impaired" range in comparison to others. Using the corresponding standard score, the clinician can establish more precisely what percentage of normal individuals with the same demographic characteristics perform at or below the patient's level of performance. Second, because standard scores in this normative system are more directly comparable, use of these scores facilitates the analysis of an individual's patterns of strengths and deficits across tests. Instead of trying to compare a raw score on one test with an error score on another, comparisons are made between scores that have the same units of measurement. Similarly, in research involving groups of individuals, the use of demographi-

graphically corrected scores facilitates comparisons of strengths and deficits both within and between groups.

Chapter 2 briefly discusses the importance of considering age, education, sex, and ethnicity in neuropsychological test interpretation. Chapter 3 describes the methods used to collect the data employed in the present normative system. Chapter 4 describes the development of the system which corrects for the influence of age (20 through 85 years), education (0 through 20 years), sex, and ethnicity (Caucasian vs. African American) on the raw scores. This chapter also examines the demographic influences that are apparent in both the raw scores and the corrected scores for all tests in the battery. The distributional properties of the corrected scores are examined, and the performance of the correction system is checked at different levels of age and education. Because this revision of the authors' previously published, regression-based norms is based on larger samples and incorporates nonlinear, as well as linear, effects of demographic variables, some differences in the T scores produced by the two systems were anticipated. Therefore, chapter 4 also examines the degree of similarity between T scores from the 1991 norms and the current ones for each test in the battery; these analyses used only Caucasian participants, because virtually all of the participants in the 1991 normative project were Caucasian.

Chapter 5 describes and illustrates the appropriate use of Appendixes C through G in converting raw scores to demographically corrected scores. In addition, four case examples are presented in this chapter, and several issues related to the use of the corrected scores in clinical interpretation and research applications are addressed.

Chapter 2

THE NEED FOR DEMOGRAPHIC CORRECTIONS IN NEUROPSYCHOLOGICAL ASSESSMENT

Over the last several decades, the field of clinical neuropsychology has produced a large number of standardized tests and test batteries that are sensitive to cerebral disorders (Boller, Grafman, & Rizzolatti, 2000; Grant & Adams, 1996; Lezak, 1995). These instruments are widely used for neurodiagnostic purposes and have unique value in identifying the effects of brain disorders on patients' basic adaptive abilities (Heaton & Marcotte, 2000). However, neuropsychological tests are not exclusively sensitive to brain pathology. It has long been realized that performances on most of these instruments are strongly related to age and education, and that significant male-female differences are observed with a few of these tests (Finlayson, Johnson, & Reitan, 1977; Heaton, Ryan, Grant, & Matthews, 1996; Matarazzo, 1972; Parsons & Prigatano, 1978; Reitan, 1955). The scope of this problem is illustrated by a study of the relationships between the neuropsychological test scores and demographic characteristics of 553 neurologically normal adults (Heaton, Grant, & Matthews, 1986). The tests included the Wechsler Adult Intelligence Scale (WAIS; Wechsler, 1955) and the Halstead-Reitan Battery (HRB; Reitan & Wolfson, 1985). A great deal of variability was found in the strength of the associations between individual test measures and particular demographic variables; that is, some test scores were found to be strongly related to age, whereas others were found to be more strongly related to education. For a few tests (especially tests of motor speed and strength in the upper extremities), scores were found to be most strongly related to sex. A significant amount of variability in almost all test scores (more than 40% in some cases) could be accounted for by a single demographic variable. Even more of the test score variance, however, can be accounted for by multiple demographic variables in combination (Barona, Reynolds, & Chastain, 1984; Karzmark, Heaton, Grant, & Matthews, 1984;

Karzmark, Heaton, Lehman, & Crouch, 1985; Wilson et al., 1978).

In addition to age, education, and sex, there is increasing evidence that ethnicity accounts for substantial amounts of variance in cognitive test performances of normal adults (Evans, Miller, Byrd, & Heaton, 2000). Although other ethnic minority groups have shown performance differences versus Caucasians on such tests (e.g., Arnold, Montgomery, Castaneda, & Longoria, 1994; Heaton, Taylor, & Manly, 2003), much of the research in this area has focused on African Americans. For example, African Americans in the Wechsler Adult Intelligence Scale-III/Wechsler Memory Scale-III (WAIS-III/WMS-III; The Psychological Corporation, 1997) national standardization sample performed significantly worse than their Caucasian counterparts, even when effects of other demographic variables were controlled (Heaton et al., 2003). This phenomenon is not test-specific: Similar ethnicity-related differences have been observed on earlier versions of the Wechsler batteries (Kaufman, McLean, & Reynolds, 1988; Reynolds, Chastain, Kaufman, & McLean, 1987) and on other tests covering a broad range of cognitive functions. These have included tests of letter and category fluency (Gladsjo et al., 1999; Johnson-Selfridge, Zalewski, & Aboudarham, 1998), naming/word-finding (Roberts & Hamsher, 1984), the Category Test from the HRB (Bernard, 1989), the California Verbal Learning Test (Norman, Evans, Miller, & Heaton, 2000), and the Paced Auditory Serial Addition Test (Diehr, Heaton, Miller, & Grant, 1998). A variety of cultural, educational, socioeconomic, and other factors probably contribute to these ethnicity-related differences in cognitive test performance, including the experience during test taking that one is being judged in terms of a negative racial stereotype ("stereotype threat"). The latter phenomenon is especially likely to be part of the cognitive

test-taking experience of African Americans and has been experimentally manipulated to influence test performance of Caucasians as well (Steel & Aronson, 1995, 1998). In any event, the noted ethnic differences in test performance are reliably observed and, although they may not accurately reflect differences in the ultimate potential of the examinees, they should be considered when interpreting cognitive tests within a neurodiagnostic context. Failure to do so typically results in a substantial (sometimes up to three-fold) increase in the probability of misclassifying normal African Americans as having brain disorders, as compared to misclassification rates for Caucasians (e.g., Heaton et al., 2003; Norman et al., 2000).

Despite the apparent importance of demographic variables in predicting neuropsychological test performances of normal adults, most such tests have normative standards that either ignore demographic effects entirely or correct only for age. These norms may take the form of a single cutoff score (defining impaired and unimpaired ranges) or may define a normal range of performance and several levels of impairment. In either case, the accuracy and appropriateness of the norms will be best when they are applied to new individuals who are similar to the average person in the normative sample (typically, a middle-aged Caucasian male with 1 or 2 years of college). On the other hand, the neurodiagnostic sensitivity and specificity of such norms are likely to vary considerably when applied to individuals and groups that differ from the average person in the normative sample (e.g., older or younger people with high or low levels of education, ethnic minorities; see Heaton et al., 1986, and Heaton et al., 2003).

To illustrate these points, the authors show how a single set of norms for the HRB (Russell, Neuringer, & Goldstein, 1970) performs with demographically stratified subgroups of the current large normative sample. More specifically, the percentages of neurologically normal participants in these subgroups are considered for those correctly classified as normal by the Russell et al. standards for the Average Impairment Rating (AIR) and 11 of the component HRB measures. For these analyses, the Caucasians and African Americans will be further divided into subgroups at three age levels (<40 years, 40-59 years, 60+ years) and three educational levels (<12 years, 12-15 years, 16+ years).

The results are presented in Table 1. Note that the sample sizes vary somewhat for the different test variables. Although the same core group of Caucasian and African American participants took all of the tests, not all of the tests in the HRB were administered to all of the

participants. Nevertheless, more than 1,000 participants provided data for each of the HRB test scores. The only large amount of missing data occurred for African Americans on Finger Tapping, and this was because the test was added to the battery after the African American norm development study was underway. As a result, 150 of the 578 AIRs of African Americans were prorated based upon 11 of the 12 component scores; no differences in the pattern of results were seen when these participants were excluded from the analyses.

Turning now to the results for the Caucasian cohort (see left half of Table 1), consider first the Russell et al. (1970) norms for the various test measures for the entire group. Although most of these correct classification rates are fairly high ($\geq 74\%$ for 9 of the 13 variables), a few are not—most notably for the Tactual Performance Test-Location and Finger Tapping-Worst Hand. Moreover, Table 1 shows that the overall correct classification rates for the 13 measures vary by more than 50% (i.e., 40% for Finger Tapping-Worst Hand in females to 93% for Sensory-Perceptual-Total). This indicates that the suggested test score cutoff points for defining “impairment” on the different measures are not at all comparable in their ability to correctly classify nonimpaired individuals. Use of such cutoff scores could cause the clinician or researcher to mistakenly infer that a given pattern of impaired or unimpaired test results reflects dysfunction of specific brain regions or functional circuits, when the pattern actually represents inconsistencies within the normative system (i.e., differences in the diagnostic precision of the cutoff scores for the various tests). For the same reason, such normative systems can obscure the presence of diagnostically meaningful patterns that do exist in the test results.

The inconsistent overall performance of these normative standards might be less surprising if one considers the relatively imprecise manner in which they were developed. Although the Russell et al. (1970) norms were arguably the best available at the time they were published and continue to be widely used by clinicians and researchers, they were originally based upon a combination of clinical judgment and the test results of a very small sample of neurologically normal individuals ($n = 26$).

As Table 1 also indicates, this variability in the performance of the normative data is even more dramatic when one considers the way different demographic subgroups are classified by the *same* test measure. The AIR is a representative example of this point. Although the overall correct classification rate of the AIR for the total normal group is a respectable 82%, it correctly classified

Table 1
Percentage of Participants Classified as Normal on Individual Tests Using the Russell et al. Criteria^a

Test measure	Abbreviation	Caucasian Correct classification rates (%)							African American Correct classification rates (%)						
		Age subgroups (years)			Education subgroups (years)				Age subgroups (years)			Education subgroups (years)			
		<40 (n = 301)	40-59 (n = 168)	60+ (n = 165)	<12 (n = 100)	12-15 (n = 320)	16+ (n = 214)	Total (n = 634)	<40 (n = 215)	40-59 (n = 163)	60+ (n = 200)	<12 (n = 106)	12-15 (n = 337)	16+ (n = 135)	Total (n = 578)
Average Impairment Rating	AIR	99.0	88.7	44.8	46.0	87.2	91.6	82.2	91.6	63.2	22.5	43.4	58.6	75.0	59.7
Category Test (errors)	CAT ERROR	93.0	74.4	39.6	34.3	78.1	86.9	74.2	80.5	44.4	7.8	33.3	44.7	57.8	45.7
Trail Making Test Part A (secs)	TRAIL A	94.4	76.8	43.9	42.4	79.7	87.9	76.6	79.1	54.6	23.5	44.3	48.8	69.9	52.9
Tactual Performance Test Total Time (min/blk)	TPT TOT	89.4	71.4	24.2	40.0	70.0	77.1	67.7	66.8	37.7	9.0	23.6	38.0	51.9	38.6
Tactual Performance Test-Memory (correct)	TPT MEM	98.0	91.1	70.3	72.0	90.0	95.3	89.0	93.5	84.0	60.5	68.9	80.1	86.0	79.4
Tactual Performance Test-Location (correct)	TPT LOC	65.1	41.7	11.2	25.0	43.4	56.5	45.0	43.3	14.1	7.5	16.0	23.2	26.5	22.7
Seashore Rhythm Test (correct)	SSHOR RHYM	84.7	78.8	60.6	55.0	77.8	85.7	76.8	83.2	75.9	64.5	70.5	71.9	84.6	74.7
Speech-Sounds Perception Test (errors)	SPCH PERC	92.9	81.8	48.5	62.0	77.1	87.6	78.2	77.1	52.1	23.1	33.3	52.2	63.2	51.4
Aphasia Screening Test (errors)	APHAS SCRН	87.4	82.9	79.3	62.0	85.3	92.9	84.1	55.2	52.5	54.5	34.9	53.3	71.3	54.2
Spatial Relations (rating)	SPAT REL	88.6	88.1	81.2	78.0	86.4	91.1	86.7	83.3	78.5	71.5	62.3	79.2	86.8	77.9
Sensory-Perceptual-Total (errors)	SP TOT	96.0	96.3	82.1	81.6	94.4	95.6	92.7	95.3	85.3	44.7	66.0	74.0	84.6	75.0
Finger Tapping-Worst Hand [Males]	TAP WH	80.3	70.3	32.6	37.7	73.7	71.0	66.8	67.6	78.3	28.2	45.5	48.9	64.7	51.6
Finger Tapping-Worst Hand [Females]	TAP WH	55.1	33.3	23.2	10.7	39.0	51.2	40.0	75.0	41.7	23.2	29.7	31.7	45.7	34.8

^aCriteria from *Assessment of Brain Damage: A Neuropsychological Key Approach* by E. W. Russell, C. Neuringer, & G. Goldstein, 1970, New York: Wiley & Sons.

almost 100% of normal participants in the youngest subgroup (<40 years), but only 45% of the normal participants in the 60+ age group. Similarly, whereas 92% of the college graduates were correctly classified as normal, 54% of the participants who did not complete high school were incorrectly classified as having cerebral impairment. These large discrepancies in the accuracy of the standard norms are evident throughout the test battery and clearly demonstrate that no single normative standard can be effective with individuals who have widely differing demographic characteristics.

Consider the right half of Table 1, which presents correct classification results using the same test score cutoffs for the African American participants. Once again, there is huge variability across test measures in overall correct classification rates (see far right column) as well as across age and educational levels for almost every individual HRB variable. Also, similar to the findings with Caucasians, the cutoffs for Tactual Performance Test-Location and female Finger Tapping-Worst Hand had exceptionally low correct classification rates at all levels of age and education. Consistent with the results of previous studies of other neuropsychological test measures (Heaton et al., 2003; Norman et al., 2000), the overall false positive error rates in classifying normal adults as "impaired" typically are about twice as high for the African Americans as for the Caucasians.

The results presented in Table 1 indicate that these norms will tend to be most effective in classifying *normal* Caucasians who are relatively young and well educated. However, diagnostic accuracy also depends on the effectiveness of the normative standard in detecting individuals who have cerebral disorders. Here one would expect the opposite pattern of relationships between demographic variables and correct classification rates; that is, the normative standard would be expected to be more effective in classifying brain-damaged persons who are relatively old and who have lower educational levels. The authors attempted to demonstrate this point using the test results of 421 Caucasian patients who had verified structural brain pathology. When the Russell et al. (1970) standard AIR cutoff score was applied to these data, 73% of the total group were correctly classified as "impaired." On the other hand, 92% of the patients who were at least 60 years old were correctly identified, as compared to only 56% of those under the age of 40 years. Interestingly, the standard AIR cutoff score correctly classified 90% of the brain-damaged patients who had less than a high school education, but only 57% of those who had completed at least a bachelor's degree. Therefore, when

one considers both sensitivity and specificity, the Russell et al. (1970) norms appear to be appropriate primarily for middle-aged Caucasians who have average educational levels.

It has been noted that individual neuropsychological test measures vary considerably in the degree to which they correlate with age, education, sex, and ethnicity. Different demographic corrections are needed for each measure. An additional complication, in attempting to adjust for demographic influences in test interpretation, is that, on some test measures, different adjustments for one demographic variable may be necessary for individuals who have different levels of another demographic variable. Significant age-by-education interaction effects were found with 10 of the 30 test measures included in the Heaton et al. (1986) study. The interaction effects reflected greater differences among education subgroups in the middle age range than in either the younger or older age ranges. An additional complexity is that test performances of Caucasian and ethnic minority groups may show different effects of other demographic variables; for example, there is evidence of stronger education effects on the Wechsler Adult Intelligence Scale-Revised (WAIS-R; Wechsler, 1981) for Caucasians than for African Americans (Kaufman et al., 1988; Reynolds et al., 1987). Future research should be done to clarify the reasons for these differences, but for current purposes, it is sufficient to note that demographic interaction effects may exist in normative data sets and may require more complex corrections.

Clinicians who use test batteries such as the HRB do not rely only on performance levels in arriving at diagnostic classifications. Another important method of inference is the consideration of patterns of strengths and deficits as they relate to the known effects of brain disorders involving different etiologies and cerebral locations (Reitan & Wolfson, 1985). Here again, the uncorrected effects of demographic variables can greatly hinder the interpretation process. For example, when attempting to interpret the HRB results of an elderly man with a college degree, it is likely that the previously available norms will not be appropriate for most measures. The norms for the age-related tests will be too stringent, whereas the norms for the tests related to education will be too liberal. Not only does this make it difficult to judge whether a given level of performance on a single test is suggestive of brain pathology, but the comparison of strengths and weaknesses among the different abilities (for a college graduate in his age group) is even more problematic.

Chapter 3

DATA COLLECTION FOR THE NORMATIVE PROJECT

Participant Samples

Participants in this normative project were tested in several studies conducted over a period of approximately 25 years. Some of these studies were multi-center collaborative efforts, in which the present authors' laboratories had responsibility for training examiners and/or monitoring data collection in several locations. As a consequence, the total sample includes individuals from both urban and rural areas who were recruited and tested in a number of U.S. states, including California, Washington, Colorado, Texas, Oklahoma, Wisconsin, Illinois, Michigan, New York, and Virginia, as well as the Canadian province of Manitoba. For the Boston Naming Test (BNT; Kaplan, Goodglass, & Weintraub, 1983) and the Complex Ideational Material subtest of the Boston Diagnostic Aphasia Exam (BDAE; Goodglass & Kaplan, 1983), Dr. Harold Goodglass generously provided data from participants who had been tested in Massachusetts. For the California Verbal Learning Test (CVLT; Delis, Kramer, Kaplan, & Ober, 1987), 286 participants (32% of the total) comprised the original test standardization sample; we are grateful to the authors for allowing us to include them in the current project. Finally, almost all of the African American participants were recruited specifically for this norming project, using a census-based survey method designed to provide a representative sample of neurologically normal participants from the San Diego area. This effort was supported by two NIH grants with S. Walden Miller as the principal investigator (R01 MH49550-01A1 and 5 R01 AG14685-04).

All participants completed structured interviews in which they denied any history of learning disability, neurological disease, other illnesses which affect brain function, significant head trauma, serious psychiatric disorder (e.g., schizophrenia), or alcohol or other drug use

disorders. Most individuals were paid for their participation in the various research studies. All were rated by their examiners as having put forth sufficient effort on the tests to yield valid results.

In the authors' original HRB norming project (Heaton, Grant, & Matthews, 1991), a randomly selected subsample was held out of the *T*-score formula development phase in order to check the adequacy of the norms with a semi-independent normal participant group. Given the sample sizes, this was probably unnecessary, because, in every instance, the validation sample data confirmed that the *T*-score formulas performed in a manner that was almost identical to that in the "base" (formula development) sample (i.e., they demonstrated the same distributional characteristics and virtually the same elimination of demographic influences). Therefore, in the current project, all available participants were used to generate the demographically corrected *T* scores. This seemed likely to yield the most stable and accurate corrections, particularly when modeling demographic effects at the highest age range and at high and low educational levels that are generally represented by fewer participants.

Table 2 presents, for the HRB and each additional test, the numbers of Caucasian and African American participants in the normative samples and summarizes their age, education, and sex distributions. For most tests, the total *ns* for both ethnicity groups are quite large (>500); to the authors' knowledge, this is by far the largest set of African American normative data ever collected for neuropsychological tests (e.g., the WAIS-III national standardization sample contains 216 African American adults, age ≥ 20 years). Also, males and females are well represented, and there is considerable variability in age (range 20-85 years) and education (range 0-20 years). The current samples also include sizeable representation at the extremes of age and education. For example, for the

Table 2
Demographic Characteristics of the Participant Samples by Test Battery or Variable

Test battery/variable	n	Age (years)		Education (years)		Sex (% male)
		M	SD	M	SD	
Halstead-Reitan Battery						
Caucasian	634	44.4	17.9	13.8	3.1	65.9
African American	578	49.0	18.0	13.4	2.5	46.7
Total sample	1,212	46.6	18.1	13.6	2.8	56.8
Grooved Pegboard/Hand Dynamometer						
Caucasian	839	44.2	17.0	13.7	2.9	68.3
African American	643	48.2	17.0	13.3	2.5	49.3
Total sample	1,482	46.0	17.1	13.5	2.8	60.1
Thurstone Word Fluency						
Caucasian	295	41.4	17.2	14.3	2.7	71.9
African American	409	38.2	12.0	13.4	2.5	50.4
Total sample	704	39.6	14.5	13.8	2.6	59.4
Letter Fluency-FAS/Category Fluency-Animals						
Caucasian	478	54.6	19.1	14.4	2.6	59.6
African American	670	46.7	18.5	13.3	2.4	47.2
Total sample	1,148	50.0	19.2	13.8	2.5	52.4
Boston Naming Test						
Caucasian	350	53.6	18.0	13.8	2.4	64.0
African American	650	48.4	17.6	13.3	2.5	47.5
Total sample	1,000	50.3	17.9	13.5	2.5	53.3
BDAE Complex Ideational Material						
Caucasian	326	53.0	18.6	13.5	2.6	77.0
African American ^a	—	—	—	—	—	—
Paced Auditory Serial Addition Test						
Caucasian	284	41.7	11.9	15.0	2.4	75.4
African American	432	36.3	12.8	13.4	2.4	50.7
Total sample	716	38.4	12.7	14.0	2.5	60.5
Digit Vigilance Test						
Caucasian	466	47.0	20.1	14.0	2.9	57.3
African American	394	38.7	12.2	13.5	2.5	49.7
Total sample	860	43.2	17.5	13.8	2.7	53.8
Story Memory Test						
Caucasian	454	46.0	19.0	14.1	2.6	64.5
African American	640	48.4	17.5	13.3	2.5	47.7
Total sample	1,094	47.5	18.2	13.6	2.5	54.7
California Verbal Learning Test						
Caucasian	537	58.1	17.8	14.1	2.5	43.2
African American	557	49.1	18.8	13.2	2.4	44.5
Total sample	1,094	53.5	18.8	13.7	2.5	43.9
Figure Memory Test						
Caucasian	444	47.0	19.1	14.1	2.5	63.3
African American	637	48.2	17.5	13.3	2.5	47.9
Total sample	1,081	47.7	18.2	13.6	2.5	54.2
PIAT Reading Recognition						
Caucasian	282	43.7	18.7	14.4	2.6	71.3
African American	593	49.5	17.8	13.4	2.5	46.2
Total sample	875	47.6	18.3	13.7	2.6	54.3
Global Deficit Score						
Caucasian	233	42.0	17.4	14.6	2.6	75.5
African American	537	49.1	17.6	13.4	2.5	41.1
Total sample	770	47.0	17.9	13.8	2.6	55.7

Note. BDAE = Boston Diagnostic Aphasia Exam; PIAT = Peabody Individual Achievement Test.

^aIt is important to note that no BDAE data were collected for the African American sample.

HRB, there are 100 Caucasians and 106 African Americans with fewer than 12 years of education, and 214 Caucasians and 136 African Americans with 16 or more years of education. The HRB sample also includes 121 Caucasians and 134 African Americans over the age of 64 years.

Although all participants in the Heaton et al. (1986) study were initially included in the present project, some had to be removed from the sample. Teenagers do not show the same relationships between education and test performance as do older participants (Kaufman et al., 1988). Because many teenagers have not completed their education, their inclusion in the data set would reduce the power of the prediction model obtained with the older participants. For example, their inclusion would inappropriately equate a teenager who is currently in the 11th grade with a 30-year-old person who dropped out of school after the 10th grade. Therefore, the normative system developed in this project was restricted to adults over the age of 19 years.

Finally, although the focus of this project was on neurologically normal participants, some limited comparisons of data from a sample of 436 brain-damaged adults are presented. These patients were clinical referrals for neuropsychological testing, and all had structural brain abnormalities that were verified with appropriate neuro-radiological procedures (primarily CT and MR brain scans). They had a mean age of 43.5 years ($SD = 15.1$) and a mean of 13.2 years ($SD = 3.0$) of formal education; 57.3% of the sample were males; and 96.6% were Caucasian (there were 15 African Americans). The most frequent diagnoses were multiple sclerosis ($n = 105$), closed head injury ($n = 61$), intrinsic brain tumor ($n = 49$), probable Alzheimer's disease ($n = 42$), cerebral infarct/ischemia ($n = 41$), extrinsic tumor ($n = 25$), hydrocephalus ($n = 21$), penetrating head injury ($n = 15$), subarachnoid hemorrhage ($n = 9$), and cerebral anoxia ($n = 7$). It is important to note that several participants had dual diagnoses.

Neuropsychological Testing

All test administration was performed by examiners who were trained and/or supervised by senior staff members of the neuropsychological laboratories at the University of California at San Diego (Psychiatry), the University of Colorado (Psychiatry), and the University of Wisconsin (Neurology). As a rule, each test protocol was scored first by the examiner who administered the tests, and then scoring was checked independently by a second experienced examiner. Collaborative research

projects among the above three laboratories emphasized and promoted the use of the same standardized procedures in all assessments. The authors' general philosophy and approach used in neuropsychological assessment, together with some guidelines for addressing common testing problems, are described in Heaton and Heaton (1981). The following sections contain information and instructions (if altered or not previously published) about each measure listed on the Record Form.

Third Editions of the Wechsler Adult Intelligence Scale (WAIS-III) and Wechsler Memory Scale (WMS-III)

In previous editions of the authors' expanded HRB norms (Heaton et al., 1991; Heaton, 1992), age, education, and sex correction for the WAIS and WAIS-R variables were provided. These instruments have now been superseded by the WAIS-III. Heaton et al. (2003) and Taylor and Heaton (2001) have employed the same statistical methods used in the current norming project (see chapter 4) to generate demographic corrections for the WAIS-III and its co-normed WMS-III. The latter norms correct for age, education, sex, and three types of ethnicity (Caucasian, African American, and Hispanic). They are based upon the WAIS-III/WMS-III national standardization samples, supplemented by the "education oversamples" (276 participants for the WAIS-III and 206 for the WMS-III who provide expanded representation of lower educational levels and ethnic minorities). These demographic corrections are available in the WAIS-III/WMS-III/WIAT-II Scoring Assistant (Version 1.0 and higher) or the WAIS-III/WMS-III/WIAT-II Writer (Version 1.0 and higher) software published by The Psychological Corporation (1999; 2001). The authors expect that neuropsychologists, in particular, also will be interested in the similarly developed demographic corrections for the factor scores derived from joint confirmatory factor analyses of the WAIS-III and WMS-III (Heaton et al., 2003; Tulsky et al., 2003). These corrections for the factor scores will be made available on The Psychological Corporation Web site.

Although we recommended that the use of the WAIS-III for current assessments, for various reasons psychologists may occasionally wish to include earlier versions of the WAIS (e.g., a retest of a person who was given the WAIS or WAIS-R some years ago) in their neuropsychological test battery. To assist examiners who wish to use the WAIS and WAIS-R, along with the other neuropsychological tests normed here, the appendixes to this manual include T-score conversions for the Full Scale IQ (FSIQ) subtest and for subtests selected to be representative of the factors assessed by the current version of the

WAIS: Vocabulary for Verbal Comprehension, Digit Span for Working Memory, Block Design for Perceptual Organization, and Digit Symbol for Processing Speed. These *T*-score conversions are taken directly from the authors' previously published manuals (Heaton et al., 1991; Heaton, 1992) and are included here to obviate the need to consult multiple sources for the selected WAIS and WAIS-R variables. **However, it is important to note that the WAIS and WAIS-R *T* scores are only adjusted for age, education, and sex (not ethnicity) and should be interpreted cautiously (if at all) with African American and other ethnic minority clients.**

Halstead-Reitan Battery (HRB)

In almost all respects, the procedures specified by Reitan and Wolfson (1985) for the administration and scoring of the following tests were applied: Category Test, Tactual Performance Test, Seashore Rhythm Test, Speech-Sounds Perception Test, Finger Tapping Test (or Finger Oscillation Test), Trail Making Test (Parts A and B), Hand Dynamometer Test, and Reitan-Kløve Tactile Form Recognition Test. The only exceptions were that, in order to reduce testing time and participant fatigue, the individual generally was given a maximum of 300 seconds to complete Part B of the Trail Making Test and 10 minutes for each trial of the Tactual Performance Test. Participants could be allowed to exceed these time limits if they were making good progress, were likely to finish soon, and/or, in the examiner's judgment, would be likely to experience additional stress if they were not permitted to complete the task. When Trail Making Test Part B was discontinued before completion, the time score (in seconds) was pro-rated; this was done by dividing 300 seconds by the number of circles completed and then multiplying the resulting "time per circle" figure by 25. Whether or not any trials of the Tactual Performance Test were discontinued early, this normative system uses a "minutes per block" raw score (i.e., number of minutes divided by number of blocks correctly placed) for each of the three trials and for the total time to complete all three trials.

Consistent with conventional practice, the following raw score units were used for the remaining tests in this series: time in seconds to complete the Trail Making Test Part A and Trail Making Test Part B (Trail Making Test Parts A and B errors are considered clinically, but occurred so rarely with the normal participants that they could not be converted to normalized standard scores); number of shapes recalled for the Tactual Performance Test-Memory; number of shapes recalled in their correct locations for the Tactual Performance Test-Location; number correct out of 30 items on the Seashore Rhythm

Test; number of errors on 60 items in the Speech-Sounds Perception Test; average number of taps for five trials of the Finger Tapping Test, reported separately for the dominant hand and nondominant hand; average number of kilograms for two trials of the Hand Dynamometer Test, reported separately for the dominant hand and nondominant hand; and total time in seconds to complete the Tactile Form Recognition Test, reported separately for the right and left hands (errors are considered clinically, but are rarely seen with normal individuals and could not be transformed into normalized standard scores).

The administrations of the Reitan-Indiana Aphasia Screening Test and the Reitan-Kløve Sensory-Perceptual Examination follow the procedures described in Reitan and Wolfson (1985; see also Reitan, 1984). However, the scoring rules defined in Russell et al. (1970) were used to obtain the following raw scores: Aphasia Screening Test errors; Spatial Relations score; Sensory-Perceptual-Total errors; separate right and left error scores on the Sensory-Perceptual Examination; and the AIR score. For the Spatial Relations score, the sum of raw scores for the two Greek crosses, as defined in Russell et al. (1970) was used. Additionally, an extra two points was added to the Spatial Relations score if the scaled score on the Wechsler Block Design subtest also suggested a specific spatial relations problem (i.e., if the Block Design scaled score is worse than the scaled scores obtained on all other WAIS/WAIS-R/WAIS-III subtests, with the exception of Object Assembly and Digit Symbol). Instructions for calculating the AIR can be found in Russell et al.'s book, *Assessment of Brain Damage: A Neuropsychological Key Approach* (1970).

The Grooved Pegboard (Reitan & Davison, 1974) was administered and scored according to instructions provided by the Lafayette Instrument Company, which manufactures the Pegboard. The raw scores used in the normative system are the number of seconds required to place all 25 pegs in the board, reported separately for the dominant hand and nondominant hand. Errors, or number of pegs dropped, are considered clinically, but are rarely made by neurologically normal persons.

Wisconsin Card Sorting Test (WCST)

The WCST is one of the most widely researched tests of executive functions and is frequently used clinically with other tests in this Comprehensive Norms project. Unfortunately, however, it was not included in the authors' normative studies of African American adults, and no ethnicity adjustments are available for this test.

Arguably the best, currently available norms for the WCST were published in the 1993 version of the test

manual, which also provides instructions for test administration and scoring (Heaton, Chelune, Talley, Kay, & Curtiss, 1993). Although there are no new WCST norms to present here, for the convenience of the users of the Comprehensive Norms, the *T*-score conversions for one representative WCST measure are included in Appendix F: the Perseverative Errors score. This score has an acceptable distribution in normal individuals and (along with the "Perseverative Responses" score) is the most sensitive of the standard WCST measures of cerebral disorders generally, particularly those involving the frontal lobes.

It is emphasized that the WCST Perseverative Errors *T* scores in the current publication are taken directly from the *Wisconsin Card Sorting Test Manual: Revised and Expanded* (Heaton et al., 1993) and are based primarily upon data from Caucasian normative samples.

Also, it should be noted that the original version of the Comprehensive Norms used the Perseverative Responses score (instead of Perseverative Errors). The change to Perseverative Errors was made because some neuropsychologists prefer not to count responses that are not errors as "perseverations." In fact, the large majority of WCST Perseverative Responses are errors, and the two scores are so highly correlated that the authors consider them to be essentially equivalent.

Thurstone (Written) Word Fluency Test

The Thurstone Word Fluency Test examines written verbal fluency (Pendleton, Heaton, Lehman, & Hulihan, 1982). The instructions for its two parts are as follows:

On Part A of this test you have five minutes to write down as many words as you can that begin with the letter "S." Words do not count if they are proper names, or if they are different forms of a word you have already used (such as plurals or different tenses of the same verb). It does not matter if your words are long, hard, or spelled correctly. I am only interested in *how many* words you can get down on the paper. If I have trouble reading any of your words, I will ask you about them at the end of the five minutes.

Part B of this test is more difficult. You are to write words that begin with the letter "C" and have four, and only four, letters in them. You have four minutes to write as many of these words as you can. As in Part A, you should not use proper names. However, on this part you are allowed to use different forms of the same word, as long as they all have four letters.

The instructions may be repeated as often as necessary before and during the test; however, the watch is not stopped for any repetition of instructions during the test.

It is important that the examiner checks the individual's work after each part and asks about any words that are not written clearly. Individuals will sometimes have trouble deciphering their own writing if they are not asked immediately.

If for any reason the participant is unable to write, the examiner may write the words as the individual dictates them; however, for purposes of interpretation, it should be noted that this constitutes a nonstandard administration. If an individual begins checking for repetitions during the test, he or she should be told to continue to write new words. If the time limit is passed after the participant has begun to write a word, he or she is allowed to finish that word, and it is counted. The individual should be watched throughout the test and should be reminded of any part of the instructions from which he or she has deviated.

The score on each part is the total number of words that conform to the criteria in the instructions. The individual scores 1 point for each word—duplicate words do not earn points. If an individual has written a word that does not resemble the one he or she says it is, it may be counted anyway (provided that the word the participant meant to write meets the criteria specified in the instructions). Non-English words commonly used by English-speaking people (e.g., siesta) are counted as correct.

The raw score used in the present normative system is the sum of the scores for Parts A and B.

Letter and Category (Oral) Fluency Tests

Letter and category fluency tests were administered according to the instructions by Gladjo et al. (1999). Briefly, to assess letter fluency, participants are given 1 minute to say as many words as they can that start with the letter "F," then "A," and then "S." The total score for the three letters is the normed test variable. Proper names, perseverations, plurals, and other close variations of the same word (e.g., "fight," "fighting") are not counted. To assess category fluency, participants are given 1 minute to say as many names of animals as possible. The raw scores used in the present normative system are the total number of correct responses.

Paced Auditory Serial Addition Test (PASAT)

The PASAT (Gronwall, 1977) is a test of auditory working memory and processing speed. It was administered using the instructions and procedures described by Diehr et al. (1998). Four series of single-digit numbers are presented via tape recorder at increasing speeds (2.4, 2.0, 1.6, and 1.2 seconds per digit). The participant's task is to add the new number to the last number presented on the

tape; thus, the previous digit must be retained during the last calculation and be available in working memory when the new digit is presented. The PASAT score is the total number of correct items across the four series.

Digit Vigilance Test

The Digit Vigilance Test of visual attention and psychomotor speed (Lewis, 1995) was administered and scored according to the instructions in the *Manual for the Repeatable Cognitive-Perceptual-Motor Battery* (Lewis & Rennick, 1979).

Briefly, the individual is given a pencil and two pieces of paper, each containing rows of 35 single-digit numbers. The individual is instructed to cross out every "6" as rapidly as possible. The examiner records the time in seconds that the individual takes to complete both pages, as well as the number of errors of omission (i.e., 6s not crossed out) and commission (i.e., numbers other than 6s that are crossed out). Both the time and the total error scores are included in the present normative system. In the sample of 280 normal adults, the Pearson correlation between the time and error scores was .11, $p = .06$; thus, speed and accuracy on this test appear to be essentially unrelated.

Boston Naming Test (BNT)

The original (now called "experimental") version of the BNT (Borod, Goodglass, & Kaplan, 1980; Kaplan, Goodglass, & Weintraub, 1978) was used in the previous edition of the HRB expanded norms. It contains 85 items, compared to 60 items in the 1983 Kaplan et al. version of the test, that are used in the current norming project. A study by Thompson and Heaton (1989) found that performances on these two versions were highly correlated ($r = .96$) in a sample of clinical referrals for neuropsychological testing; however, the group mean "percentage correct" score was slightly lower for the original version (85.1% vs. 87.8%).

The BNT was administered and scored according to the instructions in the manual (Kaplan et al., 1983). The score used in the present normative system is the number of items correct (out of 60).

Complex Ideational Material Subtest of the Boston Diagnostic Aphasia Examination (BDAE)

Complex Ideational Material is the most difficult of the four auditory comprehension subtests in the BDAE, and the only one on which the results of normal individuals in the present study showed enough variability to

warrant its inclusion in the project. This subtest requires "yes-no" responses to 12 two-part questions. The individual must answer each part correctly in order to be given credit for the item. The first four items assess the individual's comprehension of simple questions about very commonly known facts, whereas the remaining eight items query the individual's understanding of brief stories that are read aloud by the examiner.

This subtest was administered and scored according to the published instructions for the BDAE (Goodglass & Kaplan, 1983). The raw score used in the present normative system is the total number of correct item responses (out of 12) to both questions.

Peabody Individual Achievement Test (PIAT)

The Peabody Individual Achievement Test (PIAT) Reading Recognition, Reading Comprehension, and Spelling subtests were administered and scored according to the instructions in the test manual (Dunn & Markwardt, 1970). For the neuropsychologist, the advantages of the PIAT over other tests of academic skills are its separate assessments of oral reading and reading comprehension, as well as the fact that reading comprehension and spelling are assessed using a multiple-choice format, which does not require speech. Effects of focal and diffuse cerebral lesions on these three PIAT subtests were investigated in studies by Heaton, Schmitz, Avitable, and Lehman (1987) and Filley, Heaton, Nelson, Burks, & Franklin (1989).

The PIAT raw scores used in the present normative system are percentiles based upon results of the 18-year-old individuals in the standardization sample; this is the highest age for which norms are provided in the PIAT manual.

Story Memory Test

The Story Memory Test is a verbal memory test that uses a 29-item story authored by Reitan & Wolfson (1985). The adaptation of this instrument for the present study yields separate measures of learning efficiency, delayed recall, and forgetting over a 4-hour delay period. In the normal sample, the measures of learning and forgetting were largely independent of each other, $r(184) = .11$, $p > .05$. This test has been used in previous studies of diverse neurologic and psychiatric conditions (Berry, Heaton, & Kirby, 1977; Braff et al., 1991; Filley et al., 1989; Heaton, Chelune, & Lehman, 1978; Heaton, Nelson, Thompson, Burks, & Franklin, 1985; Heaton & Pendleton, 1981; Newnan, Heaton, & Lehman, 1978;

Pennington et al., 1985; Savage et al., 1988; Woodward, Heaton, Simon, & Ringel, 1982).

The story is tape recorded at a rate of approximately one item per second. The examiner gives the initial instructions (presented in the following paragraphs), clarifying or repeating them, if necessary. When the examiner is certain that the individual understands the instructions and that the tape recorder volume is adequate, the tape is played once. The tape is not stopped, nor is any portion of it repeated. After the tape is completed, the individual is asked to tell the examiner all the information he or she can remember from the story. If the individual asks, he or she is told that it is not necessary to use all the exact words used on the tape other than names of people and places, but to give the same information. After it appears that the individual has finished, the examiner encourages the report of any additional bits of information that he or she can remember.

Learning trials are administered until the individual has obtained at least 15 points on a single trial, or until the story has been given (via the tape) five times, whichever comes first. After the last Learning trial is completed, the individual is told to remember as much of the story as possible, because he or she will be asked to recall it later in the day. The individual is not permitted to write down any part of the story. Assessment of delayed recall is done 4 hours after the last Learning trial.

The initial test instructions are as follows:

I'm going to play a story on the tape recorder that takes less than one minute. Listen carefully to the story and try to remember all the details you can. When it is finished, I'll ask you to tell the story back to me. Try to tell the story in the order in which it is given on the tape. I will also ask you to tell me the story later in the day.

Prior to each of the second through the fifth Learning trials, the individual is told:

I'm going to play the same story again. When it's finished tell me *everything*, not just the new information, you remember from the story. Try to remember the story in order.

After the last Learning trial, the individual is told:

Now remember what you've learned of the story, because you'll be asked to recall it later in the day.

After the 4-hour delay, the individual is told:

Earlier today you heard a story on the tape recorder. Now I'd like you to tell me that story again. Please include all the details you can, and try to tell the story in the correct order.

The guidelines for scoring the items in the Story Memory Test are presented in Appendix A. A maximum of 1 point is awarded for each line of information. The participant can receive 0, $\frac{1}{2}$, or 1 point for each line recalled. For example, "He started thumbing a ride" receives 1 point as an acceptable response for "He began hitchhiking." "He went traveling" receives $\frac{1}{2}$ point, and "He went" receives 0 points as responses to the same line of the story. If a participant first gives a $\frac{1}{2}$ -point response, and then later in the same trial, gives a different $\frac{1}{2}$ -point response for the same line of information (and has now given enough information in total to warrant a full point), the examiner should give credit for 1 point; this requires that the examiner always indicates that part of the line for which the individual is receiving $\frac{1}{2}$ credit.

Although the individual is asked to try to recall the story in the correct order, credit is given for information recalled out of order.

The first normed variable is the Trial 1 Recall score. The "Learning" score that is used in the present normative system is defined as the score obtained on the last Learning trial divided by the number of trials taken to reach criterion (e.g., if the individual reaches criterion by earning 18 points on the third trial, the Learning score is $18/3 = 6$).

The third normed variable for the Story Memory Test is the Delayed Recall score. Finally, the "Memory Loss" (or forgetting) score is defined as the percentage of difference between the amounts of information recalled on the last Learning trial and on the Delayed Recall trial (i.e., the percentage of information that was "forgotten" over the delay period). Using the previous example, if the individual repeated 18 bits of information in the last Learning trial, but could recall only 12 bits after the delay, the "Memory Loss" score would be calculated as follows: $(18-12)/18 = 33\%$.

California Verbal Learning Test (CVLT)

The CVLT was administered and scored in the standard manner as prescribed by Delis et al. (1987). In brief, this is a verbal list-learning task involving a 16-item shopping list (List A) that is presented for five trials; after each trial, the participant is asked to recall as many items as possible. Then, there is a single interference trial in which immediate memory for a second 16-item list is tested (List B), followed immediately by a delayed recall assessment for List A (Short Delay Free Recall) and then a cued recall assessment (Short Delay Cued Recall). After a 20-minute delay, there is another free recall assessment for List A (Long Delay Free Recall), a cued recall assessment (Long Delay Cued Recall), and finally a 40-item,

forced-choice assessment of recognition memory for the items in List A. The test variables selected for demographic correction include List A Trial 1, Trial 5, Trials 1-5, Short Delay Free Recall, and Long Delay Free Recall.

Figure Memory Test

The Figure Memory Test examines visual learning and delayed recall. It uses the figures in the Visual Reproduction subtest of the Wechsler Memory Scale (WMS; Wechsler, 1945), but follows procedures very similar to those just described for the Story Memory Test. As with the Story Memory Test, measures of learning efficiency and delayed forgetting were essentially independent in the sample of 155 normal adults, $r(153) = .06$. The Figure Memory Test has been used in several previous studies of various neurologic and psychiatric conditions (Braff et al., 1991; Filley et al., 1989; Heaton et al., 1978; Heaton et al., 1985; Pennington et al., 1985; Woodward et al., 1982).

Although the same figural stimuli (four figures on three cards) are used in both the Figure Memory Test and the Wechsler Visual Reproduction subtest, the Figure Memory Test differs in most other respects (i.e., in the way learning is assessed, in some details in the scoring of the figures, and in the additional assessment of recall after a 4-hour delay).

In the learning component of the Figure Memory Test, the three stimulus cards are presented up to five times, until the individual reaches a criterion of 15 points on a single Learning trial. Furthermore, instead of testing immediate recall of one card at a time (as in the Wechsler procedure), the individual is shown each card for 10 seconds and then asked to reproduce all four figures at the same time. The latter method is comparable to that used in the Story Memory Test, in which the individual is asked to recall the entire story at once. It is also more comparable to the way in which delayed recall is assessed in the Figure Memory Test (i.e., the individual reproduces all the information he or she can recall about all of the figures at the same time).

The instructions for the initial Learning trial are as follows:

I am going to show you some figures drawn on cards. I will show you each card for 10 seconds. After you have seen all three cards, I will ask you to draw all four figures (the last card has two figures). Study the cards carefully, and then draw the figures as accurately as you can. Also, try not to forget the figures because I'll ask you to draw them again later today.

The examiner should clarify or repeat these instructions, if necessary. Then, design cards are presented in order, one at a time, for exactly 10 seconds each. Each design card is kept from the individual's view, except for this 10-second exposure. Then, the individual is asked to draw the four figures, as carefully as possible, on a blank sheet of paper (preferably $8\frac{1}{2} \times 11$ inches). Erasures are permitted.

Additional Learning trials are given until the individual has scored at least 15 points on a single trial, or until five Learning trials have been completed, whichever comes first. Prior to the second and subsequent Learning trials, the individual is told:

I am going to show you the figures again, so that you can try to get more of the details in your drawings. Study each card for 10 seconds.

After the last Learning trial, the individual is told:

Remember the figures because I'll have you draw them again later in the day.

The individual is not allowed to make notes about the figures.

The assessment of delayed recall is done 4 hours after the last Learning trial. At that time, the individual is told:

Earlier in the day I showed you figures drawn on cards, and then you drew those figures from memory. Now I'd like you to draw those same figures again. Please draw the figures carefully, and include all the details you can.

Each design is scored according to criteria presented in the *Wechsler Memory Scale Manual* (Wechsler & Stone, 1945), with minor adaptations. Specific scoring criteria are provided in Appendix B.

As with the Story Memory Test, there is a Trial 1 Recall score, and the "Learning" score is the score obtained in the last Learning trial divided by the number of Learning trials (e.g., if the individual reaches criterion by earning 15 points on the second trial, the Learning score is $15/2 = 7.5$).

The third score that is normed for this test is the Delayed Recall score, and the fourth ("Memory Loss" or forgetting score is defined as the percentage of information recalled at the last Learning trial that is not recalled (i.e., was "forgotten") after the 4-hour delay. Thus, if the individual earns 15 points on the last Learning trial and earns 7 points after the delay, the "Memory Loss" score is calculated as follows: $(15-7)/15 = 53\%$.

Global Deficit Score (GDS)

A neuropsychological summary score was constructed to reflect the number and severity of impaired performances on the expanded Halstead-Reitan Battery. An advantage of this Global Deficit Score (GDS) is that, similar to clinical interpretations of neuropsychological data, it considers all major measures in the battery and gives greater weight to deficits than to strengths (i.e., it minimizes the chance that good performances on some component test measures will obscure impairments on others). This approach to summarizing neuropsychological data has been used to detect relatively "spotty," and sometimes subtle, impairment associated with HIV infection (Carey et al., *in press*; Heaton et al., 1995) and schizophrenia (Heaton et al., 1994), and has shown good sensitivity and specificity in predicting gold standard classifications by expert clinical ratings (Carey et al.; Heaton et al., 1995). Moreover, the GDS approach of using a single cutoff for detecting impairment appears to generalize to different patient groups and even to largely different test batteries (Carey et al.).

The GDS approach begins with demographically corrected *T* scores on a set of neuropsychological test variables. Each of these is converted to a "deficit score" that reflects presence and severity of impairment. A deficit score of 0 is assigned to any normal performance (*T* score ≥ 40), whereas a deficit score of 1 reflects mild impairment (*T* score = 35-39), 2 = mild to moderate impairment (*T* score = 30-34), 3 = moderate impairment (*T* score = 25-29), 4 = moderate to severe impairment (*T* score = 20-24) and 5 = severe impairment (*T* score < 20). Deficit scores of all component test measures are then averaged to create the GDS. In previous studies, a GDS greater than or equal to 0.50 has accurately predicted expert clinical ratings of overall impairment based upon the same test protocols (Carey et al., *in press*); a GDS at this cutoff indicates that, on average, the examinee was mildly impaired on half of the test measures in the battery.

The GDS proposed here will be based on the following 21 key measures from the expanded Halstead-Reitan Battery: Category Test; Trail Making Test Part A; Trail Making Test Part B; the Total Time, Memory, and Location components of Tactual Performance Test; Seashore Rhythm Test; Speech-Sounds Perception Test; Time and Error components of Digit Vigilance Test; the Learning and Delayed Recall components of Story Memory (or alternatively CVLT Trials 1-5 and CVLT Long Delay Free Recall); the Learning and Delayed Recall components of Figure Memory; Aphasia Screening Test; Boston Naming Test; Thurstone Word Fluency Test (or alternatively, Letter

Fluency-FAS); Spatial Relations; Sensory-Perceptual-Total; Finger Tapping-Worst Hand; and Grooved Pegboard-Worst Hand.

It is likely that users of these norms will, at times, have some missing data on the above 21 GDS variables. As noted earlier, the method appears to be relatively unaffected by modifications in test batteries, provided that they are reasonably comprehensive in the coverage of cognitive and sensorimotor abilities. For this reason, some prorating of the GDS seemed possible. Therefore, using protocols from the 220 normal adults in the samples who were administered all 21 test measures, the authors investigated the impact of deleting three randomly selected variables (leaving a prorated score based on 18 of the 21 variables). The correlation between the full GDS and prorated GDS was .98, the mean difference between the two scores was 0.008 (*SD* = 0.048), and the distributional properties were similar. Based on these results, the authors suggest that prorating the GDS is acceptable, provided that at least 18 test variables are available, including the measures from one of the verbal learning/memory tests, the Figure Memory Test, and at least one measure from each of the nine content areas described in Table 3.

Finally, for the GDS to be valid for neurodiagnostic purposes, it is essential that all of the composite scores should be considered valid measures of brain function. Thus, for example, motor test performances that are affected by peripheral measures should not be included, nor should performance on the sensory perceptual test that is affected by the high frequency hearing loss or any test on which the patient did not put forth adequate effort. However, if a peripheral problem involving one upper extremity invalidates motor performance on that scale, valid scores for the other hand may be used as a "worst hand" on the Finger Tapping and the Grooved Pegboard tests.

Summary of Measures

Table 3 lists the measures for which normative data are provided, grouped in a summary score category, a Lateralized Sensorimotor/Psychomotor Comparisons category, and the following nine content areas: Executive Functions, Attention/Working Memory, Speed of Information Processing, Spatial Skills, Verbal/Academic Skills, Verbal Episodic Memory, Visual Episodic Memory, Sensory Perceptual Skills, and Motor Skills. The acronyms and abbreviations listed for each measure are used in this manual and its accompanying Record Form.

Table 3
List of Measures

Test measure	Abbreviation	Test measure	Abbreviation
Summary Scores		Verbal Episodic Memory	
WAIS-III Full Scale IQ	WAIS-III FSIQ	Story Memory Trial 1 Recall (correct)	STORY-T1
WAIS-R Full Scale IQ	WAIS-R FSIQ	Story Memory Learning (points/trials)	STORY LEARN
WAIS Full Scale IQ	WAIS FSIQ	Story Memory Delayed Recall (correct)	STORY RECALL
Average Impairment Rating	AIR	Story Memory Loss (% loss)	STORY LOSS
Global Deficit Score	GDS	CVLT Trial 1 (correct)	CVLT-1
Executive Functions		CVLT Trial 5 (correct)	CVLT-5
WCST-Perseverative Errors	WCST	CVLT Trials 1-5 (correct)	CVLT-TOT
Category Test (errors)	CAT ERROR	CVLT Short Delay Free Recall (correct)	CVLT-SDFR
Trail Making Test Part B (secs)	TRAIL B	CVLT Long Delay Free Recall (correct)	CVLT-LDFR
Thurstone Word Fluency (correct)	THUR FLU		
Letter Fluency-FAS (total correct)	FAS		
Category Fluency-Animals (total correct)	ANIMALS		
Attention/Working Memory			
WAIS-III Working Memory Index	WAIS-III WKG MEM	Tactual Performance Test-Memory (correct)	TPT MEM
WAIS-R Digit Span	WAIS-R DIGIT SPAN	Tactual Performance Test-Location (correct)	TPT LOC
WAIS Digit Span	WAIS DIGIT SPAN	Figure Memory Trial 1 Recall (correct)	FIGUR-T1
Paced Auditory Serial Addition Test (total correct)	PASAT	Figure Memory Learning (points/trials)	FIGUR LEARN
Digit Vigilance-Errors	DIGIT ERROR	Figure Memory Delayed Recall (correct)	FIGUR RECALL
Seashore Rhythm Test (correct)	SSHOR RHYM	Figure Memory Loss (% loss)	FIGUR LOSS
Speech-Sounds Perception Test (errors)	SPCH PERC		
Speed of Information Processing			
WAIS-III Processing Speed Index	WAIS-III PSI	Sensory Perceptual Skills	
WAIS-R Digit Symbol	WAIS-R DIGIT SYMB	Sensory-Perceptual-Total (errors)	SP TOT
WAIS Digit Symbol	WAIS DIGIT SYMB	Tactile Form Recognition-Worst Hand (secs)	TFR WH
Trail Making Test Part A (secs)	TRAIL A		
Digit Vigilance-Time (secs)	DIGIT TIME	Motor Skills	
		Finger Tapping-Worst Hand (taps)	TAP WH
Spatial Skills		Hand Dynamometer-Worst Hand (kgs)	GRIP WH
WAIS-III Perceptual Organization Index	WAIS-III POI	Grooved Pegboard-Worst Hand (secs)	PEG WH
WAIS-R Block Design	WAIS-R BLOCK DESGN		
WAIS Block Design	WAIS BLOCK DESGN	Lateralized Sensorimotor/Psychomotor Comparisons	
Tactual Performance Test Total Time (min/blk)	TPT TIME	Finger Tapping-Dominant (taps)	TAP DH
Spatial Relations (rating)	SPAT REL	Finger Tapping-Nondominant (taps)	TAP NDH
Verbal/Academic Skills		Hand Dynamometer-Dominant (kgs)	GRIP DH
WAIS-III Verbal Comprehension Index	WAIS-III VCI	Hand Dynamometer-Nondominant (kgs)	GRIP NDH
WAIS-R Vocabulary	WAIS-R VOCAB	Grooved Pegboard-Dominant (secs)	PEG DH
WAIS Vocabulary	WAIS VOCAB	Grooved Pegboard-Nondominant (secs)	PEG NDH
Aphasia Screening Test (errors)	APHAS SCRNN	Tactual Performance Test-Dominant (min/blk)	TPT DH
Boston Naming Test (correct)	BSTN NAME	Tactual Performance Test-Nondominant (min/blk)	TPT NDH
BDAE Complex Ideational Material (correct)	BDAE COMP	Tactual Performance Test-Both Hands (min/blk)	TPT BH
PIAT Reading Recognition (percentile)	PIAT RECOG	Sensory-Perceptual-Right (errors)	SP R
PIAT Reading Comprehension (percentile)	PIAT COMP	Sensory-Perceptual-Left (errors)	SP L
PIAT Spelling (percentile)	PIAT SPELL	Tactile Form Recognition-Right (secs)	TFR R
		Tactile Form Recognition-Left (secs)	TFR L

Note. WAIS-III = Wechsler Adult Intelligence Scale-Third Edition; WAIS-R = Wechsler Adult Intelligence Scale-Revised; WAIS = Wechsler Adult Intelligence Scale; WCST = Wisconsin Card Sorting Test; BDAE = Boston Diagnostic Aphasia Exam; PIAT = Peabody Individual Achievement Test; CVLT = California Verbal Learning Test.

Chapter 4

DEVELOPMENT AND VALIDATION OF THE DEMOGRAPHIC CORRECTION SYSTEM

Procedure

The specific goals of this project were (a) to develop a system for converting raw scores on the various test measures to demographically adjusted *T* scores, and (b) to assess the distributional and other aspects of the resulting *T* scores that are expected to be of interest to users of the norms. The latter goal includes providing information about the frequency and degree to which the current normative values differ from those based on the authors' previously published norms that were developed (a) using smaller participant samples, and (b) considering only the linear effects of demographic variables on test scores. The following is a description of the analyses completed to accomplish these goals.

The first step in the development of the new *T*-score system was to normalize each test score distribution, converting raw scores to scaled scores having means and standard deviations of approximately 10 and 3, respectively. The raw score to scaled score conversion ensured that higher scaled scores always reflected better test performance. Besides promoting desirable distributional properties of test scores prior to adjusting for demographic effects, these scaled scores were intended to provide estimates of overall adequacy of test performance with reference to a general, normal, adult population. Therefore, for all variables having substantial data for both ethnicities, the raw score to scaled score conversion was done using a combined sample of Caucasians and African Americans. These samples were randomly selected from the parent groups in proportions approximating the White and Non-White composition of the U.S. population over the age of 19 years as reflected in the 2000 U.S. census (e.g., for HRB variables, the scaled score conversions were based upon data from 523 Caucasians and 127 African Americans). For the few test

variables on which data were available only for Caucasians, the conversion from raw scores to scaled scores was based on data from the entire sample of Caucasians.

Years of Education: Definition

It is important that users of this demographic correction system employ the same procedures for determining years of education that were used in developing the norms. Determining educational level usually is quite straightforward, but one occasionally encounters complex or nontraditional educational histories that require some judgment on the part of the examiner. The following guidelines for such cases were used.

In general, only full years of regular academic coursework that was successfully completed were counted. Years in which the person obtained overall failing grades were not counted. For example, a person who dropped out of school during the 11th grade would be given credit for 10 years, provided that he or she (at least reportedly) received passing grades in regular classes during his or her sophomore year of high school. In addition, a General Equivalency Diploma (GED) does not add to the years of education completed (e.g., a person who completed 11 years of schooling and obtained a GED would be assigned an educational level of 11 years).

Vocational training or coursework was not counted in the "years of education." For example, if a person graduates from high school and completes nursing training to become an RN, his or her educational level typically would be set at 12 years. On the other hand, if this same person completed nursing training (as well as other required academic coursework) at a regular college or university and earned a BS degree in nursing, the educational level would be 16 years.

No matter how much time it takes a person to complete a diploma or degree, standard numbers of education years are assigned to high school diplomas (12), associate's degrees (14), bachelor's degrees (16), master's degrees (18), and doctoral degrees (20). For example, a person who spends 6 years in college and obtains a bachelor's degree is given credit for 16 years of education (12 for high school, plus 4 for college). A person who spends a total of 28 years in school and obtains two doctoral degrees is given the maximum of 20 years credit. Also, a person who spends 3 years in a community college program and fails to obtain an associate's degree is given credit for only 13 years; however, if that same person completes 3 years in a traditional 4-year college or university degree program, the educational level would be set at 15 years.

It should be noted that none of the participants in our normative samples had been diagnosed with a learning disability or had any schooling in special education classes. Therefore, it is uncertain what regular education "value" (if any) should be placed on years of schooling completed in special education classes. In the absence of database guidelines, and because patients differ in the amounts and type of special education they have had, the determination of education-based normative standards must rely heavily on clinical judgment. A very conservative approach (in terms of minimizing false positive errors) is to not count years in which all or most academic classes were in special education. However, this approach may underestimate the presence and severity of any acquired impairment. In contrast, the most liberal approach (i.e., giving full credit for special education coursework) may overestimate acquired impairment. In such cases, the clinician may choose to consider education-adjusted norms using both of these extreme values of education and to make interpretative judgments based on the observed difference in *T* scores and any other relevant information (e.g., grade levels associated with scores on standardized academic achievement tests).

Demographic Corrections

Using data from all available participants for each measure, fractional polynomial regression equations were generated to predict scaled scores from age, education, and sex. To account for the influence of ethnicity on the scaled scores, separate regression analyses were conducted for each ethnic group. To determine the optimal fractional polynomial regression equations, the method of Royston and Altman (1994) was employed using the statistical package Stata (StataCorp, 2003). Briefly, this approach uses an iterative algorithm for evaluating the influence of combinations of predictors, which have been transformed using a restricted set of predetermined

powers (i.e., -2, -1, -0.5, 0, 0.5, 1, 2, 3). The algorithm compares all sets of predictors using these transformations to generate the final optimal fit. The residuals from optimal regression equations were then converted to *T* scores with a mean of 50 and a standard deviation of 10.

Evaluating the T Scores

Theoretically, the *T* scores derived from the preceding steps should have several important characteristics. At least for neurologically normal individuals, the *T* scores should be normally distributed and have a mean of 50 and a standard deviation of 10. The *T* scores also should show no sex or ethnicity differences and should be essentially unrelated to age and education. Several steps were taken to determine whether the *T*-score conversions provided in this manual have these desired characteristics.

The methods by which the *T*-score conversions were developed guarantee the absence of main effects for any of the demographic variables. However, because some Age \times Education interaction effects in the 1991 HRB norming project were encountered, analyses were needed to check whether all *T*-score corrections were performed in the expected manner across the different levels of age and education. Using *T* scores on each test variable for each ethnicity group, a 3 \times 3 ANOVA was performed using the same age and education groupings presented in Table 1. In addition to ensuring the absence of significant interaction effects, means in each of the Age \times Education cells were visually inspected; *a priori*, the authors specified as cause for concern any deviation of more than 3 *T*-score points from the expected values of 50 and 10 (e.g., a cell mean >53 or <47). For every test variable in each ethnicity group, the Kolmogorov-Smirnov (Smirnov, 1939) procedure was used to determine whether the *T*-score distributions differed significantly from normality.

Clinicians and researchers who have been using the authors' previously published demographic corrections for the expanded HRB may be interested in what differences they can expect with the current system. A significant limitation of the 1991 norms is that they were based upon test results of samples that consisted of virtually all Caucasian individuals. As indicated throughout this manual (see especially Tables 1, 4, and 5), different norms on these tests are needed for African Americans and perhaps other ethnic minority groups as well. Even for Caucasians, however, some differences might be expected between the old and new norms, because the newer ones presented here are based upon larger samples of Caucasian individuals and a somewhat different statistical approach (i.e., one that considers possible nonlinear demographic effects on test performance).

Therefore, for all test variables in the two normative systems, the percentage of Caucasian participants for whom the differences between the old and new *T* scores are within 5, 7, and 10 points are reported.

Results

Table 4 summarizes the raw score results of the normal Caucasian and African American groups on all test measures in the battery. These results for the Caucasian samples are similar to those of the smaller groups used in the authors' 1991 norming project, and also to those of other large normal groups reported in the literature (Fromm-Auch & Yeudall, 1983). However, the results of the African American groups were somewhat worse than those of the Caucasian groups on most test measures. This is consistent with the previously cited literature on ethnicity differences in neuropsychological test performances. Nevertheless, questions still might be raised about the representativeness of the African American samples in this project in particular, because they were recruited entirely in one Western city (San Diego), whereas the Caucasians came from several U.S. states and one Canadian province. Because the African Americans in the samples in this project also were administered either the WAIS-R ($n = 375$) or the WAIS-III ($n = 210$), their results on those batteries were available for comparisons with expectations based upon the African Americans in the national standardization samples for the respective versions of the WAIS. The WAIS-III/WMS-III/WIAT-II Scoring Assistant program (The Psychological Corporation, 1999), was used to generate age-, education-, sex-, and ethnicity-corrected *T* scores for the FSIQ of African American individuals. This group obtained a mean of 52.3 and standard deviation of 9.7, which are very close to the values of 50 and 10, respectively, in the national sample. For the subgroup that was administered the WAIS-R, the representativeness was assessed by comparing their FSIQs with those of the adult (age ≥ 20 years) African American subsample within the WAIS-R standardization sample (Wechsler, 1981). To minimize any differences that might be due to other demographic characteristics, the authors used their previously published *T*-score conversions that correct for age, education, and sex (Heaton, 1992). The current sample obtained a mean FSIQ *T* score of 42.4 ($SD = 8.2$), which is similar to that of the adult African Americans in the national standardization sample ($n = 142$; $M = 43.6$, $SD = 8.9$). Considered together, these results support the generalizability of the normative data provided by the samples of African Americans in this project.

The results in Table 4 also illustrate the great diversity of raw score means and standard deviations on the different tests in the battery. As noted above, this diversity in raw score metrics within a test battery complicates pattern analysis in neuropsychological test interpretation (i.e., the identification of relative strengths and weaknesses on the different measures). Conversion of the raw scores to *T* scores should facilitate the process of pattern analysis.

Table 5 is rather complex and contains more information than is usually desirable in a single table. Its purpose is to enable the reader to readily compare the amounts of demographic influence that exist within the normative sample raw scores. The first three data columns show the percentage of variance for the Caucasian sample in each test raw score distribution that is accounted for by each demographic variable; these percentages were derived by squaring the correlation coefficients between the test raw scores and demographic variables. The varying age, education, and sex effects on the HRB have been described previously (Heaton et al., 1986). However, this report did not include data on the several "added" (non-HRB) variables in Table 5. Not unexpectedly, results on those variables generally show greater age effects for nonverbal measures and greater education effects for verbal measures; only modest sex effects were observed on these particular tests. Of some interest is the fact that the verbal and nonverbal memory (forgetting) scores correlate minimally or not at all with either age or education; this is in contrast to the substantial R^2 's observed for the corresponding learning measures.

The fourth data column in Table 5 indicates the amount of variance in each test's raw scores that can be accounted for by the three demographic variables *in combination*. Here the percentages are based upon the R^2 's for the stepwise multiple regressions. Comparing the numbers in this column with those in the previous three columns, it is apparent that, for most test measures, a far greater percentage of the variance is accounted for by combined demographic variables than by any single demographic characteristic. For example, 29% of the variance in scores on the Category Test can be accounted for by age alone, whereas education alone accounts for 13% and sex alone accounts for only 1%. However, the three demographic variables in combination account for 37% of the variance in Category Test scores. Only one of the test measures (Figure Memory Loss) failed to show a statistically significant association with any of the demographic variables. For the remaining test measures, the amount of variance accounted for by demographic variables ranged from 1% to 63%, with a median of 30%.

Table 4
Raw Score Means and Standard Deviations for Participants in the Normal Group

Test measure	Abbreviation	Caucasian		African American		Total	
		M	SD	M	SD	M	SD
Summary Scores							
Average Impairment Rating	AIR	1.05	0.59	1.57	0.68	1.31	0.69
Global Deficit Score	GDS	0.20	0.21	0.22	0.25	0.22	0.24
Executive Functions							
Category Test (errors)	CAT ERROR	39.83	25.61	61.23	31.35	49.21	30.19
Trail Making Test Part B (secs)	TRAIL B	72.31	38.17	102.77	61.03	85.68	51.76
Thurstone Word Fluency (correct)	THUR FLU	57.70	18.17	50.82	17.72	53.70	18.22
Letter Fluency-FAS (total correct)	FAS	42.63	11.87	36.29	11.7	38.93	12.17
Category Fluency-Animals (total correct)	ANIMALS	20.76	5.39	17.72	5.36	18.95	5.57
Attention/Working Memory							
Paced Auditory Serial Addition Test (total correct)	PASAT	128.62	29.96	108.06	31.67	116.21	32.58
Digit Vigilance-Errors	DIGIT ERROR	6.62	7.91	8.31	7.38	7.39	7.72
Seashore Rhythm Test (correct)	SSHOR RHYM	26.19	3.16	25.93	3.65	26.08	3.39
Speech-Sounds Perception Test (errors)	SPCH PERC	5.29	4.31	8.79	5.73	6.84	5.28
Speed of Information Processing							
Trail Making Test Part A (secs)	TRAIL A	28.21	11.47	35.08	15.50	31.22	13.81
Digit Vigilance-Time (secs)	DIGIT TIME	394.59	88.92	380.41	86.63	390.87	57.59
Spatial Skills							
Tactual Performance Test Total Time (min/blk)	TPT TIME	0.53	0.42	0.89	0.99	0.69	0.75
Spatial Relations (rating)	SPAT REL	2.58	1.05	2.87	1.13	2.72	1.10
Verbal/Academic Skills							
Aphasia Screening Test (errors)	APHAS SCRN	3.42	4.03	6.91	5.39	5.11	5.05
Boston Naming Test (correct)	BSTN NAME	54.59	5.04	49.47	6.95	51.26	6.80
BDAE Complex Ideational Material (correct) ^a	BDAE COMP	11.36	0.87				
PIAT Reading Recognition (percentile)	PIAT RECOG	59.84	23.66	47.79	24.41	51.70	24.80
PIAT Reading Comprehension (percentile) ^a	PIAT COMP	68.94	24.90				
PIAT Spelling (percentile) ^a	PIAT SPELL	66.25	32.10				
Verbal Episodic Memory							
Story Memory Trial 1 Recall (correct)	STORY-T1	14.24	4.87	10.83	4.50	12.25	4.95
Story Memory Learning (points/trials)	STORY LEARN	13.26	5.47	8.99	4.77	10.77	5.49
Story Memory Delayed Recall (correct)	STORY RECALL	16.75	2.95	14.58	3.42	15.48	3.40
Story Memory Loss (% loss)	STORY LOSS	11.72	9.39	17.07	12.55	14.85	11.64
CVLT Trial 1 (correct)	CVLT-T1	7.22	2.28	6.53	2.04	6.86	2.18
CVLT Trial 5 (correct)	CVLT-5	12.18	2.64	11.33	2.68	11.74	2.69
CVLT Trials 1-5 (correct)	CVLT-TOT	51.86	11.46	47.93	11.30	49.86	11.54
CVLT Short Delay Free Recall (correct)	CVLT-SDFR	10.39	3.32	9.50	3.43	9.93	3.40
CVLT Long Delay Free Recall (correct)	CVLT-LDFR	10.79	3.37	9.81	3.54	10.29	3.49
Visual Episodic Memory							
Tactual Performance Test-Memory (correct)	TPT MEM	7.54	1.62	6.79	1.65	7.21	1.68
Tactual Performance Test-Location (correct)	TPT LOC	4.08	2.43	2.84	2.12	3.54	2.38
Figure Memory Trial 1 Recall (correct)	FIGUR-T1	12.89	4.24	9.66	4.00	10.99	4.40
Figure Memory Learning (points/trials)	FIGUR LEARN	10.76	5.60	6.39	4.52	8.19	5.43
Figure Memory Delayed Recall (correct)	FIGUR RECALL	14.71	2.63	13.60	2.92	14.06	2.86
Figure Memory Loss (% loss)	FIGUR LOSS	8.81	12.46	8.20	10.37	8.45	11.27
Sensory Perceptual Skills							
Sensory-Perceptual-Total (errors)	SP TOT	4.17	5.39	8.67	10.10	6.41	8.38

(continued)

Table 4 (continued)
Raw Score Means and Standard Deviations for Participants in the Normal Group

Test measure	Abbreviation	Caucasian		African American		Total	
		M	SD	M	SD	M	SD
Lateralized Sensorimotor/Psychomotor Comparisons							
Finger Tapping–Dominant (taps)	TAP DH	50.49	7.75	46.75	9.88	49.20	8.73
Finger Tapping–Nondominant (taps)	TAP NDH	45.99	7.28	42.50	8.34	44.79	7.84
Hand Dynamometer–Dominant (kgs)	GRIP DH	44.14	13.14	39.33	12.11	41.94	12.90
Hand Dynamometer–Nondominant (kgs)	GRIP NDH	40.48	12.44	37.04	11.97	38.91	12.35
Grooved Pegboard–Dominant (secs)	PEG DH	68.37	16.12	79.43	23.06	73.17	20.19
Grooved Pegboard–Nondominant (secs)	PEG NDH	74.01	18.63	90.51	30.31	81.17	25.72
Tactual Performance Test–Dominant (min/blk)	TPT DH	0.73	0.83	1.30	1.55	0.98	1.23
Tactual Performance Test–Nondominant (min/blk)	TPT NDH	0.60	0.71	1.08	1.28	0.81	1.03
Tactual Performance Test–Both Hands (min/blk)	TPT BH	0.37	0.58	0.64	0.95	0.49	0.77
Sensory-Perceptual–Right (errors)	SPR	2.34	3.09	4.50	5.32	3.41	4.47
Sensory-Perceptual–Left (errors)	SPL	1.83	2.85	4.17	5.28	2.99	4.39
Tactile Form Recognition–Right (secs)	TFR R	12.10	4.84	12.08	5.57	12.09	5.22
Tactile Form Recognition–Left (secs)	TFR L	11.00	4.53	10.95	5.20	10.97	4.87

Note. BDAE = Boston Diagnostic Aphasia Exam; PIAT = Peabody Individual Achievement Test; CVLT = California Verbal Learning Test.

^aIt is important to note that no data were collected on the BDAE COMP, PIAT COMP, and PIAT SPELL for the African American sample.

The remaining four data columns in Table 5 present the same information for the African American sample. Although the total amounts of variance accounted for by age, education, and/or sex combined (see last column) tend to be fairly similar for African Americans and Caucasians, there are different contributions for age and education on a number of test variables. For example, African Americans showed a greater age effect on several variables (Category Test, all Perceptual Error scores, PIAT Reading Recognition, Tactile Form Recognition) and/or a smaller education effect on some variables (AIR, Category Test, Trail Making Test Part B, Digit Vigilance-Errors, PIAT Reading Recognition, and Tactual Performance Test–Memory). There was also a smaller sex effect for African Americans on the Figure Memory measures (Trial 1 Recall and Learning) and Tactile Form Recognition (Right and Left). These differences in relationships with other demographic variables convinced us to develop separate demographic corrections for the two ethnicity cohorts, rather than simply adding ethnicity to the multiple regression analyses.

The first step in developing the *T*-score system was converting the test raw scores to normalized scaled scores, having a mean of 10 and a standard deviation of 3. The raw score to scaled score conversions are presented in Appendix C. Next, the multiple regressions for the two ethnicity groups were computed separately, using the three other demographic variables to predict the scaled scores. The remaining steps described previously were followed to develop the *T*-score conversions.

The Age \times Education (3 \times 3) ANOVAs using the final *T* scores revealed no significant age or education main effects or interaction effects for either the Caucasian or the African American groups. In 24 (2.7%) of the 873 Age \times Education cells, the mean *T* scores deviated from the acceptable values and required some cell adjustments (usually by 1 or 2 *T*-score points).

Table 6 shows the percentage of participants predicted to score within seven *T*-score ranges, assuming a perfectly normal distribution, and then presents the actual percentages for the respective ethnicity groups on each test measure. Kolmogorov-Smirnov tests were performed to determine whether the actual cumulative frequencies across these seven ranges differed significantly from the predictions for a normal distribution; this was done separately for the two ethnicity samples. In all, 97 *T*-score distributions were checked in this way, and 7 differed significantly from normal (all at the .01 level); these included the Spatial Relations, Figure Memory Loss, and Sensory-Perceptual–Left measures for both the ethnicity groups, and the BDAE Complex Ideational Material measure for the Caucasian sample. For all of these measures, the distributional problem can be attributed to the fact that too many normal participants obtained perfect raw scores. Because quite modest performance difficulty on these particular tests is sufficiently rare (in normal individuals) to cause the participant to be classified as “abnormal,” *T* scores between 30 and 39 on these four measures should be interpreted with caution (*T* scores <30 rarely occur in normal individuals). On the positive

Table 5
Percentage of Variance in Test Raw Scores Accounted for by Demographic Variables

Test measure	Abbreviation	Caucasian (% of variance)				African American (% of variance)			
		Age	Education	Sex	Combined	Age	Education	Sex	Combined
Summary Scores									
Average Impairment Rating	AIR	53	24	0	63	50	9	0	56
Global Deficit Score ^a	GDS	0	0	0	0	0	0	0	0
Executive Functions									
Category Test (errors)	CAT ERROR	29	13	1	37	42	4	2	46
Trail Making Test Part B (secs)	TRAIL B	25	16	0	35	29	8	0	35
Thurstone Word Fluency (correct)	THUR FLU	9	14	0	20	6	12	1	20
Letter Fluency-FAS (total correct)	FAS	4	3	0	8	5	10	0	16
Category Fluency-Animals (total correct)	ANIMALS	20	3	1	24	12	6	2	19
Attention/Working Memory									
Paced Auditory Serial Addition Test (total correct)	PASAT	4	4	1	10	6	6	0	14
Digit Vigilance-Errors	DIGIT ERROR	10	10	0	15	1	2	1	4
Seashore Rhythm Test (correct)	SSHOR RHYM	7	9	0	13	8	4	0	10
Speech-Sounds Perception Test (errors)	SPCH PERC	20	11	0	26	24	5	0	28
Speed of Information Processing									
Trail Making Test Part A (secs)	TRAIL A	25	10	0	30	26	6	0	30
Digit Vigilance-Time (secs)	DIGIT TIME	24	5	0	25	9	1	2	12
Spatial Skills									
Tactual Performance Test Total Time (min/blk)	TPT TIME	27	5	1	29	22	3	0	23
Spatial Relations (rating)	SPAT REL	4	6	0	8	3	3	1	6
Verbal/Academic Skills									
Aphasia Screening Test (errors)	APHAS SCRН	3	14	4	19	0	10	3	13
Boston Naming Test (correct)	BSTN NAME	9	11	0	18	3	13	1	16
BDAE Complex Ideational Material (correct) ^b	BDAE COMP	0	7	0	6				
PIAT Reading Recognition (percentile)	PIAT RECOG	0	20	1	22	11	11	1	22
PIAT Reading Comprehension (percentile) ^b	PIAT COMP	5	18	0	17				
PIAT Spelling (percentile) ^b	PIAT SPELL	1	28	8	32				
Verbal Episodic Memory									
Story Memory Trial 1 Recall (correct)	STORY-T1	13	9	1	20	5	9	1	15
Story Memory Learning (points/trials)	STORY LEARN	14	11	1	22	11	11	0	21
Story Memory Delayed Recall (correct)	STORY RECALL	2	4	0	6	7	9	0	16
Story Memory Loss (% loss)	STORY LOSS	0	0	0	1	1	2	0	3
CVLT Trial 1 (correct)	CVLT-1	14	2	1	18	19	3	2	23
CVLT Trial 5 (correct)	CVLT-5	23	5	1	30	27	8	4	39
CVLT Trials 1-5 (correct)	CVLT-TOT	25	4	1	32	29	6	3	38
CVLT Short Delay Free Recall (correct)	CVLT-SDFR	23	4	0	28	29	8	3	39
CVLT Long Delay Free Recall (correct)	CVLT-LDFR	22	4	1	28	31	6	5	42
Visual Episodic Memory									
Tactual Performance Test-Memory (correct)	TPT MEM	21	10	1	27	27	2	0	28
Tactual Performance Test-Location (correct)	TPT LOC	26	6	0	28	21	1	1	22
Figure Memory Trial 1 Recall (correct)	FIGUR-T1	31	10	8	38	22	7	1	28
Figure Memory Learning (points/trials)	FIGUR LEARN	28	8	7	34	24	4	1	28
Figure Memory Delayed Recall (correct)	FIGUR RECALL	4	3	0	6	15	2	0	17
Figure Memory Loss (% loss)	FIGUR LOSS	0	0	0	0	0	0	0	0
Sensory Perceptual Skills									
Sensory-Perceptual-Total (errors)	SP TOT	11	5	1	14	29	3	1	32

(continued)

Table 5 (continued)
Percentage of Variance in Test Raw Scores Accounted for by Demographic Variables

Test measure	Abbreviation	Caucasian (% of variance)				African American (% of variance)			
		Age	Education	Sex	Combined	Age	Education	Sex	Combined
Lateralized Sensorimotor/Psychomotor Comparisons									
Finger Tapping–Dominant (taps)	TAP DH	12	4	20	32	16	2	17	30
Finger Tapping–Nondominant (taps)	TAP NDH	12	4	18	30	18	2	16	30
Hand Dynamometer–Dominant (kgs)	GRIP DH	5	0	56	60	7	0	56	59
Hand Dynamometer–Nondominant (kgs)	GRIP NDH	6	0	54	59	7	0	55	59
Grooved Pegboard–Dominant (secs)	PEG DH	34	6	0	37	34	4	0	37
Grooved Pegboard–Nondominant (secs)	PEG NDH	32	4	0	33	30	3	1	33
Tactual Performance Test–Dominant (min/blk)	TPT DH	10	1	1	10	19	2	0	21
Tactual Performance Test–Nondominant (min/blk)	TPT NDH	19	4	0	20	25	3	0	27
Tactual Performance Test–Both Hands (min/blk)	TPT BH	15	4	0	16	18	1	0	19
Sensory-Perceptual–Right (errors)	SP R	9	4	0	11	30	3	1	33
Sensory-Perceptual–Left (errors)	SP L	10	4	1	12	23	3	0	25
Tactile Form Recognition–Right (secs)	TFR R	1	5	4	10	19	2	0	20
Tactile Form Recognition–Left (secs)	TFR L	1	4	5	9	17	1	0	18

Note. BDAE = Boston Diagnostic Aphasia Exam; PIAT = Peabody Individual Achievement Test; CLVT = California Verbal Learning Test.

^aAlready demographically corrected.

^bIt is important to note that no data were collected on the BDAE COMP, PIAT COMP, and PIAT SPELL for the African American sample.

side, the results of these analyses indicate that the *T* scores approximate a normal distribution for 46 of the 50 test measures in this project for both Caucasians and African Americans.

Another issue to be addressed in this section is an identification of *T*-score categories appropriate for use in clinical interpretation. The most important question in this regard is the selection of a cutoff score to define "impairment." One feature of the *T* scores is that, whatever cutoff score one chooses, the resulting false positive rate (percentage of normal individuals identified as "impaired") can be specified. The cutoff scores chosen by individual clinicians will probably vary in consideration of additional factors, such as the base rates of cerebral disorders in various clinical settings and the perceived costs of making false positive and false negative errors. Based on experience (see also Taylor & Heaton, 2001), the following *T*-score categories for clinical use are suggested: 0-19 = severe impairment; 20-24 = moderate to severe impairment; 25-29 = moderate impairment; 30-34 = mild to moderate impairment; 35-39 = mild impairment; 40-44 = below average; 45-54 = average; 55+ = above average. In using this classification system, one accepts a false positive rate up to approximately 15%. Moreover, for any given *T* score less than 40, the clinician can specify his or her likelihood of being wrong in calling the test result abnormal. To assist in this process, Tables 7 and 8 present the percentage of normal individuals predicted to score in each of the clinical *T*-score ranges;

this is followed by a listing of actual frequencies for the total normal group on each test measure.

In the preceding paragraph and as shown in Tables 7 and 8, the likelihood of normal individuals being correctly classified by various *T*-score cutoff points has been considered. It is beyond the scope of this manual to address in any detail the equally important topic of *sensitivity* (true positive classification rate among people who have cerebral disorders). However, using the AIR as an example variable, Figure 1 presents comparisons of the *T*-score distribution of the total normal group with that of the 436 brain-damaged patients described earlier. Interestingly, the primary difference is that the distribution for the brain-damaged group is shifted in the direction of impairment. In addition, however, there is a fair amount of overlap between these two distributions; clearly, no cutoff score will correctly classify all individuals in both groups.

Figure 2 plots the cumulative frequency distributions for these two participant groups, focusing on the cutoff scores for the eight proposed clinical *T*-score ranges. The suggested cutoff score for defining impairment correctly classified 85.6% of the normal participants and 77.1% of the brain-damaged patients. Moving the cutoff score one category to the left would correctly classify an additional 10% of normal individuals, but would misclassify an equal percentage of brain-damaged patients (i.e., reducing the overall sensitivity of the score to 67.2%).

Table 6
Predicted and Actual Percentage of Caucasian and African American Participants
in the Normal Group Scoring Within Seven T-Score Ranges

T-score range		0-24	25-34	35-44	45-54	55-64	65-74	75+		0-24	25-34	35-44	45-54	55-64	65-74	75+	
Predicted from normal distribution (%)		0.5	5.5	22.9	38.2	25.4	6.7	0.7		0.5	5.5	22.9	38.2	25.4	6.7	0.7	
Test measure	Abbreviation	% of Caucasians							% of African Americans								
Summary Scores																	
Average Impairment Rating	AIR	0.2	4.7	23.3	40.9	23.0	6.2	1.7	0.0	5.0	25.3	38.8	23.5	5.9	1.3		
Global Deficit Score	GDS	0.0	0.4	30.0	31.8	37.8	0.0	0.0	0.0	1.3	25.7	37.6	35.4	0.0	0.0		
Executive Functions																	
Category Test (errors)	CAT ERROR	0.9	4.3	23.4	38.7	25.0	6.5	1.2	0.8	5.3	21.0	40.7	25.1	6.2	0.9		
Trail Making Test Part B (secs)	TRAIL B	0.7	4.6	23.7	38.3	24.6	7.1	1.1	0.6	4.9	24.0	37.4	25.6	6.9	0.6		
Thurstone Word Fluency (correct)	THUR FLU	0.3	5.4	24.7	36.3	26.8	5.4	1.0	0.2	5.1	24.9	38.4	22.7	7.6	1.0		
Letter Fluency-FAS (total correct)	FAS	0.2	6.1	23.6	37.4	25.3	6.7	0.6	0.4	4.2	24.8	38.7	24.9	5.8	1.2		
Category Fluency-Animals (total correct)	ANIMALS	0.7	4.6	22.9	40.4	25.1	5.1	1.3	0.4	5.4	21.9	38.1	27.7	5.5	0.9		
Attention/Working Memory																	
Paced Auditory Serial Addition Test (total correct)	PASAT	0.4	5.6	23.2	38.4	25.0	7.4	0.0	0.5	5.1	24.1	38.4	23.4	8.3	0.2		
Digit Vigilance-Errors	DIGIT ERROR	0.6	4.9	24.5	34.8	28.5	6.2	0.4	0.0	5.3	27.3	36.9	23.2	7.1	0.3		
Seashore Rhythm Test (correct)	SSHOR RHYM	1.1	4.5	25.1	34.5	28.8	5.7	0.3	0.2	6.4	22.3	32.7	31.5	6.9	0.0		
Speech-Sounds Perception Test (errors)	SPCH PERC	0.1	4.5	25.8	40.9	19.4	7.5	1.9	0.7	3.5	25.0	39.3	23.5	6.5	1.5		
Speed of Information Processing																	
Trail Making Test Part A (secs)	TRAIL A	0.5	5.6	19.5	44.1	23.3	5.7	1.4	0.7	5.5	21.3	42.2	24.0	5.1	1.2		
Digit Vigilance-Time (secs)	DIGIT TIME	0.4	5.2	23.4	39.3	25.1	5.8	0.9	0.0	4.6	24.6	34.3	29.2	5.3	2.0		
Spatial Skills																	
Tactual Performance Test Total Time (min/blk)	TPT TIME	0.4	4.5	23.2	42.0	22.7	5.8	1.5	0.3	5.5	24.2	39.1	24.6	4.8	1.5		
Spatial Relations (rating)	SPAT REL	2.7	8.3	13.5	34.1	39.7	1.7	0.0	3.7	3.4	16.4	32.0	44.5	0.0	0.0		
Verbal/Academic Skills																	
Aphasia Screening Test (errors)	APHAS SCRN	0.2	7.5	22.7	32.6	31.5	5.0	0.5	0.7	3.9	28.3	32.4	25.7	8.6	0.5		
Boston Naming Test (correct)	BSTN NAME	0.3	3.1	26.6	37.4	23.4	8.6	0.6	0.0	4.9	23.4	44.0	18.9	6.3	2.5		
BDAE Complex Ideational Material (correct) ^a	BDAE COMP	1.8	5.2	24.5	21.5	46.3	0.6	0.0									
PIAT Reading Recognition (percentile)	PIAT RECOG	0.4	5.3	26.2	38.7	20.6	7.8	1.1	0.2	8.6	15.7	44.2	24.1	5.9	1.3		
PIAT Reading Comprehension (percentile) ^a	PIAT COMP	0.0	3.8	25.4	40.0	21.6	8.1	1.1									
PIAT Spelling (percentile) ^a	PIAT SPELL	0.0	5.6	24.0	38.4	24.0	8.0	0.0									
Verbal Episodic Memory																	
Story Memory Trial 1 Recall (correct)	STORY-T1	0.4	6.2	22.0	37.8	26.8	6.6	0.2	1.5	6.0	18.2	41.4	27.1	5.5	0.3		
Story Memory Learning (points/trials)	STORY LEARN	0.7	5.3	23.8	36.8	26.7	6.6	0.2	0.2	6.0	25.4	35.4	25.8	6.3	0.9		
Story Memory Delayed Recall (correct)	STORY RECALL	1.8	5.1	20.4	41.1	22.6	9.0	0.0	0.2	6.6	22.9	34.8	28.1	7.4	0.0		
Story Memory Loss (% loss)	STORY LOSS	0.9	4.8	25.5	36.5	18.0	14.3	0.0	0.0	5.3	26.2	37.7	17.7	13.0	0.0		
CVLT Trial 1 (correct)	CVLT-1	0.7	5.0	19.9	42.3	25.1	6.1	0.7	1.4	3.8	23.9	42.7	21.5	6.1	0.5		
CVLT Trial 5 (correct)	CVLT-5	0.6	5.2	21.8	41.3	22.0	8.8	0.4	0.2	5.7	23.5	39.3	23.5	7.0	0.7		
CVLT Trials 1-5 (correct)	CVLT-TOT	0.4	4.7	23.3	40.4	23.6	6.1	1.5	0.5	4.1	24.6	41.3	20.8	7.9	0.7		
CVLT Short Delay Free Recall (correct)	CVLT-SDFR	0.6	6.1	22.2	35.8	29.1	6.1	0.2	0.9	4.1	23.3	39.1	24.6	7.9	0.0		
CVLT Long Delay Free Recall (correct)	CVLT-LDFR	0.9	3.7	22.5	43.4	20.9	8.0	0.6	0.9	4.8	20.3	45.8	20.8	5.9	1.4		

(continued)

Table 6 (continued)
Predicted and Actual Percentage of Caucasian and African American Participants
in the Normal Group Scoring Within Seven T-Score Ranges

T-score range		0-24	25-34	35-44	45-54	55-64	65-74	75+		0-24	25-34	35-44	45-54	55-64	65-74	75+
Predicted from normal distribution (%)		0.5	5.5	22.9	38.2	25.4	6.7	0.7		0.5	5.5	22.9	38.2	25.4	6.7	0.7
Test measure	Abbreviation	% of Caucasians							% of African Americans							
Visual Episodic Memory																
Tactual Performance Test-Memory (correct)	<i>TPT MEM</i>	0.3	6.5	21.9	36.5	28.5	5.3	1.1	0.0	6.0	26.5	34.9	26.9	4.3	1.5	
Tactual Performance Test-Location (correct)	<i>TPT LOC</i>	0.1	3.7	25.7	41.0	22.7	4.2	2.5	0.0	3.9	26.0	43.7	17.5	6.6	2.2	
Figure Memory Trial 1 Recall (correct)	<i>FIGUR-T1</i>	0.7	5.1	23.8	38.2	24.9	6.4	0.9	0.5	5.6	22.2	40.5	23.3	7.5	0.5	
Figure Memory Learning (points/trials)	<i>FIGUR LEARN</i>	0.5	5.2	23.4	38.7	24.5	6.5	1.1	0.2	5.9	22.4	40.2	24.0	6.4	0.9	
Figure Memory Delayed Recall (correct)	<i>FIGUR RECALL</i>	0.7	5.6	19.2	45.3	23.9	4.9	0.4	0.8	6.0	21.0	38.0	27.4	6.8	0.0	
Figure Memory Loss (% loss)	<i>FIGUR LOSS</i>	0.7	7.9	20.3	22.5	48.6	0.0	0.0	0.5	8.6	21.8	23.1	46.0	0.0	0.0	
Sensory Perceptual Skills																
Sensory-Perceptual-Total (errors)	<i>SP TOT</i>	0.0	6.5	23.9	35.6	27.7	6.1	0.2	0.2	4.9	25.3	34.1	29.6	5.9	0.0	
Lateralized Sensorimotor/Psychomotor Comparisons																
Finger Tapping-Dominant (taps)	<i>TAP DH</i>	0.4	4.1	26.3	39.7	21.3	7.2	1.1	0.5	5.6	24.0	40.0	22.6	6.1	1.2	
Finger Tapping-Nondominant (taps)	<i>TAP NDH</i>	0.4	4.7	26.6	35.2	26.1	6.1	1.0	0.7	4.5	22.2	43.6	22.2	5.4	1.4	
Hand Dynamometer-Dominant (kgs)	<i>GRIP DH</i>	0.3	4.3	23.0	41.0	23.7	5.9	1.9	0.5	4.1	24.3	41.3	23.4	3.9	2.5	
Hand Dynamometer-Nondominant (kgs)	<i>GRIP NDH</i>	0.6	4.1	23.6	39.7	24.3	6.2	1.5	1.1	3.3	19.8	46.6	23.2	4.4	1.5	
Grooved Pegboard-Dominant (secs)	<i>PEG DH</i>	0.5	5.2	22.6	39.5	24.3	6.8	1.1	0.2	5.1	23.3	40.9	23.0	5.9	1.6	
Grooved Pegboard-Nondominant (secs)	<i>PEG NDH</i>	0.5	4.8	24.6	38.4	24.3	6.4	1.0	0.6	6.5	20.7	40.2	25.4	5.5	1.1	
Tactual Performance Test-Dominant (min/blk)	<i>TPT DH</i>	0.4	4.1	25.9	40.1	21.9	6.3	1.3	0.0	4.6	25.6	40.3	22.0	5.6	1.9	
Tactual Performance Test-Nondominant (min/blk)	<i>TPT NDH</i>	0.3	4.5	26.0	37.3	25.5	4.4	2.1	0.5	5.5	23.2	39.3	23.1	7.7	0.7	
Tactual Performance Test-Both Hands (min/blk)	<i>TPT BH</i>	0.5	3.2	27.6	37.1	23.1	7.4	1.2	0.0	5.3	24.1	41.3	20.8	7.3	1.2	
Sensory-Perceptual-Right (errors)	<i>SP R</i>	0.5	6.9	24.6	29.9	34.3	3.8	0.0	0.5	5.6	24.4	32.0	32.2	4.9	0.5	
Sensory-Perceptual-Left (errors)	<i>SP L</i>	1.4	8.0	18.3	31.5	37.6	3.1	0.0	0.3	7.2	25.5	24.4	38.5	4.0	0.2	
Tactile Form Recognition-Right (secs)	<i>TFR R</i>	0.5	6.5	21.3	40.3	23.7	6.7	1.0	1.0	5.8	20.1	41.9	23.5	7.3	0.3	
Tactile Form Recognition-Left (secs)	<i>TFR L</i>	0.5	4.5	26.6	33.3	28.5	5.4	1.2	0.7	4.1	24.2	39.6	24.6	5.6	1.2	

Note. BDAE = Boston Diagnostic Aphasia Exam; PIAT = Peabody Individual Achievement Test; CVLT = California Verbal Learning Test.

Table 7
Predicted and Actual Percentage of Caucasian Participants in the
Normal Group Scoring Within Suggested Clinically Relevant T-score Ranges

Category	Test measure	Range of performance							Normal range			
		Impaired range					Normal range			Below average	Average	Above average
		Total impaired	Severe	Moderate to severe	Moderate	Mild to moderate	Mild					
T-score range		0-39	0-19	20-24	25-29	30-34	35-39	40-44	45-54	55+		
Predicted from normal distribution (%)		14.6	0.1	0.4	1.5	4.0	8.6	14.4	38.2	32.8		
Test measure		% of Caucasians							% of Caucasians			
Summary Scores												
Average Impairment Rating	AIR	13.2	0.0	0.2	0.5	4.3	8.4	15.0	40.9	30.9		
Global Deficit Score	GDS	10.3	0.0	0.0	0.0	0.4	9.9	20.2	31.8	37.8		
Executive Functions												
Category Test (errors)	CAT ERROR	13.9	0.1	0.8	0.7	3.6	8.7	14.7	38.7	32.7		
Trail Making Test Part B (secs)	TRAIL B	13.2	0.2	0.5	1.3	3.3	7.9	15.8	38.3	32.8		
Thurstone Word Fluency (correct)	THUR FLU	13.6	0.0	0.3	1.0	4.4	7.8	16.9	36.3	33.2		
Letter Fluency-FAS (total correct)	FAS	16.3	0.0	0.2	2.1	4.0	10.0	13.6	37.4	32.6		
Category Fluency-Animals (total correct)	ANIMALS	15.2	0.0	0.7	1.5	3.1	9.9	13.0	40.4	31.4		
Attention/Working Memory												
Paced Auditory Serial Addition Test (total correct)	PASAT	15.3	0.0	0.4	1.8	3.9	9.2	14.1	38.4	32.4		
Digit Vigilance-Errors	DIGIT ERROR	16.1	0.0	0.6	1.5	3.4	10.5	13.9	34.8	35.2		
Seashore Rhythm Test (correct)	SSHOR RHYM	15.9	0.1	0.9	0.5	4.0	10.3	14.8	34.5	34.8		
Speech-Sounds Perception Test (errors)	SPCH PERC	13.1	0.0	0.1	0.3	4.3	8.4	17.5	40.7	28.7		
Speed of Information Processing												
Trail Making Test Part A (secs)	TRAIL A	12.8	0.2	0.2	1.9	3.7	6.8	12.7	44.1	30.4		
Digit Vigilance-Time (secs)	DIGIT TIME	15.0	0.0	0.4	1.3	3.9	9.4	13.9	39.3	31.8		
Spatial Skills												
Tactual Performance Test Total Time (min/blk)	TPT TIME	13.9	0.1	0.3	0.8	3.7	9.0	14.2	42.0	29.9		
Spatial Relations (rating)	SPAT REL	12.3	1.4	1.4	0.5	7.8	1.3	12.2	34.1	41.4		
Verbal/Academic Skills												
Aphasia Screening Test (errors)	APHAS SCRN	14.9	0.0	0.2	1.1	6.4	7.2	15.5	32.6	37.0		
Boston Naming Test (correct)	BSTN NAME	14.3	0.0	0.3	0.6	2.6	10.9	15.7	37.4	32.6		
BDAE Complex Ideational Material (correct)	BDAE COMP	13.7	1.2	0.6	2.1	3.1	6.7	17.8	21.5	46.9		
PIAT Reading Recognition (percentile)	PIAT RECOG	12.4	0.0	0.4	1.8	3.5	6.7	19.5	38.7	29.4		
PIAT Reading Comprehension (percentile)	PIAT COMP	13.5	0.0	0.0	1.6	2.2	9.7	15.7	40.0	30.8		
PIAT Spelling (percentile)	PIAT SPELL	14.4	0.0	0.0	0.8	4.8	8.8	15.2	38.4	32.0		

(continued)

Table 7 (continued)
Predicted and Actual Percentage of Caucasian Participants in the
Normal Group Scoring Within Suggested Clinically Relevant T-score Ranges

Category	Test measure	Abbreviation	Range of performance								
			Impaired range					Normal range			
			Total impaired	Severe	Moderate to severe	Moderate	Mild to moderate	Mild	Below average	Average	Above average
T-score range			0-39	0-19	20-24	25-29	30-34	35-39	40-44	45-54	55+
Predicted from normal distribution (%)			14.6	0.1	0.4	1.5	4.0	8.6	14.4	38.2	32.8
Test measure		Abbreviation		% of Caucasians					% of Caucasians		
Verbal Episodic Memory											
Story Memory Trial 1 Recall (correct)	STORY-T1	16.5	0.0	0.4	2.0	4.2	9.9	12.1	37.8	33.6	
Story Memory Learning (points/trials)	STORY LEARN	14.5	0.2	0.4	2.0	3.3	8.6	15.2	36.8	33.5	
Story Memory Delayed Recall (correct)	STORY RECALL	13.6	0.0	1.8	0.9	4.2	6.8	13.6	41.1	31.6	
Story Memory Loss (% loss)	STORY LOSS	11.9	0.0	0.9	1.1	3.7	6.2	19.3	36.5	32.3	
CVLT Trial 1 (correct)	CVLT-1	14.3	0.2	0.6	1.5	3.5	8.6	11.4	42.3	32.0	
CVLT Trial 5 (correct)	CVLT-5	15.1	0.0	0.6	0.9	4.3	9.3	12.5	41.3	31.1	
CVLT Trials 1-5 (correct)	CVLT-TOT	13.6	0.2	0.2	1.1	3.5	8.6	14.7	40.4	31.3	
CVLT Short Delay Free Recall (correct)	CVLT-SDFR	15.1	0.4	0.2	2.2	3.9	8.4	13.8	35.8	35.4	
CVLT Long Delay Free Recall (correct)	CVLT-LDFR	13.6	0.2	0.7	1.7	2.0	8.9	13.6	43.4	29.4	
Visual Episodic Memory											
Tactual Performance Test-Memory (correct)	TPT MEM	15.3	0.0	0.3	1.6	4.9	8.6	13.3	36.5	34.8	
Tactual Performance Test-Location (correct)	TPT LOC	13.7	0.0	0.1	0.8	2.9	9.9	15.8	41.0	29.4	
Figure Memory Trial 1 Recall (correct)	FIGUR-T1	13.8	0.2	0.4	2.0	3.1	8.0	15.8	38.2	32.2	
Figure Memory Learning (points/trials)	FIGUR LEARN	15.3	0.0	0.5	0.9	4.3	9.7	13.7	38.7	32.2	
Figure Memory Delayed Recall (correct)	FIGUR RECALL	14.5	0.4	0.2	2.0	3.6	8.3	10.9	45.3	29.2	
Figure Memory Loss (% loss)	FIGUR LOSS	17.8	0.0	0.7	2.5	5.4	9.2	11.0	22.5	48.6	
Sensory Perceptual Skills											
Sensory-Perceptual-Total (errors)	SP TOT	16.5	0.0	0.0	1.6	4.9	10.1	13.9	35.6	34.0	
Lateralized Sensorimotor/Psychomotor Comparisons											
Finger Tapping-Dominant (taps)	TAP DH	14.4	0.0	0.4	1.9	2.2	9.9	16.4	39.7	29.6	
Finger Tapping-Nondominant (taps)	TAP NDH	14.8	0.1	0.2	1.1	3.6	9.7	16.9	35.2	33.1	
Hand Dynamometer-Dominant (kgs)	GRIP DH	13.2	0.1	0.1	1.1	3.2	8.7	14.3	41.0	31.5	
Hand Dynamometer-Nondominant (kgs)	GRIP NDH	13.4	0.0	0.6	0.8	3.3	8.7	14.9	39.7	32.0	
Grooved Pegboard-Dominant (secs)	PEG DH	13.7	0.0	0.5	1.3	3.9	8.0	14.7	39.5	32.2	
Grooved Pegboard-Nondominant (secs)	PEG NDH	13.2	0.1	0.2	1.4	3.5	8.0	16.3	38.3	32.1	
Tactual Performance Test-Dominant (min/blk)	TPT DH	12.4	0.3	0.1	0.4	3.7	7.9	17.9	40.1	29.6	
Tactual Performance Test-Nondominant (min/blk)	TPT NDH	13.5	0.1	0.1	1.5	3.0	8.7	17.3	37.3	31.9	
Tactual Performance Test-Both Hands (min/blk)	TPT BH	12.9	0.3	0.3	0.7	2.5	9.2	18.3	37.1	31.7	
Sensory-Perceptual-Right (errors)	SP R	16.9	0.0	0.5	1.3	5.7	9.4	15.1	29.9	38.1	
Sensory-Perceptual-Left (errors)	SP L	15.4	0.2	1.3	2.8	5.2	6.0	12.3	31.5	40.8	
Tactile Form Recognition-Right (secs)	TFR R	12.8	0.0	0.5	1.2	5.3	5.8	15.5	40.3	31.4	
Tactile Form Recognition-Left (secs)	TFR L	13.0	0.0	0.5	1.7	2.8	7.9	18.7	33.3	35.1	

Note. BDAE = Boston Diagnostic Aphasia Exam; PIAT = Peabody Individual Achievement Test; CVLT = California Verbal Learning Test.

Table 8
Predicted and Actual Percentage of African American Participants in the
Normal Group Scoring Within Suggested Clinically Relevant T-score Ranges

Category	Test measure	Abbreviation	Range of performance						Normal range		
			Impaired range						Normal range		
			Total impaired	Severe	Moderate to severe	Moderate	Mild to moderate	Mild	Below average	Average	Above average
T-score range			0-39	0-19	20-24	25-29	30-34	35-39	40-44	45-54	55+
Predicted from normal distribution (%)			14.6	0.1	0.4	1.5	4.0	8.6	14.4	38.2	32.8
Test measure		% of African American						% of African American			
Summary Scores											
Average Impairment Rating	AIR		15.6	0.0	0.0	0.9	4.2	10.6	14.7	38.8	31.0
Global Deficit Score	GDS		13.2	0.0	0.0	0.2	1.1	11.9	13.8	37.6	35.4
Executive Functions											
Category Test (errors)	CAT ERROR		12.6	0.3	0.5	2.1	3.2	6.5	14.4	40.7	32.2
Trail Making Test Part B (secs)	TRAIL B		14.0	0.0	0.6	1.9	3.0	8.5	15.5	37.4	33.1
Thurstone Word Fluency (correct)	THUR FLU		15.7	0.0	0.2	1.0	4.2	10.3	14.7	38.4	31.3
Letter Fluency-FAS (total correct)	FAS		15.1	0.0	0.4	0.9	3.3	10.4	14.3	38.7	31.9
Category Fluency-Animals (total correct)	ANIMALS		15.6	0.0	0.4	1.8	3.6	9.7	12.1	38.1	34.2
Attention/Working Memory											
Paced Auditory Serial Addition Test (total correct)	PASAT		14.6	0.0	0.5	2.1	3.0	9.0	15.0	38.4	31.9
Digit Vigilance-Errors	DIGIT ERROR		13.4	0.0	0.0	2.0	3.3	8.1	19.2	36.9	30.6
Seashore Rhythm Test (correct)	SSHOR RHYM		16.8	0.0	0.2	1.0	5.4	10.2	12.1	32.7	38.4
Speech-Sounds Perception Test (errors)	SPCH PERC		14.1	0.2	0.5	0.8	2.7	9.9	15.1	39.3	31.5
Speed of Information Processing											
Trail Making Test Part A (secs)	TRAIL A		13.3	0.1	0.6	1.3	4.2	7.0	14.3	42.2	30.3
Digit Vigilance-Time (secs)	DIGIT TIME		15.0	0.0	0.0	0.5	4.1	10.4	14.2	34.3	36.5
Spatial Skills											
Tactual Performance Test Total Time (min/blk)	TPT TIME		14.5	0.0	0.3	0.9	4.6	8.7	15.5	39.1	30.9
Spatial Relations (rating)	SPAT REL		14.3	1.5	2.2	1.2	2.2	7.2	9.2	32.0	44.5
Verbal/Academic Skills											
Aphasia Screening Test (errors)	APHAS SCRN		15.3	0.2	0.5	0.7	3.3	10.6	17.6	32.4	34.8
Boston Naming Test (correct)	BSTN NAME		12.1	0.0	0.0	1.1	3.8	7.2	16.2	44.0	27.7
BDAE Complex Ideational Material (correct) ^a	BDAE COMP										
PIAT Reading Recognition (percentile)	PIAT RECOG		15.0	0.0	0.2	1.5	7.1	6.2	9.4	44.2	31.4
PIAT Reading Comprehension (percentile) ^a	PIAT COMP										
PIAT Spelling (percentile) ^a	PIAT SPELL										

(continued)

Table 8 (continued)
Predicted and Actual Percentage of African American Participants in the
Normal Group Scoring Within Suggested Clinically Relevant T-score Ranges

Category	Test measure	Abbreviation	Range of performance								
			Impaired range					Normal range			
			Total impaired	Severe	Moderate to severe	Moderate	Mild to moderate	Mild	Below average	Average	Above average
T-score range			0-39	0-19	20-24	25-29	30-34	35-39	40-44	45-54	55+
Predicted from normal distribution (%)			14.6	0.1	0.4	1.5	4.0	8.6	14.4	38.2	32.8
Test measure	Abbreviation		% of African American						% of African American		
Visual Episodic Memory											
Tactual Performance Test-Memory (correct)	TPT MEM		13.3	0.0	0.0	1.0	4.9	7.3	19.2	34.9	32.7
Tactual Performance Test-Location (correct)	TPT LOC		13.1	0.0	0.0	1.4	2.6	9.2	16.8	43.7	26.4
Figure Memory Trial 1 Recall (correct)	FIGUR-T1		15.0	0.0	0.5	1.9	3.7	8.9	13.4	40.5	31.2
Figure Memory Learning (points/trials)	FIGUR LEARN		15.9	0.0	0.2	1.6	4.4	9.7	12.8	40.2	31.3
Figure Memory Delayed Recall (correct)	FIGUR RECALL		16.2	0.2	0.6	1.4	4.6	9.4	11.6	38.0	34.2
Figure Memory Loss (% loss)	FIGUR LOSS		16.8	0.0	0.5	0.6	8.0	7.8	14.0	23.1	46.0
Sensory Perceptual Skills											
Sensory-Perceptual-Total (errors)	SP TOT		16.4	0.0	0.2	1.1	3.8	11.3	14.0	34.1	35.5
Lateralized Sensorimotor/Psychomotor Comparisons											
Finger Tapping-Dominant (taps)	TAP DH		14.0	0.5	0.0	1.2	4.5	7.8	16.2	40.0	29.9
Finger Tapping-Nondominant (taps)	TAP NDH		13.7	0.2	0.5	1.9	2.6	8.5	13.7	43.6	29.0
Hand Dynamometer-Dominant (kgs)	GRIP DH		14.2	0.0	0.5	0.5	3.6	9.6	14.7	41.3	29.7
Hand Dynamometer-Nondominant (kgs)	GRIP NDH		12.0	0.5	0.7	0.5	2.8	7.5	12.3	46.6	29.1
Grooved Pegboard-Dominant (secs)	PEG DH		15.7	0.2	0.0	1.2	3.9	10.4	12.9	40.9	30.5
Grooved Pegboard-Nondominant (secs)	PEG NDH		14.4	0.2	0.5	0.6	5.9	7.2	13.6	40.2	31.9
Tactual Performance Test-Dominant (min/blk)	TPT DH		12.8	0.0	0.0	0.3	4.3	8.2	17.4	40.3	29.5
Tactual Performance Test-Nondominant (min/blk)	TPT NDH		14.5	0.0	0.5	0.5	5.0	8.5	14.7	39.3	31.5
Tactual Performance Test-Both Hands (min/blk)	TPT BH		13.1	0.0	0.0	1.7	3.6	7.8	16.2	41.3	29.4
Sensory-Perceptual-Right (errors)	SP R		16.4	0.2	0.5	1.1	4.3	10.4	14.0	32.0	37.6
Sensory-Perceptual-Left (errors)	SP L		16.4	0.2	0.2	2.2	4.9	8.9	16.6	24.4	42.7
Tactile Form Recognition-Right (secs)	TFR R		13.1	0.5	0.5	1.5	4.3	6.3	13.8	41.9	31.2
Tactile Form Recognition-Left (secs)	TFR L		15.0	0.2	0.5	1.9	2.2	10.2	14.0	39.6	31.4
Verbal Episodic Memory											
Story Memory Trial 1 Recall (correct)	STORY-T1		13.8	0.0	1.5	3.1	2.9	6.3	11.8	41.4	32.9
Story Memory Learning (points/trials)	STORY LEARN		16.0	0.0	0.2	0.5	5.5	9.8	15.5	35.4	33.1
Story Memory Delayed Recall (correct)	STORY RECALL		16.1	0.0	0.2	1.9	4.8	9.3	13.6	34.8	35.5
Story Memory Loss (% loss)	STORY LOSS		15.0	0.0	0.0	1.2	4.0	9.8	16.5	37.7	30.7
CVLT Trial 1 (correct)	CVLT-1		13.1	0.9	0.5	1.3	2.5	7.9	16.0	42.7	28.2
CVLT Trial 5 (correct)	CVLT-5		14.2	0.0	0.2	1.4	4.3	8.3	15.3	39.3	31.2
CVLT Trials 1-5 (correct)	CVLT-TOT		14.4	0.0	0.5	1.4	2.7	9.7	14.9	41.3	29.4
CVLT Short Delay Free Recall (correct)	CVLT-SDFR		15.4	0.4	0.5	2.0	2.2	10.4	12.9	39.1	32.5
CVLT Long Delay Free Recall (correct)	CVLT-LDFR		12.9	0.4	0.5	1.4	3.4	7.2	13.1	45.8	28.2

Note. BDAE = Boston Diagnostic Aphasia Exam; PIAT = Peabody Individual Achievement Test; CVLT = California Verbal Learning Test.

^aIt is important to note that no data were collected on the BDAE COMP, PIAT COMP, and PIAT SPELL for the African American sample.

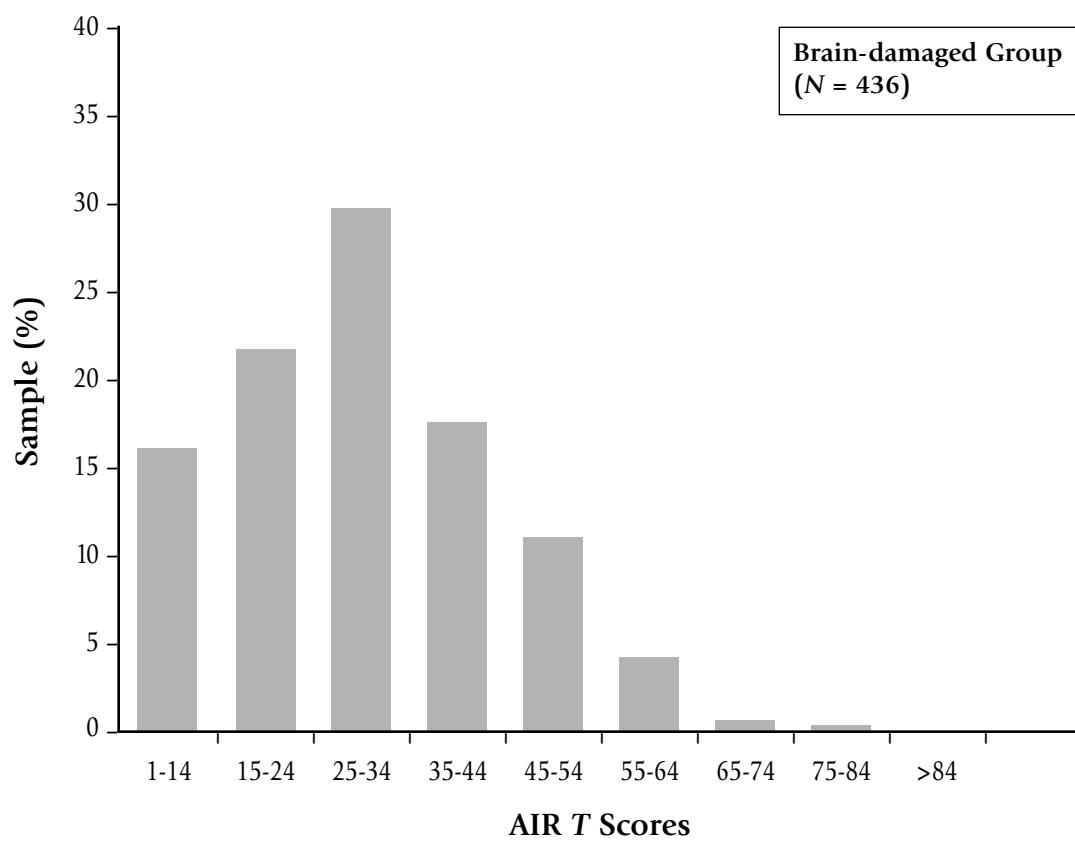
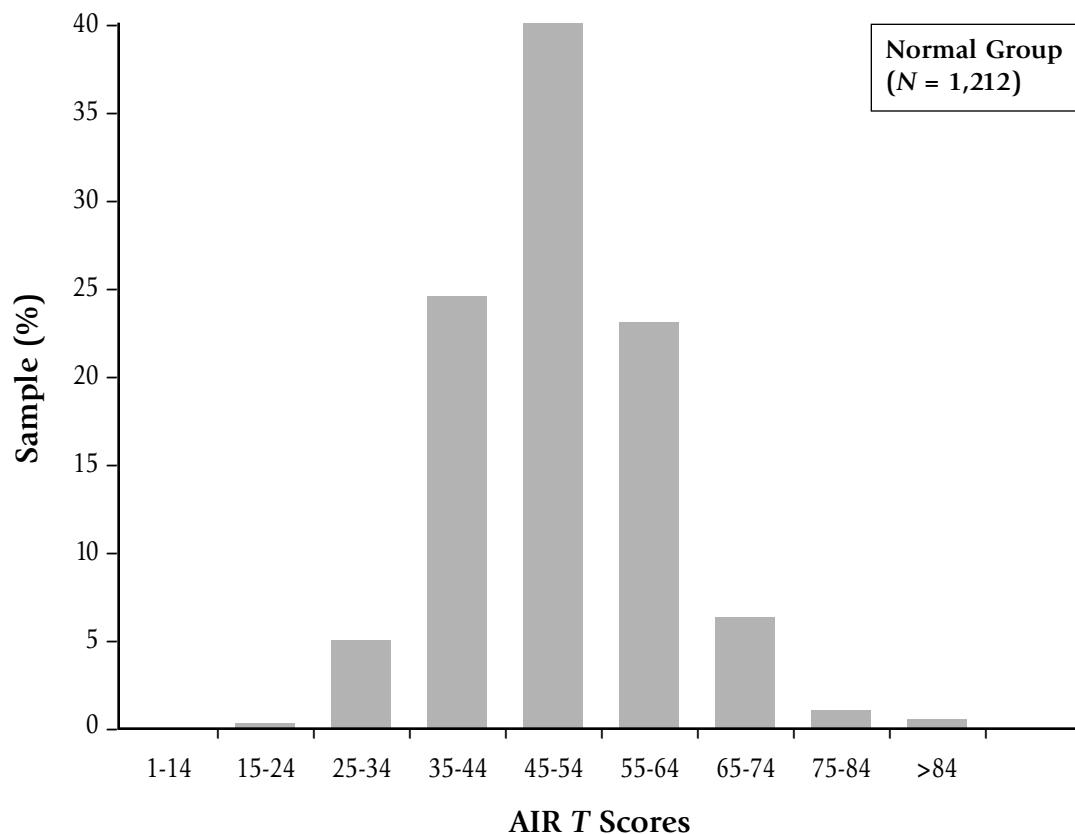


Figure 1. Distribution of Average Impairment Rating (AIR) T scores for normal and brain-damaged groups.

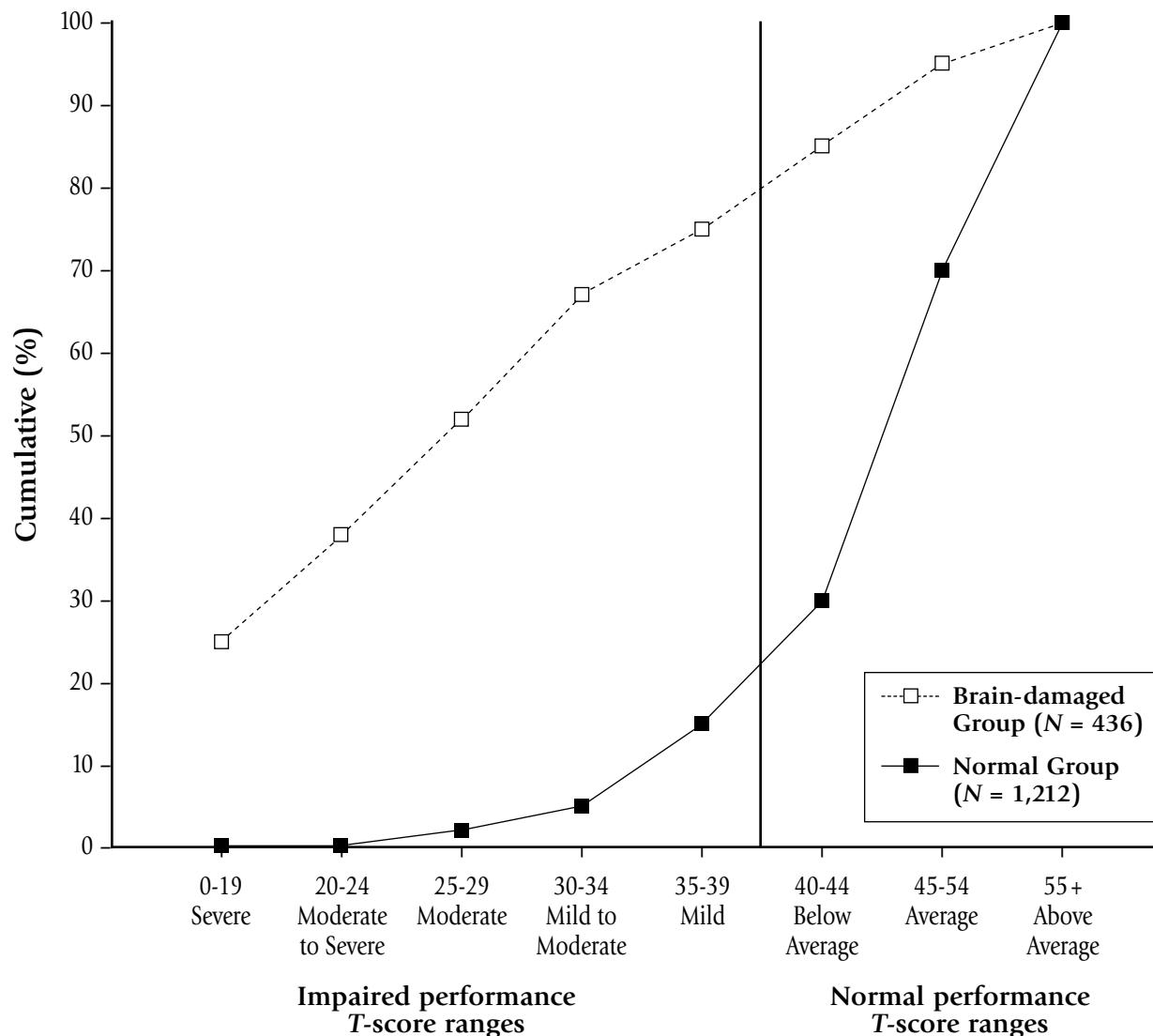


Figure 2. Cumulative frequency distribution of Average Impairment Rating (AIR) *T* scores for normal and brain-damaged groups.

Similarly, shifting the cutoff score one category to the right would pick up only a small percentage of additional brain-damaged patients and would result in a false positive rate for normal individuals that most clinicians would consider unacceptable. In the current example, the suggested *T*-score cutoff point (*T* score ≥ 40) provided good sensitivity and specificity, as well as a fairly even balance between the two types of diagnostic error. Very similar results have been reported for the WAIS-III and WMS-III batteries, using the joint WAIS/WMS national standardization sample and a group of 126 patients who had brain disorders with mixed etiologies (Taylor & Heaton, 2001).

Further Refinement and Validation of the Global Deficit Score (GDS)

The process for converting the GDS raw scores to *T* scores was done differently than the other test measures. The guiding principles were (a) to map GDS *T* scores onto the clinically based conceptual model of impairment ranges (presented in Figure 2), and (b) to match for *T* scores within the normal range (*T* score ≥ 40) with cumulative frequency expectations based on the normal curve. Thus, the beginning of the mild impairment range was a *T* score of 39 and a GDS of 0.50 (actually 0.4945 before rounding); similarly, the beginning of the mild to

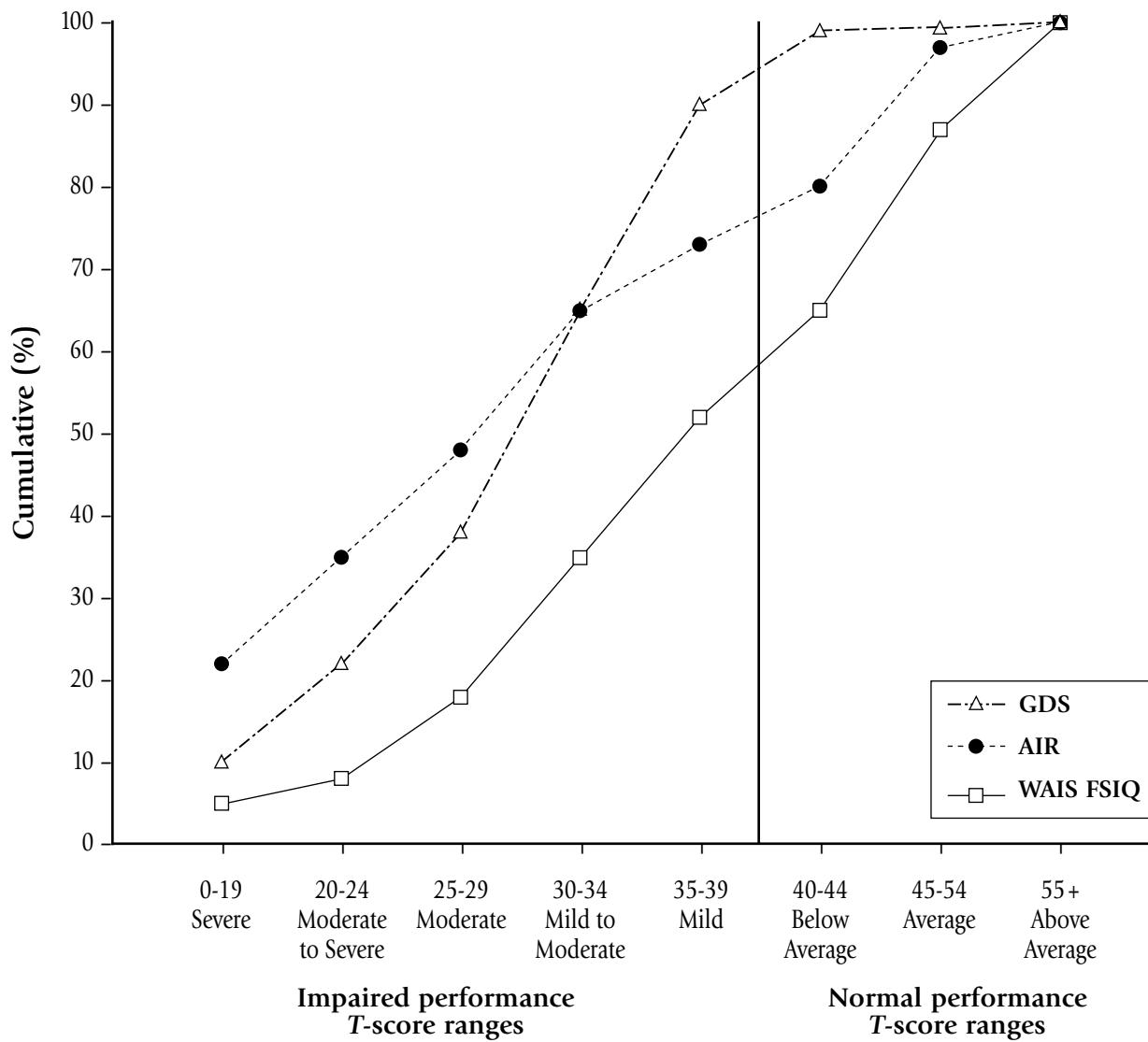


Figure 3. Cumulative frequency distribution for the brain-damaged group with complete data on all variables ($n = 436$) of the Global Deficit Score (GDS), Average Impairment Rating (AIR), and WAIS Full Scale IQ (WAIS FSIQ) T scores.

moderate impairment range was a T score of 34 and a GDS of 1.00, the moderate impairment range started with a T score of 29 and a GDS of 1.50, and so forth. Equal GDS ranges were assigned to T scores in between these cutpoints, and the same GDS width per individual T score was projected downward within the severe impairment range. Within the normal range, a separate strategy was used. The beginning was a T score of 40 and a GDS of 0.4944. Then, using the GDS frequency distribution of the total sample of normal individuals who had sufficient data to complete the summary score ($n = 770$), the GDS ranges were matched as closely as possible with the cumulative frequencies that would be associated with a perfectly normal distribution. This yielded a mean

GDS T score for normal individuals of 49.7 ($SD = 7.6$). Also, of the 770 normal adults, 87 (11.3%) scored within the mild impairment range (T score = 35-39), 7 (0.91%) scored within the mild to moderate impairment range (T score = 30-34), and 1 (0.13%) scored in the moderately impaired range ($T = 25-29$); none obtained a GDS T score lower than 25. The resulting 87.66% specificity estimate (12.34% false positive error rate) for the GDS T score is only slightly different from (and usually better than) the predicted and actual values for T scores on the AIR and on individual tests in the battery (see Tables 7 and 8). The obtained frequencies of the GDS T scores in the three normal ranges (below average, average, and above average) also were close to predictions based upon

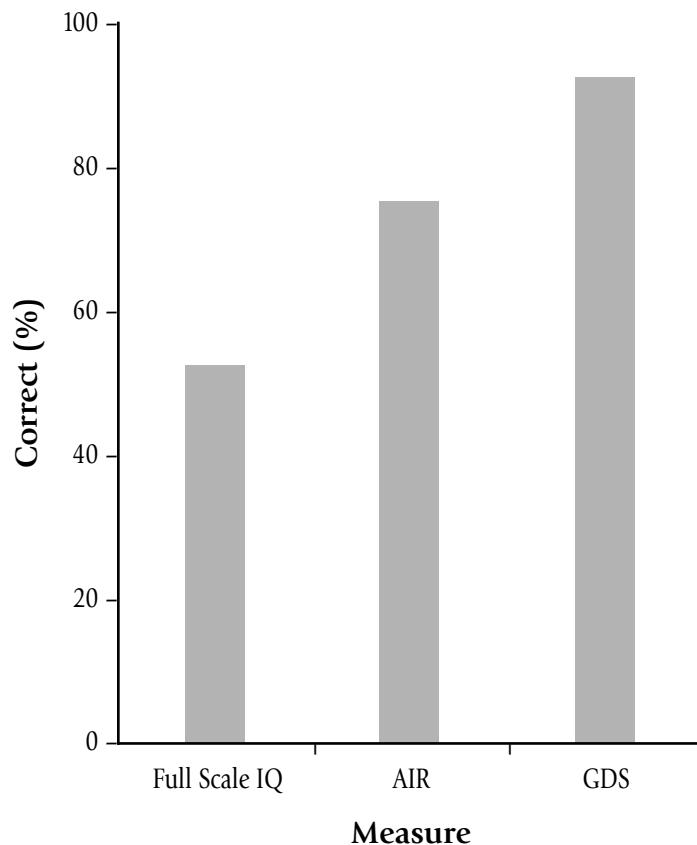


Figure 4. Sensitivity estimates for the WAIS Full Scale IQ (WAIS FSIQ), Average Impairment Rating (AIR), and Global Deficit Score (GDS), using 1 SD cutoffs on the respective *T* scores of 436 brain-damaged patients.

a normal distribution; respectively, they were 15.7% versus 14.4%, 35.8% versus 38.2%, and 36.1% versus 32.8%. Using the Kolmogorov-Smirnov procedure, the cumulative frequencies of the obtained GDS *T* scores across these eight *T*-score ranges did not differ significantly from the normal distribution. Also, these *T* scores were virtually unrelated to age, education, sex, and ethnicity.

Figures 1 and 2 demonstrated that the AIR *T* score, with a 1 *SD* cutoff, provides very acceptable sensitivity, as well as specificity, in classifying patients with respect to presence or absence of cerebral abnormality. To determine how the sensitivity of the GDS *T* scores compares with the *T* scores of both the AIR and the WAIS-III/WAIS-R/WAIS FSIQ, the frequency distributions of these respective *T* scores for the 370 brain-damaged patients who had sufficient test data to compute the GDS were examined. The cumulative frequency results for the eight *T*-score ranges are shown in Figure 3. Overall, the sensitivity of the AIR was somewhat better than that of the WAIS FSIQ (74.6% vs. 52.2%, McNemar $\chi^2[df = 1] = 60.8, p < .001$), but the GDS improved significantly upon the sensitivity of the

AIR (91.4% vs. 74.6%; McNemar $\chi^2[df = 1] = 58.1, p < .001$) (see Figure 4). The use of the GDS approach with coverage of a broader range of neuropsychological functions (especially including episodic memory) thus appears to improve upon the classification accuracies of the two other summary scores.

An additional set of analyses was performed to determine how comparable the current *T* scores are with those obtained using the authors' previously published norms. These analyses used only normal Caucasian participants (again, the previous norms were based on samples of virtually all Caucasian individuals). Table 9 presents the percentages of participants scoring within 5, 7, and 10 *T*-score points on the two normative systems for the HRB tests and 10 added test measures, and also the percentage of agreement regarding presence or absence of impairment. Despite using somewhat different participant samples and different statistical approaches to the development of norms, relatively small differences in *T* scores and impairment classifications were observed in most instances.

Table 9
Differences Between Old and New Normative System *T* scores for Normal Caucasian Participants

Test measure	Abbreviation	% within 5 points	% within 7 points	% within 10 points	% with same impairment classifications
Summary Scores					
Average Impairment Rating	AIR	95.2	98.8	99.8	93.1
Executive Functions					
Category Test (errors)	CAT ERROR	96.6	100.0	100.0	97.1
Trail Making Test Part B (secs)	TRAIL B	95.7	99.5	100.0	94.4
Thurstone Word Fluency (correct)	THUR FLU	88.6	99.0	100.0	93.3
Attention/Working Memory					
Digit Vigilance–Errors	DIGIT ERROR	72.0	87.1	97.8	91.4
Seashore Rhythm Test (correct)	SSHOR RHYM	92.4	98.5	100.0	92.9
Speech-Sounds Perception Test (errors)	SPCH PERC	99.3	100.0	100.0	94.1
Speed of Information Processing					
Trail Making Test Part A (secs)	TRAIL A	98.4	99.9	99.9	96.3
Digit Vigilance–Time (secs)	DIGIT TIME	98.4	99.5	100.0	95.7
Spatial Skills					
Tactual Performance Test Total Time (min/blk)	TPT TIME	95.3	99.1	99.9	94.2
Spatial Relations (rating)	SPAT REL	99.2	100.0	100.0	99.0
Verbal/Academic Skills					
Aphasia Screening Test (errors)	APHAS SCRN	90.2	98.6	100.0	93.1
Boston Naming Test (correct)	BSTN NAME	48.7	77.4	93.5	89.9
PIAT Reading Recognition (percentile)	PIAT RECOG	76.6	88.7	98.6	96.5
Verbal Episodic Memory					
Story Memory Learning (points/trials)	STORY LEARN	98.9	100.0	100.0	96.1
Story Memory Loss (% loss)	STORY LOSS	90.8	98.0	99.8	97.4
Visual Episodic Memory					
Tactual Performance Test–Memory (correct)	TPT MEM	98.4	100.0	100.0	96.2
Tactual Performance Test–Location (correct)	TPT LOC	100.0	100.0	100.0	97.7
Figure Memory Learning (points/trials)	FIGUR LEARN	67.1	94.1	99.8	88.7
Figure Memory Loss (% loss)	FIGUR LOSS	90.1	98.9	100.0	89.4
Sensory Perceptual Skills					
Sensory-Perceptual–Total (errors)	SP TOT	99.8	100.0	100.0	96.2
Lateralized Sensorimotor/Psychomotor Comparisons					
Finger Tapping–Dominant (taps)	TAP DH	99.5	99.9	100.0	92.4
Finger Tapping–Nondominant (taps)	TAP NDH	93.8	99.0	99.9	92.8
Hand Dynamometer–Dominant (kgs)	GRIP DH	90.2	95.6	99.6	91.3
Hand Dynamometer–Nondominant (kgs)	GRIP NDH	91.2	97.8	99.9	92.3
Grooved Pegboard–Dominant (secs)	PEG DH	96.1	99.0	99.9	94.7
Grooved Pegboard–Nondominant (secs)	PEG NDH	91.5	97.3	100.0	93.0
Tactual Performance Test–Dominant (min/blk)	TPT DH	94.7	98.7	99.6	92.4
Tactual Performance Test–Nondominant (min/blk)	TPT NDH	96.8	99.9	100.0	94.8
Tactual Performance Test–Both Hands (min/blk)	TPT BH	95.0	100.0	100.0	86.4
Sensory-Perceptual–Right (errors)	SP R	97.5	99.8	100.0	94.9
Sensory-Perceptual–Left (errors)	SP L	100.0	100.0	100.0	96.8
Tactile Form Recognition–Right (secs)	TFR R	100.0	100.0	100.0	97.1
Tactile Form Recognition–Left (secs)	TFR L	99.8	100.0	100.0	95.2

Note. PIAT = Peabody Individual Achievement Test.

Chapter 5

USE OF THE DEMOGRAPHIC CORRECTION SYSTEM

Converting Raw Scores to *T* Scores

The conversion of raw test scores to demographically corrected *T* scores can be done in either of two ways: (a) using the computer software available through the publisher, or (b) using Appendixes C through G in this manual. The computer program has the advantage of providing somewhat more precise conversions, because it uses exact age and education values to calculate *T* scores rather than the 10 age and 6 educational ranges provided in Appendixes D and E. Although the *T* scores provided in Appendixes D and E are based on the midpoints of each age and education range, the discrepancies between *T* scores in the appendixes and those generated by the computer program are actually fairly small. When three representative test variables (AIR, PASAT, and Story Memory Learning) were compared, the absolute difference between the *T* scores derived from the computer program and those from Appendixes D and E had means of 1.25 ($SD = 1.11$), 0.79 ($SD = .74$) and 0.89 ($SD = .85$), for the respective test measures. Furthermore, differences of 0 to 2 points between *T* scores derived by these two methods were found for 88.0% of the sample on AIR, 98.4% on the PASAT, and 97.0% on Story Memory Learning; the largest discrepancy found for any participant on any of these variables was 5 points. However, it also should be noted that in some situations (e.g., forensic evaluations), the additional accuracy provided by the computer program may be more important.

A Record Form is available to facilitate the use of Appendixes C through G to derive and display *T* scores and to calculate the GDS score. This booklet provides a list of the test variables, along with spaces for recording each raw score and its corresponding scaled and *T* scores. The booklet also provides areas for capturing patient

information, as well as profile grids for plotting *T* scores for the three summary scores and groups of measures organized within nine ability domains, and lateralized sensorimotor and psychomotor measures from the HRB (see Figures 5-8 for examples). A few additional variables and alternatives to "primary variables" that require some explanation also can be found on the Record Form. First, the Sensory-Perceptual and Motor Skills domains, which are intended to highlight the presence and severity of impairment in these domains, include "worst hand" measures. The operational definition of "worst hand" is the hand with the lower *T* scores on a particular test; this can be readily identified in the section for "Lateralized Sensorimotor/Psychomotor Comparisons." (If equal *T* scores are obtained for both hands, record the dominant hand results; if the score for one hand are valid but tests for the other hand are invalid due to peripheral injuries, use the valid scores as "worst hand" scores—avoid using scores for GDS that are not considered valid measures of brain functioning.). Also, for computation of the GDS, substitutions are permitted for letter fluency (use either the Thurstone Word Fluency or Letter Fluency-FAS) and for verbal episodic memory (use Story Memory Test or CVLT). In addition, for the convenience of users, the inclusion of the *T*-score conversions for the WCST-Perseverative Errors score can be found in Appendix F. In addition, spaces also are provided to record selected measures from any one of the three versions of the WAIS, which in most cases will be administered along with the other measures in this test battery. The WAIS measures selected include *T* scores for a FSIQ, and for each of four major abilities that have been identified by factor analysis of the WAIS-III: Verbal Comprehension, Working Memory, Perceptual Organization, and Processing Speed. Note that when using the WAIS-III,

these particular *T* scores are not available in the current manual, and must be obtained from the WAIS-III/WMS-III/WIAT-II Scoring Assistant software (The Psychological Corporation, 1999). However, for Wechsler's 1995 version of the WAIS, age-, education-, and sex-adjusted *T* scores are available in this manual and can be generated with our associated software. These *T* scores are based on the Caucasian sample used for the authors' original HRB norms and must be used cautiously with other ethnic groups. The WAIS-R *T* scores also are available in this manual and associated software. These *T* scores are based upon the WAIS-R national standardization sample of adults (ages 20-74 years). Although the sample was census matched at the time of its recruitment, it included rather few participants from non-Caucasian groups (e.g., only 142 African Americans and 34 Hispanics ages 20 years and older). Thus, the authors suggest that the WAIS-R *T* scores also are primarily applicable to Caucasians, because they comprised 89.2% of the normative sample. By contrast, the WAIS-III *T* scores are based upon a normative sample with much larger representation of African Americans and English-speaking Hispanics (see Heaton et al., 2003). These *T* scores, which again are available from the WAIS-III/WMS-III/WIAT-II Scoring Assistant software program, are adjusted for age, education, sex, and these three ethnicities.

Only for the WAIS-III, demographically adjusted *T* scores also are available for the four cognitive factors measured by the instrument (i.e., the Verbal Comprehension Index, Working Memory Index, Perceptual Organization Index, and Processing Speed Index). *T* scores for these indexes are expected to be of greatest interest to neuropsychologists. However, as described previously, for earlier versions of the WAIS, representative subtests within the respective factors may be substituted (Vocabulary, Digit Span, Block Design, and Digit Symbol). However, in interpreting these results for non-Caucasian patients, it is important to keep in mind that *T* scores for the earlier versions of the WAIS are not adjusted for ethnicity. To help highlight this distinction, the Record Form includes an "NE" (not ethnicity adjusted) designation beside the WAIS/WAIS-R scores and the four other test variables that have no available adjustments for ethnicity. As mentioned in chapter 3, the appendixes in this manual include *T*-score conversions for selected WAIS and WAIS-R measures; these were taken directly from the previous versions of this manual (Heaton, et al., 1991) and reprinted here for those users who continue to use earlier versions of the WAIS.

Keeping these definitional issues in mind, the first step in obtaining the *T* scores is to record the raw scores for all of the tests that were administered. Care should be taken to ensure that the raw score units are the ones specified for each measure (e.g., minutes-per-block are used for all time measures of the Tactual Performance Test, error scores are used for the Speech-Sounds Perception Test, and number correct scores are used for the Seashore Rhythm Test). The next step is to locate and record the corresponding scaled scores from Appendix C. In addition to providing the data in the standard units needed for the next step in the *T*-score conversion process, scaled scores can be clinically useful in their own right; clinical issues that are best addressed using raw or scaled scores will be discussed later in this chapter.

The final step in the *T*-score conversion process is to find the pages in Appendix D (for Caucasian-based norms) or Appendix E (for African American-based norms) and Appendix F (for the WCST-Perseverative Errors) that correspond to the individual's sex, education, and age, and to locate the *T* score that corresponds to the previously recorded scaled score for each test variable. Note again that the educational level in Appendixes D, E, and F corresponds to the actual number of years of regular academic schooling the individual has successfully completed; vocational/trade school years are not counted, and no additional credit is given for completion of a GED. Also, partial years are not counted (e.g., $11\frac{1}{2} = 11$), nor are years in which the individual obtained an overall failing grade point average. Finally, credit for 12 years requires awarding of a high school diploma (otherwise, count as 11), credit for 16 years must be associated with a bachelor's degree (otherwise, count as 15), credit for 18 years requires a master's degree (otherwise, count as 17), and credit for 20 years requires completion of a doctoral degree (otherwise, count as 19). More details and examples regarding the determination of "education years" are provided in chapter 4, which also contains a discussion of whether and how one might consider coursework completed in "special education" classes.

Provided that valid data are available for at least 18 of the designated 21 GDS components (see the Global Deficit Score section in chapter 3), the examiner can compute the GDS. On pages 2 and 3 of the Record Form, spaces are provided in the far right column for all 21 GDS components (as well as for the two CVLT variables that can be substituted for comparable measures from the Story Memory Test). A box at the bottom of page 3 of the Record Form provides guidelines for the *T* score to deficit score conversion. Following this guide, a 0 to 5

deficit score should be recorded for each available GDS component. Then, deficit scores are summed and averaged to derive the GDS. Note that this GDS "raw score" is already adjusted for age, education, sex, and for Caucasian versus African American ethnicity, and it has no scaled score metric.

Appendix G is used to convert the GDS to a *T* score, which is then recorded in the Summary Scores section on page 2 of the Record Form.

The profiles provided in the Record Form allow the clinician to record the *T* scores for the three summary scores and the ability-related measures. The clinician simply records the *T* scores in the space provided below the profile and then plots the *T* scores for a graphic picture of the test battery results.

The authors have found that after a bit of practice, all of the above steps can be performed quite readily by neuropsychological examiners. However, the HRB-Revised Scoring Program, the software published by PAR (Heaton, Miller, Taylor, & Grant, 2004) greatly facilitates the process and only requires the examiner to input the individual's demographic and raw score information. The program automatically computes the *T* scores and deficit scores (including the GDS), classifies each score qualitatively (e.g., above average to severe impairment) and graphically displays all 11 sets of *T*-score variables. The computed *T* scores are based upon education and age as continuous variables (vs. midpoints of ranges as presented in Appendixes D and E) and, therefore, are slightly more accurate. Finally, the software allows for batching and exporting data on groups of patients to facilitate research applications.

Clinical Case Examples

To illustrate the use of the *T*-score conversion system, test data from four patients who were referred to the authors' laboratories for clinical neuropsychological assessments are presented. In all cases, the medical information presented is accurate, but numerous small (clinically insignificant) changes to the demographics and test scores have been made to protect confidentiality.

Patient 1 (P.E.)

P.E. is a 66-year-old, right-handed, Caucasian, female, high school graduate with a long history of low back pain and multiple psychiatric hospitalizations for depression and anxiety. In the past, she was employed for a number of years as a factory worker, but she retired about 8 years earlier due to chronic pain and problems with "nerves."

At the time of her referral for neuropsychological testing, she was again undergoing inpatient psychiatric evaluation and treatment for depression. She complained of problems with her memory and other mental functions, and some psychological testing on the hospital ward suggested the possibility of a dementing disorder. More comprehensive neuropsychological testing was requested to help confirm or rule out this possibility.

The patient denied any history of learning disability, head trauma, neurological illness, or substance abuse. At the time of testing, she was prescribed acetaminophen with codeine (Tylenol® No. 3) as needed, but had not been taking antidepressant medication for some months. The testing was accomplished without difficulty, except that her bilateral hearing loss invalidated the auditory suppression testing in the Sensory-Perceptual Exam and also the Speech Sounds Perception Test. P.E.'s effort on all tests appeared to be sufficient to yield valid results.

Figure 5 presents P.E.'s raw test scores, followed by her corresponding scaled scores and *T* scores. The patterns of *T* scores are also profiled in an accompanying graph. Although P.E.'s FSIQ on the 1955 version of the WAIS is above 100, the *T* score (from Heaton et al., 1991) reveals that this is actually at the juncture between the below average and mild impairment ranges for her demographic group. However, her *T* scores on the AIR and GDS, which are more sensitive to brain disorders, are both more solidly normal (*T* scores of 52 and 45, respectively). Also, P.E. shows a flat and generally below average profile on the WAIS, with her normatively worst (mild impairment) performance coming on the Vocabulary subtest. This is representative of the Wechsler Verbal Comprehension Factor is highly dependent upon educational background and not particularly sensitive to cerebral dysfunction, especially in the absence of convincing evidence of acquired language/communication impairment (dysphasia).

It is of some concern that two of P.E.'s worst scores on the HRB also were on the two verbal subtests, namely the Aphasia Screening Exam and the Speech-Sounds Perception Test. On the other hand, the quality of her performance on the Aphasia Screening Test did not suggest acquired dysphasia and would be quite consistent with a slight verbal intellectual weakness that has been present since childhood (i.e., she was slow at calculating and made minor errors in spelling, reading, writing, and pronouncing complex words). She had never been better than an average student, had not gone beyond high school, and had always worked in nonverbally oriented jobs. In addition, her mildly impaired performance on

**Record Form for the Revised Comprehensive Norms
for an Expanded Halstead-Reitan Battery:
Demographically Adjusted Neuropsychological Norms
for African American and Caucasian Adults**

Robert K. Heaton, PhD, S. Walden Miller, PhD, Michael J. Taylor, PhD, and Igor Grant, MD

Name P.E. Date of Birth 11/01/37 Age 66 Sex F
Education 12 Handedness R Ethnicity Caucasian

Date of Examination 11/10/03 Version of WAIS Used: WAIS-III WAIS-R WAIS None
Examiner Melissa
Peripheral Injuries Bilateral hearing loss
Referred by Dr. White
Working Diagnosis Rule out dementing disorder
Medications Acetaminophen with codeine

Clinical Notes and Comments: Speech Sounds Perception Test is considered invalid because of patient's high frequency hearing loss. AIR and GDS are prorated without the Speech Sounds Perception Test.

Some clients/patients may occasionally produce test scores that are considered invalid for neurodiagnostic purposes, because the relevant performances were affected by peripheral factors (e.g., hearing loss or injury to an upper extremity) or suboptimal effort. It is recommended that such problems be noted in the "Clinical Notes and Comments" section. To help avoid misinterpretation, care should be taken to avoid using invalid test scores in the computation of the Global Deficit Score (GDS).

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Figure 5. Clinical case example for Patient 1 (P.E.).

Summary Scores

WAIS-III Full Scale IQ
 WAIS-R Full Scale IQ ^(NE)
 WAIS Full Scale IQ ^(NE)
 Average Impairment Rating
 Global Deficit Score

Abbreviation	Raw Score	Scaled Score	T Score	Descriptive Classification	Deficit Score
WAIS-III FS IQ	103	8	40	<Average	
WAIS-R FS IQ					
WAIS FS IQ					
AIR	1.36	8	52	Average	
GDS	2500	45		Average	

Executive Functions

WCST-Perseverative Errors ^(NE)
 Category Test (errors)
 Trail Making Test Part B (secs)
 Thurstone Word Fluency (correct)
 Letter Fluency-FAS (total correct)
 Category Fluency-Animals (total correct)

WCST	43		37	Mild	
CAT ERROR	64	7	49	Average	0
TRAIL B	106	7	43	<Average	0
THUR FLU					
FAS	39	7	42	<Average	0
ANIMALS					

Attention/Working Memory

WAIS-III Working Memory Index
 WAIS-R Digit Span ^(NE)
 WAIS Digit Span ^(NE)
 Paced Auditory Serial Addition Test (total correct)
 Digit Vigilance-Errors
 Seashore Rhythm Test (correct)
 Speech-Sounds Perception Test (errors)

WAIS-III WKG MEM	9	8	47	Average	
WAIS-R DIGIT SPAN					
WAIS DIGIT SPAN					
PASAT					
DIGIT ERROR	6	9	50	Average	0
SSHOR RHYM	27	10	51	Average	0
SPCH PERC	15	6	38	Invalid	

Speed of Information Processing

WAIS-III Processing Speed Index
 WAIS-R Digit Symbol ^(NE)
 WAIS Digit Symbol ^(NE)
 Trail Making Test Part A (secs)
 Digit Vigilance-Time (secs)

WAIS-III PSI	7	6	44	<Average	
WAIS-R DIGIT SYMB					
WAIS DIGIT SYMB					
TRAIL A	44	7	44	<Average	0
DIGIT TIME	568	5	34	Mild-Moderate	2

Spatial Skills

WAIS-III Perceptual Organization Index
 WAIS-R Block Design ^(NE)
 WAIS Block Design ^(NE)
 Tactual Performance Test Total Time (min/blk)
 Spatial Relations (rating)

WAIS-III POI	7	6	42	<Average	
WAIS-R BLOCK DESGN					
WAIS BLOCK DESGN					
TPT TIME	0.500	9	57	>Average	0
SPAT REL	3	9	47 *	Average	0

Verbal/Academic Skills

WAIS-III Verbal Comprehension Index
 WAIS-R Vocabulary ^(NE)
 WAIS Vocabulary ^(NE)
 Aphasia Screening Test (errors)
 Boston Naming Test (correct)
 BDAE Complex Ideational Material ^(NE) (correct)
 PIAT Reading Recognition (percentile)
 PIAT Reading Comprehension ^(NE) (percentile)
 PIAT Spelling ^(NE) (percentile)

WAIS-III VCI	9	7	39	Mild	
WAIS-R VOCAB					
WAIS VOCAB					
APHAS SCRN	12	5	28	Moderate	3
BSTN NAME	49	7	42	<Average	0
BDAE COMP	12	12	58 *	>Average	
PIAT RECOG	24	6	36	Mild	
PIAT COMP	20	5	34	Mild-Moderate	
PIAT SPELL	35	8	41	<Average	

① Sum of Deficit Scores (page 2): 5

Verbal Episodic Memory	Abbreviation	Raw Score	Scaled Score	T Score	Descriptive Classification	Deficit Score
Story Memory Trial 1 Recall (correct)	STORY-T1	14.0	10	56	>Average	
Story Memory Learning (points/trials)	STORY LEARN	10.00	9	54	Average	0
Story Memory Delayed Recall (correct)	STORY RECALL	19.0	12	58	>Average	0
Story Memory Loss (% loss)	STORY LOSS	5.00	11	54	Average	
CVLT Trial 1 (correct)	CVLT-1	—	—	—	—	
CVLT Trial 5 (correct)	CVLT-5	—	—	—	—	
CVLT Trials 1-5 (correct) [†]	CVLT-TOT	—	—	—	—	(alt) [†]
CVLT Short Delay Free Recall (correct)	CVLT-SDFR	—	—	—	—	
CVLT Long Delay Free Recall (correct) [†]	CVLT-LDFR	—	—	—	—	(alt) [†]

Visual Episodic Memory

Tactual Performance Test—Memory (correct)	TPT MEM	6	7	45	Average	0
Tactual Performance Test—Location (correct)	TPT LOC	3	9	53	Average	0
Figure Memory Trial 1 Recall (correct)	FIGUR-T1	12	9	56	>Average	
Figure Memory Learning (points/trials)	FIGUR LEARN	5.30	7	48	Average	0
Figure Memory Delayed Recall (correct)	FIGUR RECALL	15	10	53	Average	0
Figure Memory Loss (% loss)	FIGUR LOSS	6.00	10	49*	Average	

Sensory Perceptual Skills

Sensory-Perceptual-Total (errors)	SP TOT	2.0	11	56	>Average	0
Tactile Form Recognition—Worst Hand (secs)	TFR WH	9.5	11	59	>Average	

Motor Skills

Finger Tapping—Worst Hand (taps)	TAP WH	42.6	8	54	Average	0
Hand Dynamometer—Worst Hand (kgs)	GRIP WH	24.0	6	48	Average	
Grooved Pegboard—Worst Hand (secs)	PEG WH	77	8	51	Average	0

Lateralized Sensorimotor/Psychomotor Comparisons

Finger Tapping—Dominant (taps)	TAP DH	45.4	8	55	>Average	
Finger Tapping—Nondominant (taps)	TAP NDH	42.6	8	54	Average	
Hand Dynamometer—Dominant (kgs)	GRIP DH	24.0	6	48	Average	
Hand Dynamometer—Nondominant (kgs)	GRIP NDH	20.5	6	48	Average	
Grooved Pegboard—Dominant (secs)	PEG DH	68	9	55	>Average	
Grooved Pegboard—Nondominant (secs)	PEG NDH	77	8	51	Average	
Tactual Performance Test—Dominant (min/blk)	TPT DH	0.76	8	48	Average	
Tactual Performance Test—Nondominant (min/blk)	TPT NDH	0.48	10	59	>Average	
Tactual Performance Test—Both Hands (min/blk)	TPT BH	0.28	10	57	>Average	
Sensory-Perceptual—Right (errors)	SP R	2.0	10	51	Average	
Sensory-Perceptual—Left (errors)	SP L	0	13	64*	>Average	
Tactile Form Recognition—Right (secs)	TFR R	9.5	11	59	>Average	
Tactile Form Recognition—Left (secs)	TFR L	7.5	12	62	>Average	

T-Score to Deficit-Score Conversion		
T score	Descriptive Classification	Deficit Score
55+	Above Average	0
45-54	Average	0
40-44	Below Average	0
35-39	Mild Impairment	1
30-34	Mild to Moderate Impairment	2
25-29	Moderate Impairment	3
20-24	Moderate to Severe Impairment	4
0-19	Severe Impairment	5

(NE) Score is not adjusted for ethnicity. Interpret T scores cautiously for non-Caucasian examinees.

* T scores for this variable are not normally distributed, but have satisfactory specificity for T score < 40 cutoff.

† For computation of the GDS, the CVLT measures may be used as alternates for Story Memory Learning and Story Memory Delayed Recall.

② Sum of Deficit Scores (page 3): 0

① Sum of Deficit Scores (page 2): 5

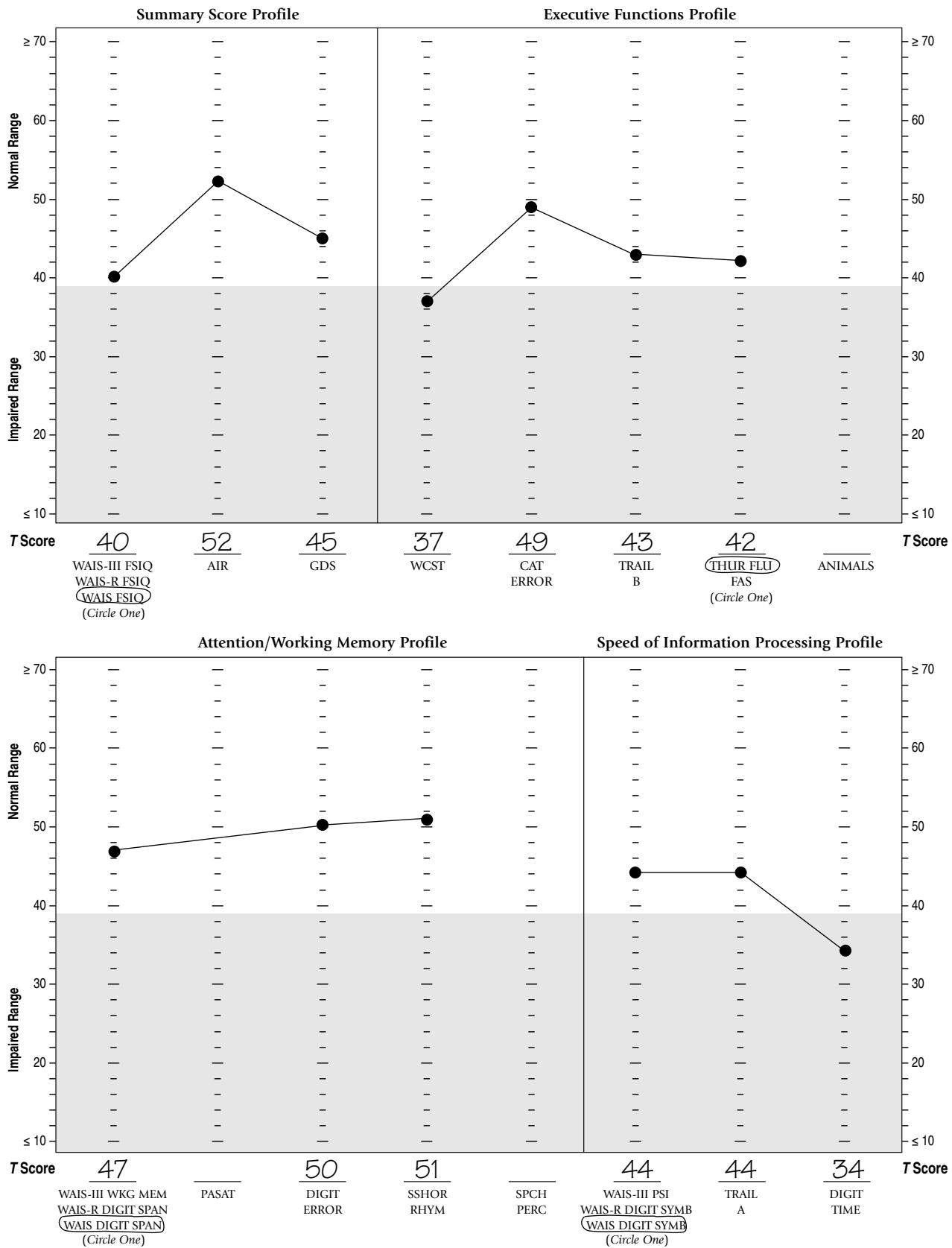
③ GDS Total (① + ②): 5

④ Number of tests in GDS: 20

GDS raw score = (③ ÷ ④): 2500

⑤ GDS to T-score conversion: 45
(see Appendix G)

Record the GDS scores in the Summary Scores section on page 2.



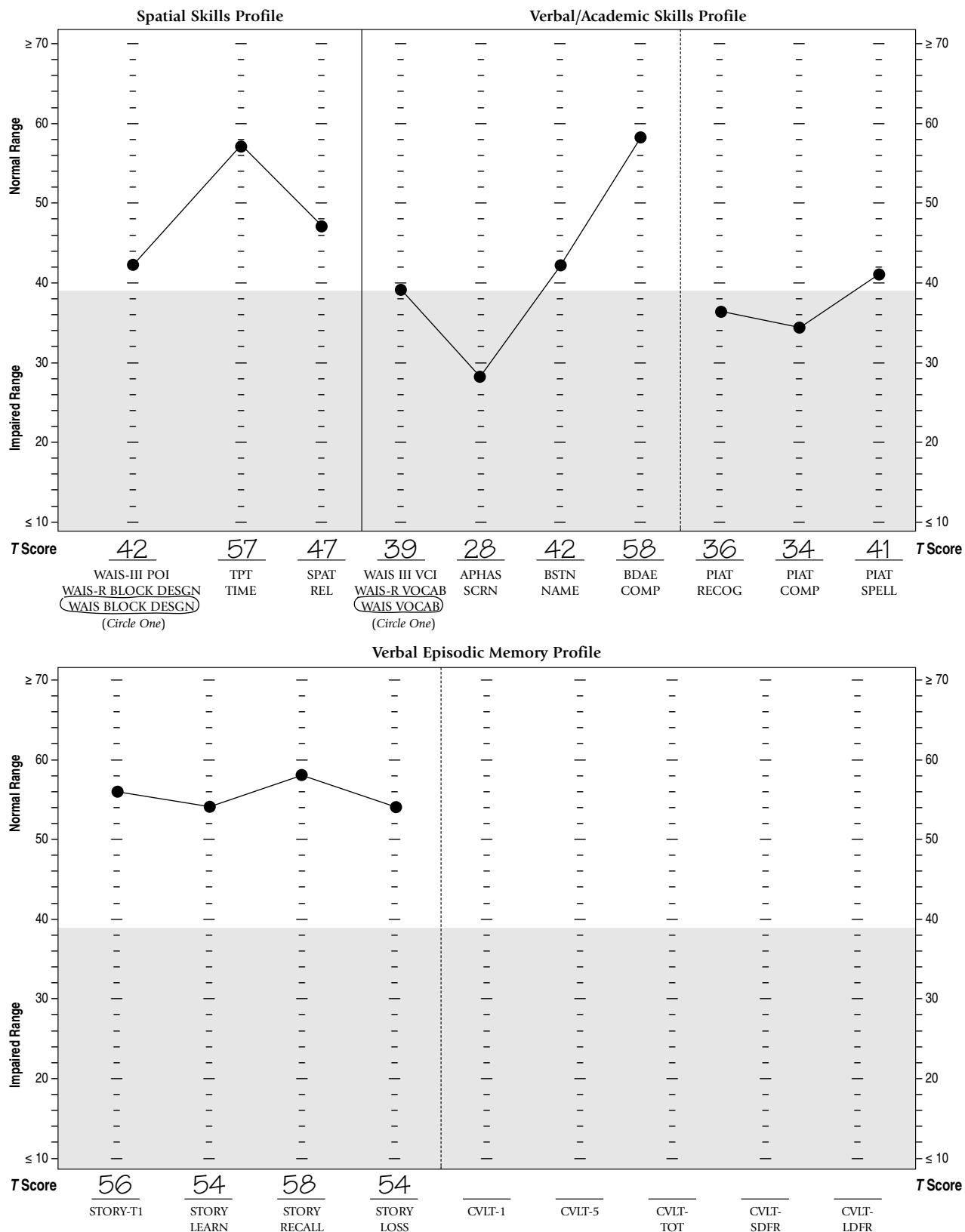
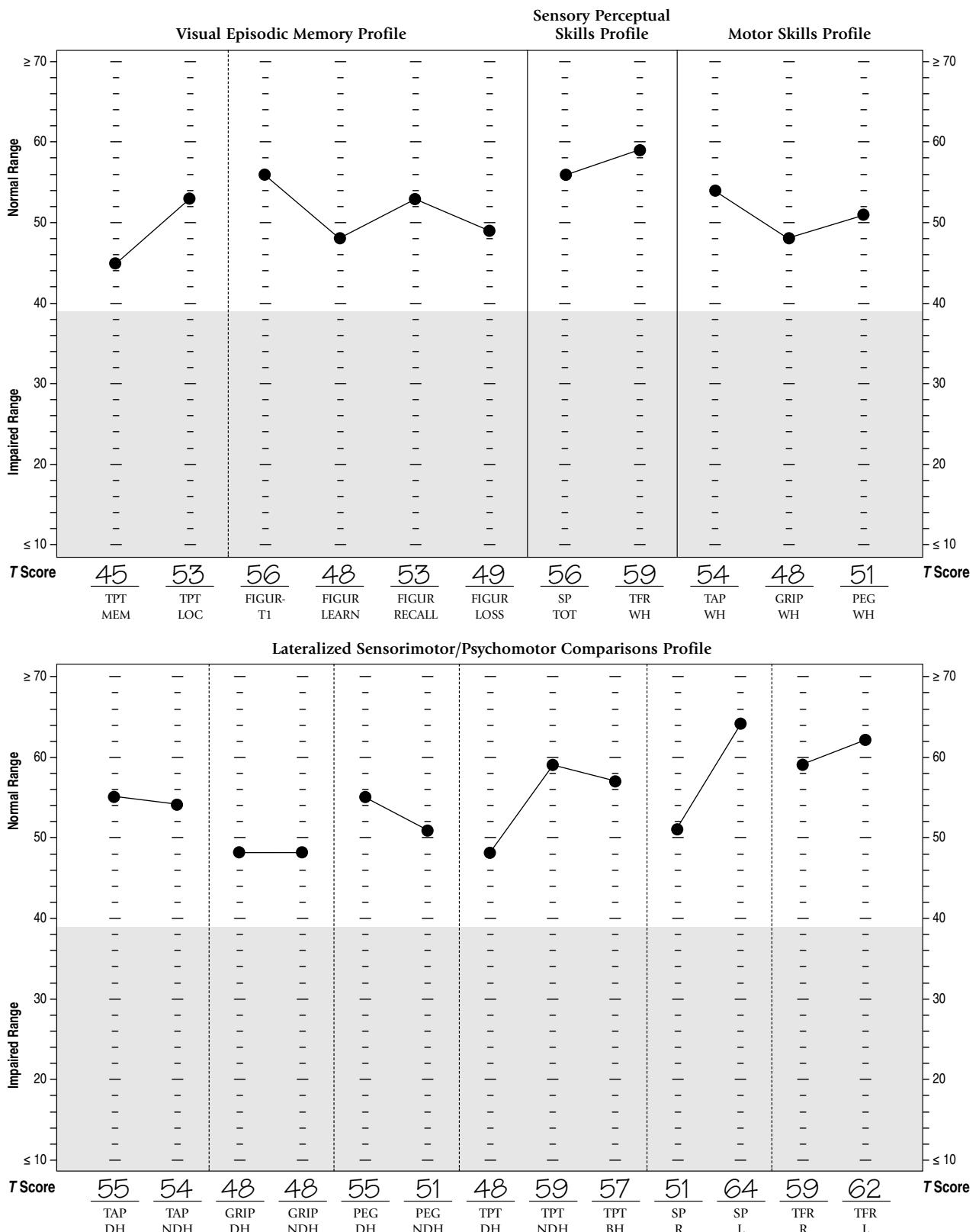


Figure 5. (continued)



the Speech-Sounds Perception Test is not considered a valid indication of brain dysfunction, because of bilateral hearing loss. Our experience indicates that high-frequency hearing loss is not uncommon in older persons and will often cause poor performance on this particular test (but not, as a rule, on other auditory tests such as Seashore Rhythm).

Further reassurance that P.E. probably does not have any acquired language impairments are her performances on the BNT and BDAE Complex Ideational Material subtest. Her *T* score on the BNT is within normal limits, which would be unusual in any kind of acquired dysphasia. Also, although her score on this test is below average, it is slightly better than would be predicted from her Basic Vocabulary (WAIS). Her perfect score on the most sensitive test to receptive language impairment (BDAE Complex Ideational Material) further supports the decision to discount P.E.'s poor performance on the Speech-Sounds Perception Test.

Within the Verbal/Academic Skills domain, she also was mildly to moderately impaired on PIAT Reading Comprehension and was mildly impaired on PIAT Reading Recognition (i.e., oral reading). Although *T* scores for Reading Comprehension tend to be much lower than those for Reading Recognition in patients with dementia of the Alzheimer's type (Filley et al., 1989), in this case, the discrepancy is not pronounced and all three PIAT scores are well below average. Also, measures of oral reading are known to be relatively insensitive to most cerebral disorders and, as a consequence, are frequently used as the best "current ability-based" estimates of premorbid intelligence (Nelson & O'Connell, 1978; however, see also Gladsjo et al., 1999, and Stebbins, Wilson, Gilley, Bernard, & Fox, 1990, for some limitations of this method). In general, therefore, P.E.'s results on the PIAT are not particularly suggestive of a dementing disorder, and more likely reflect a longstanding relative weakness in verbal/academic skills.

It is interesting to note that several raw score measures on the core HRB are within the range typically considered "impaired" by population norms. These include the Category Test, the Trail Making Test Parts A and B, the Tactual Performance Test-Location, and the Finger Tapping-Worst Hand, in addition to the above-mentioned Aphasia Screening Test. However, the *T* scores reveal that most of these results are entirely within normal limits (frequently even above average) for her demographic characteristics.

Analysis of P.E.'s results on the remaining ability domains reveals isolated impaired performances on just

2 of the 29 test variables: Digit Vigilance-Time and WCST-Perseverative Errors. It is possible that some slowness and cognitive inflexibility could have resulted from her severe depression and/or her chronic pain and ongoing use of narcotic analgesic medication. However, these two results, considered together with the other normal scores in the Executive Functions and Speed of Information Processing domains, are not sufficient to classify her as having definite impairments in these ability domains. Also, again, her overall percentage of "impaired" test results on the entire battery (as reflected by the GDS) is well within normal limits.

Finally, P.E.'s Spatial Skills, Sensory-Perceptual, Motor Skills, and both Verbal and Visual Episodic Memory are completely normal. Her above average episodic memory, in particular, would argue strongly against the possibility of any dementing process in this case.

To summarize, although many of P.E.'s test results would be considered "impaired" by population norms, almost all of her results are within normal limits for a woman of her age and educational level. She had no pathognomonic signs of a cerebral disorder and no significant right-left differences on sensorimotor and psychomotor tests. Moreover, several of her test findings argue strongly *against* a dementing disorder. These include her normal conceptual and problem-solving skills (e.g., Category Test, Tactual Performance Test Total Time) and the fact that her verbal and nonverbal learning and memory were entirely within normal limits (e.g., Story Memory Test, Figure Memory Test, Tactual Performance Test [Memory and Location]). Finally, a number of factors were considered important in interpreting her few mildly abnormal findings as probably not reflecting a dementing disorder: her chronic depression and pain, her current use of narcotic analgesics, her bilateral hearing loss, and a history and pattern of test findings, which would be consistent with a longstanding relative weakness of verbal/academic skills.

It was concluded that P.E.'s test results do not reflect any clinically significant, acquired neurocognitive impairment. It is noteworthy, however, that whereas the demographically corrected *T* scores facilitated the clinical interpretation of P.E.'s results, the interpretation involved consideration of numerous additional factors that were not directly observable in the *T* scores. It should be emphasized in this regard that the present demographic correction system cannot replace clinical judgment and is only a tool to facilitate the larger process of clinical interpretation.

Patient 2 (T.J.)

T.J. is a 30-year-old, right-handed, Caucasian, male, college graduate who began experiencing seizures about 2 years before the referral for his current testing. His spells typically involved an intense experience of fear, automatic thoughts, and shaking of his left hand, lasting 2 to 3 minutes. An EEG recording during one of his spells showed left temporal spike discharges. This was associated with *right* hand shaking and some transient post-ictal dysphasia. Recent CT and MR brain scans revealed some diffuse ventricular dilation, as well as a large left medial temporal lobe mass. At the time of testing, his seizure disorder was well controlled on carbamazepine, 600 mg per day; he was not taking any other medication. He had been employed for the preceding 4 years as an office manager. Although he thought his job performance continued to be adequate, he rated himself as having significant difficulties with concentration, memory, word finding, understanding what people said to him, knowing where he was, finding his way about, following new directions and instructions, general problem solving, and performing motor tasks with his left hand. The neuropsychological testing was requested to provide baseline measures of his neurocognitive functioning prior to his scheduled craniotomy for what was found to be a cerebrovascular malformation in the left medial temporal area.

T.J. had no other past history of neurological illness. He had been dazed a few times in sports accidents during childhood, but there were no apparent neurological sequelae. He was always a B+ student, and he denied any history of substance abuse.

The neuropsychological testing proceeded without difficulty. There was no behavioral evidence of seizure activity during the testing day, and T.J.'s effort on all tests appeared to be sufficient to yield valid results. Figure 6 contains the lists of T.J.'s raw test scores, the associated scaled scores and *T* scores, and the *T*-score profiles.

Using the standard norms in the original (1955) WAIS manual, almost all of T.J.'s results on this test are in the average or above average ranges. On the other hand, the *T* scores reveal that his FSIQ is at the bottom of the below average range and that his scores on three of the four subtests representing WAIS factors are below normal expectations for a young college graduate. Although two of these (Digit Symbol and Digit Span) are on subtests that are relatively sensitive to cerebral dysfunction, his mildly deficient performance on a test of word knowledge (Vocabulary) often would not be considered suggestive of an acquired impairment—indeed, this is how a similar

Vocabulary performance was interpreted for the patient P.E. (see Figure 5). T.J., however, differs from P.E. in that he had always done well in verbal/academic pursuits (including school and a verbally oriented job), and that he also showed strong evidence of acquired language impairment and acquired verbal memory deficits on other tests in the battery.

Although T.J.'s raw score on the AIR is normal by population norms, it is in the mild to moderately impaired range after demographic adjustment. In this case, of course, the demographic corrections have an effect opposite to the one observed with the previously described patient, P.E. (i.e., for a young college graduate, the *T* scores apply performance standards that are higher than those reflected in the population norms).

T.J.'s GDS, which is also within the mild to moderately impaired range, clearly reflects broad impairments beyond the core HRB. Indeed, his GDS is almost at a level that is pathognomonic of cerebral dysfunction, in that only 1.4% of 770 normal participants obtained a raw score this high (or *T* score this low) on the most sensitive neuropsychological summary measure.

Inspection of T.J.'s results across the nine ability domains reveals both expected and some unexpected aspects of the profile. The only domains that are not affected are Executive Functions and Motor Skills, and there is only equivocal evidence of problems with Attention/Working Memory and Speed of Information Processing. The former findings would suggest relative sparing of systems mediated by frontal lobe circuitry. The exceptionally poor results with both hands on the Tactual Performance Test, together with normal motor skills, also would be consistent with primary nonfrontal involvements.

T.J. shows several deficits consistent with his known left temporal lobe lesion. Although he gave no evidence of gross language disturbance on the Aphasia Screening Test, he was clearly impaired on the BNT. On this test, he very frequently gave correct names of pictured items only after being provided phonemic cues, thus providing strong evidence of difficulty thinking of words he actually knew; this supports his complaints of word-finding difficulties in his everyday life. The testing also supported his report of occasional problems following and understanding the speech of others: His *T* score on BDAE Complex Ideational Material is virtually outside the distribution of normal individuals on this test (see Table 7). On the PIAT, his oral reading skills tested at the ninth-grade level. Although this is in the functional range for routine everyday purposes, it is clearly below normal expectations for a college graduate. Also, although oral

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Demographically Adjusted Neuropsychological Norms
for African American and Caucasian Adults**

Robert K. Heaton, PhD, S. Walden Miller, PhD, Michael J. Taylor, PhD, and Igor Grant, MD

Name T.J. Date of Birth 07/23/73 Age 30 Sex M
Education 16 Handedness R Ethnicity Caucasian

Date of Examination 10/27/03 Version of WAIS Used: WAIS-III WAIS-R WAIS None
Examiner Jennifer
Peripheral Injuries None
Referred by Dr. Ruiz
Working Diagnosis Cerebrovascular malformation in left temporal lobe, epilepsy
Medications Carbamazepine (600 mg/day)

Clinical Notes and Comments:

Some clients/patients may occasionally produce test scores that are considered invalid for neurodiagnostic purposes, because the relevant performances were affected by peripheral factors (e.g., hearing loss or injury to an upper extremity) or suboptimal effort. It is recommended that such problems be noted in the "Clinical Notes and Comments" section. To help avoid misinterpretation, care should be taken to avoid using invalid test scores in the computation of the Global Deficit Score (GDS).

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Figure 6. Clinical case example for Patient 2 (T.J.).

Summary Scores	Abbreviation	Raw Score	Scaled Score	T Score	Descriptive Classification	Deficit Score
WAIS-III Full Scale IQ	WAIS-III FSIQ	106	9	42	<Average	
WAIS-R Full Scale IQ ^(NE)	WAIS-R FSIQ					
WAIS Full Scale IQ ^(NE)	WAIS FSIQ					
Average Impairment Rating	AIR	1.25	9	31	Mild-Moderate	
Global Deficit Score	GDS	1.1429		33	Mild-Moderate	
Executive Functions						
WCST-Perseverative Errors ^(NE)	WCST	9		45	Average	
Category Test (errors)	CAT ERROR	25	11	44	<Average	0
Trail Making Test Part B (secs)	TRAIL B	35	15	61	>Average	0
Thurstone Word Fluency (correct)	THUR FLU					
Letter Fluency-FAS (total correct)	FAS	46	9	39	Mild	1
Category Fluency-Animals (total correct)	ANIMALS					
Attention/Working Memory						
WAIS-III Working Memory Index	WAIS-III WKG MEM					
WAIS-R Digit Span ^(NE)	WAIS-R DIGIT SPAN	9	8	39	Mild	
WAIS Digit Span ^(NE)	WAIS DIGIT SPAN					
Paced Auditory Serial Addition Test (total correct)	PASAT					
Digit Vigilance-Errors	DIGIT ERROR	1	13	57	>Average	0
Seashore Rhythm Test (correct)	SSHOR RHYM	26	9	37	Mild	1
Speech-Sounds Perception Test (errors)	SPCH PERC	2	13	53	Average	0
Speed of Information Processing						
WAIS-III Processing Speed Index	WAIS-III PSI					
WAIS-R Digit Symbol ^(NE)	WAIS-R DIGIT SYMB	8	7	28	Moderate	
WAIS Digit Symbol ^(NE)	WAIS DIGIT SYMB					
Trail Making Test Part A (secs)	TRAIL A	21	12	49	Average	0
Digit Vigilance-Time (secs)	DIGIT TIME	397	9	43	<Average	0
Spatial Skills						
WAIS-III Perceptual Organization Index	WAIS-III POI					
WAIS-R Block Design ^(NE)	WAIS-R BLOCK DESGN	14	13	54	Average	
WAIS Block Design ^(NE)	WAIS BLOCK DESGN					
Tactual Performance Test Total Time (min/blk)	TPT TIME	1.650	4	18	Severe	5
Spatial Relations (rating)	SPAT REL	4	7	43 *	<Average	2
Verbal/Academic Skills						
WAIS-III Verbal Comprehension Index	WAIS-III VCI					
WAIS-R Vocabulary ^(NE)	WAIS-R VOCAB	11	9	37	Mild	
WAIS Vocabulary ^(NE)	WAIS VOCAB					
Aphasia Screening Test (errors)	APHAS SCRN	0	13	61	>Average	0
Boston Naming Test (correct)	BSTN NAME	47	7	32	Mild-Moderate	2
BDAE Complex Ideational Material ^(NE) (correct)	BDAE COMP	9	5	22 *	Moderate-Severe	
PIAT Reading Recognition (percentile)	PIAT RECOG	27	7	35	Mild	
PIAT Reading Comprehension ^(NE) (percentile)	PIAT COMP	89	13	56	>Average	
PIAT Spelling ^(NE) (percentile)	PIAT SPELL	10	7	34	Mild-Moderate	

① Sum of Deficit Scores (page 2): 11

	Abbreviation	Raw Score	Scaled Score	T Score	Descriptive Classification	Deficit Score
Verbal Episodic Memory						
Story Memory Trial 1 Recall (correct)	STORY-T1	11.0	9	39	Mild	
Story Memory Learning (points/trials)	STORY LEARN	8.00	7	31	Mild-Moderate	2
Story Memory Delayed Recall (correct)	STORY RECALL	9.5	4	21	Moderate-Severe	4
Story Memory Loss (% loss)	STORY LOSS	40.60	3	27	Moderate	
CVLT Trial 1 (correct)	CVLT-1	—	—	—	—	
CVLT Trial 5 (correct)	CVLT-5	—	—	—	—	
CVLT Trials 1-5 (correct) [†]	CVLT-TOT	—	—	—	—	(alt) [†]
CVLT Short Delay Free Recall (correct)	CVLT-SDFR	—	—	—	—	
CVLT Long Delay Free Recall (correct) [†]	CVLT-LDFR	—	—	—	—	(alt) [†]
Visual Episodic Memory						
Tactual Performance Test-Memory (correct)	TPT MEM	5	6	26	Moderate	3
Tactual Performance Test-Location (correct)	TPT LOC	1	7	30	Mild-Moderate	2
Figure Memory Trial 1 Recall (correct)	FIGUR-T1	11	9	35	Mild	
Figure Memory Learning (points/trials)	FIGUR LEARN	9.00	10	40	<Average	0
Figure Memory Delayed Recall (correct)	FIGUR RECALL	14	9	43	<Average	0
Figure Memory Loss (% loss)	FIGUR LOSS	22.20	7	38*	Mild	
Sensory Perceptual Skills						
Sensory-Perceptual-Total (errors)	SP TOT	10.0	6	33	Mild-Moderate	2
Tactile Form Recognition-Worst Hand (secs)	TFR WH	13.0	8	40	<Average	
Motor Skills						
Finger Tapping-Worst Hand (taps)	TAP WH	58.6	13	56	>Average	0
Hand Dynamometer-Worst Hand (kgs)	GRIP WH	50.0	12	46	Average	
Grooved Pegboard-Worst Hand (secs)	PEG WH	66	10	43	<Average	0
Lateralized Sensorimotor/Psychomotor Comparisons						
Finger Tapping-Dominant (taps)	TAP DH	58.6	13	56	>Average	
Finger Tapping-Nondominant (taps)	TAP NDH	52.0	13	54	Average	
Hand Dynamometer-Dominant (kgs)	GRIP DH	50.0	12	46	Average	
Hand Dynamometer-Nondominant (kgs)	GRIP NDH	47.5	12	46	Average	
Grooved Pegboard-Dominant (secs)	PEG DH	66	10	43	<Average	
Grooved Pegboard-Nondominant (secs)	PEG NDH	68	10	43	<Average	
Tactual Performance Test-Dominant (min/blk)	TPT DH	1.67	6	27	Moderate	
Tactual Performance Test-Nondominant (min/blk)	TPT NDH	10.00	0	0	Severe	
Tactual Performance Test-Both Hands (min/blk)	TPT BH	0.81	6	21	Moderate-Severe	
Sensory-Perceptual-Right (errors)	SP R	3.0	9	40	<Average	
Sensory-Perceptual-Left (errors)	SP L	7.0	5	26*	Moderate	
Tactile Form Recognition-Right (secs)	TFR R	12.0	9	44	<Average	
Tactile Form Recognition-Left (secs)	TFR L	13.0	8	40	<Average	
T-Score to Deficit-Score Conversion						
<i>T</i> score	Descriptive Classification		Deficit Score			
55+	Above Average		0			
45-54	Average		0			
40-44	Below Average		0			
35-39	Mild Impairment		1			
30-34	Mild to Moderate Impairment		2			
25-29	Moderate Impairment		3			
20-24	Moderate to Severe Impairment		4			
0-19	Severe Impairment		5			

(NE) Score is not adjusted for ethnicity. Interpret *T* scores cautiously for non-Caucasian examinees.

* *T* scores for this variable are not normally distributed, but have satisfactory specificity for *T* score < 40 cutoff.

† For computation of the GDS, the CVLT measures may be used as alternates for Story Memory Learning and Story Memory Delayed Recall.

② Sum of Deficit Scores (page 3): 13

① Sum of Deficit Scores (page 2): 11

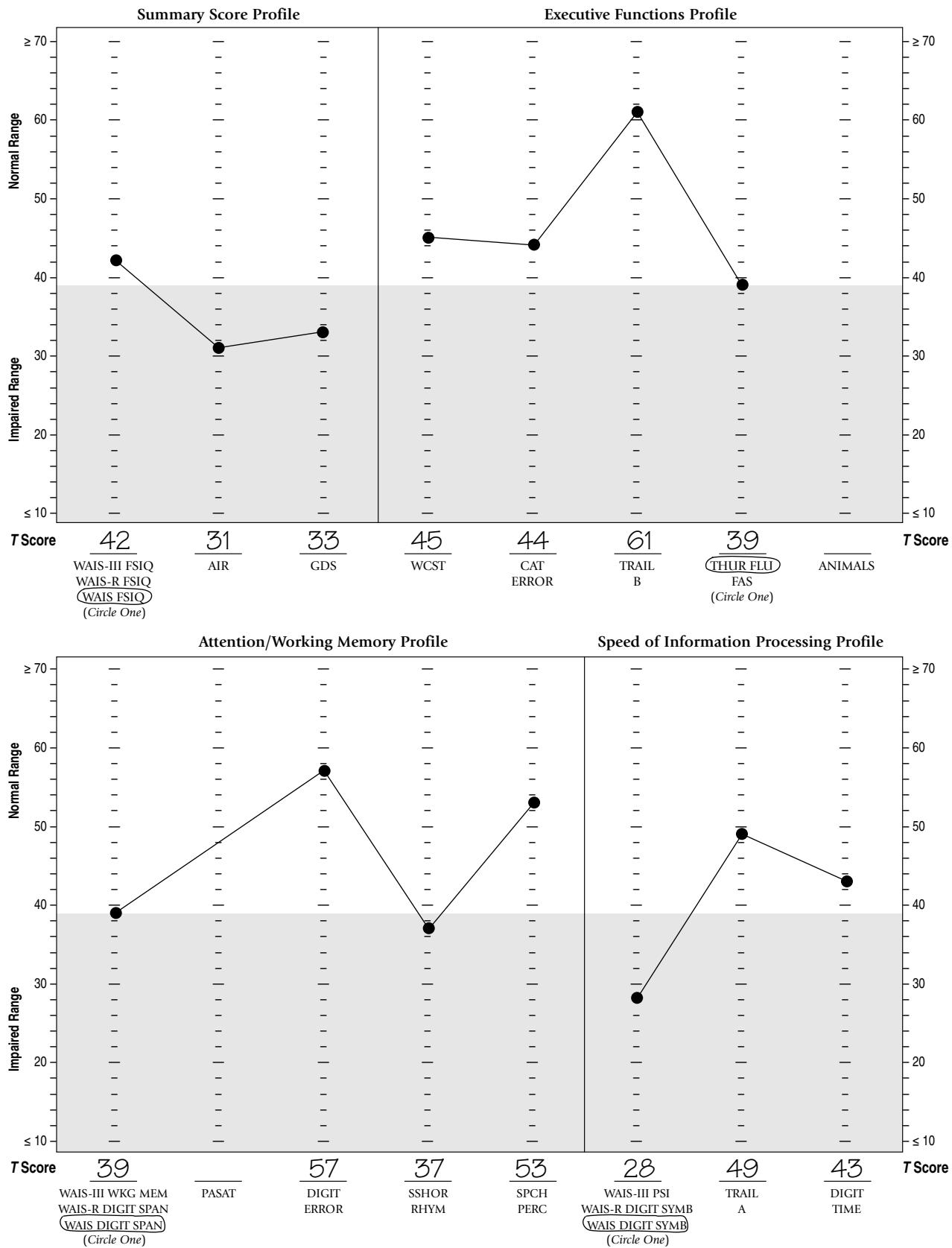
③ GDS Total (① + ②): 24

④ Number of tests in GDS: 21

GDS raw score = (③ ÷ ④): 1.1429

⑤ GDS to *T*-score conversion: 33
(see Appendix G)

Record the GDS scores in the Summary Scores section on page 2.



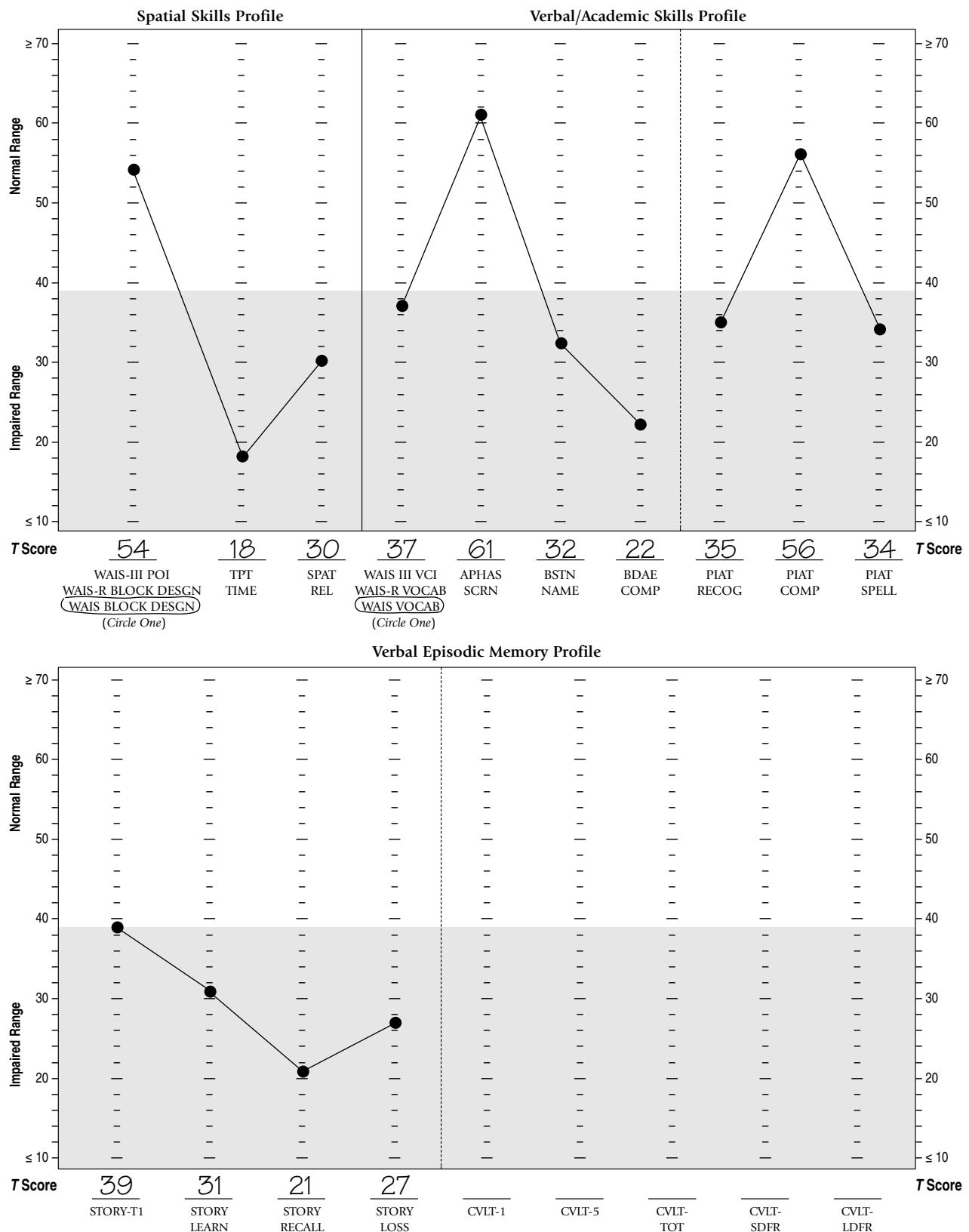
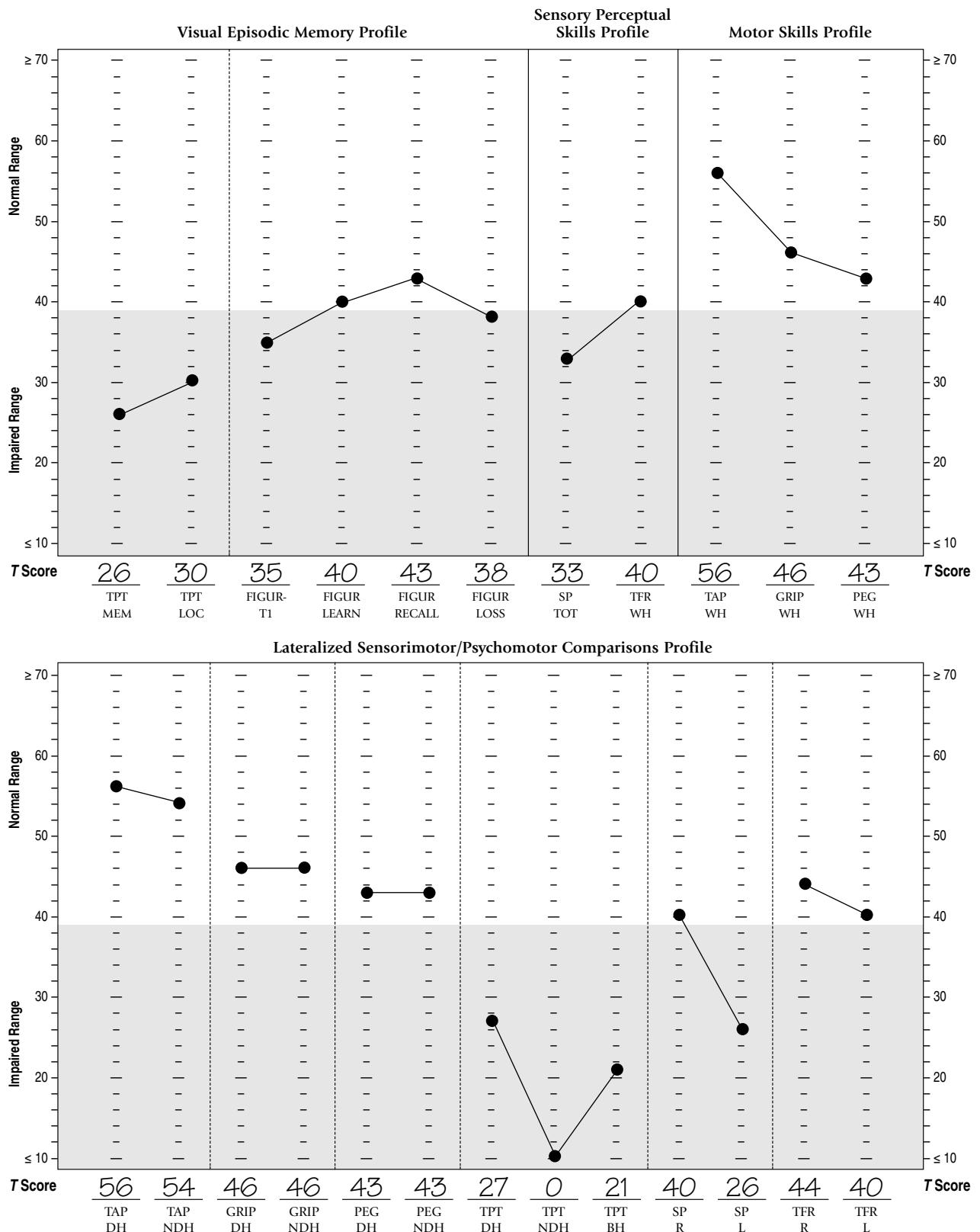


Figure 6. (continued)



reading skills tend to be relatively spared in many cerebral disorders, focal lesions involving the left temporal lobe can be associated with mild impairment on PIAT Reading Recognition (Heaton et al., 1987). Finally, T.J.'s very marked impairments in learning and retention of new verbal information, compared to much milder difficulties with Visual Episodic Memory (Story vs. Figure Memory Tests), are also quite consistent with focal involvement of the left medial temporal lobe.

T.J.'s low Spatial Relations *T* score provides an example of how a strictly statistical approach to test interpretation can be misleading. Although he did show some slight asymmetry in his copies of a Greek cross, qualitatively these and other drawings by T.J. would not justify the clinical conclusion that he has constructional dyspraxia. Again, with Spatial Relations and a few other variables showing skewed raw score distributions and small raw score standard deviations in normal individuals, a slight deviation from a perfect test performance can cause a *T* score to be within the "impaired" range. For these variables, the clinician's interpretation should be based much more upon qualitative aspects of the patient's performance than upon his *T* scores.

The profile of T.J.'s results on Lateralized Sensorimotor/Psychomotor Comparisons reflects some unexpected findings. Consistent with his self-report, but inconsistent with the location of his medial left temporal lobe lesion, he did significantly worse with his left hand than with his right on the Tactual Performance Test (severe impairment vs. moderate impairment). In addition, on the Sensory-Perceptual Exam, he made seven errors with his left hand as compared to three with his right hand on testing for dysgraphesthesia. This is a rather subtle difference, but considered together with the Tactual Performance Test results, it might suggest some additional focal dysfunction of the right cerebral hemisphere.

In conclusion, T.J.'s results on several components of the neuropsychological test battery revealed striking deficits that are well beyond what would be expected from a neurologically normal person. Most of these deficits would be consistent with the patient's known mass lesion in the left medial temporal lobe: impaired naming, auditory comprehension, verbal episodic memory, oral reading, and retrieval of factual information likely to have been learned in school (i.e., in his case, a low WAIS Digit Symbol *T* score of 28 probably reflects some impairment of semantic memory). There are a few test findings that specifically implicate the right hemisphere as well: his very poor left-hand performance on the Tactual Performance Test and his mild dysgraphesthesia on the left. The cause of these latter deficits cannot

be established with confidence, although it seems possible that there is an additional seizure focus in the right hemisphere (responsible for the left hand shaking during some of his spells) and/or some anomalous vascular supply to that hemisphere.

Patient 3 (M.P.)

M.P. is a 55-year-old, right-handed, Caucasian, female physician who suffered two separate strokes about 4 months prior to the current testing. The first of these caused transient left-sided visual disturbance and disorientation, whereas the second was associated with more severe confusion and disorientation, as well as left hemiplegia, left hemianesthesia, and a left homonymous hemianopsia. A cerebral CT scan revealed a large right parietal infarct and a second smaller infarct in the right occipital area. Over the next few months, her visual field defect resolved, she regained some use of her left hand, and she was able to walk. Although she recognized some problems with her endurance and believed her memory, concentration, and calculation abilities were still somewhat affected, she was anxious to return to her internal medicine practice. Her husband confirmed her problems with concentration, memory, and calculation, and indicated that she still tended to ignore the left side of space and had trouble calculating the balance in the check-book. M.P. did well on clinical mental status testing, and her neurologist referred her for more comprehensive testing to provide further information about her neurocognitive functioning.

M.P. had been treated for hypertension for a number of years, but she denied any past history of trauma or disease involving the brain. After about 15 years of moderate regular alcohol use, she had substantially reduced her drinking about 4 years prior to her strokes. Her medications at the time of testing included dipyridamole, pentoxifylline, verapamil hydrochloride, and lovastatin.

The neuropsychological testing was accomplished without difficulty, and the results are considered valid. Figure 7 contains the list of raw scores, scaled scores, and *T* scores, together with profiles of her *T* scores. M.P.'s results on the three summary *T* scores are unusually discrepant, ranging from just within normal limits (WAIS FSIQ) to moderately to severely impaired (AIR). Understanding such inconsistencies requires an appreciation of differences in the components of the summary scores and in how they were constructed. The present case illustrates the clinical relevance of such differences. The one extreme is M.P.'s WAIS FSIQ, which is well above average when considered in relation to the 1955 WAIS standardization sample results. However, the *T* score

reveals that, for someone with her high educational level, the WAIS FSIQ is actually below average. There is also a great deal of variability among her scores on the subtests that represent the four WAIS factors, with outstanding results (even for her high educational level) on Verbal Comprehension and Working Memory, but below average scores on subtests representing the Perceptual Organization and Processing Speed factors. Although not definitely within the "impaired" range, these relatively weak performances on subtests representing Perceptual Organization and Processing Speed would be consistent with some dysfunction of the right cerebral hemisphere, as with her only impaired WAIS subtest score (*T* score of 32 on WAIS Arithmetic, not shown on the Record Form). The way in which IQs are calculated, however, allows excellent scores on some subtests (in this case, all the Verbal Comprehension subtests, plus Digit Span) to obscure the presence of weak performances on other subtests when the subtest scores are all summed in the IQ computation.

Although the AIR and GDS also sum and then average scores in their computation, the scores that are averaged are ratings that have only 0 or 1 as possible values in the normal range and up to 5 in the "impaired" range. In this way, poor performances are weighted more heavily than good ones.

In addition, the AIR and GDS both have more components that represent abilities likely to be affected by posterior right hemisphere lesions (i.e., tests of tactile perceptual abilities, spatial abilities, perceptual motor abilities, visual episodic memory). The exceptionally poor AIR *T* score in this case reflects high impairment ratings (of 3 to 5) on the Sensory-Perceptual Exam, Tactual Performance Test (Time and Location), and Category Test, which cannot be "canceled" by normal ratings on a few of the other component measures (e.g., Aphasia Screening Test, Trail Making Test Part B).

Also, it is important to recall that *T* scores within the "impaired" range are derived differently for the AIR and GDS. As with all the individual tests and the battery, AIR *T* scores within "impaired" ranges are based on standard deviation units from the mean of normal individuals. Given that M.P.'s AIR is quite far out of the normal range for someone with her demographic characteristics, her AIR *T* score is in the moderately to severely impaired range. However, clinically, it would be difficult to justify calling M.P. moderately to severely impaired overall, given her strengths in fund of general information (semantic memory), verbal communication skills, attention/working memory, and verbal episodic memory, and the fact that she is severely impaired in only one of her nine ability

domains (Sensory-Perceptual). Indeed, the fact that she is living independently and her neurologist is considering the possibility of allowing her to return to her medical practice would seem at odds with the overall behavioral designation of "moderately to severely impaired." The authors would argue that the conceptually based definitions of impairment ranges, introduced only for the GDS, ensure a more clinically defensible classification of overall severity of impairment. Thus, in this case, although M.P. does have a few deficits that are more severe, the GDS-based designation of mild to moderate impairment seems to aptly characterize her overall level of functioning (especially her cognitive functioning).

Turning now to M.P.'s results on the ability domains, in the Executive Functions area, she demonstrated impaired performance only on the Category Test—a task that requires spatial reasoning and new concept formation. In general, results from the Category Test and the WCST tend to be correlated, but impairment only on the Category Test is more likely to occur in the presence of nonfrontal brain lesions (Pendleton et al., 1982). Also consistent with significant involvement of the right parietal area, M.P. shows clear impairment in her spatial skills as evidenced by her mild to moderate impaired performance on the Tactual Performance Test. Unlike the previous patient, T.J., M.P.'s impaired Spatial Relations rating accurately reflects mild to moderate constructional dyspraxia. This was apparent in the consistent mild spatial distortions in her copies of a Greek cross, and it was confirmed by more severe configurational distortions in her efforts to draw a cube and a bicycle. The nature of these configural distortions is also more typical of a right, rather than a left, hemisphere problem (i.e., unrecognizable cube; bicycle with one wheel almost totally above the other, but with accurate local details). Moreover, the discrepancy between her definite visuoconstructional impairment and her totally intact verbal skills would suggest greater right hemisphere involvement.

M.P.'s mild impairment of processing speed is a non-specific finding with regard to location of cerebral involvement. Although her pattern of results on the Trail Making Test (impairment on Part A, but not on Part B) has been mentioned in the literature as a possible indication of right hemisphere disorder, the authors have not found this to be a reliable indicator in individual cases of lateralized brain damage (Heaton, Grant, Anthony, & Lehman, 1981).

On the other hand, M.P.'s pattern of results on testing episodic memory clearly suggests greater involvement of the right cerebral hemisphere. Whereas she was normal on all components of the Story Memory Test, she

**Record Form for the Revised Comprehensive Norms
for an Expanded Halstead-Reitan Battery:
Demographically Adjusted Neuropsychological Norms
for African American and Caucasian Adults**

Robert K. Heaton, PhD, S. Walden Miller, PhD, Michael J. Taylor, PhD, and Igor Grant, MD

Name M.P. Date of Birth 09/15/48 Age 55 Sex F
Education 20 Handedness R Ethnicity Caucasian

Date of Examination 10/30/03 Version of WAIS Used: WAIS-III WAIS-R WAIS None
Examiner Christine
Peripheral Injuries None
Referred by Dr. Rodriguez
Working Diagnosis Right parietal and right occipital infarcts
Medications Dipyridamole, Pentoxifylline, Verapamil Hydrochloride, Lovastatin

Clinical Notes and Comments:

Some clients/patients may occasionally produce test scores that are considered invalid for neurodiagnostic purposes, because the relevant performances were affected by peripheral factors (e.g., hearing loss or injury to an upper extremity) or suboptimal effort. It is recommended that such problems be noted in the "Clinical Notes and Comments" section. To help avoid misinterpretation, care should be taken to avoid using invalid test scores in the computation of the Global Deficit Score (GDS).

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Figure 7. Clinical case example for Patient 3 (M.P.).

Summary Scores

WAIS-III Full Scale IQ
 WAIS-R Full Scale IQ ^(NE)
 WAIS Full Scale IQ ^(NE)
 Average Impairment Rating
 Global Deficit Score

Abbreviation	Raw Score	Scaled Score	T Score	Descriptive Classification	Deficit Score
WAIS-III FSIQ	123	12	42	<Average	
WAIS-R FSIQ					
WAIS FSIQ					
AIR	2.08	5	20	Moderate-Severe	
GDS	1.2857		32	Mild-Moderate	

Executive Functions

WCST-Perseverative Errors ^(NE)
 Category Test (errors)
 Trail Making Test Part B (secs)
 Thurstone Word Fluency (correct)
 Letter Fluency-FAS (total correct)
 Category Fluency-Animals (total correct)

WCST	6	49	Average	
CAT ERROR	86	6	Mild-Moderate	2
TRAIL B	61	11	Average	0
THUR FLU				
FAS	81	14	>Average	0
ANIMALS				

Attention/Working Memory

WAIS-III Working Memory Index
 WAIS-R Digit Span ^(NE)
 WAIS Digit Span ^(NE)
 Paced Auditory Serial Addition Test (total correct)
 Digit Vigilance-Errors
 Seashore Rhythm Test (correct)
 Speech-Sounds Perception Test (errors)

WAIS-III WKG MEM	16	15	>Average	
WAIS-R DIGIT SPAN				
WAIS DIGIT SPAN				
PASAT				
DIGIT ERROR	7	9	Average	0
SSHOR RHYM	26	9	<Average	0
SPCH PERC	5	10	<Average	0

Speed of Information Processing

WAIS-III Processing Speed Index
 WAIS-R Digit Symbol ^(NE)
 WAIS Digit Symbol ^(NE)
 Trail Making Test Part A (secs)
 Digit Vigilance-Time (secs)

WAIS-III PSI	9	8	<Average	
WAIS-R DIGIT SYMB				
WAIS DIGIT SYMB				
TRAIL A	44	7	Mild	1
DIGIT TIME	463	7	Mild	1

Spatial Skills

WAIS-III Perceptual Organization Index
 WAIS-R Block Design ^(NE)
 WAIS Block Design ^(NE)
 Tactual Performance Test Total Time (min/blk)
 Spatial Relations (rating)

WAIS-III POI	9	8	<Average	
WAIS-R BLOCK DESGN				
WAIS BLOCK DESGN				
TPT TIME	1.190	5	Mild-Moderate	2
SPAT REL	4	7	Mild-Moderate	2

Verbal/Academic Skills

WAIS-III Verbal Comprehension Index
 WAIS-R Vocabulary ^(NE)
 WAIS Vocabulary ^(NE)
 Aphasia Screening Test (errors)
 Boston Naming Test (correct)
 BDAE Complex Ideational Material ^(NE) (correct)
 PIAT Reading Recognition (percentile)
 PIAT Reading Comprehension ^(NE) (percentile)
 PIAT Spelling ^(NE) (percentile)

WAIS-III VCI	19	17	>Average	
WAIS-R VOCAB				
WAIS VOCAB				
APHAS SCRN	1	11	Average	0
BSTN NAME	58	13	Average	0
BDAE COMP	12	12	Average	0
PIAT RECOG	87	14	Average	
PIAT COMP	87	11	<Average	
PIAT SPELL	99	16	>Average	

① Sum of Deficit Scores (page 2): 8

Verbal Episodic Memory

Story Memory Trial 1 Recall (correct)
 Story Memory Learning (points/trials)
 Story Memory Delayed Recall (correct)
 Story Memory Loss (% loss)
 CVLT Trial 1 (correct)
 CVLT Trial 5 (correct)
 CVLT Trials 1-5 (correct)[†]
 CVLT Short Delay Free Recall (correct)
 CVLT Long Delay Free Recall (correct)[†]

Abbreviation	Raw Score	Scaled Score	T Score	Descriptive Classification	Deficit Score
STORY-T1	12.5	9	41	<Average	
STORY LEARN	10.25	9	43	<Average	0
STORY RECALL	17.5	11	49	Average	0
STORY LOSS	14.60	8	43	<Average	
CVLT-1	—	—	—	—	
CVLT-5	—	—	—	—	
CVLT-TOT	—	—	—	—	(alt) [†]
CVLT-SDFR	—	—	—	—	
CVLT-LDFR	—	—	—	—	(alt) [†]

Visual Episodic Memory

Tactual Performance Test—Memory (correct)
 Tactual Performance Test—Location (correct)
 Figure Memory Trial 1 Recall (correct)
 Figure Memory Learning (points/trials)
 Figure Memory Delayed Recall (correct)
 Figure Memory Loss (% loss)

TPT MEM	8	11	51	Average	0
TPT LOC	0	5	29	Moderate	3
FIGUR-T1	8	7	35	Mild	
FIGUR LEARN	3.75	6	32	Mild-Moderate	2
FIGUR RECALL	9	5	28	Moderate	3
FIGUR LOSS	40.00	5	30*	Mild-Moderate	

Sensory Perceptual Skills

Sensory-Perceptual—Total (errors)
 Tactile Form Recognition—Worst Hand (secs)

SP TOT	62	1	17	Severe	5
TFR WH	>32	1	19	Severe	

Motor Skills

Finger Tapping—Worst Hand (taps)
 Hand Dynamometer—Worst Hand (kgs)
 Grooved Pegboard—Worst Hand (secs)

TAP WH	32.6	5	37	Mild	1
GRIP WH	18.5	5	40	<Average	
PEG WH	195	1	15	Severe	5

Lateralized Sensorimotor/Psychomotor Comparisons

Finger Tapping—Dominant (taps)
 Finger Tapping—Nondominant (taps)
 Hand Dynamometer—Dominant (kgs)
 Hand Dynamometer—Nondominant (kgs)
 Grooved Pegboard—Dominant (secs)
 Grooved Pegboard—Nondominant (secs)
 Tactual Performance Test—Dominant (min/blk)
 Tactual Performance Test—Nondominant (min/blk)
 Tactual Performance Test—Both Hands (min/blk)
 Sensory-Perceptual—Right (errors)
 Sensory-Perceptual—Left (errors)
 Tactile Form Recognition—Right (secs)
 Tactile Form Recognition—Left (secs)

TAP DH	55.5	12	67	>Average	
TAP NDH	32.6	5	37	Mild	
GRIP DH	25.0	7	48	Average	
GRIP NDH	18.5	5	40	<Average	
PEG DH	74	8	41	<Average	
PEG NDH	195	1	15	Severe	
TPT DH	0.89	7	38	Mild	
TPT NDH	>10.00	0	8	Severe	
TPT BH	0.49	8	39	Mild	
SP R	4.0	8	37	Mild	
SP L	58.0	1	12*	Severe	
TFR R	11.4	10	50	Average	
TFR L	>32	1	19	Severe	

T-Score to Deficit-Score Conversion

T score	Descriptive Classification	Deficit Score
55+	Above Average	0
45-54	Average	0
40-44	Below Average	0
35-39	Mild Impairment	1
30-34	Mild to Moderate Impairment	2
25-29	Moderate Impairment	3
20-24	Moderate to Severe Impairment	4
0-19	Severe Impairment	5

(NE) Score is not adjusted for ethnicity. Interpret T scores cautiously for non-Caucasian examinees.

* T scores for this variable are not normally distributed, but have satisfactory specificity for T score < 40 cutoff.

† For computation of the GDS, the CVLT measures may be used as alternates for Story Memory Learning and Story Memory Delayed Recall.

② Sum of Deficit Scores (page 3): 19

① Sum of Deficit Scores (page 2): 8

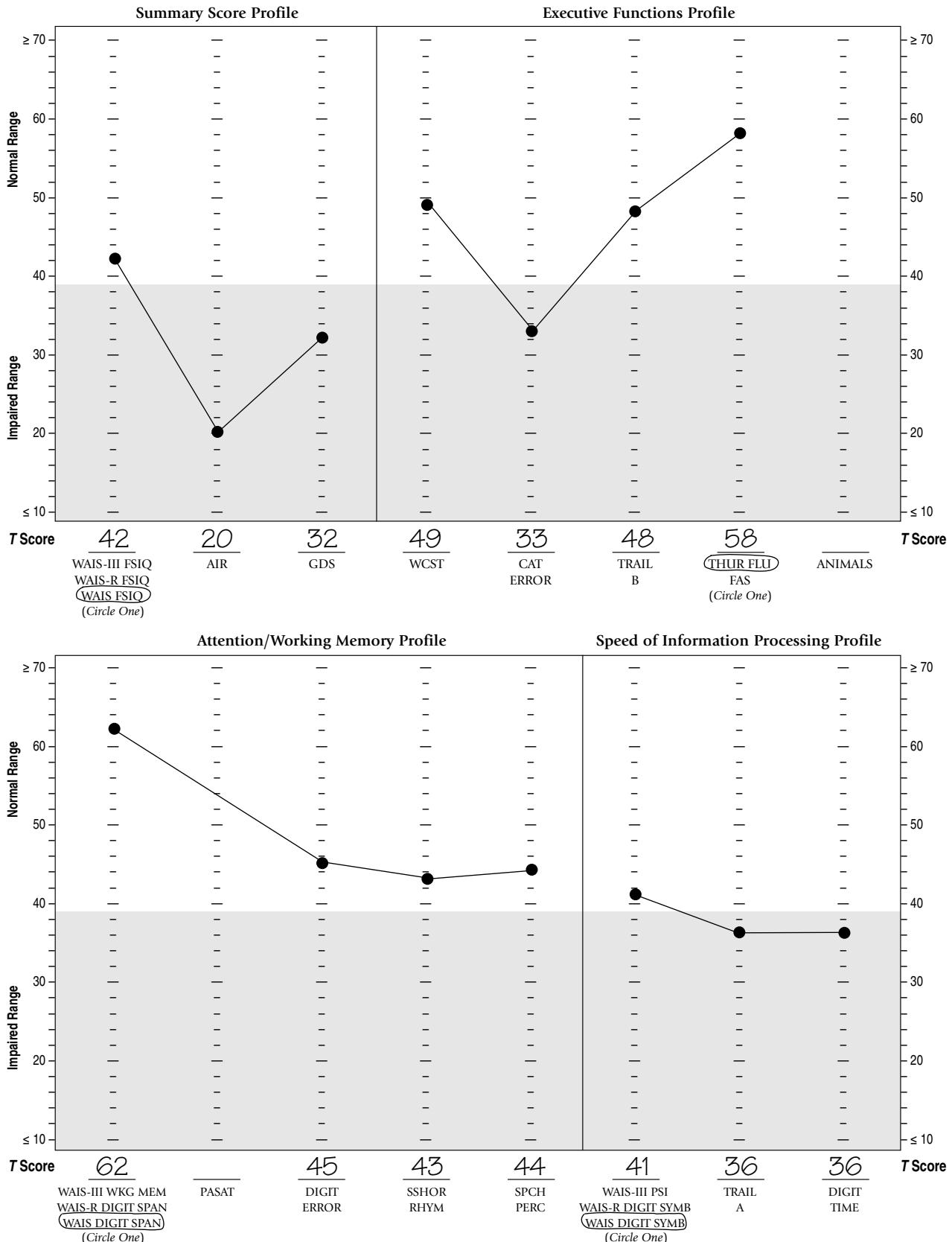
③ GDS Total (① + ②): 27

④ Number of tests in GDS: 21

GDS raw score = (③ ÷ ④): 1.2857

⑤ GDS to T-score conversion: 32
 (see Appendix G)

Record the GDS scores in the Summary Scores section on page 2.



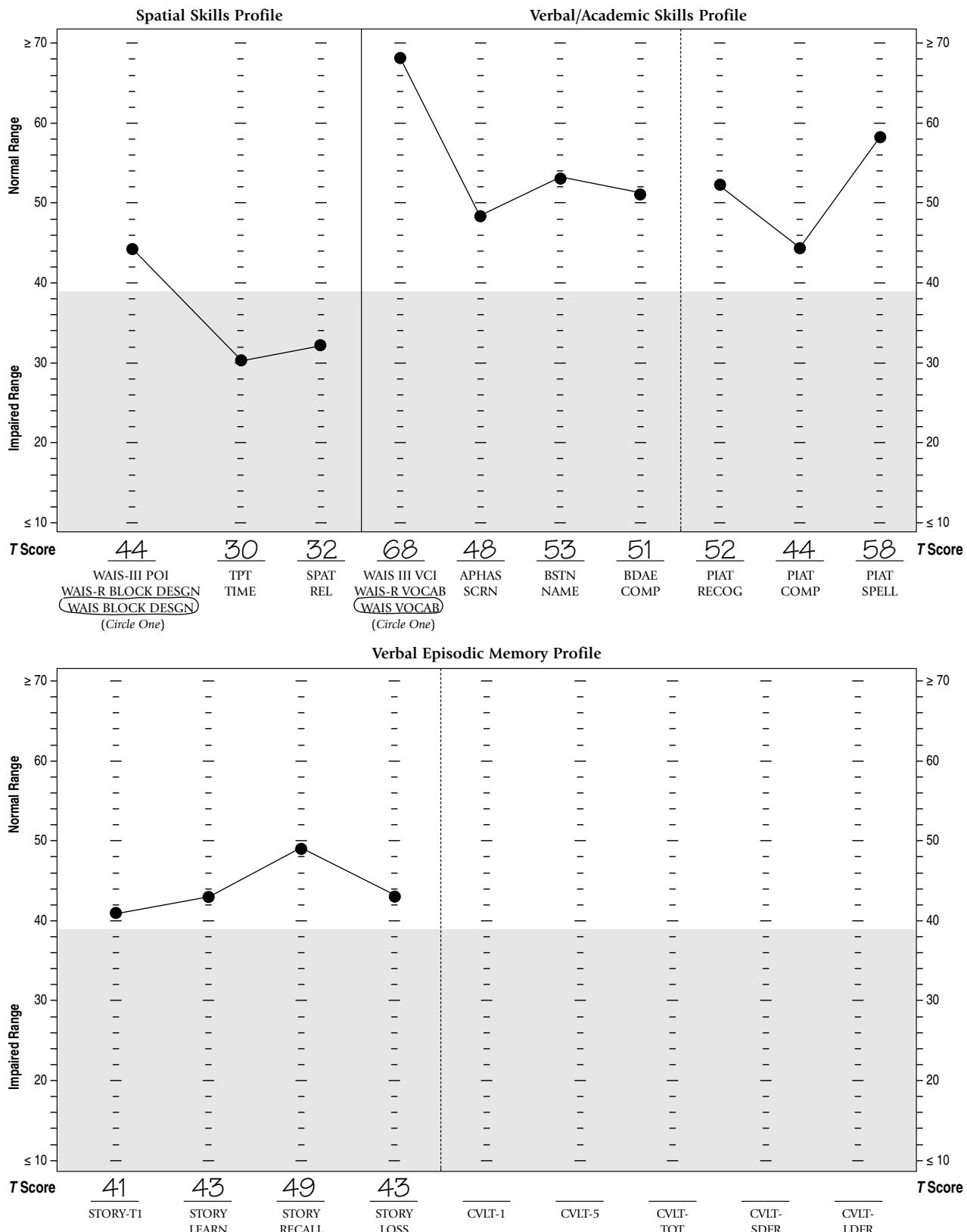
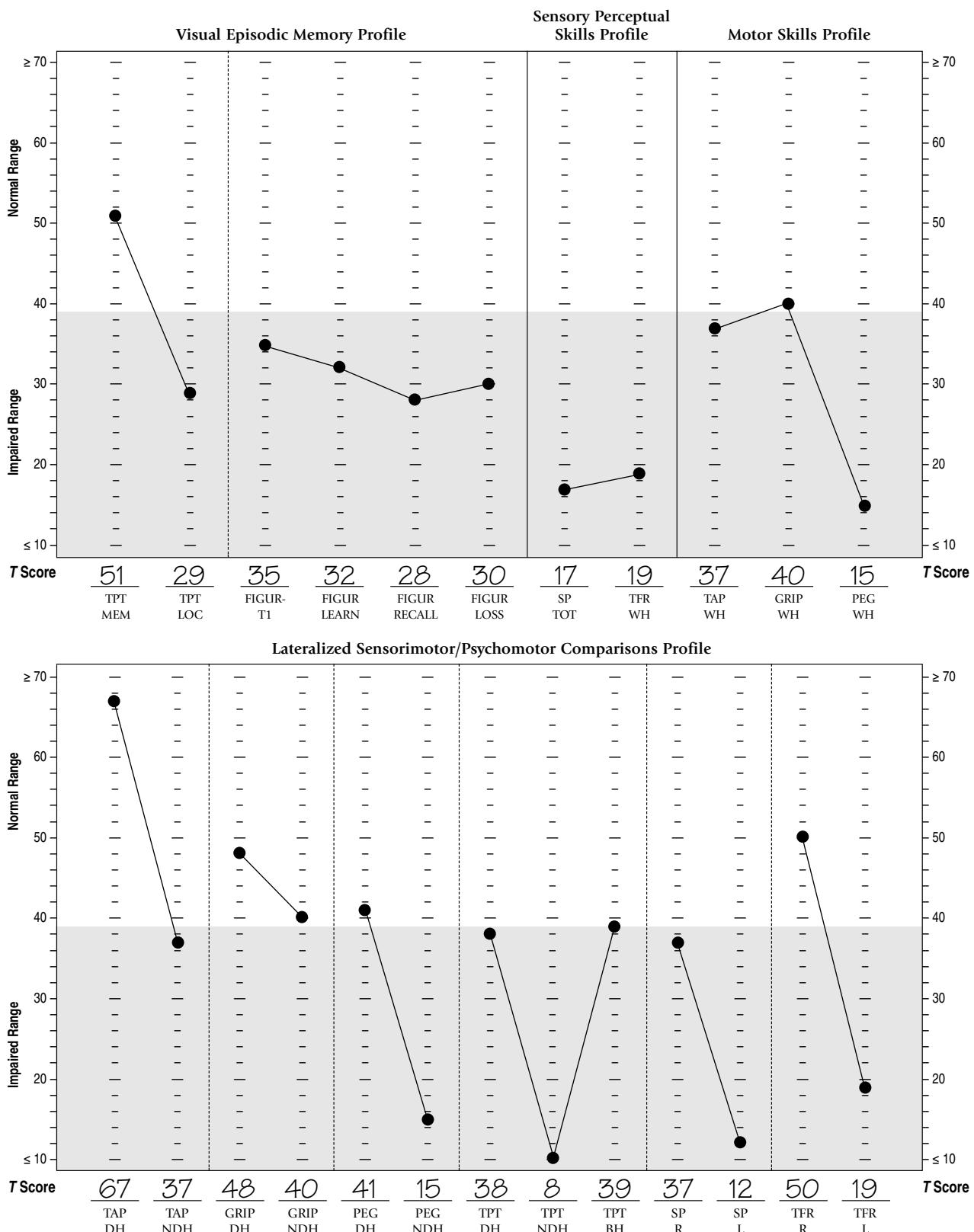


Figure 7. (continued)



evidenced mild to moderate inefficiency in learning and moderate inefficiency in retaining new visual information on the Figure Memory Test. Although one should consider whether M.P.'s poor performance on the latter test can be explained on the basis of her constructional dyspraxia, this does not appear to be the case; she demonstrated an adequate ability to draw the figures on the later Learning trials and then forgot one complete figure and important details on another over the 4-hour delay period. Furthermore, the nonverbal memory deficit shown on the Figure Memory Test is consistent with the observations by M.P. and her husband that she misplaces things and tends to forget details of recent experiences in her everyday life.

Strongly lateralizing neuropsychological evidence is most apparent in the last group of test results, which shows the right-left differences on the sensorimotor and psychomotor tasks. For all tests in this series, there are striking right-left differences, all of which strongly implicate the right hemisphere. In addition, greater posterior than anterior involvement is suggested by the fact that the Sensory-Perceptual measures show a much more severe level of impairment than do the "pure" motor measures (Finger Tapping-Worst Hand and Hand Dynamometer-Worst Hand). The Sensory-Perceptual scores reflect left-sided finger dysgnosia, dysgraphesthesia, and dystereognosis, as well as a strong tendency to suppress tactile and auditory stimulation on the left during bilateral simultaneous stimulation (perception of unilateral stimulation was adequate). The severe impairment rating of her left-hand performance on the Grooved Pegboard-Worst Hand and Tactual Performance Test would be expected because both of these tasks require spatial skills and perceptual-motor integration. Although all of these lateralized findings are fairly obvious without the *T*-score conversions (i.e., they are apparent in the raw scores as well), the *T* scores do facilitate the overall configurational analysis (right vs. left and sensory-perceptual vs. motor comparisons).

Considered together, M.P.'s neuropsychological test results suggest moderate dysfunction of the right cerebral hemisphere, probably involving the posterior areas more than the anterior areas. Left hemisphere functions appear to be essentially intact. These findings are quite consistent with her history of recent right parietal and occipital strokes. The focal pattern of M.P.'s neuropsychological test results is readily apparent in the demographically corrected *T* scores, particularly when they are displayed graphically, as in Figure 7.

It is beyond the scope of this manual to provide a full discussion of the implications of M.P.'s test results for her everyday functioning (although this was a major focus of her clinical report). However, we will provide a summary

of the authors' conclusions and a brief illustration of the use of the test score conversions when addressing questions about everyday functioning.

As discussed above, M.P. has a number of important strengths as well as weaknesses. It should be recognized that her particular strengths in the verbal areas may lead others (and even herself) to conclude that, in a general sense, she is more capable than she actually is at the present time. Although she is likely to seem cognitively normal in superficial social interactions and may well be able to discuss medical topics with considerable facility, her test results reveal a number of basic ability deficits that would be expected to interfere with the practice of medicine.

In attempting to identify basic ability deficits that are likely to be important in everyday functioning, it can be helpful to consider not only how a person is doing in relation to his or her own reference group, but also to consider the ability itself in more general terms. For example, young, well-educated people tend to do very well on these tests (i.e., perform quickly, make few errors), and they also tend to have relatively demanding jobs. This does not mean, however, that their jobs actually require that level of ability. In fact, if their ability is reduced somewhat (e.g., as a result of normal aging), this may not interfere at all with job functioning. A young physician who makes 38 errors on the Category Test would be within the bottom 15th percentile for his or her reference group and, in this sense, would be considered "impaired," but an older physician with this score would not be considered "impaired." Moreover, 38 errors on the Category Test is about average for the general population and reflects basic conceptual skills that are adequate for almost all jobs (including the practice of medicine, providing other relevant abilities are also adequate). Because scaled scores are in standard units and do not fluctuate with differences in demographic characteristics, they are helpful in judging the status of abilities in these more general terms.

M.P. made 86 errors on the Category Test for a *T* score of 33, indicating that her conceptual skills are very poor for a 55-year-old person with 20 years of education. In addition, her scaled score of 6 on this test confirms that her performance was also very poor in more general terms. It suggests that she has quite limited abilities to analyze new, fairly complex data and to form concepts on the basis of such information. She also is likely to function poorly in everyday situations that require these abilities. Thus, although M.P. can probably still use her past experience to identify and treat routine medical conditions, her very poor performance on the Category Test raises doubts

about her likely effectiveness in sizing up and responding effectively to medical conditions that are more complex and/or less familiar to her. Unfortunately, it is not possible to restrict a medical practice to routine cases, so the presence of this deficit alone would argue against M.P.'s returning to work in that profession.

Other specific deficits that would put M.P. at a disadvantage in functioning as a physician are her very impaired psychomotor problem-solving skills (Tactual Performance Test-Time, scaled score = 5) and nonverbal learning and memory (Figure Memory Learning and Delayed Recall, scaled scores of 6 and 5), and possibly her impaired visuoconstructional skills (Spatial Relations, scaled score = 7) and calculation skills (WAIS Arithmetic, scaled score = 7). Finally, her score on the AIR (raw = 2.08, scaled = 5) is well within the range characteristic of previous patients who have not been able to obtain and hold competitive employment of any sort (Heaton et al., 1978; Newnan et al., 1978). Thus, considering the level of overall impairment and the nature of specific ability deficits, M.P. was advised against resuming the practice of internal medicine at the time of the evaluation.

Patient 4 (M.T.)

M.T. is a 45-year old, right-handed, African American woman who had suffered a severe traumatic head injury in a beating 3 years previously. She had a 3-week period of posttraumatic amnesia and underwent a craniotomy for removal of a left temporoparietal subdural hematoma. Subsequently, M.T. experienced persisting problems with her speech. She also had complaints about her memory and other mental functions and was unable to resume her clerical job. Comprehensive neuropsychological testing was requested to assist in a disability determination.

The patient denied any previous history of trauma or disease involving the brain. She did have hypertension, for which she was being prescribed hydrochlorothiazide. She also took Naprosyn® for pain. She denied any past or present substance use problems.

M.T. reported that she never had difficulty learning basic academic skills or subjects and graduated from high school with above average grades. At the time of her injury, she had been successfully employed for a number of years in a clerical position. Following the injury, she continued to live independently as a single parent to her son. She did not drive, but used public transportation on her own. However, on the Patient's Assessment of Own Functioning Inventory (Chelune, Heaton, & Lehman, 1986), she reported continuing difficulties with recent memory, understanding what she reads and what people say to her, enunciating, spelling, performing motor tasks

with her right hand, planning new activities, general problem solving, and following new directions and instructions. She also felt that she was generally less "bright" than she had been prior to her injury, but indicated that her most serious problem was her speech.

M.T.'s testing took considerably longer than usual (3 days), primarily due to communication problems. Her spontaneous speech was fairly fluent, but she had obvious word-finding difficulties and made frequent phonemic and semantic paraphasic errors. Her directed speech was much less fluent than her spontaneous speech, and she was unable to repeat almost anything the examiner said; writing to dictation also was much more difficult than spontaneous writing. Most test instructions had to be simplified and repeated multiple times, but eventually she was able to understand what she was being asked to do on all tests. Despite her severe communication difficulties, M.T. was well-oriented; she managed to get to and from the clinic on her own and was able to find her way around the medical center independently. She maintained a positive attitude toward the evaluation and always appeared to put forth her best effort on the tests.

In this case, the qualitative pathognomonic evidence of brain dysfunction (i.e., her obvious dysphasia) would seem to overshadow psychometric findings, but it is nevertheless of interest to consider what else can be learned from analyzing the psychometric data. Indeed, the main question about M.T. was not whether she had a brain injury, which was well established by history, but about the extent of its effects on her everyday functioning. Also, the presence of moderate to severe dysphasia complicates interpretation of other test scores, especially scores on tests that are designed to measure other things. For example, her communication difficulty clearly interfered with her performance on WAIS-III subtests contributing to the Verbal Comprehension and Working Memory factors. Thus, do her scaled scores of 5 on the Vocabulary and Information subtests accurately reflect her word knowledge and fund of general information? Probably not. Also her virtual inability to repeat verbal information on Digit Span (scaled score of 2) does not provide a clear indication of her working memory (ability to hold and manipulate new information "online"). The same problem with repetition greatly interfered with her performance on all "free recall" aspects of the Story Memory Test and the CVLT, although follow-up recognition testing on these instruments did reveal a mild to moderate impairment of Verbal Episodic Memory. With these considerations in mind, M.T.'s psychometric data are discussed.

Figure 8 lists M.T.'s raw scores, scaled scores, and *T* scores on the test battery, and plots the *T*-score profiles

**Record Form for the Revised Comprehensive Norms
for an Expanded Halstead-Reitan Battery:
Demographically Adjusted Neuropsychological Norms
for African American and Caucasian Adults**

Robert K. Heaton, PhD, S. Walden Miller, PhD, Michael J. Taylor, PhD, and Igor Grant, MD

Name M.T. Date of Birth 10/25/58 Age 45 Sex F
Education 12 Handedness R Ethnicity African American

Date of Examination 11/11/03 Version of WAIS Used: WAIS-III WAIS-R WAIS None
Examiner Melissa
Peripheral Injuries None
Referred by Dr. Ledbetter
Working Diagnosis Traumatic brain injury with left temporoparietal subdural hematoma
Medications Hydrochlorothiazide, Naprosyn

Clinical Notes and Comments:

Some clients/patients may occasionally produce test scores that are considered invalid for neurodiagnostic purposes, because the relevant performances were affected by peripheral factors (e.g., hearing loss or injury to an upper extremity) or suboptimal effort. It is recommended that such problems be noted in the "Clinical Notes and Comments" section. To help avoid misinterpretation, care should be taken to avoid using invalid test scores in the computation of the Global Deficit Score (GDS).

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Figure 8. Clinical case example for Patient 4 (M.T.).

Summary Scores	Abbreviation	Raw Score	Scaled Score	T Score	Descriptive Classification	Deficit Score
WAIS-III Full Scale IQ	WAIS-III FSIQ	74	—	38	Mild	
WAIS-R Full Scale IQ ^(NE)	WAIS-R FSIQ					
WAIS Full Scale IQ ^(NE)	WAIS FSIQ					
Average Impairment Rating	AIR	2.58	4	29	Moderate	
Global Deficit Score	GDS	1.3333		31	Mild-Moderate	
Executive Functions						
WCST-Perseverative Errors ^(NE)	WCST	22	39	—	Mild	
Category Test (errors)	CAT ERROR	32	10	62	>Average	0
Trail Making Test Part B (secs)	TRAIL B	174	5	35	Mild	1
Thurstone Word Fluency (correct)	THUR FLU					
Letter Fluency-FAS (total correct)	FAS	21	5	36	Mild	1
Category Fluency-Animals (total correct)	ANIMALS	10	4	31	Mild-Moderate	
Attention/Working Memory						
WAIS-III Working Memory Index	WAIS-III WKG MEM	55	—	25	Moderate	
WAIS-R Digit Span ^(NE)	WAIS-R DIGIT SPAN					
WAIS Digit Span ^(NE)	WAIS DIGIT SPAN					
Paced Auditory Serial Addition Test (total correct)	PASAT					
Digit Vigilance-Errors	DIGIT ERROR	11	7	45	Average	0
Seashore Rhythm Test (correct)	SSHOR RHYM	20	5	32	Mild-Moderate	2
Speech-Sounds Perception Test (errors)	SPCH PERC	33	2	21	Moderate-Severe	4
Speed of Information Processing						
WAIS-III Processing Speed Index	WAIS-III PSI	73	—	38	Mild	
WAIS-R Digit Symbol ^(NE)	WAIS-R DIGIT SYMB					
WAIS Digit Symbol ^(NE)	WAIS DIGIT SYMB					
Trail Making Test Part A (secs)	TRAIL A	52	6	38	Mild	1
Digit Vigilance-Time (secs)	DIGIT TIME	304	13	61	>Average	0
Spatial Skills						
WAIS-III Perceptual Organization Index	WAIS-III POI	74	—	36	Mild	
WAIS-R Block Design ^(NE)	WAIS-R BLOCK DESGN					
WAIS Block Design ^(NE)	WAIS BLOCK DESGN					
Tactual Performance Test Total Time (min/blk)	TPT TIME	1.430	4	35	Mild	1
Spatial Relations (rating)	SPAT REL	3	9	50 *	Average	0
Verbal/Academic Skills						
WAIS-III Verbal Comprehension Index	WAIS-III VCI	67	—	32	Mild-Moderate	
WAIS-R Vocabulary ^(NE)	WAIS-R VOCAB					
WAIS Vocabulary ^(NE)	WAIS VOCAB					
Aphasia Screening Test (errors)	APHAS SCRN	46	0	18	Severe	5
Boston Naming Test (correct)	BSTN NAME	5	1	22	Moderate-Severe	4
BDAE Complex Ideational Material ^(NE) (correct)	BDAE COMP	7	2	10 *	Severe	
PIAT Reading Recognition (percentile)	PIAT RECOG	1	2	28	Moderate	
PIAT Reading Comprehension ^(NE) (percentile)	PIAT COMP	20	5	33	Mild-Moderate	
PIAT Spelling ^(NE) (percentile)	PIAT SPELL	54	9	45	Average	

① Sum of Deficit Scores (page 2): 19

	Abbreviation	Raw Score	Scaled Score	T Score	Descriptive Classification	Deficit Score
Verbal Episodic Memory						
Story Memory Trial 1 Recall (correct)	STORY-T1	0.0	1	22	Moderate-Severe	
Story Memory Learning (points/trials)	STORY LEARN	1.20	2	29	Moderate	3
Story Memory Delayed Recall (correct)	STORY RECALL	5.5	2	27	Moderate	3
Story Memory Loss (% loss)	STORY LOSS	8.30	10	55	>Average	
CVLT Trial 1 (correct)	CVLT-1	2	3	14	Severe	
CVLT Trial 5 (correct)	CVLT-5	6	4	25	Moderate	
CVLT Trials 1-5 (correct) [†]	CVLT-TOT	19	3	17	Severe	
CVLT Short Delay Free Recall (correct)	CVLT-SDFR	5	6	33	Mild-Moderate	
CVLT Long Delay Free Recall (correct) [†]	CVLT-LDFR	4	5	30	Mild-Moderate	
Visual Episodic Memory						
Tactual Performance Test-Memory (correct)	TPT MEM	8	11	59	>Average	0
Tactual Performance Test-Location (correct)	TPT LOC	0	5	33	Mild-Moderate	2
Figure Memory Trial 1 Recall (correct)	FIGUR-T1	10	8	52	Average	
Figure Memory Learning (points/trials)	FIGUR LEARN	5.33	8	54	Average	0
Figure Memory Delayed Recall (correct)	FIGUR RECALL	13	8	47	Average	0
Figure Memory Loss (% loss)	FIGUR LOSS	18.80	7	38*	Mild	
Sensory Perceptual Skills						
Sensory-Perceptual-Total (errors)	SP TOT	9.0	6	39	Mild	1
Tactile Form Recognition-Worst Hand (secs)	TFR WH	14.6	8	42	<Average	
Motor Skills						
Finger Tapping-Worst Hand (taps)	TAP WH	41.0	8	50	Average	0
Hand Dynamometer-Worst Hand (kgs)	GRIP WH	37.0	10	58	>Average	
Grooved Pegboard-Worst Hand (secs)	PEG WH	58	12	67	>Average	0
Lateralized Sensorimotor/Psychomotor Comparisons						
Finger Tapping-Dominant (taps)	TAP DH	46.2	8	51	Average	
Finger Tapping-Nondominant (taps)	TAP NDH	41.0	8	50	Average	
Hand Dynamometer-Dominant (kgs)	GRIP DH	39.5	10	59	>Average	
Hand Dynamometer-Nondominant (kgs)	GRIP NDH	37.0	10	58	>Average	
Grooved Pegboard-Dominant (secs)	PEG DH	58	12	67	>Average	
Grooved Pegboard-Nondominant (secs)	PEG NDH	62	12	70	>Average	
Tactual Performance Test-Dominant (min/blk)	TPT DH	5.00	4	32	Mild-Moderate	
Tactual Performance Test-Nondominant (min/blk)	TPT NDH	1.67	6	39	Mild	
Tactual Performance Test-Both Hands (min/blk)	TPT BH	0.58	7	41	<Average	
Sensory-Perceptual-Right (errors)	SP R	4.0	8	43	<Average	
Sensory-Perceptual-Left (errors)	SP L	5.0	6	38*	Mild	
Tactile Form Recognition-Right (secs)	TFR R	14.6	8	42	<Average	
Tactile Form Recognition-Left (secs)	TFR L	12.8	8	42	<Average	

T-Score to Deficit-Score Conversion		
T score	Descriptive Classification	Deficit Score
55+	Above Average	0
45-54	Average	0
40-44	Below Average	0
35-39	Mild Impairment	1
30-34	Mild to Moderate Impairment	2
25-29	Moderate Impairment	3
20-24	Moderate to Severe Impairment	4
0-19	Severe Impairment	5

(NE) Score is not adjusted for ethnicity. Interpret T scores cautiously for non-Caucasian examinees.

* T scores for this variable are not normally distributed, but have satisfactory specificity for T score < 40 cutoff.

† For computation of the GDS, the CVLT measures may be used as alternates for Story Memory Learning and Story Memory Delayed Recall.

② Sum of Deficit Scores (page 3): 9

① Sum of Deficit Scores (page 2): 19

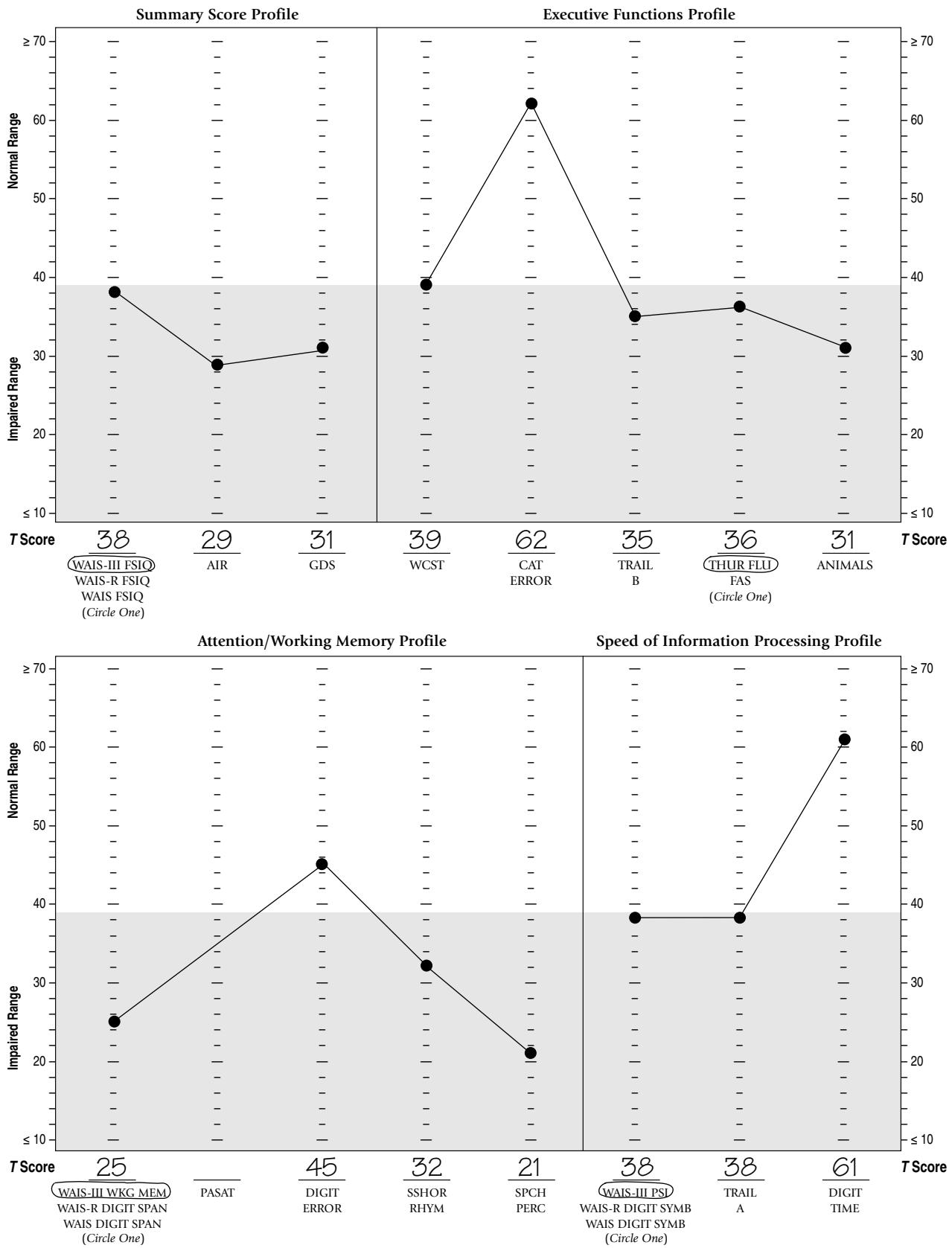
③ GDS Total (① + ②): 28

④ Number of tests in GDS: 21

GDS raw score = (③ ÷ ④): 1.3333

⑤ GDS to T-score conversion: 31
(see Appendix G)

Record the GDS scores in the Summary Scores section on page 2.



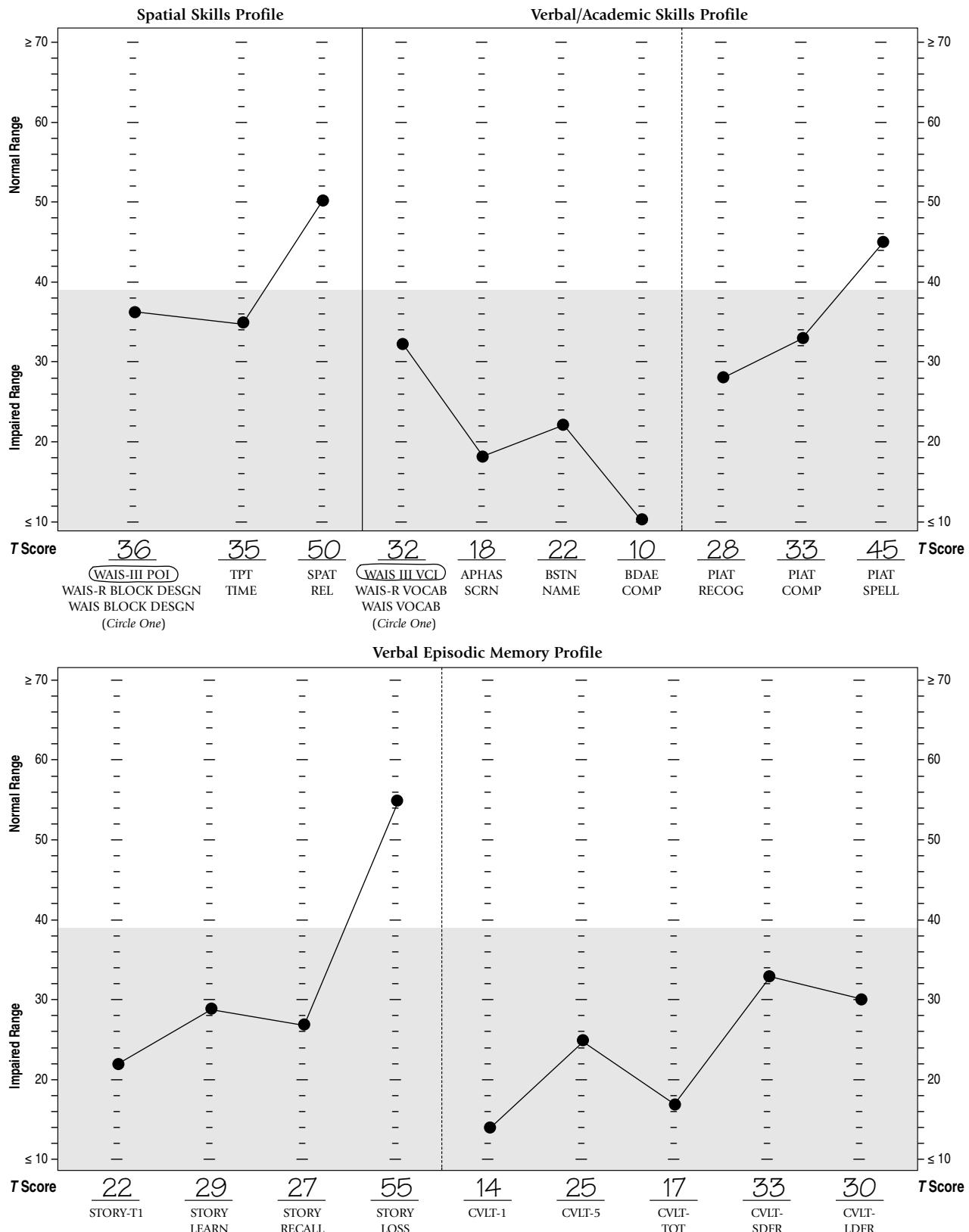
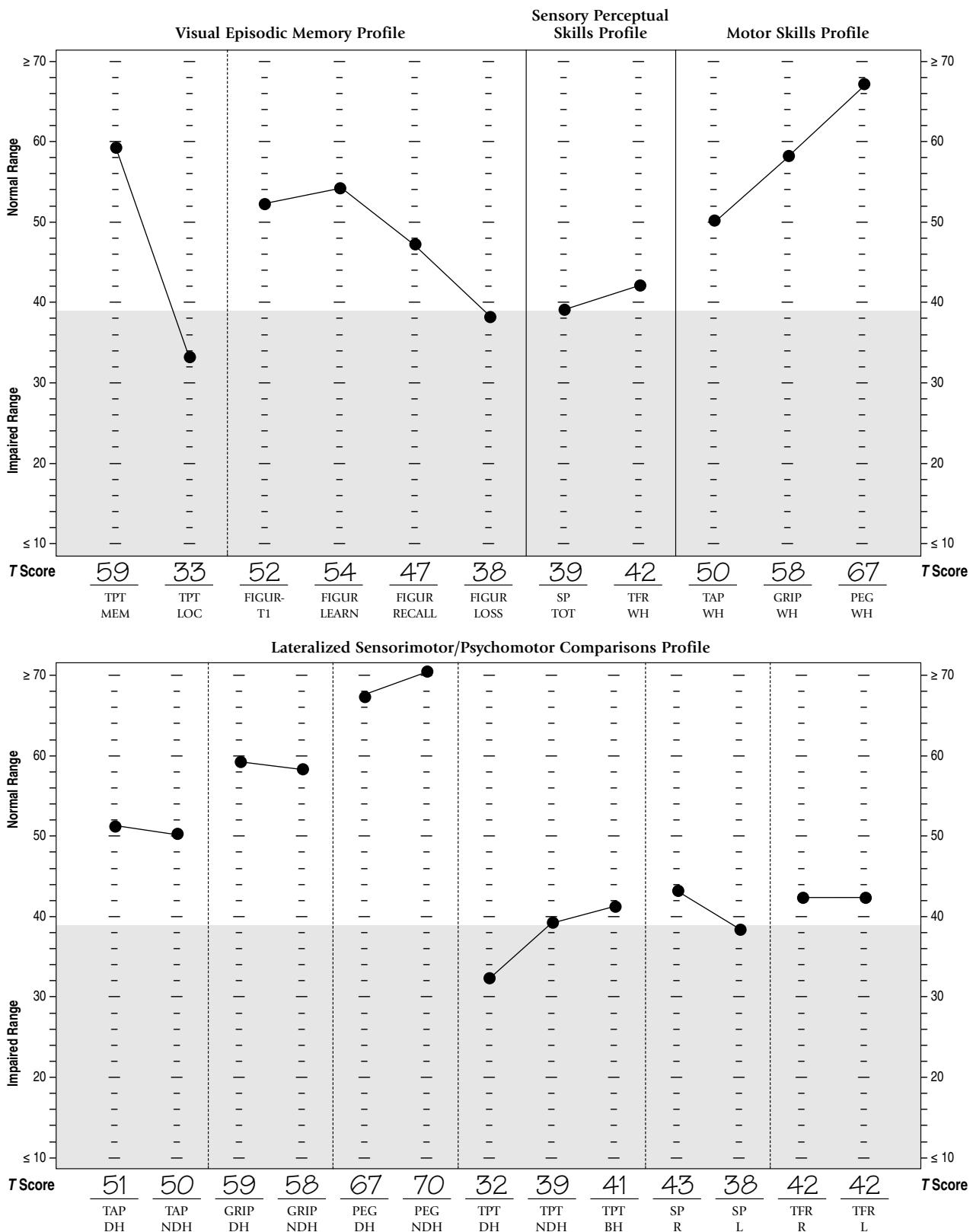


Figure 8. (continued)



on the graphs. Her standard WAIS-III FSIQ of 74 places her in the bottom 4% of the *general* population in her age range. The associated *T* score of 38 puts her at a somewhat higher percentile within her demographic peer group, but it is still within the mildly impaired range. As already noted, however, M.T.'s communication disorder invalidated (or at least negatively biased) her results on component subtests that were designed to measure knowledge and abilities distinct from aphasia. Thus, her Working Memory and Verbal Comprehension raw score indexes of 55 and 67, respectively, probably underestimate these abilities, and the FSIQ must be considered significantly biased as well.

On the other hand, M.T.'s *T* scores on the more sensitive neuropsychological summary measures (AIR and GDS) make it virtually certain that she does have a brain disorder (i.e., Table 6 shows that less than 1% of the large, neurologically normal participant samples performed this poorly on the overall test battery). Also, although the previously mentioned aphasia confound on testing of Verbal Episodic Memory probably slightly inflated the GDS (only 2 scores out of 21 were affected by her aphasia, and recognition testing did confirm significant impairment of Verbal Episodic Memory), the authors would argue that these 2 summary scores validly reflect M.T.'s overall neurocognitive functioning. In addition, of relevance to the referral question, is the fact that M.T.'s AIR raw score of 2.58 is well beyond the 1.58 cutoff that characterizes patients who are unlikely to maintain competitive employment (Heaton & Pendleton, 1981).

Turning to the Executive Functions grouping of test measures, there is a wide range of abilities represented—from above average (Category Test) to mild to moderate impairment (Category Fluency–Animals). The good performance on the Category Test, within the context of widespread impairment on the rest of the battery, is unusual in general, but less so in cases of focal damage to the left cerebral hemisphere. Also, this good result on the Category Test is a positive sign with respect to M.T.'s ability to conceptualize novel situations, adapt to feedback, and think abstractly (all relevant to her likely success in living independently and functioning as a single parent). In addition, she was just outside normal limits on the WCST Perseverative Errors; this additional evidence of intact conceptual skills again has positive implications for her everyday functioning and also argues against major frontal lobe involvement. On the other hand, the Trail Making Test Part B result is poor, both in absolute terms (scaled score = 5) and with reference to M.T.'s demographic peer group (*T* score = 35),

suggesting inefficiency in following complex sequential procedures. This type of inefficiency would certainly be expected to put her at a disadvantage in most clerical/administrative jobs.

It is unclear whether measures of verbal fluency should be considered more under executive or verbal functions (or both). M.T. clearly has some acquired limitation in fluency, although this deficit is less pronounced than those in other aspects of her communication skills (enunciating, word finding/naming, and repetition and verbal comprehension, which will be discussed later in this report). Also, it is possible that her somewhat worse performance on Category Fluency–Animals than on Letter Fluency–FAS reflects greater temporal than frontal lobe involvement on the left side (Delis, Kaplan, & Kramer, 2001, p. 75).

Variable performance also occurred within the Attention/Working Memory and Speed of Information Processing domains, due to differences in specific task requirements. In general, M.T.'s performance was worse on attention measures that also involved working memory and were auditory (as opposed to visual) in nature. Her exceptionally poor result on the Speech-Sounds Perception Test undoubtedly relates to the specific linguistic requirements of this test. Together with other findings (e.g., the impaired repetition and better spontaneous writing than writing to dictation), this also may reflect some disconnection of the circuitries involved in linguistic processing. In any event, despite the already noted complications in interpreting M.T.'s results on the Working Memory tests from the WAIS-III, there is enough evidence from other relevant measures to conclude that she has at least mild impairments in this area, as well as in processing speed.

M.T.'s simple visuoconstructional skills (reflected by the HRB Spatial Relations measure) were within normal limits. Although she was able to copy a cross, a square, and a key, she had great difficulty with a cube (this does not contribute to the Spatial Relations score, but does reflect some mild constructional dyspraxia). In addition, she was mildly impaired on more challenging spatial problem-solving tasks (Tactual Performance Test and WAIS Block Design).

Consistent with M.T.'s self-assessment, by far her worst performances came on verbal tests. On the Aphasia Screening Test, she evidenced marked impairment across a wide range of linguistic skills: She was unable to repeat words and phrases or to write to dictation (but she could write spontaneously), and she made gross errors in naming common objects, in explaining a simple statement, and in simple spelling and reading.

On the BNT, she was moderately to severely impaired overall, with many instances of semantic and phonemic paraphasias. She also was markedly impaired on the BDAE Complex Ideational Material subtest, as well as on the other three auditory comprehension subtests of the BDAE (Word Discrimination, Commands, and Body Part Discrimination—not shown). Her results on the PIAT indicated moderately impaired oral reading skills, consistent with her expressive dysphasia, but on the multiple-choice testing of reading comprehensions, she demonstrated functional ability to understand what she read (i.e., reading comprehension was on the seventh-grade level). She also did quite well on the multiple-choice PIAT Spelling subtest (12th-grade level), although she made frequent spelling errors in spontaneous writing and had more severe difficulty when asked by the examiner to spell specific words.

Again, M.T.'s testing of Verbal Episodic Memory was greatly complicated by her difficulty with repeating. Using a free recall assessment format, she never approached criterion levels of learning performance, yet showed minimal forgetting over the delay periods. Recognition testing demonstrated somewhat better encoding, but was still impaired. Overall, Verbal Episodic Memory was considered mildly to moderately impaired. Consistent with primary involvement of the left cerebral hemisphere, Visual Episodic Memory was only minimally affected (poor Tactual Performance Test–Location score; although she gave equivocal evidence of mildly rapid forgetting on the Figure Memory Test, her Delayed Recall score was normal).

M.T.'s motor speed, strength, and fine coordination with both hands were average to above average. On the Sensory-Perceptual Exam, she made four errors with each hand (out of 20 trials) on testing for dysgraphesthesia, and one left-sided error (out of 20 chances) on tactile finger localization. These results are not well lateralized and have no implications for the patient's everyday functioning.

As was true of T.J. and M.P. (discussed earlier), M.T. illustrates the use of demographically corrected norms in establishing the presence, severity, and pattern of deficits associated with a known brain injury. More importantly, however, this case illustrates the frequent need for considerable clinical judgment in interpreting psychometric data, particularly when deficits in one ability domain (in this case, aphasia) compromise performance on tests typically used to assess other domains (semantic memory, working memory, and verbal episodic memory). Qualitative analysis of the patient's performance was critical in establishing both the nature of her deficits and the

importance of confounds on specific tests and summary scores. Regarding the latter, the authors discussed the need to consider the differences in the composition of the three major summary scores (FSIQ, AIR, and GDS) in order to weigh the differential effects of confounds and to determine which most accurately reflect the overall neurobehavioral status of the patient.

In conclusion, M.T.'s test results suggest moderate cerebral dysfunction, involving the posterior left hemisphere much more than the rest of the brain. Her performance on the neuropsychological battery was well within the range characteristic of previous patients who have *not* been able to obtain and hold competitive employment. The nature of her specific deficits certainly would rule out returning to the kinds of clerical work she has done in the past, and it is very unlikely that she could adequately perform any competitive job at this time. Thus, the results would support a 100% disability rating in this case.

With regard to M.T.'s ability to live independently and function as a single parent, the results are less clear. On the one hand, her impairment in communication skills and episodic memory, in particular, would be expected to put her at a disadvantage in many relevant activities (e.g., analyzing complex social situations, keeping track of her son's progress and potential problems as he gets older, providing guidance when needed). On the other hand, this patient was clearly very devoted to her son, and evidence not presented here indicated that she was doing very well in school and in their community. Also, there was family available in the area to provide at least occasional help, as needed. All indications were that M.T. was providing a safe living environment and adequate parenting at the time of this evaluation, and there was no compelling evidence that this would not continue. Still, periodic clinical monitoring of their situation might be desirable to identify any future needs for social services.

Finally, in any future clinical evaluation of M.T., it would be important to recognize that her particular aphasic disorder may lead some examiners to conclude that she has less ability to learn, understand, and conceptualize than she does. For example, although she cannot repeat verbal communications, she can demonstrate some learning and comprehension if she is tested in a recognition format. Whereas she cannot effectively explain her conceptual thinking verbally, she shows normal reasoning abilities when these abilities are tested nonverbally (e.g., normal results on the Category Test and WAIS-III Picture Arrangement). In summary, when her cognition is tested primarily through verbal interactions, her mental abilities may appear to be much more impaired than they actually are.

Review of Interpretive Issues

The use of demographically corrected *T* scores is most straightforward when considering level of performance on individual test measures. The *T* scores can be applied fairly directly in answering the following questions: (a) How adequate is this test result for a person of the same age, education, ethnicity, and sex? and (b) What is the likelihood that a neurologically normal person would obtain this *T* score? In other words, how abnormal is this result for this individual? Even in interpreting level of performance, however, the clinician should take into consideration a number of features and limitations of the *T*-score system.

It is important to note that not all demographic characteristics are corrected by the present system. First, all participants in the sample were educated in North America, with English as their first language. It is unknown whether or how well their results would generalize to persons with other cultural and educational backgrounds. Although 347 participants (158 Caucasian, 189 African American) were between ages 60 and 85 years, only 32 (16 in each group) were older than 79 years at the time of testing; thus, the current normative system should be used cautiously to correct for "normal aging" beyond the eighth decade.

A major limitation of this normative system is that its only ethnic corrections involve Caucasians and African Americans. The authors have not evaluated enough normal people in other racial/ethnic groups to provide the basis for norms, or even to adequately assess how generalizable the current Caucasian and African American norms may be to such groups. This problem is perhaps most pressing with regard to Hispanics, a very rapidly growing ethnic minority group within the U.S.; indeed, Hispanics are now the majority in several U.S. areas. Providing norms for Hispanics is especially challenging and complex, because Hispanic individuals in this country have such diverse cultural, linguistic, and educational backgrounds, as well as differing degrees of acculturation (Puente & Ardilla, 2000).

The largest existing normative samples of English-speaking Hispanics were collected as part of the WAIS-III and WMS-III standardization research. Scores for these samples were generally intermediate between those of Anglo/Caucasians and African Americans on the WAIS-III and WMS-III measures (Heaton et al., 2003), but little is known about expected performances of Hispanics on other tests. The authors do have some very limited data from English-speaking Hispanics on several of the tests included in this norming project ($n_s = 21-40$ on different

test measures). These were normal participants in studies from which the Caucasian normative samples were collected, but their representativeness is unknown, and the authors have no information about their bilingual status, degree of acculturation, and so forth. Clearly, no conclusions are warranted about results from such a small and poorly characterized sample. Nevertheless, with these strong caveats, their test findings are summarized as very preliminary indications of how these norms for Caucasians and African Americans might work with Hispanics. Table 10 summarizes the *T*-score results and the percentage of the Hispanic sample that would be classified as "impaired" (*T* score <40) using both sets of norms. The largest sample of Hispanics represented here ($n = 40$) included 29 males and 11 females; they had a mean age of 40.25 ($SD = 12.97$) years and a mean education of 13.25 ($SD = 2.91$) years. The table shows that, at least with this sample, use of the Caucasian norms results in excessive false positive errors on more test variables than was the case when the African American norms were used. Because no "Hispanic norms" are available for these tests, this result would seem to argue for preferential use of African American norms if the tests are administered to Hispanic individuals—especially those for whom no information has been collected about their cultural and linguistic backgrounds. However, clinicians routinely obtain such information about Hispanic patients, which obviously would be taken into consideration when choosing any normative guidelines. Also, the authors recommend using the Hispanic norms that are available for the WAIS-III and the WMS-III to help guide interpretive strategies with the other tests.

Although some might interpret the information in Table 10 as arguing against using any demographically corrected norms on these tests with Hispanic patients, interpreting test performance without considering age, education, and sex is likely to lead to even greater error. This is especially true for people at the highest or lowest age or educational levels. In fact, both sets of demographically adjusted norms significantly attenuated age and education effects on the test raw scores of the Hispanic sample. For example, age and education, respectively, explained 61% and 31% of this sample's AIR raw score variance; these respective demographic effects (R^2 s) were reduced to 7% and 0% for Caucasian normative *T* scores, and 6% and 0% for African American normative *T* scores.

In the *T*-score conversion system, educational level is used as the most universally available indication of pre-morbid cognitive functioning. It is interesting to note the amount of variance in the raw test scores of normal

Table 10
T Score Means, Standard Deviations, and False Positive (FP) Error Rates on a Small Group of Normal Hispanic Participants Using Caucasian and African American T-Score Equations

Test measure	Abbreviation	Caucasian T scores				African American T scores			
		N	M	SD	%FP	N	M	SD	%FP
Summary Scores									
Average Impairment Rating	AIR	32	43.3	12.3	40.6	32	51.0	11.6	12.5
Global Deficit Score	GDS	28	43.2	7.7	50.0	28	49.4	7.2	7.1
Executive Functions									
Category Test (errors)	CAT ERROR	39	46.8	10.8	23.1	39	53.5	12.2	15.4
Trail Making Test Part B (secs)	TRAIL B	40	45.2	9.9	30.0	40	52.0	9.5	10.0
Thurstone Word Fluency (correct)	THUR FLU	21	43.1	12.8	38.1	21	46.5	13.5	28.6
Attention/Working Memory									
Digit Vigilance-Errors	DIGIT ERROR	16	47.4	13.7	37.5	16	51.2	14.0	25.0
Seashore Rhythm Test (correct)	SSHOR RHYM	40	47.2	11.2	25.0	40	47.1	10.2	20.0
Speech-Sounds Perception Test (errors)	SPCH PERC	40	40.3	11.1	50.0	40	47.2	12.9	32.5
Speed of Information Processing									
Trail Making Test Part A (secs)	TRAIL A	40	48.8	9.8	12.5	40	53.4	9.4	5.0
Digit Vigilance-Time (secs)	DIGIT TIME	16	47.2	7.9	6.3	16	48.0	7.4	6.3
Spatial Skills									
Tactual Performance Test Total Time (min/blk)	TPT TIME	40	43.5	9.2	30.0	40	50.3	9.3	15.0
Spatial Relations (rating)	SPAT REL	33	49.3	7.4	6.1	33	51.3	6.5	6.1
Verbal/Academic Skills									
Aphasia Screening Test (errors)	APHAS SCRNN	30	45.1	10.5	30.0	30	55.5	10.2	6.7
Boston Naming Test (correct)	BSTN NAME	20	40.8	16.0	60.0	20	52.2	16.2	20.0
PIAT Reading Recognition (percentile)	PIAT RECOG	25	39.9	8.0	56.0	25	45.4	8.4	24.0
PIAT Reading Comprehension (percentile)	PIAT COMP	21	41.6	6.5	38.1				
Verbal Episodic Memory									
Story Memory Trial 1 Recall (correct)	STORY-T1	28	45.4	9.6	32.1	28	52.2	9.5	7.1
Story Memory Learning (points/trials)	STORY LEARN	28	44.2	9.7	32.1	28	52.4	8.8	3.6
Story Memory Delayed Recall (correct)	STORY RECALL	28	44.3	10.6	32.1	28	51.1	9.9	7.1
Story Memory Loss (% loss)	STORY LOSS	28	47.2	10.0	17.9	28	51.3	9.0	10.7
Visual Episodic Memory									
Tactual Performance Test-Memory (correct)	TPT MEM	40	48.7	10.7	20.0	40	52.4	10.7	15.0
Tactual Performance Test-Location (correct)	TPT LOC	40	48.5	10.3	15.0	40	53.9	12.2	5.0
Figure Memory Trial 1 Recall (correct)	FIGUR-T1	30	47.5	7.1	16.7	30	55.7	7.7	0.0
Figure Memory Learning (points/trials)	FIGUR LEARN	30	48.1	6.5	10.0	30	57.4	7.2	0.0
Figure Memory Delayed Recall (correct)	FIGUR RECALL	29	49.6	10.3	17.2	29	52.6	11.2	13.8
Figure Memory Loss (% loss)	FIGUR LOSS	29	51.4	10.6	20.7	29	51.8	10.9	20.7
Sensory Perceptual Skills									
Sensory-Perceptual-Total (errors)	SP TOT	24	46.0	10.0	29.2	24	47.0	9.1	20.8
Lateralized Sensorimotor/Psychomotor Comparisons									
Finger Tapping-Dominant (taps)	TAP DH	39	48.6	10.1	17.9	39	48.4	8.4	15.4
Finger Tapping-Nondominant (taps)	TAP NDH	39	48.0	13.1	25.6	39	48.6	11.4	15.4
Hand Dynamometer-Dominant (kgs)	GRIP DH	28	44.3	7.1	21.4	28	45.1	8.0	21.4
Hand Dynamometer-Nondominant (kgs)	GRIP NDH	28	44.0	9.0	32.1	28	43.8	9.5	39.3
Grooved Pegboard-Dominant (secs)	PEG DH	40	49.8	8.8	15.0	40	55.5	9.0	2.5
Grooved Pegboard-Nondominant (secs)	PEG NDH	40	49.8	9.7	10.0	40	57.5	10.1	0.0
Tactual Performance Test-Dominant (min/blk)	TPT DH	40	44.6	10.2	35.0	40	50.0	10.0	17.5
Tactual Performance Test-Nondominant (min/blk)	TPT NDH	40	44.8	8.4	27.5	40	50.9	9.1	15.0
Tactual Performance Test-Both Hands (min/blk)	TPT BH	40	45.1	9.5	32.5	40	50.6	9.6	5.0
Sensory-Perceptual-Right (errors)	SP R	24	47.1	10.4	29.2	24	47.7	10.0	20.8
Sensory-Perceptual-Left (errors)	SP L	24	45.7	10.6	37.5	24	48.0	9.7	12.5
Tactile Form Recognition-Right (secs)	TFR R	21	54.5	9.5	9.5	21	51.6	10.0	14.3
Tactile Form Recognition-Left (secs)	TFR L	21	56.3	8.1	4.8	21	53.6	9.0	4.8

Note. PIAT = Peabody Individual Achievement Test.

adults that can be explained by such a gross measure as years of education (see Table 5). However, this cannot be considered a valid estimate of premorbid functioning if the person has suffered a brain insult and/or is tested prior to the completion of his or her education. For such individuals, *T* scores cannot be based on current level of education; rather, the use of the present normative system would require some estimate of the educational level that might be (or might have been) achieved, perhaps considering such factors as premorbid school performance and the educational levels of parents and adult siblings. *T* scores that are based on such estimates should be interpreted with considerable caution.

Occasionally, an adult patient's level of formal education appears to be a poor estimate of his or her premorbid abilities. For example, a person may have dropped out of high school for financial reasons and may have then completed vocational and other achievements that would be typical of someone with much more education. Some current ability indicators (e.g., PIAT Reading Recognition) also might suggest a level of premorbid functioning that is atypical for the educational level achieved. Alternatively, a person may have some college background, but may never have done well either academically or vocationally. Historical information of this type should be considered when interpreting the *T* scores. For example, a person with a poor academic record would be expected to have more *T* scores in the below average range. However, any education adjustment in the actual computation of *T* scores should be done cautiously, if at all. In such cases, we recommend that the clinical report should specify that a nonstandard approach to educational determination was used and should provide the clinical rationale for this decision.

The substantial "education effects" observed for normal adults on most neuropsychological tests (see Table 5) probably do not simply represent what the individuals have learned in school. Rather, the years of completed education also provide some estimate of their previously demonstrated cognitive abilities. Arguably, that estimate will tend to be negatively biased when a person is still in school (has not completed his or her education). We attempted to minimize this bias by excluding teenagers from the normative project, because larger percentages of teenagers than adults are still in school. Nevertheless, adults obviously can be in school, and teenagers can be finished with their schooling. Strictly speaking, any use of the current education-adjusted norms with people who are still in school is nonstandard and requires additional clinical judgment for interpretation. As with the "special education" issue discussed in chapter 4, the

clinician may wish to consider *T* scores based on two education levels (in this case, years currently completed and years associated with the degree the person is seeking), along with any other relevant data that may be available (e.g., grades and other indicators of previous progress in a degree program).

A strictly statistical approach to interpreting the *T* scores is particularly cautioned against with tests that were initially designed to assess pathognomonic signs of cerebral dysfunction (e.g., aphasia, constructional dyspraxia). On most of these tests, normal individuals typically achieve the best possible raw score and rarely make more than one or two errors (e.g., Spatial Relations, BDAE Complex Ideational Material, and Sensory-Perceptual Exam). In these cases, even a trivial deviation from a perfect performance can place a person (statistically) within the "impaired" range. Great care should be taken when interpreting such impairments, particularly when slight deviations from a perfect performance can result from nonspecific factors such as brief inattention or carelessness. Also, on these and other tests (e.g., Aphasia Screening Test), it is possible to obtain the same score in ways that are qualitatively quite different. Although these scores do have some limited uses, such as in the comparison of group data in research, clinical interpretation of results on these tests requires a qualitative analysis of the patient's performance (Reitan, 1984).

Especially at extreme age and educational levels, *T* scores are not good reflections of the adequacy of a test performance in *absolute* terms. This is important when considering implications of the test results for everyday functioning. For example, a Category Test raw score of 80 errors is about average (*T* score = 49) for a 75-year-old high school graduate, but this score does not reflect good conceptual skills in an absolute sense (i.e., although it is normal to have relatively weak conceptual skills at this age, the average 75-year-old high school graduate is not likely to perform well in a conceptually demanding job). Conversely, a Category Test raw score of 35 errors is just within the "impaired" range (*T* score = 39) for a 30-year-old attorney or physician, but reflects conceptual skills that are adequate for most (if not all) everyday situations. When judging the adequacy of a test performance in more absolute terms, use of the scaled scores provided in Appendix C is recommended.

As demonstrated in Table 7, a *T* score in the "impaired" range (≤ 39) on any given test measure is expected to occur in no more than about 15% of neurologically normal persons. However, this does not mean that normal individuals rarely show such deficits on lengthy neuropsychological test batteries. In fact, it is a

serious mistake to assume that one or more test scores beyond the acceptable cutoff scores always indicate the presence of an acquired cerebral disorder. To illustrate the fallacy of this assumption, the results of 1,189 neurologically normal participants who had complete data on at least 25 measures in the expanded HRB were analyzed. Figure 9 shows the distribution of "impaired" test scores (T score ≤ 39) for this participant group. Only 13.2% of these normal adults had no T score in the "impaired" range, and the group median was three abnormal scores (out of a possible 25). Many fewer "abnormal" test results would occur in normal individuals if the T -score cutoff point were shifted to, for example, less than or equal to 34 or 29; with these respective cutoff points, 40.6% and 72.2% of the normal individuals would have no abnormal scores. However, this gain in specificity

would be offset by a similar or even greater loss in sensitivity to brain disorders (see Taylor & Heaton, 2001). The important point to recognize is that some poor test results are to be expected in most normal persons, especially when a large battery of tests is administered. Moreover, what distinguishes the normal individuals from persons with acquired brain disorders is not just the number or even the severity of deficits, but also the nature and pattern of those deficits. Although T scores will help to identify which abilities are especially low for a person with a given set of demographic characteristics, the clinician must determine the significance of those deficits by considering a variety of additional factors. As illustrated in the case examples presented in this chapter, these additional factors include information about the person's school performance, vocational history, medical

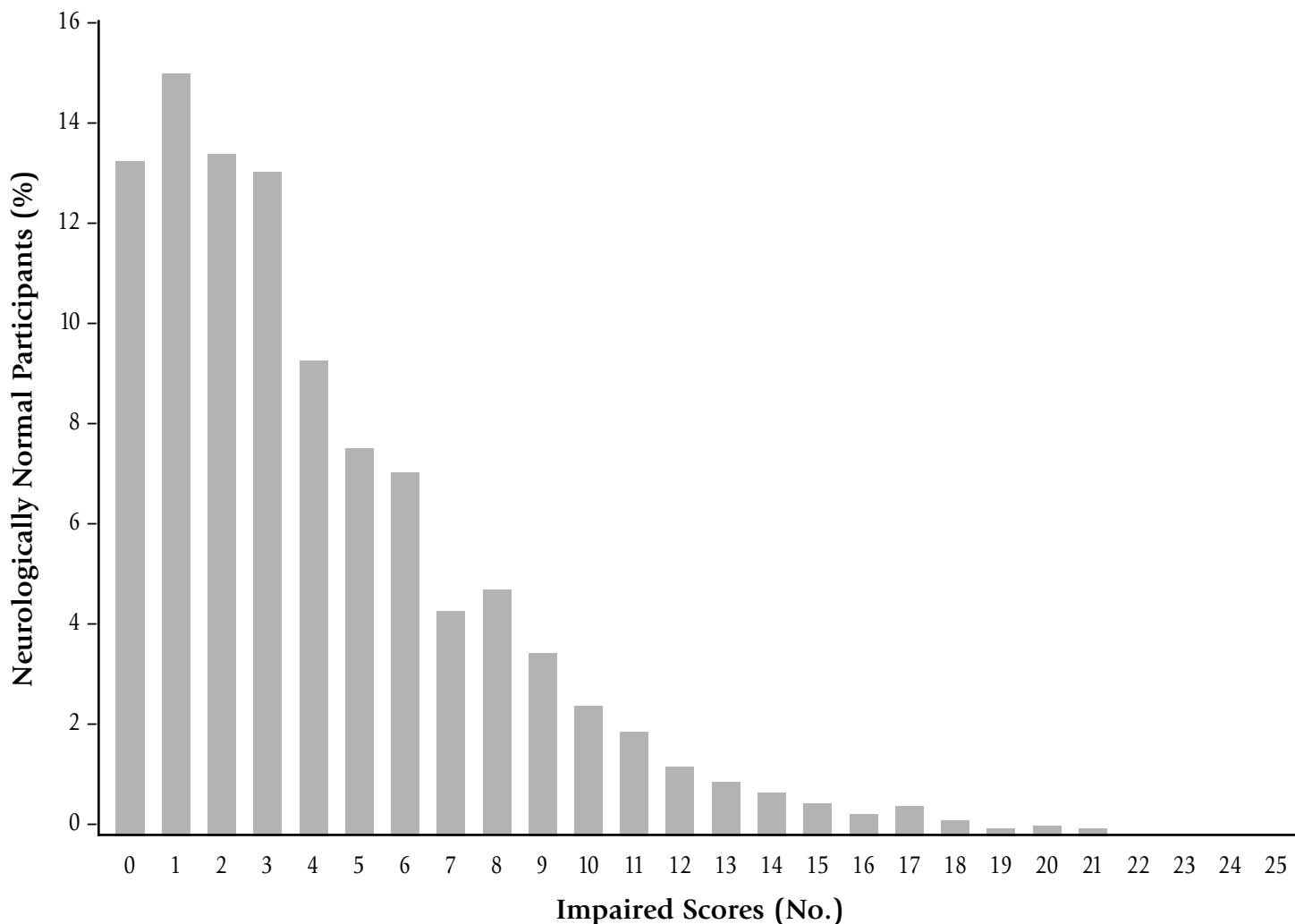


Figure 9. Frequency of "impaired" test scores (T scores ≤ 39) for 1,189 neurologically normal participants on 25 measures of the test battery.

and psychiatric history, current medications, and behavior during testing, as well as a knowledge of the patterns of strengths and deficits that are associated with various types of brain disorders.

The *T*-score conversion system holds specificity essentially constant at about 85% for all test measures, at all levels of age and education. This provides some interesting perspectives on the sensitivity of various test measures to cerebral disorders. For example, the Tactual Performance Test–Location measure has traditionally been considered one of the most sensitive HRB measures to cerebral disorders. In fact, it is a very sensitive measure for younger and even middle-aged persons. However, Tactual Performance–Location has a limited range of possible raw score values and requires a substantial correction to avoid excessive false positive errors in the older age ranges. In essence, this results in a “floor” effect beyond about 60 years of age. Even the lowest possible raw scores (0 to 1 correct) are not sufficiently rare in normal individuals to be considered “impaired,” so the measure has little or no potential to detect neurologic disorders in older individuals.

By holding specificity constant, the *T*-score system also permits more direct comparisons of the sensitivities of different test measures to brain disorders involving different etiologies and cerebral locations. Filley et al. (1989) provide an example of such comparisons for Alzheimer’s disease and multiple sclerosis, but more studies are needed to elucidate the patterns of *T*-score results associated with these and other neurologic conditions.

Although the clinical interpretation of *T* scores on individual test measures can be complex, analyses of *T*-score *patterns* is even more complex. To the extent that the *T*-score conversions remove the effects of demographic factors on patterns of test results, they should facilitate identification of patterns that are attributable to focal and diffuse cerebral disorders. However, the distributional properties of raw scores and *T* scores can be quite different, and converting raw scores to *T* scores with constant standard deviations can have major effects on pattern features. This is particularly true for test measures in which the raw scores have either very low or very high variability in normal individuals. For low variability measures, a small change in raw score (and in actual test performance) can translate into a relatively large *T*-score

change; this was discussed previously in relation to interpretations of level of performance on individual test measures. In addition, for measures in which raw score variability is quite high in normal individuals, very large differences in test performances (e.g., in the number of errors made) would be required to cause an appreciable *T*-score shift. Another factor that will alter patterns of scores in the *T*-score conversion process is the fact that different test measures require different magnitudes of correction for age, education, and sex.

For these reasons, patterns of demographically corrected *T* scores eventually may prove more informative than raw score patterns for neurodiagnostic purposes. The four clinical cases all demonstrated that diagnostically meaningful patterns of performance are apparent in the *T*-score results. Nevertheless, patterns of raw scores and *T* scores are different, and most previous clinical and research experience in neuropsychology has been with raw scores. Therefore, at least until more is known about the relative merits of the different types of scores for different purposes, clinicians should find it useful to consider all three (raw, scaled, and *T* scores) in the interpretation process.

A final consideration about using *T* scores to evaluate patterns of results on the test battery relates to differences in the normative samples across tests (see Table 2). Co-norming of tests (i.e., based on administration of all tests to the same individuals) clearly facilitates comparisons of normative scores across tests. Although the core HRB was in fact co-normed (i.e., administered as a unit in our studies), the normative samples used for the additional tests did vary. Clinicians and researchers should keep this in mind when considering pattern features that involve the additional tests. On the other hand, Table 2 indicates that the individuals in these samples have similar demographic characteristics across tests (e.g., means and standard deviations for years of education, age). To further address the question of comparability of the different normative samples described in Table 2, the authors have investigated the WAIS FSIQ data of the samples involved in each of the 21 GDS component measures. The mean WAIS FSIQ *T* score across samples ranged from 48.9 ($SD = 9.7$) to 50.8 ($SD = 10.4$). Thus, the varying samples appear to be fairly similar, both demographically and in terms of general intelligence.

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Appendix A

SCORING GUIDELINES FOR THE STORY MEMORY TEST

APPENDIX A

Story bits and scores	Scoring for incorrect responses
$\frac{1}{2}$ $\frac{1}{2}$	
(After attending) <i>preparatory school</i>	$\frac{1}{2}$ = college 0 = after that
$\frac{1}{2}$	
(in) <i>London</i> , England	0 = Europe
1	
<i>Henry</i>	0 = any other name
1	
<i>Hooker</i>	0 = any other name
$\frac{1}{2}$ $\frac{1}{2}$	
<i>a native (of) Turkey</i>	1 = originally from Turkey 1 = born in Turkey $\frac{1}{2}$ = from Turkey
1	
<i>was sent to attend</i>	1 = went to, was sent to $\frac{1}{2}$ = attended
$\frac{1}{2}$ $\frac{1}{2}$	
<i>Caswell College</i>	1 = "Cozwell" College $\frac{1}{2}$ = school
1	
(in) <i>Connecticut</i> .	0 = any other state
$\frac{1}{2}$ $\frac{1}{2}$	
<i>After completing</i>	$\frac{1}{2}$ = after that $\frac{1}{2}$ = attended
$\frac{1}{2}$ $\frac{1}{2}$	
(the) <i>first year</i>	1 = a year
$\frac{1}{2}$ $\frac{1}{2}$	
<i>(Henry) ran out of money</i>	$\frac{1}{2}$ = didn't have enough (any) money
$\frac{1}{2}$ $\frac{1}{2}$	
(and was) <i>unable to return home</i> .	1 = couldn't get home $\frac{1}{2}$ = wanted to go home $\frac{1}{2}$ = went home
$\frac{1}{2}$ $\frac{1}{2}$	
<i>Eager to see (the) U.S.</i>	1 = wanted to see the U.S. 1 = decided to see the U.S. 1 = decided to tour the U.S. 1 = decided to tour the country $\frac{1}{2}$ = wanted to see the states

(continued)

APPENDIX A (*continued*)

Story bits and scores	Scoring for incorrect responses
1 (he began) <i>hitchhiking</i>	1 = started thumbing a ride ½ = set out for ½ = decided to go
1 (to) <i>Los Angeles</i> .	½ = California
1 (In) <i>New Orleans</i>	½ = Louisiana
½ ½ <i>he met (a fellow) hitchhiker</i>	1 = picked up a hitchhiker ½ = met a guy ½ = ran into, ran across
1 (named) <i>Jim</i> (who suggested)	0 = any other name
½ ½ (that they) <i>ride the rails</i> .	1 = go by the rails 1 = hit the rails 1 = do the rails 1 = go by train, ride the train ½ = rail the rods ½ = train 0 = travel together
1 (Just) <i>outside</i> (of)	½ = near
1 <i>Blackwell</i> (City)	1 = "Blockwell" ½ = "Black..." 0 = some city
1 (they were) <i>picked up</i>	1 = apprehended ½ = busted, arrested, got caught, hauled in, stopped
1 (by) <i>Sheriff</i>	½ = by the law, cop, officer, police
1 <i>Cooper</i>	1 = "Copper"
½ ½ <i>taken to court</i>	1 = taken before the judge 1 = brought to court ½ = taken to jail ½ = went to court

(continued)

APPENDIX A (*continued*)

Story bits and scores	Scoring for incorrect responses
$\frac{1}{2}$ $\frac{1}{2}$	
(and) <i>charged with vagrancy.</i>	$\frac{1}{2}$ = cited $\frac{1}{2}$ = for "flagrantcy" $\frac{1}{2}$ = as transients 0 = loitering
1	
(Although they) <i>protested</i> this charge	1 = pleaded innocent, pleaded not guilty 1 = objected/contested the charge $\frac{1}{2}$ = thought it wasn't fair $\frac{1}{2}$ = didn't think it was right $\frac{1}{2}$ = they fought it $\frac{1}{2}$ = they denied it
1	
(they were nevertheless) <i>fined</i>	1 = given a fine $\frac{1}{2}$ = charged, had to pay
$\frac{1}{2}$ $\frac{1}{2}$	
\$10.00 (and) <i>costs.</i>	$\frac{1}{2}$ = court expenses, fees, charges

Note. Words in parenthesis are not scored. Learning trials are administered until the individual obtains at least 15 points on a single trial or until five trials (administrations) are completed, whichever comes first. The Learning score is the score obtained on the last trial which is administered. After a 4-hour delay, the individual is again asked to recall the story (aphasia tests should not be administered during this 4-hour test). The individual's recall is again scored. The Memory Loss score is calculated on the basis of the Learning score and the score on the Recall trial. The Learning and Memory Loss scores are calculated as follows:

Learning score: Number of points earned on the last Learning trial administered divided by the number of trials administered. For example, if the individual earned 18 points on the third trial, the Learning score would be 6 (18 divided by 3).

Memory Loss score (%): Number of points earned on the last Learning trial minus the number of points earned on the Recall; this difference is then divided by the number of points earned on the last Learning trial administered. For example, if the individual earned 18 points on the last trial administered and 16 points on Recall, the Memory Loss score is 11.1% (18 minus 16 = 2; 2 divided by 18 = 11.1%).

Appendix B

SCORING GUIDELINES FOR THE FIGURE MEMORY TEST

APPENDIX B

Design A

Criteria	Points
1. Two lines crossed.	1
2. Crossed flags (flags need NOT be square).	1
3. Flags correctly face one another.	1
4. Figure correctly reproduced and proportion accurate (lines nearly equal [within 20%], nearly bisected, nearly square, and flags <i>on</i> the lines).	1
	Maximum score
	4

Design B

Criteria	Points
1. Large square/rectangle.	1
2. Two diameters in large square/rectangle.	1
3. Four small squares/rectangles within each large square.	1
4. Two diameters in each small square/rectangle.	1
5. Sixteen dots, each in a small square/rectangle.	1
6. Accuracy of proportion (width of spaces around the four small squares between $\frac{1}{4}$ and $\frac{1}{2}$ the width of the 16 smallest squares; 1 through 4 above must be correct).	1
7. All inner and outer rectangles approximately squares; look at each square individually.	1
Note: If design is complete, but with superfluous squares, lines, or dots, maximum score = 4.	Maximum score
	7

Design C – Left Figure

Criteria	Points
1. Open rectangle.	1
2. Direction correct on the right loop (loop need not be square).	1
3. Direction correct on the left loop (loop need not be square).	1
4. Loops are square and extend <i>beyond the main line</i> (loop direction does not have to be correct).	1
5. Figure correctly reproduced and in approximate proportion.	1
Note: Regarding Items 1 to 3: If figure is correct but upside down, score 2. Additionally, if loops are square and lines cross main lines but figure is upside down, score 3.	Maximum score
	5

(continued)

APPENDIX B (*continued*)

Design C – Right Figure

Criteria	Points
1. Large rectangle.	1
2. Small rectangle inside.	1
3. All vertices (of rectangle) connected (or nearly connected) to vertices of larger rectangles.	1
4. Smaller rectangle correctly shifted to right.	1
5. Figure correct and proportions of both rectangles approximately as in stimulus figure.	1
	Maximum score
	5

Note. Learning trials are administered until the individual obtains at least 15 points on a single trial or until five trials (administrations) are completed, whichever comes first. The Learning score is the score obtained on the last trial administered. After a 4-hour delay, the individual is again asked to reproduce the designs. The individual's reproduction is again scored. The Memory Loss score is calculated on the basis of the Learning score and the score on the Recall trial. The Learning and Memory Loss scores are calculated as follows:

Learning score: Number of points earned on the last Learning trial administered divided by the number of trials administered. For example, if the individual earned 18 points on the third trial, the Learning score would be 6 (18 divided by 3).

Memory Loss score (%): Number of points earned on the last Learning trial minus the number of points earned on Recall; this difference is then divided by the number of points earned on the last Learning trial administered. For example, if the individual earned 18 points on the last Learning trial administered and 16 points on Recall, the Memory Loss score is 11.1% (18 minus 16 = 2; 2 divided by 18 = 11.1%).

Appendix C

RAW SCORE TO SCALED SCORE EQUIVALENTS

APPENDIX C

Scaled score	Summary scores			Executive functions						Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	≥143	—	0.00-0.07	0-4	0-24	≥103	≥79	≥39	18-19	—	—	—	—	—	—	—	19
18	140-142	≥141	0.08-0.16	5	25-27	99-102	73-78	36-38	16-17	19	—	—	—	—	0	18	
17	134-139	139-140	0.17-0.24	6-7	28	94-98	67-72	34-35	—	—	192-196	—	—	—	—	—	17
16	129-133	135-138	0.25-0.32	8-10	29-33	89-93	63-66	32-33	15	—	187-191	—	—	—	—	—	16
15	123-128	132-134	0.33-0.35	11-12	34-38	85-88	58-62	30-31	14	16	176-186	0	30	1	15	—	15
14	117-122	129-131	0.36-0.44	13-15	39-43	76-84	54-57	28-29	13	15	167-175	—	29	—	—	—	14
13	113-116	124-128	0.45-0.57	16-18	44-48	70-75	50-53	25-27	12	14	155-166	1	—	—	2	13	
12	108-112	121-123	0.58-0.72	19-22	49-55	64-69	46-49	23-24	11	—	145-154	2	28	3	12	—	12
11	102-107	117-120	0.73-0.90	23-28	56-63	58-63	42-45	21-22	10	12	134-144	3	—	4	11	—	11
10	97-101	111-116	0.91-1.07	29-37	64-74	51-57	38-41	19-20	8-9	11	124-133	4	27	5	10	—	10
9	92-96	106-110	1.08-1.26	38-47	75-88	46-50	34-37	17-18	—	10	112-123	5-7	26	6-7	9	—	9
8	87-91	103-105	1.27-1.54	48-59	89-104	41-45	29-33	15-16	7	9	100-111	8-9	25	8-9	8	—	8
7	82-86	99-102	1.55-1.82	60-72	105-123	31-40	26-28	14	6	—	89-99	10-12	24	10-12	7	—	7
6	77-81	94-98	1.83-2.07	73-86	124-154	26-30	22-25	12-13	5	7	78-88	13-16	22-23	13-15	6	—	6
5	71-76	90-93	2.08-2.40	87-98	155-214	21-25	18-21	11	4	6	67-77	17-21	20-21	16-18	5	—	5
4	66-70	85-89	2.41-2.66	99-111	215-264	18-20	15-17	9-10	3	—	56-66	22-25	18-19	19-23	4	—	4
3	60-65	83-84	2.67-3.07	112-117	265-294	15-17	13-14	8	2	4	43-55	26-36	15-17	24-28	3	—	3
2	55-59	76-82	3.08-3.41	118-124	295-299	11-14	10-12	6-7	1	—	34-42	37-50	14	29-34	2	—	2
1	≤54	70-75	3.42-3.59	125-140	≥300	0-10	0-9	5	—	2	24-33	51-70	3-13	35-60	1	—	1
0	—	≤69	3.60-5.00	141-208	—	—	—	0-4	—	0-1	0-23	≥71	0-2	—	0	—	0

Scaled score	Speed of information processing				Spatial skills					Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL			
19	19	—	0-11	—	19	—	0.000-0.177	—	19	—	—	—	—	—	—	—	—	19	
18	18	19	12	0-200	—	—	0.178-0.183	—	18	—	—	—	—	—	—	—	—	18	
17	17	18	13	201-243	17	—	0.184-0.197	—	17	19	—	—	—	97-99	95-99	—	—	17	
16	16	17	14	244-253	16	17	0.198-0.213	—	16	18	—	60	—	95-96	93-94	99	—	16	
15	15	16	15-16	254-264	15	16	0.214-0.233	—	15	17	—	—	—	91-94	91-92	—	—	15	
14	14	15	17	265-287	14	15	0.234-0.257	—	14	16	—	59	—	87-90	90	98	—	14	
13	13	14	18-19	288-320	13	14	0.258-0.293	—	13	15	0	58	—	82-86	89	95-97	—	13	
12	12	13	20-21	321-338	12	13	0.294-0.333	—	12	14	—	—	12	78-81	88	89-94	—	12	
11	11	12	22-24	339-367	11	12	0.334-0.373	0-2	11	13	1	57	—	68-77	84-87	78-88	—	11	
10	10	11	25-28	368-392	10	11	0.374-0.440	—	10	12	2	56	—	57-67	75-83	66-77	—	10	
9	9	10	29-33	393-420	9	10	0.441-0.513	3	9	11	3-4	54-55	11	47-56	63-74	42-65	—	9	
8	8	9	34-38	421-451	8	9	0.514-0.640	—	8	10	5-6	51-53	—	36-46	44-62	27-41	—	8	
7	7	8	39-44	452-496	7	8	0.641-0.804	4	7	9	7	47-50	10	27-35	32-43	8-26	—	7	
6	6	7	45-52	497-553	6	7	0.805-1.015	—	6	8	8-9	45-46	—	19-26	22-31	6-7	—	6	
5	5	6	53-62	554-599	5	6	1.016-1.360	5	5	7	10-14	40-44	9	12-18	5-21	2-5	—	5	
4	4	5	63-70	≥600	4	5	1.361-2.140	—	4	6	15-20	28-39	—	6-11	3-4	1	—	4	
3	3	4	71-80	—	3	4	2.141-2.727	6	3	5	21-22	26-27	8	2-5	1-2	—	—	3	
2	2	3	81-91	—	2	3	2.728-3.000	7	2	4	23-24	14-25	4-7	0-1	—	—	—	2	
1	1	2	≥92	—	1	2	3.001-3.750	8	1	3	25-27	0-13	0-3	—	—	—	—	1	
0	—	0-1	—	—	0-1	≥3.751	9-12	—	0-2	28-75	—	—	0	0	0	0	0	0	

(continued)

APPENDIX C (continued)

Scaled score	Verbal episodic memory								Visual episodic memory							Scaled score
	STORY-T1	STORY LEARN	STORY RECALL	STORY LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT MEM	TPT LOC	FIGUR-T1	FIGUR LEARN	FIGUR RECALL	FIGUR LOSS	
19	≥31.1	—	≥29.1	—	15-16	—	77-80	—	—	—	10	≥22	≥21.00	≥22	—	19
18	28.1-31.0	≥29.00	28.1-29.0	—	—	—	75-76	—	—	—	9	21	20.00-20.99	21	—	18
17	26.1-28.0	28.00-28.99	24.6-28.0	—	13-14	—	71-74	—	—	10	—	20	—	20	—	17
16	24.1-26.0	26.00-27.99	23.1-24.5	—	—	16	70	16	16	—	—	19	19.00-19.99	19	—	16
15	22.1-24.0	24.00-25.99	21.1-23.0	—	12	—	67-69	15	—	—	8	—	—	—	—	15
14	20.6-22.0	22.00-23.99	20.1-21.0	0.00-2.60	11	15	64-66	14	15	—	7	18	18.00-18.99	18	—	14
13	18.6-20.5	20.00-21.99	19.1-20.0	—	10	—	62-63	13	—	9	—	17	17.00-17.99	17	0.00	13
12	17.1-18.5	18.50-19.99	18.1-19.0	2.61-4.17	9	14	59-61	12	14	—	6	16	16.00-16.99	—	0.01-5.54	12
11	15.1-17.0	17.00-18.49	16.6-18.0	4.18-7.77	8	13	54-58	11	13	8	5	15	15.00-15.99	16	5.55-5.79	11
10	12.6-15.0	11.00-16.99	15.1-16.5	7.78-10.64	7	12	49-53	10	11-12	—	4	13-14	8.50-14.99	15	5.80-6.66	10
9	10.6-12.5	9.50-10.99	14.1-15.0	10.65-14.00	6	11	45-48	9	9-10	7	3	11-12	7.50-8.49	14	6.67-12.49	9
8	8.6-10.5	8.50-9.49	13.1-14.0	14.01-17.65	5	10	41-44	8	7-8	—	2	9-10	5.33-7.49	13	12.50-18.74	8
7	7.1-8.5	7.75-8.49	12.6-13.0	17.66-22.22	4	9	37-40	7	6	6	1	7-8	5.00-5.32	12	18.75-24.99	7
6	5.6-7.0	5.67-7.74	11.6-12.5	22.23-26.67	—	8	32-36	5-6	5	5	—	6	3.00-4.99	10-11	25.00-33.49	6
5	4.6-5.5	4.13-5.66	10.6-11.5	26.68-31.43	3	7	27-31	4	4	4	0	5	2.40-2.99	9	33.50-41.09	5
4	3.6-4.5	3.10-4.12	9.1-10.5	31.44-39.47	—	6	25-26	3	3	3	—	4	2.00-2.39	8	41.10-50.99	4
3	2.1-3.5	2.50-3.09	7.1-9.0	39.48-42.00	2	5	16-24	—	2	2	—	3	1.40-1.99	6-7	51.00-73.32	3
2	1.1-2.0	0.00-2.49	4.1-7.0	42.01-55.00	1	4	7-15	2	1	1	—	0-2	0.00-1.39	5	73.33-100.00	2
1	0.0-1.0	—	0.0-4.0	55.01-68.00	0	3	4-6	1	0	0	—	—	—	0-4	—	1
0	—	—	—	68.01-100.00	—	0-2	0-3	0	—	—	—	—	—	—	—	0
Lateralized sensorimotor/Psychomotor comparisons																
Scaled score	TAP DH	TAP NDH	GRIP DH	GRIP NDH	PEG DH	PEG NDH	TPT DH	TPT NDH	TPT BH	SP R	SP L	SP TOT	TFR R	TFR L	Scaled score	
19	≥71.1	≥68.1	≥74.0	≥67.0	0-45	0-44	0.00-0.19	0.00-0.13	0.00-0.07	—	—	—	0.0-4.4	0.0-4.0	19	
18	70.1-71.0	64.0-68.0	72.0-73.9	66.0-66.9	46	45-48	0.20-0.22	0.14	0.08-0.09	—	—	—	4.5-5.0	4.1-4.5	18	
17	67.6-70.0	63.0-63.9	67.0-71.9	62.8-65.9	47	49-51	0.23-0.24	0.15	0.10	—	—	—	5.1-5.5	4.6-5.0	17	
16	64.9-67.5	58.1-62.9	64.0-66.9	60.0-62.7	48-49	52	0.25-0.26	0.16-0.18	0.11	—	—	—	5.6-6.0	5.1-5.5	16	
15	62.5-64.8	57.0-58.0	61.0-63.9	56.0-59.9	50-51	53-55	0.27-0.30	0.19-0.21	0.12-0.13	—	—	0.0-0.9	6.1-6.6	5.6-6.0	15	
14	59.5-62.4	54.0-56.9	56.0-60.9	52.0-55.9	52-53	56-58	0.31-0.34	0.22-0.24	0.14-0.15	0.0-0.9	—	—	6.7-7.2	6.1-6.7	14	
13	57.3-59.4	52.0-53.9	52.5-55.9	48.5-51.9	54-56	59-61	0.35-0.39	0.25-0.29	0.16-0.17	—	0.0-0.4	1.0-1.4	7.3-8.0	6.8-7.4	13	
12	55.3-57.2	50.1-51.9	48.5-52.4	44.5-48.4	57-59	62-64	0.40-0.44	0.30-0.34	0.18-0.20	1.0-1.4	—	—	8.1-8.5	7.5-8.0	12	
11	53.2-55.2	48.0-50.0	44.5-48.4	40.5-44.4	60-62	65-67	0.45-0.50	0.35-0.40	0.21-0.24	—	0.5-1.4	1.5-2.4	8.6-9.9	8.1-8.9	11	
10	51.3-53.1	45.1-47.9	38.0-44.4	35.0-40.4	63-66	68-71	0.51-0.60	0.41-0.49	0.25-0.31	1.5-2.4	1.5-1.9	2.5-3.4	10.0-11.4	9.0-9.9	10	
9	47.8-51.2	43.0-45.0	32.5-37.9	29.0-34.9	67-70	72-76	0.61-0.74	0.50-0.59	0.32-0.42	2.5-3.9	2.0-2.4	3.5-4.4	11.5-13.0	10.0-11.0	9	
8	45.1-47.7	40.1-42.9	28.0-32.4	25.5-28.9	71-74	77-82	0.75-0.87	0.60-0.79	0.43-0.55	4.0-4.9	2.5-3.4	4.5-5.9	13.1-15.0	11.1-13.0	8	
7	42.1-45.0	37.1-40.0	25.0-27.9	22.3-25.4	75-81	83-88	0.88-1.36	0.80-1.11	0.56-0.80	5.0-7.4	3.5-4.4	6.0-8.9	15.1-17.0	13.1-15.0	7	
6	38.3-42.0	35.0-37.0	23.0-24.9	20.0-22.2	82-88	89-101	1.37-2.50	1.12-2.00	0.81-1.50	7.5-10.4	4.5-6.4	9.0-12.9	17.1-19.0	15.1-17.0	6	
5	35.1-38.2	31.1-34.9	19.5-22.9	17.0-19.9	89-103	102-113	2.51-4.20	2.01-3.30	1.51-2.40	10.5-13.9	6.5-8.9	13.0-16.9	19.1-22.0	17.1-20.0	5	
4	32.1-35.0	29.0-31.0	15.5-19.4	14.5-16.9	104-120	114-130	4.21-5.40	3.31-4.50	2.41-3.30	14.0-17.9	9.0-12.4	17.0-25.4	22.1-25.0	20.1-24.0	4	
3	27.1-32.0	25.1-28.9	13.3-15.4	9.5-14.4	121-137	131-163	5.41-7.90	4.51-5.20	3.31-3.60	18.0-19.4	12.5-19.4	25.5-30.4	25.1-28.0	24.1-27.0	3	
2	23.1-27.0	23.1-25.0	12.5-13.2	9.0-9.4	138-155	164-179	7.91-10.01	5.21-5.80	3.61-7.00	19.5-24.4	19.5-20.9	30.5-48.9	28.1-31.6	27.1-29.0	2	
1	21.3-23.0	22.1-23.0	5.0-12.4	5.0-8.9	156-165	180-201	≥10.02	5.81-7.00	≥7.01	24.5-64.0	21.0-64.0	≥49	≥31.7	≥29.1	1	
0	0.0-21.2	0.0-22.0	0.0-4.9	0.0-4.9	≥166	≥202	—	≥7.01	—	—	—	—	—	—	0	

Note. See page 16 for a description of acronyms.

Appendix D

CAUCASIAN-BASED NORMS: SCALED SCORE TO T-SCORE CONVERSIONS BY SEX, EDUCATION, AND AGE GROUP

APPENDIX D

Sex: Male

Education: 7-8 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	100	100	100	87	94	92	82	85	91	87	80				19
18	96	100	97	83	89	88	79	81						81	18
17	92	98	92	79	85	84	75	77			81				17
16	88	94	87	75	80	81	72	72	80		78				16
15	84	90	81	71	76	77	68	68	76	70	74	74	68	69	15
14	79	85	76	67	72	73	65	64	72	67	70		64		14
13	75	81	71	63	67	69	61	59	68	64	66	68		61	13
12	71	77	65	59	63	65	57	55	64		62	64	58	57	12
11	67	72	60	55	58	62	54	51	60	57	58	61		53	11
10	62	68	55	51	54	58	50	47	56	54	55	57	52	49	10
9	58	64	49	47	49	54	47	42		51	51	54	49	45	9
8	54	59	44	43	45	50	43	38	48	48	47	50	46	41	8
7	50	55	39	39	40	46	39	34	44		43	47	43	37	7
6	46	51	33	35	36	43	36	30	40	41	39	43	40	33	6
5	41	47	28	31	32	39	32	25	37	38	35	40	36	29	5
4	37	42	22	27	27	35	29	21	33		32	37	33	26	4
3	33	38	17	23	23	31	25	17	29	32	28	33	30	22	3
2	29	34	12	19	18	27	21	12	25		24	30	27	18	2
1	24	29	6	15	14	24	18	8		25	20	26	24	14	1
0	25	1		11				4		22	16	23	21		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	97		93		93		84		100							19
18	93	95	88	81			80		99							18
17	89	90	84	77	85		76		94	96			90	85		17
16	85	86	79	73	81	76	72		90	91	80		86	82	89	16
15	81	82	75	69	77	71	68		86	87			82	78		15
14	77	77	70	65	73	67	64		82	82	72		79	74	81	14
13	73	73	66	61	69	63	60		78	77	68		75	71	77	13
12	69	69	61	57	65	59	56		74	73		65	71	67	73	12
11	65	64	57	53	61	55	52	64	69	68	69	61	68	63	69	11
10	61	60	53	49	57	51	48		65	64	65	57	64	60	65	10
9	57	56	48	45	53	47	44	52	61	59	60	53	51	60	56	9
8	53	51	44	40	49	43	39		57	55	56	49	57	52	57	8
7	49	47	39	36	45	39	35	41	53	50	52	45	41	53	49	7
6	45	43	35	32	41	35	31		49	46	48	41		49	45	6
5	41	38	30	28	37	30	27	29	45	41	43	37	31	46	41	5
4	37	34	26	24	33	26	23		40	37	39	33	42	38	42	4
3	33	30	21		29	22	19	18	36	32	35	29	22	38	34	3
2	29	25	17		25	18	15	12	32	27	31	25	17	35		2
1	25	21	13		21	14	11	6	28	23	27	21	12			1
0	17				10	7	0		18	22			23	26		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 20-34 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		88		89		85				82	89	87	86		19
18	88	93	84				81				78	85	83	83		18
17	84	88	80		80		77				78	80		79		17
16	79	84	76			73	73	70	77			76	75	75		16
15	75	79	72		71		68	67				66				15
14	71	75	68	65	66	65	64	63	68		62	68	67	68		14
13	66	70	64		62		60	59			62	64	63	64	60	13
12	62	66	60	58	57	57	56	55	59		54	59	59		57	12
11	58	61	56	55	52	53	52	51	55		54	51	55	55	56	11
10	54	57	52	51	48	49	48	48	50		47	51	51	53	50	10
9	49	52	48	48	43	45	44	44	46		46	43	47	47	46	9
8	45	48	44	44	39	41	40	40	41		39	42	43	45	43	8
7	41	43	40	41	34	37	35	36	37		38	35	38	39	41	7
6	36	39	36	37		33	31	33	32		34	34	34	38	36	6
5	32	34	32	34	25	29	27	29	28		30	27	30	30	32	5
4	28	30	28	30		25	23	25	23		26		25	26	30	4
3	24	25	24	27	16	21	19		19		22		21	22	27	3
2	19	21	20	24	11	17	15	18	14		18		17	18	23	2
1	15		15	20	7	13	11	14	10		14			19		1
0				17		9	7	10								

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	87	82	80	87	84	83	84	84				90	89	19
18	85	83	77	75	83	80	79	80	80				86	86	18
17	81	78	72	70	79	76	75	76	75				82	82	17
16	77	74	66	65	74	72	71	71	71				79	79	16
15	72	70	61	60	70	68	66	67	66				66	75	15
14	68	66	56	55	66	64	62	63	62				72	71	14
13	64	62	51	50	62	60	58	59	58				60	68	13
12	60	58	46	45	57	56	54	55	53				65	64	12
11	56	54	41	40	53	52	50	50	49				61	61	11
10	52	50	36	35	49	48	46	46	45				58	57	10
9	47	46	31	30	44	44	42	42	40				54	54	9
8	43	42	26	25	40	40	38	38	36				51	50	8
7	39	38	21	20	36	36	34	33	31				47	47	7
6	35	34	16	15	32	32	29	29	27				44	43	6
5	31	30	10	10	27	28	25	25	23				40	40	5
4	27	25	5	5	23	24	21	21	18				37	36	4
3	22	21	0	0	19	20	17	17	14				27	33	3
2	18	17	0	0	15	16	13	12	9				30	29	2
1	14	13	0	0	10	12	9	8	5				26	26	1
0	10	9	0	0	6	8		4							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 7-8 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	99	100	100	90	96	94	84	88	91						19
18	95	100	100	86	92	90	80	84	87	81				81	18
17	90	96	96	82	87	86	77	79			83				17
16	86	92	90	78	83	82	73	75	80		79				16
15	82	88	85	74	78	78	69	71	76	71	76	76	69	70	15
14	78	83	80	70	74	75	66	67	72	68	72		66		14
13	74	79	74	66	69	71	62	62	68	65	68	69		62	13
12	69	75	69	62	65	67	59	58	64		64	66	59	58	12
11	65	70	64	58	60	63	55	54	60	58	60	62		54	11
10	61	66	58	54	56	60	51	49	56	55	56	59	53	50	10
9	57	62	53	50	52	56	48	45	52	53	55	50	46		9
8	52	57	47	46	47	52	44	41	48	49	49	52	47	42	8
7	48	53	42	42	43	48	41	37	44		45	48	44	38	7
6	44	49	37	38	38	44	37	32	40	42	41	45	41	34	6
5	40	44	31	34	34	41	33	28	37	39	37	41	38	30	5
4	35	40	26	30	29	37	30	24	33		33	38	34	26	4
3	31	36	21	26	25	33	26	20	29	33	30	35	31	23	3
2	27	31	15	22	20	29	23	15	25		26	31	28	19	2
1	23	27	10	18	16	25	19	11		26	22	28	25	15	1
0	23	23	5	14				7	23	18	24	22			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	100		96		95		86		100							19
18	97	94	91	82			82		97							18
17	93	90	87	78	87		78		93	96			89	86		17
16	89	85	82	74	83	78	74		89	91		78	86	82	89	16
15	85	81	78	70	79	74	70		85	87			82	79		15
14	81	77	74	66	75	70	66		81	82		70	78	75	81	14
13	77	72	69	62	71	66	62		76	77	78	66	75	71	77	13
12	73	68	65	58	67	62	57		72	73			65	71	68	73
11	69	64	60	54	63	57	53	64	68	68	69	59	67	64	69	11
10	65	59	56	50	59	53	49		64	64	65	55	64	60	65	10
9	61	55	51	46	55	49	45	53	60	59	61	51	51	60	57	61
8	57	51	47	42	51	45	41		56	55	57	47	56	53	57	8
7	53	46	43	38	47	41	37	41	52	50	52	43	41	53	49	53
6	49	42	38	33	43	37	33		47	46	48	39	49	46	49	6
5	45	38	34	29	39	33	29	30	43	41	44	35	32	45	42	45
4	41	33	29	25	35	29	25		39	37	40	31	42	38	41	4
3	37	29	25		31	25	21	18	35	32	35	27	22	38	35	3
2	33	25	20		27	21	17	13	31	27	31	23	17	34		2
1	29	20	16		23	16	12	7	27	23	27	19	12			1
0	16				12	8	1		18	23			24	25		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 35-39 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	94		89		90		86				85	92	90	87		19	
18	90	95	85				82				81	88	86	84		18	
17	85	91	81		81		78				79	84		80		17	
16	81	86	77			74	74	72	78			79	78	76		16	
15	77	82	73		72		70	68				69				15	
14	73	77	69	66	67	66	66	64	69			65	71	70	69	14	
13	68	73	65		63		61	60			63		67	66	65	60	13
12	64	68	61	59	58	58	57	56	60			58	62	62	57	12	
11	60	63	57	55	53	54	53	53	56			55	54	58	57	11	
10	55	59	53	52	49	50	49	49	51			50	54	54	50	10	
9	51	54	49	48	44	46	45	45	47			47	46	50	50	9	
8	47	50	45	45	40	42	41	41	42			42	45	46	43	8	
7	43	45	40	41	35	38	37	38	38			39	38	41	42	7	
6	38	41	36	38		34	33	34	33			35	37	38	39	6	
5	34	36	32	34	26	30	28	30	29			31	30	33	34	5	
4	30	32	28	31		26	24	26	24			27	29	30	29	4	
3	26	27	24	27	17	22	20		20			23	24	26	25	3	
2	21	23	20	24	12	18	16	19	15			19	20	22	24	2	
1	17		16	20	8	15	12	15	11			15			20	1	
0				17		11	8	11								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	90	87	81	79	90	87	84	86	87				90	89	19	
18	86	83	76	74	86	83	80	82	82				86	86	18	
17	82	79	71	69	81	79	76	78	78				83	82	17	
16	77	75	66	64	77	75	72	74	73				79	79	16	
15	73	71	60	59	73	71	68	70	69				67	76	15	
14	69	67	55	54	69	67	64	65	65	64			72	72	14	
13	65	63	50	49	64	63	59	61	60			62	60	69	68	13
12	61	59	45	44	60	59	55	57	56			56		65	65	12
11	57	55	40	39	56	55	51	53	52			54	54	62	61	11
10	52	50	35	34	52	51	47	48	47			49	50	50	58	10
9	48	46	30	29	47	47	43	44	43			45	46	47	55	9
8	44	42	25	24	43	43	39	40	38			41	42	44	51	8
7	40	38	20	19	39	39	35	36	34			37	38	41	48	7
6	36	34	15	14	35	35	31	32	30			33	34	37	44	6
5	31	30	9	9	30	31	26	27	25			30	30	34	41	5
4	27	26	4	4	26	27	22	23	21			26	26	31	37	4
3	23	22	0	0	22	23	18	19	16			22	22	27	33	3
2	19	18	0	0	18	19	14	15	12			18	19	24	30	2
1	15	14	0	0	13	15	10	10	8			14	15	21	26	1
0	11	10	0	0	9	11			6							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 7-8 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	99	99	100	92	97	91	84	89	91	87	82				19
18	95	99	100	88	93	88	81	85						82	18
17	90	95	98	84	89	84	77	81			84				17
16	86	91	93	80	84	80	74	76	80		80				16
15	82	86	87	76	80	76	70	72	76	72	76	77	69	70	15
14	78	82	82	72	75	73	66	68	72	69	73		66		14
13	74	78	76	68	71	69	63	64	68	65	69	70		63	13
12	69	73	71	64	66	65	59	59	64		65	66	60	59	12
11	65	69	66	60	62	61	56	55	60	59	61	63		55	11
10	61	65	60	56	57	57	52	51	56	56	57	59	54	51	10
9	57	61	55	52	53	54	48	47		52	53	56	51	47	9
8	52	56	50	48	49	50	45	42	48	49	50	52	48	43	8
7	48	52	44	44	44	46	41	38	44		46	49	44	39	7
6	44	48	39	40	40	42	38	34	40	43	42	46	41	35	6
5	40	43	34	36	35	38	34	30	37	40	38	42	38	31	5
4	35	39	28	32	31	35	30	25	33		34	39	35	27	4
3	31	35	23	28	26	31	27	21	29	33	30	35	32	23	3
2	27	30	17	24	22	27	23	17	25		27	32	29	19	2
1	23	26	12	20	17	23	20	12		27	23	28	26	15	1
0	22	22	7	16				8		23	19	25	23		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		97		95		87		100							19	
18	97	96	93	83			83		97							18	
17	93	92	89	79	87		79		93	96			89	86		17	
16	89	88	84	75	83	79	75		89	91		75	85	83	89	16	
15	85	83	80	71	79	75	71		85	87			82	79		15	
14	81	79	75	67	75	71	67		81	82		68	78	75	81	14	
13	77	75	71	63	71	67	63		76	77	78	64	74	72	77	13	
12	73	70	66	59	67	63	59		72	73			65	71	68	73	12
11	69	66	62	55	63	59	55	65	68	68	69	56	67	64	69	11	
10	65	62	57	51	59	55	50		64	64	65	52	63	61	65	10	
9	61	57	53	46	55	50	46	53	60	59	61	48	51	60	57	9	
8	57	53	49	42	51	46	42		56	55	57	44	56	53	57	8	
7	53	49	44	38	47	42	38	42	52	50	53	40	41	52	50	7	
6	49	44	40	34	43	38	34		47	46	48	36	49	46	49	6	
5	45	40	35	30	39	34	30		43	41	44	32	32	45	42	5	
4	41	36	31	26	35	30	26		39	37	40	28	41	39	41	4	
3	37	31	26		31	26	22	19	35	32	36	24	22	38	35	3	
2	33	27	22		27	22	18	13	31	27	31	20	17	34		2	
1	29	22	17		23	18	14	7	27	23	27	16	12			1	
0	18				14	10	1		18	23			24	25		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 40-44 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	95		89		91		87				86	94	92	88		19
18	91	96	85				83				83	89	88	84		18
17	86	92	81		82		79			80		85		80		17
16	82	87	77			75	75	72	79			81	80	77		16
15	78	83	73		72		71	69			71					15
14	74	78	69	66	68	67	66	65	70		67	72	72	69		14
13	69	74	65		63		62	61		64		68	68	65	61	13
12	65	69	61	59	59	59	58	57	61		59	64	64	57	57	12
11	61	65	57	55	54	55	54	53	56	56	55	60	60	58	53	11
10	56	60	53	52	49	51	50	50	52		52	55	56	54	50	10
9	52	55	49	48	45	47	46	46	47	48	48	51	51	50	46	9
8	48	51	45	45	40	43	42	42	43		44	47	47	47	43	8
7	44	46	41	41	36	39	38	38	39	40	40	43	43	43	39	7
6	39	42	37	38		35	33	35	34		36	39	39	39	36	6
5	35	37	33	34	27	31	29	31	30		32	32	34	35	36	5
4	31	33	29	31		27	25	27	25		28		30	31	32	4
3	27	28	25	27	17	23	21		21		24		26	27	28	3
2	22	24	21	24	13	19	17	19	16		20		22	23	24	2
1	18		17	21	8	15	13	16	12		16			21		1
0				17		11	9	12								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	91	88	82	80	92	87	85	88	88				86	85	19	
18	86	84	77	75	87	83	81	84	84				82	82	18	
17	82	80	72	70	83	79	77	79	79				79	78	17	
16	78	76	66	65	79	75	73	75	75				75	75	16	
15	74	72	61	60	75	71	69	71	71		68	72	71	71	15	
14	70	68	56	55	70	67	64	67	66	64			68	68	14	
13	66	64	51	50	66	63	60	63	62		63	61	65	64	13	
12	61	60	46	45	62	59	56	58	58	57		61	61	61	12	
11	57	56	41	40	58	55	52	54	53		55	54	58	57	11	
10	53	52	36	35	53	51	48	50	49	49	51	51	54	54	10	
9	49	48	31	30	49	47	44	46	44	45	47	48	51	50	9	
8	45	44	26	25	45	43	40	41	40	42	43	45	47	47	8	
7	40	39	21	20	41	39	36	37	36		38	39	41	44	43	7
6	36	35	15	15	36	35	32	33	31	34	35	38	40	40	6	
5	32	31	10	10	32	31	27	29	27	30	31	35	37	36	5	
4	28	27	5	6	28	27	23	25	22	26	27	31	33	33	4	
3	24	23	0	1	24	23	19	20	18	23	23	28	30	29	3	
2	20	19	0	0	19	19	15	16	14	19	19	25	26	25	2	
1	15	15	0	0	15	15	11	12	9	15	16	22	23	22	1	
0	11	11	0	0	11	11		8							0	

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 7-8 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	97	100		94	99	92	85	91	91						19	
18	93	98	100	90	95	89	81	86	87	82				83	18	
17	89	94	100	86	90	85	78	82			85				17	
16	85	90	95	82	86	81	74	78	80		81				16	
15	80	85	90	78	81	77	71	74	76	72	77	77	70	71	15	
14	76	81	84	74	77	73	67	69	72	69	74		67		14	
13	72	77	79	70	72	70	63	65	68	66	70	70		64	13	
12	68	72	74	66	68	66	60	61	64		66	67	61	60	12	
11	63	68	68	62	63	62	56	57	60	59	62	64		56	11	
10	59	64	63	58	59	58	53	52	56	56	58	60	54	52	10	
9	55	59	57	54	55	54	49	48		53	54	57	51	48	9	
8	51	55	52	50	50	51	45	44	48	50	50	53	48	44	8	
7	46	51	47	46	46	47	42	39	44		47	50	45	40	7	
6	42	46	41	41	41	43	38	35	40	43	43	46	42	36	6	
5	38	42	36	37	37	39	35	31	37	40	39	43	39	32	5	
4	34	38	31	33	32	35	31	27		33		35	39	36	28	4
3	30	34	25	29	28	32	28	22	29	34	31	36	33	24	3	
2	25	29	20	25	23	28	24	18	25		27	33	29	20	2	
1	21	25	15	21	19	24	20	14		27	24	29	26	16	1	
0	21	21	9	17				10	24	20	26	23			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		99		96		89		100							19	
18	100	99	95	84			85		96							18	
17	96	94	90	80	88		81		92	96			89	87		17	
16	92	90	86	76	85	80	77		88	91	76		85	83	89	16	
15	88	86	81	72	81	76	72		83	87			81	79		15	
14	84	81	77	68	77	72	68		79	82	68		78	76	81	14	
13	80	77	72	64	73	68	64		75	77	78	64		74	72	77	13
12	76	73	68	60	69	64	60		71	73		65	70	68	73	12	
11	72	68	64	56	65	60	56	65	67	68	70	56		67	65	69	11
10	68	64	59	52	61	56	52		63	64	65	53		63	61	65	10
9	64	60	55	47	57	52	48	54	59	59	61	49	51	59	57	61	9
8	60	55	50	43	53	48	44		54	55	57	45		56	54	57	8
7	56	51	46	39	49	43	40	42	50	50	53	41	41	52	50	53	7
6	52	47	41	35	45	39	36		46	46	49	37		48	46	49	6
5	48	42	37	31	41	35	32	31	42	41	44	33	32	45	43	45	5
4	44	38	32	27	37	31	27		38	37	40	29		41	39	41	4
3	40	33	28		33	27	23	19	34	32	36	25	22	37	35		3
2	36	29	24		29	23	19	13	29	27	32	21	17	34			2
1	32	25	19		25	19	15	8	25	23	27	17	13				1
0	20	25			15	11	2		18	23			24	25		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 45-49 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		90		92		88				88	95	94	88		19	
18	92	97	86				84				84	91	90	85		18	
17	87	93	82		82		80			81		87		81		17	
16	83	88	78			76	76	73	80			82	81	77		16	
15	79	84	74		73		72	70			73					15	
14	74	79	70	66	69	68	68	66	71		69	74	73	70		14	
13	70	75	65		64		64	62		65		70	69	66	61	13	
12	66	70	61	59	60	60	59	58	62		61	66	65	57	57	12	
11	62	66	57	55	55	56	55	55	58	57	57	61	61	58	54	11	
10	57	61	53	52	50	52	51	51	53		53	57	57	55	50	10	
9	53	57	49	48	46	48	47	47	49	49	49	53	53	51	47	9	
8	49	52	45	45	41	44	43	43	44		45	49	49	47	43	8	
7	45	47	41	42	37	40	39	39	40	41	41	44	45	43	39	7	
6	40	43	37	38		36	35	36	35		37	40	41	40	36	6	
5	36	38	33	35	27	32	31	32	31	33	34	36	37	36	32	5	
4	32	34	29	31		28	26	28	26		29		32	33	32	29	4
3	27	29	25	28	18	24	22		22		25		27	29	29	25	3
2	23	25	21	24	14	20	18	21	17	21		23	25	25	22	2	
1	19		17	21	9	16	14	17	13		17			21		1	
0				17		13	10	13								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	91	90	83	82	94	89	86	90	90				86	86	19
18	87	86	78	77	90	85	82	85	86				82	82	18
17	83	82	73	72	85	81	78	81	81				79	79	17
16	79	78	68	67	81	77	74	77	77				75	75	16
15	75	73	63	62	77	73	70	73	72				68	72	15
14	70	69	58	57	72	69	66	68	68	65			68	68	14
13	66	65	53	52	68	65	62	64	64		64		62	65	13
12	62	61	47	47	64	61	57	60	59	57			61	61	12
11	58	57	42	42	60	57	53	56	55		56		55	58	11
10	54	53	37	37	55	53	49	52	51	50	52		52	54	10
9	50	49	32	32	51	49	45	47	46	46	48		49	51	9
8	45	45	27	27	47	45	41	43	42	42	44		45	47	8
7	41	41	22	22	43	41	37	39	37		38	40	42	44	7
6	37	37	17	17	38	37	33	35	33		35	36	39	40	6
5	33	33	12	12	34	33	29	30	29	31	32	36	37	36	5
4	29	29	7	7	30	29	24	26	24		27	28	32	33	4
3	24	25	2	2	26	25	20	22	20		23	24	29	30	3
2	20	20	0	0	21	21	16	18	15		20	20	26	26	2
1	16	16	0	0	17	17	12	14	11		16	16	22	23	1
0	12	12	0	0	13	13			9						0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 7-8 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	97	100		95	100	93	86	92	91						19	
18	93	97	100	91	96	89	82	88	87	83				84	18	
17	89	93	100	87	92	86	78	84			86				17	
16	85	89	98	83	87	82	75	79	80		82				16	
15	80	84	92	79	83	78	71	75	76	73	78	78	71	73	15	
14	76	80	87	75	79	74	68	71	72	70	74		67		14	
13	72	76	82	71	74	70	64	67	68	66	71	71		65	13	
12	68	71	76	67	70	67	60	62	64		67	68	61	61	12	
11	63	67	71	63	65	63	57	58	60	60	63	64		57	11	
10	59	63	66	59	61	59	53	54	56	57	59	61	55	53	10	
9	55	58	60	55	56	55	50	49		53	55	57	52	49	9	
8	51	54	55	51	52	51	46	45	48	50	51	54	49	45	8	
7	46	50	49	47	47	48	43	41	44		48	50	46	41	7	
6	42	45	44	43	43	44	39	37	40	44	44	47	42	37	6	
5	38	41	39	39	38	40	35	32	37	41	40	44	39	33	5	
4	34	37	33		35	34	36	32	33		36	40	36	29	4	
3	30	32	28		31	30	32	28	29	34	32	37	33	25	3	
2	25	28	23		27	25	29	25	25		28	33	30	21	2	
1	21	24	17		23	21	25	21	15		28	25	30	27	18	1
0	19	12		19	13			11		24	21	26	24		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		96		91		100							19	
18	100	100	96	85			87		96							18	
17	96	97	92	81	88		82		92	96				88	87	17	
16	92	92	87	77	85	82	78		88	91	77		85	83	89	16	
15	88	88	83	73	81	78	74		83	87			81	80		15	
14	84	84	79	69	77	73	70		79	82	69		77	76	81	14	
13	80	79	74	65	73	69	66		75	77	78	65		74	72	77	13
12	76	75	70	61	69	65	62		71	73		65	70	69	73	12	
11	72	71	65	57	65	61	58	65	67	68	70	58		66	65	69	11
10	68	66	61	53	61	57	54		63	64	66	54		63	61	65	10
9	64	62	56	49	57	53	50	54	59	59	61	50	51	59	58	61	9
8	60	57	52	45	53	49	46		54	55	57	46		55	54	57	8
7	56	53	47	41	49	45	42	42	50	50	53	42	41	52	50	53	7
6	52	49	43	37	45	41	38		46	46	49	38		48	47	49	6
5	48	44	39	33	41	36	33	31	42	41	45	34	32	44	43	45	5
4	44	40	34	28	37	32	29		38	37	40	30		41	39	41	4
3	40	36	30		33	28	25	19	34	32	36	26	22	37	36		3
2	36	31	25		29	24	21	14	29	27	32	22	17	33			2
1	32	27	21		25	20	17	8	25	23	28	18	13				1
0	23				16	13	2		18	23				25	25		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 50-54 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	97		90		93		90				90	97	95	89		19
18	92	98	86				86				86	92	91	85		18
17	88	94	82		84		82			82		88		81		17
16	84	89	78			77	77	75	81			84	83	78		16
15	80	85	74		74		73	71			74					15
14	75	80	70	66	70	69	69	67	72		70	76	75	70		14
13	71	76	66		65		65	63		66		71	71	66	61	13
12	67	71	62	59	61	61	61	60	63		62	67	67	57		12
11	63	67	58	56	56	57	57	56	59	58	59	63	63	59	54	11
10	58	62	54	52	51	53	53	52	54		55	59	59	55	50	10
9	54	58	50	49	47	50	49	48	50	50	51	54	55	51	47	9
8	50	53	46	45	42	46	44	45	45		47	50	51	48	43	8
7	45	49	42	42	38	42	40	41	41	42	43	46	47	44	40	7
6	41	44	38	38		38	36	37	36		38	42	43	40	36	6
5	37	40	34	35	29	34	32	33	32	34	35	37	39	37	32	5
4	33	35	29	31		30	28	29	27		30	33	34	33	29	4
3	28	30	25	28	19	26	24		23		26	29	30	29	25	3
2	24	26	21	24	15	22	20	22	18		22	25	26	25	22	2
1	20		17	21	10	18	15	18	14		18			22		1
0				17		14	11	14								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	91	85	83	96	91	88	91	92				86	86	19
18	88	87	80	78	92	87	84	87	88				82	82	18
17	84	83	75	74	88	83	79	83	83				79	79	17
16	80	79	70	69	83	79	75	79	79				75	75	16
15	76	75	64	64	79	75	71	75	74				69	72	15
14	71	71	59	59	75	71	67	70	70	66			68	68	14
13	67	67	54	54	70	67	63	66	66				65	65	13
12	63	63	49	49	66	63	59	62	61	58			61	61	12
11	59	59	44	44	62	59	55	58	57				57	58	11
10	55	54	39	39	58	55	51	53	53	51	53	53	54	54	10
9	50	50	34	34	53	51	46	49	48	47	49	50	51	50	9
8	46	46	29	29	49	47	42	45	44	43	45	46	47	47	8
7	42	42	24	24	45	43	38	41	39	39	41	43	44	43	7
6	38	38	19	19	41	39	34	37	35	36	37	40	40	40	6
5	34	34	13	14	36	35	30	32	31	32	33	37	37	36	5
4	30	30	8	9	32	31	26	28	26	28	29	33	33	33	4
3	25	26	3	4	28	27	22	24	22	24	25	30	30	29	3
2	21	22	0	0	24	23	18	20	17	20	21	27	26	26	2
1	17	18	0	0	19	19	13	15	13	17	17	23	23	22	1
0	13	14	0	0	15	15		11							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 7-8 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	96	100		97	100	94	86	94	89							19
18	91	96	100	93	98	90	83	89	85	83						18
17	87	92	100	89	94	86	79	85			87					17
16	83	87	100	85	89	83	75	81	77		83					16
15	79	83	95	81	85	79	72	76	73	73	79	79	71	74		15
14	74	79	90	77	80	75	68	72	70	70	75		68			14
13	70	75	85	73	76	71	65	68	66	67	71	72				13
12	66	70	79	69	72	67	61	64	62		68	68	62	62		12
11	62	66	74	65	67	64	58	59	58	60	64	65		58		11
10	58	62	69	61	63	60	54	55	54	57	60	62	56	54		10
9	53	57	63	57	58	56	50	51		54	56	58	52	50		9
8	49	53	58	53	54	52	47	47	46	51	52	55	49	46		8
7	45	49	53	49	49	48	43	42	42		48	51	46	43		7
6	41	44	47	45	45	45	40	38	38	44	45	48	43	39		6
5	36	40	42	41	40	41	36	34	34	41	41	44	40	35		5
4	32	36	36	37	36	37	32	29	30		37	41	37	31		4
3	28	31	31	33	31	33	29	25	27	35	33	37	34	27		3
2	24	27	26	29	27	29	25	21	23		29	34	31	23		2
1	19	23	20	25	23	26	22	17		28	25	31	27	19		1
0	18	15		21				12		25	22	27	24			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100	100	100		98		93		99								19	
18	100	100	98	87			89		95								18	
17	96	99	94	83	90		85		90	96				88	87		17	
16	92	95	89	79	86	83	81		86	91	79		84	84	89		16	
15	88	90	85	75	82	79	77		82	87			80	80			15	
14	84	86	80	71	78	75	73		78	82	71		77	76	81		14	
13	80	82	76	67	74	71	68		74	77	78	67		73	73	77		13
12	76	77	71	63	71	66	64		70	73			65	69	69	73		12
11	72	73	67	58	67	62	60	66	65	68	70	59		66	65	69		11
10	68	68	62	54	63	58	56		61	64	66	55		62	62	65		10
9	65	64	58	50	59	54	52	54	57	59	62	51	51	58	58	61		9
8	61	60	54	46	55	50	48		53	55	57	47		55	54	57		8
7	57	55	49	42	51	46	44	43	49	50	53	43	41	51	51	53		7
6	53	51	45	38	47	42	40		45	46	49	39		47	47	49		6
5	49	47	40	34	43	38	36	31	41	41	45	35	32	44	43	45		5
4	45	42	36	30	39	34	32		36	37	41	31		40	40	41		4
3	41	38	31		35	29	28	20	32	32	36	28	22	36	36			3
2	37	34	27		31	25	23	14	28	27	32	24	17	33				2
1	33	29	22		27	21	19	8	24	23	28	20	13					1
0	25	25			17	15	2		18	24				25	25			0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 55-59 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	98		91		94		92				91	98	97	89		19
18	93	99	86				87				87	94	93	86		18
17	89	95	82		85		83				83	90		82		17
16	85	90	78			79	79	76	83			86	85	78		16
15	81	86	74		76		75	73				76				15
14	76	81	70	66	71	71	71	69	74		72	77	77	71		14
13	72	77	66		67		67	65			68	73	73	67	61	13
12	68	72	62	59	62	63	63	61	65		64	69	68	57	57	12
11	64	68	58	56	57	59	59	58	60		60	64	64	59	54	11
10	59	63	54	52	53	55	54	54	56		56	60	60	56	50	10
9	55	59	50	49	48	51	50	50	51		52	52	56	56	47	9
8	51	54	46	45	44	47	46	46	47		49	52	52	48	43	8
7	46	50	42	42	39	43	42	42	42		44	45	47	48	44	7
6	42	45	38	38		39	38	39	38		40	43	44	41	36	6
5	38	41	34	35	30	35	34	35	33		36	37	39	40	37	5
4	34	36	30	31		31	30	31	29		32		35	36	33	4
3	29	32	26	28	21	27	26		24		28		30	32	30	3
2	25	27	22	24	16	23	21	24	20		24		26	28	26	2
1	21		18	21	12	20	17	20	15		20			22		1
0				18		16	13	16								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	93	87	86	98	94	89	93	94				86	86	19
18	89	88	82	81	94	90	85	89	90				82	82	18
17	85	84	77	76	90	86	81	85	85				79	79	17
16	81	80	72	71	86	82	77	81	81				75	75	16
15	77	76	66	66	81	78	73	77	77				71	72	15
14	73	72	61	61	77	74	69	72	72	67			68	68	14
13	68	68	56	56	73	70	65	68	68		66	64	65	65	13
12	64	64	51	51	69	66	61	64	64	59		61	61	61	12
11	60	60	46	46	64	62	56	60	59		58	58	58	58	11
10	56	56	41	41	60	58	52	55	55	52	54	54	54	54	10
9	52	52	36	36	56	54	48	51	50	48	50	51	51	51	9
8	47	48	31	31	52	50	44	47	46	44	46	48	47	47	8
7	43	44	26	26	47	46	40	43	42	40	42	44	44	44	7
6	39	40	21	21	43	42	36	39	37	37	38	41	40	40	6
5	35	35	15	16	39	38	32	34	33	33	34	38	37	36	5
4	31	31	10	11	35	34	28	30	28	29	30	34	33	33	4
3	27	27	5	6	30	30	23	26	24	25	26	31	30	29	3
2	22	23	0	1	26	26	19	22	20	22	22	28	26	26	2
1	18	19	0	0	22	22	15	17	15	18	18	25	23	22	1
0	14	15	0	0	18	18		13							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 7-8 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	96	100		99	100	95	87	95	89						19
18	91	95	100	95	100	91	83	91	85	84				87	18
17	87	91	100	91	96	87	80	86			88				17
16	83	86	100	87	91	83	76	82	77		84				16
15	79	82	99	83	87	80	73	78	73	74	80	79	72	76	15
14	74	78	93	79	83	76	69	74	70	71	76		69		14
13	70	73	88	75	78	72	65	69	66	67	72	73		68	13
12	66	69	83	71	74	68	62	65	62		69	69	62	64	12
11	62	65	77	67	69	64	58	61	58	61	65	66		60	11
10	58	60	72	63	65	61	55	57	54	58	61	62	56	56	10
9	53	56	67	59	60	57	51	52		54	57	59	53	52	9
8	49	52	61	55	56	53	47	48	46	51	53	55	50	48	8
7	45	48	56	51	51	49	44	44	42		49	52	47	44	7
6	41	43	50	47	47	45	40	39	38	45	46	48	44	40	6
5	36	39	45	43	42	42	37	35	34	42	42	45	41	36	5
4	32	35	40	39	38	38	33	31	30		38	42	37	32	4
3	28	30	34	35	34	34	29	27	27	35	34	38	34	28	3
2	24	26	29	31	29	30	26	22	23		30	35	31	25	2
1	19	22	24	27	25	27	22	18		29	26	31	28	21	1
0		17	18	23				14		25	22	28	25		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		98		96		99							19	
18	100	100	100	89			92		95							18	
17	96	100	95	85	90		88		90	96				87	88	17	
16	92	97	91	81	86	84	83		86	91	81			84	84	89	16
15	88	93	86	77	82	80	79		82	87				80	80		15
14	84	88	82	72	78	76	75		78	82	73			76	77	81	14
13	80	84	77	68	74	72	71		74	77	79	69		73	73	77	13
12	76	79	73	64	71	68	67		70	73			65	69	69	73	12
11	72	75	69	60	67	64	63	66	65	68	70	61		65	66	69	11
10	68	71	64	56	63	59	59		61	64	66	57		62	62	65	10
9	65	66	60	52	59	55	55	55	57	59	62	53	51	58	58	61	9
8	61	62	55	48	55	51	51		53	55	58	49		54	55	57	8
7	57	58	51	44	51	47	47	43	49	50	53	45	41	51	51	53	7
6	53	53	46	40	47	43	43		45	46	49	41		47	47	49	6
5	49	49	42	36	43	39	38	32	41	41	45	37	32	43	44	45	5
4	45	45	37	32	39	35	34		36	37	41	33		40	40	41	4
3	41	40	33		35	31	30	20	32	32	37	29	22	36	36		3
2	37	36	29		31	27	26	14	28	27	32	25	18	32			2
1	33	32	24		27	22	22	9	24	23	28	21	13				1
0		27			18	18	3		18	24				25	25		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 60-64 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	97		91		96		94				93	100	98	90		19
18	92	97	87				90				89	96	94	86		18
17	88	93	83		86		85			85		91		82		17
16	84	88	79			81	81	78	85			87	86	79		16
15	80	84	75		77		77	75			77					15
14	75	79	71	67	73	73	73	71	76		73	79	78	71		14
13	71	75	67		68		69	67		69		74	74	67	61	13
12	67	70	63	60	64	65	65	63	67		66	70	70		57	12
11	62	66	59	57	59	61	61	59	62	61	62	66	66	60	54	11
10	58	61	55	53	54	57	57	56	58		58	62	62	56	50	10
9	54	57	50	50	50	53	52	52	53	54	54	57	58	52	47	9
8	50	52	46	46	45	49	48	48	49		50	53	54	49	43	8
7	45	48	42	43	41	45	44	44	44	46	46	49	50	45	40	7
6	41	43	38	39		41	40	41	40	42		45	46	41	36	6
5	37	39	34	36	31	37	36	37	35	38	39	41	42	38	33	5
4	33	34	30	33		33	32	33	31		34	36	38	34	29	4
3	28	30	26	29	22	29	28		26		30	32	34	30	26	3
2	24	25	22	26	18	25	24	26	22		26	28	30	26	22	2
1	20		18	22	13	21	19	22	17					23		1
0			19		18	15	15									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	94	89	88	100	96	91	96	97				86	86	19
18	91	90	84	83	97	92	87	91	92				82	82	18
17	86	86	79	78	93	88	83	87	88				79	79	17
16	82	82	74	73	88	84	79	83	83				75	75	16
15	78	78	69	68	84	80	75	79	79				72	72	15
14	74	73	63	63	80	76	71	75	75	68			68	68	14
13	70	69	58	58	76	72	67	70	70		67	66	65	65	13
12	66	65	53	53	71	68	63	66	66	61			61	61	12
11	61	61	48	48	67	64	58	62	62	59	59	58	58	58	11
10	57	57	43	43	63	60	54	58	57	53	55	56	54	54	10
9	53	53	38	38	59	56	50	53	53	49	51	52	51	51	9
8	49	49	33	33	54	52	46	49	48	45	47	49	47	47	8
7	45	45	28	28	50	48	42	45	44	42	43	46	44	44	7
6	40	41	23	23	46	44	38	41	40	38	39	43	40	40	6
5	36	37	18	18	42	40	34	37	35	34	35	39	37	37	5
4	32	33	13	13	37	36	30	32	31	30	31	36	33	33	4
3	28	29	7	8	33	32	26	28	27	27	27	33	30	30	3
2	24	25	2	3	29	28	21	24	22	23	23	29	26	26	2
1	20	20	0	0	25	24	17	20	18	19	19	26	23	22	1
0	15	16	0	0	20	20		15							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 7-8 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	94	100		100	100	96	88	96	89						19
18	90	94	100	97	100	92	84	92	85	84				89	18
17	86	90	100	93	98	88	80	88			89				17
16	81	85	100	89	94	84	77	84	77		85				16
15	77	81	100	84	89	80	73	79	73	74	81	80	72	78	15
14	73	77	97	80	85	77	70	75	70	71	77		69		14
13	69	72	92	76	80	73	66	71	66	68	73	73		70	13
12	64	68	86	72	76	69	62	66	62		69	70	63	66	12
11	60	64	81	68	71	65	59	62	58	61	66	66		62	11
10	56	59	76	64	67	61	55	58	54	58	62	63	57	58	10
9	52	55	70	60	63	58	52	54		55	58	60	54	54	9
8	47	51	65	56	58	54	48	49	46	52	54	56	50	50	8
7	43	46	59	52	54	50	44	45	42		50	53	47	46	7
6	39	42	54	48	49	46	41	41	38	45	46	49	44	42	6
5	35	38	49	44	45	43	37	37	34	42	43	46	41	38	5
4	31	33	43	40	40	39	34	32	30		39	42	38	34	4
3	26	29	38	36	36	35	30	28	27	36	35	39	35	30	3
2	22	25	33	32	31	31	26	24	23		31	35	32	26	2
1	18	20	27	28	27	27	23	19		29	27	32	29	23	1
0	16	22		24				15		26	23	29	26		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		100		99		97							19	
18	100	100	100	91			95		93							18	
17	99	100	97	87	92		91		89	96				87	88	17	
16	95	99	92	83	88	85	87		85	91	83		83	84	89	16	
15	91	95	88	79	84	81	83		81	87			79	81		15	
14	88	90	83	75	80	77	78		77	82	75		76	77	81	14	
13	84	86	79	71	76	73	74		72	77	79	71		72	73	77	13
12	80	82	75	67	72	69	70		68	73		65	68	70	73	12	
11	76	77	70	62	68	65	66	66	64	68	70	63		65	66	69	11
10	72	73	66	58	64	61	62		60	64	66	59		61	62	65	10
9	68	69	61	54	60	57	58	55	56	59	62	55	51	57	59	61	9
8	64	64	57	50	57	52	54		52	55	58	51		54	55	57	8
7	60	60	52	46	53	48	50	43	48	50	54	47	42	50	51	53	7
6	56	56	48	42	49	44	46		43	46	49	43		46	48	49	6
5	52	51	44	38	45	40	42	32	39	41	45	39	32	43	44	45	5
4	48	47	39	34	41	36	38		35	37	41	35		39	40	41	4
3	44	43	35		37	32	33	20	31	32	37	31	22	35	37		3
2	40	38	30		33	28	29	15	27	27	33	27	18	32			2
1	36	34	26		29	24	25	9	23	23	28	23	13				1
0	30				20	21	3		18	24			26	25		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 65-69 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	98		91		97		96				95	100	100	90		19	
18	93	99	87				92				91	97	96	86		18	
17	89	94	83		88		88			88		93		83		17	
16	85	89	79			83	84	81	87			89	88	79		16	
15	80	85	75		79		80	77			79					15	
14	76	80	71	67	75	75	76	73	78		75	80	80	72		14	
13	72	76	67		70		71	69		72		76	76	68	61	13	
12	68	71	63	60	65	67	67	66	69		67	72	72	57		12	
11	63	67	59	57	61	63	63	62	64	64	63	67	68	60	54	11	
10	59	62	55	54	56	59	59	58	60		60	63	64	57	50	10	
9	55	58	51	50	52	55	55	54	55	56	56	59	60	53	47	9	
8	51	53	47	47	47	52	51	50	51		52	55	56	49	43	8	
7	46	49	43	43	43	48	47	47	46	48	48	51	51	45	40	7	
6	42	44	39	40		44	43	43	42	44	46	47	42	36		6	
5	38	40	35	36	33	40	38	39	37	40	40	42	43	38	33	5	
4	33	35	31	33		36	34	35	33		36	38	39	34	29		4
3	29	31	27	29	24	32	30		29		32	34	35	31	26		3
2	25	26	23	26	20	28	26	28	24		28	29	31	27	22		2
1	21		19	22	15	24	22	24	20		24			23		1	
0				19		20	18	20								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	96	95	91	90	100	99	94	98	99				86	86	19
18	92	91	86	85	100	95	90	94	95				82	83	18
17	88	87	81	80	96	91	86	90	90				79	79	17
16	84	83	76	75	91	87	82	85	86				75	76	16
15	80	79	71	70	87	83	77	81	82		74	72	72		15
14	75	75	66	65	83	79	73	77	77	70			68	68	14
13	71	71	61	60	79	75	69	73	73		68	67	65	65	13
12	67	67	56	55	74	71	65	68	69	62		61	61		12
11	63	62	50	50	70	67	61	64	64		60	61	58	58	11
10	59	58	45	45	66	63	57	60	60	55	56	57	54	54	10
9	55	54	40	40	62	59	53	56	55	51	52	54	51	51	9
8	50	50	35	35	57	55	49	52	51	47	48	51	47	47	8
7	46	46	30	30	53	51	44	47	47		44	48	44	44	7
6	42	42	25	26	49	47	40	43	42		39	40	44	40	6
5	38	38	20	21	45	43	36	39	38		36	36	41	37	5
4	34	34	15	16	40	39	32	35	34		32	32	38	33	4
3	29	30	10	11	36	35	28	30	29		28	28	34	30	3
2	25	26	5	6	32	31	24	26	25		24	24	31	26	2
1	21	22	0	1	28	27	20	22	20		21	20	28	23	1
0	17	18	0	0	23	23		18							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 7-8 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	92	100		100	100	96	88	98	89						19
18	88	93	100	98	100	93	85	93	85	85				92	18
17	84	89	100	94	100	89	81	89			89				17
16	80	84	100	90	96	85	77	85	77		86				16
15	75	80	100	86	92	81	74	81	73	75	82	81	73	80	15
14	71	76	100	82	87	78	70	76	70	72	78	70			14
13	67	71	95	78	83	74	67	72	66	68	74	74		72	13
12	63	67	90	74	78	70	63	68	62		70	71	64	68	12
11	59	63	85	70	74	66	59	64	58	62	66	67		64	11
10	54	58	79	66	69	62	56	59	54	59	63	64	57	60	10
9	50	54	74	62	65	59	52	55		55	59	60	54	56	9
8	46	50	69	58	61	55	49	51	46	52	55	57	51	52	8
7	42	45	63	54	56	51	45	47	42		51	53	48	48	7
6	37	41	58	50	52	47	41	42	38	46	47	50	45	44	6
5	33	37	53	46	47	43	38	38	34	43	43	46	42	41	5
4	29	32	47	42	43	40	34	34	30		40	43	39	37	4
3	25	28	42	38	38	36	31	29	27	36	36	40	35	33	3
2	20	24	36	34	34	32	27	25	23		32	36	32	29	2
1	16	19	31	30	29	28	23	21		30	28	33	29	25	1
0	15	15	26	26				17		26	24	29	26		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		100		100		96							19	
18	100	100	100	93			99		92							18	
17	100	100	98	89	94		94		88	96				86	88	17	
16	99	100	94	85	90	87	90		84	91		85		82	85	88	16
15	95	97	90	81	86	82	86		79	87				78	81	15	
14	91	93	85	77	82	78	82		75	82		77		75	77	81	14
13	87	88	81	73	78	74	78		71	77	79	73		71	74	77	13
12	83	84	76	69	74	70	74		67	73			66	67	70	73	12
11	79	80	72	65	70	66	70	67	63	68	71	65		64	66	69	11
10	75	75	67	61	66	62	66		59	64	66	61		60	63	65	10
9	71	71	63	57	62	58	62	55	55	59	62	57	51	56	59	61	9
8	67	67	58	53	58	54	58		50	55	58	53		53	55	57	8
7	63	62	54	49	54	50	54	44	46	50	54	49	42	49	52	53	7
6	59	58	50	45	50	45	50		42	46	50	45		45	48	49	6
5	55	54	45	41	46	41	45	32	38	41	45	41	32	42	44	45	5
4	51	49	41	37	43	37	41		34	37	41	37		38	41	41	4
3	47	45	36		39	33	37	21	30	32	37	34	22	34	37		3
2	43	41	32		35	29	33	15	25	27	33	30	18	31			2
1	39	36	27		31	25	29	9	21	23	29	26	13				1
0	32				21	25	4		18	24				26	25		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 70-74 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	99		92		100		99				96	100	100	91		19	
18	94	100	88				95				92	99	98	87		18	
17	90	95	84		90		91				90	94		83		17	
16	86	91	80			86	87	83	89			90	89	80		16	
15	81	86	75		81		83	80				81				15	
14	77	81	71	68	77	78	78	76	80		77	82	81	72		14	
13	73	77	67		72		74	72			74	78	77	68	61	13	
12	69	72	63	61	68	70	70	68	71			69	73	73	58	12	
11	64	68	59	57	63	66	66	64	67		66	65	69	69	61	11	
10	60	63	55	54	58	62	62	61	62			61	65	65	57	10	
9	56	59	51	50	54	58	58	57	58		58	57	61	61	53	9	
8	52	54	47	47	49	54	54	53	53			53	56	57	50	43	8
7	47	50	43	43	45	50	50	49	49		50	50	52	53	46	40	7
6	43	45	39	40		46	45	46	44			46	48	49	42	36	6
5	39	41	35	36	35	42	41	42	40		42	42	44	45	38	33	5
4	34	36	31	33		38	37	38	36			38	39	41	35	29	4
3	30	32	27	29	26	34	33		31			34	35	37	31	26	3
2	26	27	23	26	22	30	29	30	27			30	31	33	27	22	2
1	22		19	22	17	27	25	27	22			26			24		1
0				19		23	21	23								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	98	96	94	93	100	100	97	100	100				86	86	19
18	94	92	88	88	100	98	93	96	98				82	83	18
17	90	88	83	83	99	94	88	92	93				79	79	17
16	86	84	78	78	95	90	84	88	89				75	76	16
15	82	80	73	73	90	86	80	84	85				76	72	15
14	77	76	68	68	86	82	76	79	80	71			68	69	14
13	73	72	63	63	82	78	72	75	76				69	69	13
12	69	68	58	58	77	74	68	71	71	64			61	62	12
11	65	64	53	53	73	70	64	67	67				61	63	11
10	61	60	48	48	69	66	60	63	63	56	57	59	54	54	10
9	56	55	43	43	65	62	55	58	58	53	53	56	51	51	9
8	52	51	38	38	60	58	51	54	54	49	49	53	47	47	8
7	48	47	32	33	56	54	47	50	49	45	45	50	44	44	7
6	44	43	27	28	52	50	43	46	45	41	41	46	40	40	6
5	40	39	22	23	48	46	39	42	41	37	37	43	37	37	5
4	36	35	17	18	43	42	35	37	36	34	33	40	33	33	4
3	31	31	12	13	39	38	31	33	32	30	29	36	30	30	3
2	27	27	7	8	35	34	27	29	28	26	25	33	26	26	2
1	23	23	2	3	31	30	23	25	23	22	21	30	23	23	1
0	19	19	0	0	26	26		20							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 7-8 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	91	100		100	100	97	89	99	89						19
18	87	92	100	100	100	94	85	95	85	85				94	18
17	82	87	100	96	100	90	82	91			90				17
16	78	83	100	92	99	86	78	86	77		87				16
15	74	79	100	88	94	82	74	82	73	75	83	82	73	82	15
14	70	74	100	84	90	78	71	78	70	72	79		70		14
13	65	70	100	80	85	75	67	74	66	69	75	75		75	13
12	61	66	94	76	81	71	64	69	62		71	71	64	71	12
11	57	62	89	72	77	67	60	65	58	62	67	68		67	11
10	53	57	84	68	72	63	56	61	54	59	64	64	58	63	10
9	48	53	78	64	68	59	53	56		56	60	61	55	59	9
8	44	49	73	60	63	56	49	52	46	53	56	58	52	55	8
7	40	44	67	56	59	52	46	48	42		52	54	49	51	7
6	36	40	62	52	54	48	42	44	38	46	48	51	45	47	6
5	32	36	57	48	50	44	38	39	34	43	44	47	42	43	5
4	27	31	51	44	45	40	35	35	30		41	44	39	39	4
3	23	27	46	40	41	37	31	31	27	37	37	40	36	35	3
2	19	23	41	36	36	33	28	27	23		33	37	33	31	2
1	15	18	35	32	32	29	24	22		30	29	33	30	27	1
0	14	30		28				18		27	25	30	27		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		95							19	
18	100	100	100	96			100		91							18	
17	100	100	100	92	96		99		86	96			85	89		17	
16	100	100	96	88	92	88	95		82	91		87	81	85	88	16	
15	98	99	91	84	88	84	91		78	87			78	81		15	
14	94	95	87	80	84	80	87		74	82		79	74	78	80	14	
13	90	91	82	76	80	75	82		70	77	79	75		70	74	76	13
12	86	86	78	72	76	71	78		66	73			66	67	70	72	12
11	82	82	73	68	72	67	74	67	62	68	71	67		63	67	68	11
10	78	78	69	64	68	63	70		57	64	67	63	51	59	63	64	10
9	74	73	65	60	64	59	66	56	53	59	62	60	51	56	59	61	9
8	70	69	60	56	60	55	62		49	55	58	56		52	56	57	8
7	66	65	56	52	56	51	58	44	45	50	54	52	42	48	52	53	7
6	62	60	51	48	52	47	54		41	46	50	48		45	48	49	6
5	58	56	47	44	48	43	50	33	37	41	46	44	32	41	45	45	5
4	54	52	42	40	44	38	46		32	37	41	40		37	41	41	4
3	50	47	38		40	34	42	21	28	32	37	36	22	34	37		3
2	46	43	33		36	30	37	15	24	27	33	32	18	30			2
1	42	39	29		32	26	33	10	20	23	29	28	13				1
0	34				22	29	4		18	25				26	25		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 75-79 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	99		92		100		100				98	100	100	91		19
18	95	100	88				98				94	100	99	87		18
17	91	96	84		93		94				93		96			17
16	87	92	80			89	90	86	92			92	91	80		16
15	82	87	76		84		86	83			82					15
14	78	83	72	68	79	81	82	79	83		78	83	83	73		14
13	74	78	68		75		78	75			77		79	79	69	13
12	70	73	64	61	70	73	74	71	74		71		75	75	58	12
11	65	69	60	57	65	69	69	67	70		69	67	71	71	61	11
10	61	64	56	54	61	65	65	64	65		63		66	67	58	10
9	57	60	52	50	56	61	61	60	61		61	59	62	63	54	9
8	52	55	48	47	52	57	57	56	56		55	58	59	50	44	8
7	48	51	44	43	47	53	53	52	52		53	51	54	55	46	7
6	44	46	39	40		49	49	49	47		49		49	51	43	6
5	40	42	35	36	38	45	45	45	43		45	43	45	47	39	5
4	35	37	31	33		41	41	41	38		41		41	43	35	4
3	31	33	27	30	29	38	36		34		37		37	39	32	3
2	27	28	23	26	24	34	32	34	29		33		32	34	28	2
1	23		19	23	20	30	28	30	25		29				24	1
0				19		26	24	26								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	97	96	95	100	100	100	100	100				86	86	19
18	96	93	91	90	100	100	96	99	100				83	83	18
17	92	89	86	85	100	97	92	95	96				79	79	17
16	88	85	81	80	98	93	88	91	92				75	76	16
15	84	81	76	75	94	89	83	86	88		78		72	72	15
14	79	77	71	70	89	85	79	82	83	73			68	69	14
13	75	73	65	65	85	81	75	78	79		70		72	65	13
12	71	69	60	60	81	77	71	74	74	66			61	62	12
11	67	65	55	55	77	73	67	70	70	62	65		58	58	11
10	63	61	50	50	72	69	63	65	66	58	58		62	54	10
9	59	57	45	45	68	65	59	61	61	55	54		59	51	9
8	54	52	40	40	64	61	55	57	57	51	50		55	47	8
7	50	48	35	35	60	57	50	53	53	47	46		52	44	7
6	46	44	30	30	55	53	46	48	48	43	42		49	40	6
5	42	40	25	25	51	49	42	44	44	39	38		45	37	5
4	38	36	20	20	47	45	38	40	39	36	34		42	33	4
3	33	32	14	16	43	41	34	36	35	32	30		39	30	3
2	29	28	9	11	38	37	30	32	31	28	26		36	26	2
1	25	24	4	6	34	33	26	27	26	24	22		32	23	1
0	21	20	0	1	30	29		23							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 7-8 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	91	100		100	100	98	89	100	89	86				98	19
18	87	91	100	100	100	94	86	96	85	86				98	18
17	82	86	100	98	100	91	82	92			91				17
16	78	82	100	94	100	87	79	88	77		88				16
15	74	78	100	90	97	83	75	84	73	76	84	82	74	86	15
14	70	73	100	86	93	79	72	79	70	73	80		71		14
13	65	69	100	82	89	75	68	75	66	69	76	76		78	13
12	61	65	99	78	84	72	64	71	62		72	72	65	74	12
11	57	60	94	74	80	68	61	67	58	63	68	69		70	11
10	53	56	88	70	75	64	57	62	54	60	65	65	59	66	10
9	48	52	83	66	71	60	54	58		56	61	62	55	62	9
8	44	47	78	62	66	56	50	54	46	53	57	58	52	58	8
7	40	43	72	58	62	53	46	49	42		53	55	49	54	7
6	36	39	67	54	57	49	43	45	38	47	49	51	46	50	6
5	32	34	62	50	53	45	39	41	34	44	45	48	43	46	5
4	27	30	56	46	48	41	36	37	30		42	45	40	43	4
3	23	26	51	42	44	38	32	32	27	37	38	41	37	39	3
2	19	21	46	38	40	34	28	28	23		34	38	34	35	2
1	15	17	40	34	35	30	25	24		31	30	34	30	31	1
0	13	35		30				20		27	26	31	27		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		95							19	
18	100	100	100	100			100		91							18	
17	100	100	100	96	96		100		86	96				84	89	17	
16	100	100	97	92	92	89	100		82	91	90		80	85	88	16	
15	98	100	93	88	88	85	96		78	87			76	82		15	
14	94	98	89	84	84	81	92		74	82	82		73	78	80	14	
13	90	93	84	80	80	77	88		70	77	80	78		69	74	76	13
12	86	89	80	76	76	73	84		66	73			66	65	71	72	12
11	82	85	75	72	72	69	80	68	62	68	71	70		62	67	68	11
10	78	80	71	68	68	64	76		57	64	67	66		58	63	64	10
9	74	76	66	63	64	60	71	56	53	59	63	62	51	54	60	60	9
8	70	72	62	59	60	56	67		49	55	58	58		51	56	56	8
7	66	67	57	55	56	52	63	45	45	50	54	54	42	47	52	52	7
6	62	63	53	51	52	48	59		41	46	50	51		43	49	48	6
5	58	58	49	47	48	44	55	33	37	41	46	47	32	40	45	44	5
4	54	54	44	43	44	40	51		32	37	42	43		36	41	41	4
3	50	50	40		40	36	47	22	28	32	37	39	23	32	38		3
2	46	45	35		36	32	43	16	24	27	33	35	18	29			2
1	42	41	31		32	27	39	10	20	23	29	31	13				1
0	37				23	35	4		18	25				27	25		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 7-8 years

Age: 80-85 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		92		100		100				100	100	100	92		19	
18	96	100	88				100				96	100	100	88		18	
17	92	97	84		96		98				97	98		84		17	
16	88	93	80			93	94	90	96			93	93	81		16	
15	83	88	76		87		90	86				84				15	
14	79	84	72	68	82	85	86	83	87		80	85	85	73		14	
13	75	79	68		78		82	79			81	81	81	69	61	13	
12	71	75	64	61	73	77	78	75	78		72	77	77	58		12	
11	66	70	60	57	69	73	74	71	74		73	68	72	73	62	11	
10	62	66	56	54	64	69	69	68	69			65	68	69	58	51	10
9	58	61	52	51	59	65	65	64	65		65	61	64	65	54		9
8	54	57	48	47	55	61	61	60	60			57	60	61	51	44	8
7	49	52	44	44	50	57	57	56	56		57	53	55	56	47		7
6	45	48	40	40		53	53	52	51			53	51	52	43		6
5	41	43	36	37	41	49	49	49	47		49	45	47	48	40		5
4	36	38	32	33		45	45	45	42			45	43	44	36		4
3	32	34	28	30	32	41	41		38			41	38	40	32		3
2	28	29	24	26	27	37	36	37	33			37	34	36	28		2
1	24		20	23	23	34	32	34	29			33			25		1
0				19		30	28	30								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	98	99	98	100	100	100	100	100				86	86	19
18	99	94	94	93	100	100	100	100	100				83	83	18
17	95	90	88	88	100	100	96	98	100				79	79	17
16	91	86	83	83	100	96	92	94	96				76	76	16
15	86	82	78	78	98	92	87	90	91				81	72	15
14	82	78	73	73	93	88	83	85	87	76			69	69	14
13	78	74	68	68	89	84	79	81	82				71	75	13
12	74	70	63	63	85	80	75	77	78				68	62	12
11	70	66	58	58	81	76	71	73	74				63	68	11
10	65	62	53	53	76	72	67	69	69	61	59	65	55	55	10
9	61	58	48	48	72	68	63	64	65	57	55	61	51	51	9
8	57	54	43	43	68	64	59	60	60	53	51	58	47	48	8
7	53	50	37	38	64	60	55	56	56	50	47	55	44	44	7
6	49	45	32	33	59	56	50	52	52	46	43	52	40	41	6
5	45	41	27	28	55	52	46	48	47	42	39	48	37	37	5
4	40	37	22	23	51	48	42	43	43	38	35	45	33	34	4
3	36	33	17	18	47	44	38	39	39	34	31	42	30	30	3
2	32	29	12	13	42	40	34	35	34	31	27	38	26	26	2
1	28	25	7	8	38	36	30	31	30	27	23	35	23	23	1
0	24	21	2	3	34	32									0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	95	95		84	88	89	80	83	87							19
18	90	97	90	80	83	85	77	79	83	78						18
17	86	92	85	76	79	81	73	74			79					17
16	82	88	79	72	74	77	70	70	76		75					16
15	78	84	74	68	70	74	66	66	72	68	71	68	64	67		15
14	73	79	69	64	65	70	62	61	68	65	67		61			14
13	69	75	63	60	61	66	59	57	64	61	63	61				13
12	65	71	58	56	56	62	55	53	60		60	58	54	55		12
11	61	66	53	52	52	58	52	49	56	55	56	55		51		11
10	56	62	47	48	47	55	48	44	52	52	52	51	48	47		10
9	52	58	42	44	43	51	44	40	49	48	48	48	45	43		9
8	48	53	36	40	39	47	41	36	44	45	44	44	42	39		8
7	44	49	31	36	34	43	37	32	40		40	41	39	35		7
6	40	45	26	32	30	39	34	27	37	39	37	37	36	31		6
5	35	40	20	28	25	36	30	23	33	36	33	34	33	27		5
4	31	36	15	24	21	32	27	19	29		29	30	29	23		4
3	27	32	10	20	16	28	23	15	25	29	25	27	26	19		3
2	23	27	4	16	12	24	19	10	21		21	24	23	16		2
1	18	23	0	12	7	20	16	6	23	17	20	20	12			1
0	19	0		8				2	19	13	17	17				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score	
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	93		87		89		83		97								19	
18	89	91	82	81			79		93								18	
17	85	87	78	77	81		75		88	90				85	81		17	
16	81	82	74	72	77	73	71		84	85	77		81	78	84		16	
15	77	78	69	68	73	69	67		80	80			77	74			15	
14	73	74	65	64	69	65	63		76	76	69		74	70	76		14	
13	69	69	60	60	65	61	59		72	71	68	65	70	67	72		13	
12	65	65	56	56	61	56	54		68	67		62	66	63	68		12	
11	61	61	51	52	57	52	50	58	63	62	60	57	63	59	64		11	
10	57	56	47	48	53	48	46		59	58	56	54	59	56	60		10	
9	53	52	42	44	49	44	42	46	55	53	52	50	48	55	52	56		9
8	49	48	38	40	45	40	38		51	49	47	46	52	48	52		8	
7	45	43	34	36	41	36	34	35	47	44	43	42	38	48	45	48		7
6	41	39	29	32	37	32	30		43	40	39	38	44	41	44		6	
5	37	35	25	28	33	28	26	23	38	35	35	34	29	41	37	40		5
4	33	30	20	24	29	24	22		34	30	31	30	37	34	36			4
3	29	26	16		25	19	18	12	30	26	26	26	19	33	30			3
2	25	22	11		21	15	14	6	26	21	22	22	14	30				2
1	21	17	7		17	11	9	0	22	17	18	18	10					1
0	13				7	5	0		12	14			19	20			0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 20-34 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		86		88		83				80	86	84	84		19
18	85	90	82				79				76	82	80	81		18
17	81	85	78		79		75				75	77		77		17
16	76	81	74			70	71	68	75			73	72	73		16
15	72	76	70		70		66	65				65				15
14	68	72	66	65	65	62	62	61	66		61	65	64	66		14
13	64	67	62		60		58	57			60	60	60	62	60	13
12	59	63	58	58	56	54	54	53	57		53	56	56	56	56	12
11	55	58	54	55	51	51	50	49	52		52	49	52	52	55	11
10	51	53	50	51	47	47	46	46	48		45	48	48	51	49	10
9	47	49	46	48	42	43	42	42	43		44	41	43	44	47	9
8	42	44	42	44	38	39	37	38	39		38	39	40	43	42	8
7	38	40	38	41	33	35	33	34	35		36	34	35	36	40	7
6	34	35	34	37		31	29	31	30		32	31	32	36	35	6
5	29	31	30	34	24	27	25	27	26		28	26	27	28	32	5
4	25	26	26	30		23	21	23	21		24		22	24	29	4
3	21	22	22	27	15	19	17		17		20		18	19	25	3
2	17	17	18	23	10	15	13	15	12		16		14	15	21	2
1	12		14	20	5	11	9	12	8		12				17	1
0				17		7	4	8								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	82	82	80	86	83	82	83	82				88	87	19
18	81	78	77	75	81	79	78	78	78				84	84	18
17	76	74	72	70	77	75	74	74	74				81	80	17
16	72	70	66	65	73	71	70	70	69				77	77	16
15	68	66	61	60	69	67	66	66	65				65	74	15
14	64	62	56	55	64	63	62	62	60	62			70	70	14
13	60	58	51	50	60	59	58	57	56		59	58	67	66	13
12	56	54	46	45	56	55	54	53	52	54			63	63	12
11	51	50	41	40	52	51	49	49	47		51	52	60	59	11
10	47	46	36	35	47	47	45	45	43	47	47	49	56	56	10
9	43	41	31	30	43	43	41	40	39	43	43	45	53	52	9
8	39	37	26	25	39	39	37	36	34	39	39	42	49	49	8
7	35	33	21	20	35	35	33	32	30	35	36	39	46	45	7
6	30	29	16	15	30	31	29	28	25	32	32	35	42	42	6
5	26	25	10	10	26	27	25	24	21	28	28	32	39	38	5
4	22	21	5	6	22	23	21	19	17	24	24	29	35	35	4
3	18	17	0	1	17	19	16	15	12	20	20	26	31	31	3
2	14	13	0	0	13	15	12	11	8	16	16	22	28	27	2
1	10	9	0	0	9	11	8	7	3	13	12	19	24	24	1
0	5	5	0	0	5	7		2							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	93	99		87	90	90	82	86	87							19	
18	89	94	94	83	85	87	78	81	84	79					79	18	
17	84	90	88	79	81	83	74	77			80					17	
16	80	86	83	75	76	79	71	73	76		77					16	
15	76	81	78	71	72	75	67	69	72	69	73	70	65	68		15	
14	72	77	72	67	68	71	64	64	68	66	69		62			14	
13	68	73	67	63	63	68	60	60	64	62	65	63			60	13	
12	63	68	61	59	59	64	57	56	60		61	59	56	56		12	
11	59	64	56	55	54	60	53	51	56	56	57	56		52		11	
10	55	60	51	51	50	56	49	47	52	53	54	53	49	48		10	
9	51	55	45	47	45	53	46	43	50	50	50	49	46	44		9	
8	46	51	40	43	41	49	42	39	44	46	46	46	43	40		8	
7	42	47	35	39	36	45	39	34	41		42	42	40		36		7
6	38	43	29	35	32	41	35	30	37	40	38	39	37	32		6	
5	34	38	24	31	27	37	31	26	33	37	34	35	34	28		5	
4	29	34	19	27	23	34	28	22	29		31	32	31	24		4	
3	25	30	13	23	19	30	24	17	25	30	27	28	27	20		3	
2	21	25	8	19	14	26	21	13	21		23	25	24	16		2	
1	17	21	2	15	10	22	17	9	24	19	22	21	13			1	
0	17	21	0	11				5	20	15	18	18				0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	96	90	90		91		85		95									19
18	93	90	86	82			81		91									18
17	89	86	81	78	83		76		87	90				84	82		17	
16	85	82	77	74	79	75	72		83	85		75		81	78	84	16	
15	81	77	72	69	75	71	68		79	80				77	75		15	
14	77	73	68	65	71	67	64		75	76		67		73	71	76	14	
13	73	69	64	61	67	63	60		70	71	69	63		70	67	72	13	
12	69	64	59	57	63	59	56		66	67			62	66	64	68	12	
11	65	60	55	53	59	55	52	59	62	62	60	55		62	60	64	11	
10	61	55	50	49	55	51	48		58	58	56	52		59	56	60	10	
9	57	51	46	45	51	47	44	47	54	53	52	48	48	55	53	56	9	
8	53	47	41	41	47	42	40		50	49	48	44		51	49	52	8	
7	49	42	37	37	43	38	36	36	45	44	44	40	38	48	45	48	7	
6	45	38	32	33	39	34	32		41	40	39	36		44	42	44	6	
5	41	34	28	29	35	30	27	24	37	35	35	32	29	40	38	40	5	
4	37	29	24	25	31	26	23		33	30	31	28		37	34	36	4	
3	33	25	19		27	22	19	13	29	26	27	24	19	33	31		3	
2	29	21	15		23	18	15	7	25	21	23	20	14	29			2	
1	25	16	10		19	14	11	1	21	17	18	16	10				1	
0	12				10	7	0		12	14				20	20		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 35-39 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	91		87		89		84			84	89	87	85		19		
18	87	92	83				80			80	85	83	82		18		
17	83	87	79		80		76			77	80		78		17		
16	78	83	75			71	72	69	76			76	75	74	16		
15	74	78	71		71		68	66			68				15		
14	70	74	67	65	66	64	63	62	67		64	68	67	67	14		
13	65	69	63		61		59	58		61		64	63	63	60	13	
12	61	65	59	59	57	56	55	54	58		56	59	59	56	12		
11	57	60	55	55	52	52	51	51	54	53	52	55	55	56	53	11	
10	53	56	51	52	48	48	47	47	49		49	51	51	52	49	10	
9	48	51	47	48	43	44	43	43	45	45	45	47	47	48	46	9	
8	44	47	43	45	38	40	39	39	40		41	42	43	44	42	8	
7	40	42	39	41	34	36	35	36	36	37	37	38	39	41	39	7	
6	36	38	35	38		32	30	32	31		33	34	35	37	35	6	
5	31	33	31	34	25	28	26	28	27	29	29	30	31	33	32	5	
4	27	28	27	31		24	22	24	22		25		25	27	30	28	4
3	23	24	23	27	16	20	18		18		21		21	23	26	25	3
2	18	19	19	24	11	16	14	17	13		17		17	19	22	21	2
1	14		14	20	6	12	10	13	9		13				18	1	
0				17	8	6	9									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	86	83	81	79	88	86	84	85	85				88	88	19
18	81	79	76	75	84	82	79	81	81				84	84	18
17	77	75	71	70	80	78	75	77	76				81	81	17
16	73	71	66	65	76	74	71	72	72				77	77	16
15	69	66	60	60	71	70	67	68	67				66	74	15
14	65	62	55	55	67	66	63	64	63				70	70	14
13	61	58	50	50	63	62	59	60	59				61	59	13
12	56	54	45	45	59	58	55	55	54				63	63	12
11	52	50	40	40	54	54	51	51	50				60	59	11
10	48	46	35	35	50	50	46	47	46				56	56	10
9	44	42	30	30	46	46	42	43	41				53	52	9
8	40	38	25	25	42	42	38	39	37				49	49	8
7	35	34	20	20	37	38	34	34	32				46	45	7
6	31	30	15	15	33	34	30	30	28				42	42	6
5	27	26	9	10	29	30	26	26	24				39	38	5
4	23	22	4	5	25	26	22	22	19				35	35	4
3	19	18	0	0	20	22	18	17	15				32	31	3
2	15	13	0	0	16	18	14	13	10				28	28	2
1	10	9	0	0	12	14	9	9	6				25	24	1
0	6	5	0	0	8	10		5							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	93	93	100	89	91	88	82	87	87	84	79				19
18	89	93	96	85	87	84	79	83	84	79				80	18
17	84	89	90	81	82	81	75	79			81				17
16	80	85	85	77	78	77	72	74	76		78				16
15	76	80	80	73	73	73	68	70	72	69	74	71	65	68	15
14	72	76	74	69	69	69	64	66	68	66	70		62		14
13	68	72	69	65	64	66	61	61	64	63	66	64		60	13
12	63	67	64	61	60	62	57	57	60		62	60	56	57	12
11	59	63	58	57	56	58	54	53	56	56	58	57		53	11
10	55	59	53	53	51	54	50	49	52	53	55	53	50	49	10
9	51	54	48	49	47	50	46	44		50	51	50	47	45	9
8	46	50	42	45	42	47	43	40	44	47	47	46	44	41	8
7	42	46	37	41	38	43	39	36	41		43	43	41	37	7
6	38	41	31	37	33	39	36	32	37	40	39	40	37	33	6
5	34	37	26	33	29	35	32	27	33	37	35	36	34	29	5
4	29	33	21	29	24	31	28	23	29		32	33	31	25	4
3	25	28	15	25	20	28	25	19	25	31	28	29	28	21	3
2	21	24	10	21	16	24	21	14	21		24	26	25	17	2
1	17	20	5	17	11	20	18	10		24	20	22	22	13	1
0	16	0		13				6		21	16	19	19		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	96	93	92		91		86		95							19	
18	93	93	87	82			82		91							18	
17	89	88	83	78	83		78		87	90				84	82	17	
16	85	84	79	74	79	77	74		83	85	72		80	79	84	16	
15	81	80	74	70	75	72	70		79	80			77	75		15	
14	77	75	70	66	71	68	65		75	76	64		73	71	76	14	
13	73	71	65	62	67	64	61		70	71	69	61		69	68	72	13
12	69	66	61	58	63	60	57		66	67		62		66	64	68	12
11	65	62	56	54	59	56	53	59	62	62	61	53		62	60	64	11
10	61	58	52	50	55	52	49		58	58	56	49		58	57	60	10
9	57	53	47	46	51	48	45	47	54	53	52	45	48	55	53	56	9
8	53	49	43	42	47	44	41		50	49	48	41		51	49	52	8
7	49	45	39	38	43	40	37	36	45	44	44	37	38	47	46	48	7
6	45	40	34	34	39	35	33		41	40	40	33		44	42	44	6
5	41	36	30	30	35	31	29	24	37	35	35	29	29	40	38	40	5
4	37	32	25	26	31	27	25		33	30	31	25		36	35	36	4
3	33	27	21		27	23	20	13	29	26	27	21	19	33	31		3
2	29	23	16		23	19	16	7	25	21	23	17	15	29			2
1	25	19	12		19	15	12	1	21	17	19	13	10				1
0	14	14			11	8	0		12	14				20	20		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 40-44 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	92		88		90		85				85	91	89	86		19	
18	88	93	84				81				81	86	85	82		18	
17	84	88	80		80		77				77	82		79		17	
16	79	84	75			72	73	70	77			78	77	75		16	
15	75	79	71		71		69	67				70				15	
14	71	75	67	66	67	64	64	63	68		66	69	69	67		14	
13	66	70	63		62		60	59			61		65	65	64	60	13
12	62	66	59	59	57	57	56	55	59		58	61	61		57	12	
11	58	61	55	55	53	53	52	51	54		54	57	57	56	53	11	
10	54	57	51	52	48	49	48	48	50		50	52	53	52	50	10	
9	49	52	47	48	44	45	44	44	45		46	46	48	49	46	9	
8	45	48	43	45	39	41	40	40	41		42	44	45	45	42	8	
7	41	43	39	41	35	37	36	36	36		38	39	40	40	39	7	
6	37	39	35	38		33	31	33	32		34		35	36	35	6	
5	32	34	31	34	25	29	27	29	27		30	31	31	32	32	5	
4	28	30	27	31		25	23	25	23		26		27	28	30	4	
3	24	25	23	27	16	21	19		18		22		23	24	26	3	
2	19	20	19	24	12	17	15	17	14		18		18	20	23	2	
1	15		15	20	7	13	11	14	10		14			19		1	
0				17		9	7	10								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	86	84	82	81	90	86	84	86	87				84	84	19
18	82	80	77	76	86	82	80	82	82				80	80	18
17	78	76	72	71	82	78	76	78	78				77	77	17
16	74	72	66	66	77	74	72	74	73				73	73	16
15	70	68	61	61	73	70	68	70	69				67	70	15
14	65	64	56	56	69	66	64	65	65	63			66	66	14
13	61	60	51	51	65	62	60	61	60		62	60	63	63	13
12	57	55	46	46	60	58	56	57	56		56		59	59	12
11	53	51	41	41	56	54	52	53	52		54	53	56	56	11
10	49	47	36	36	52	50	47	48	47		48	50	50	52	10
9	44	43	31	31	48	46	43	44	43		44	46	47	49	9
8	40	39	26	26	43	42	39	40	38		40	42	44	45	8
7	36	35	21	21	39	38	35	36	34		37	38	40	42	7
6	32	31	15	16	35	34	31	32	30		33	34	37	38	6
5	28	27	10	11	31	30	27	27	25		29	31	34	35	5
4	24	23	5	6	26	26	23	23	21		25	27	30	31	4
3	19	19	0	1	22	22	19	19	16		22	23	27	28	3
2	15	15	0	0	18	18	14	15	12		18	19	24	24	2
1	11	11	0	0	14	14	10	10	8		14	15	21	21	1
0	7	7	0	0	9	10		6							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	91	90	100	91	93	89	83	88	87	84	80					19
18	87	92	98	87	88	85	79	84	84	80					81	18
17	83	88	93	83	84	82	76	80			82					17
16	79	84	88	79	79	78	72	76	76		78					16
15	74	79	82	75	75	74	69	71	72	70	75	71	66	69		15
14	70	75	77	71	70	70	65	67	68	67	71		63			14
13	66	71	71	67	66	66	61	63	64	63	67	64			61	13
12	62	66	66	63	62	63	58	59	60		63	61	57	57		12
11	57	62	61	59	57	59	54	54	56	57	59	57			54	11
10	53	58	55	55	53	55	51	50	52	54	55	54	50	50		10
9	49	53	50	51	48	51	47	46	50	52	51	47	46			9
8	45	49	45	47	44	47	43	41	44	47	48	47	44	42		8
7	41	45	39	43	39	44	40	37	41		44	44	41		38	7
6	36	40	34	39	35	40	36	33	37	41	40	40	38	34		6
5	32	36	29	35	30	36	33	29	33	38	36	37	35	30		5
4	28	32	23	31	26	32	29	24	29		32	33	32	26		4
3	24	27	18	26	22	28	25	20	25	31	29	30	29	22		3
2	19	23	13	22	17	25	22	16	21		25	26	26	18		2
1	15	19	7	18	13	21	18	12	25	21	23	22	14			1
0	14	17	2	14				7	21	17	20	19				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100		94		93		87		94								19	
18	96	95	89	83			83		90								18	
17	92	91	85	79	85		79		86	90				84	83		17	
16	88	86	80	75	81	78	75		82	85	73		80	79	83		16	
15	84	82	76	71	77	74	71		77	80				76	75		15	
14	80	77	71	67	73	70	67		73	76	65			73	72	76	14	
13	76	73	67	63	69	65	63		69	71	61			69	68	72	13	
12	72	69	62	59	65	61	59		65	67		62		65	64	68	12	
11	68	64	58	55	61	57	55	59	61	62	61	53		62	61	64	11	
10	64	60	54	51	57	53	51		57	58	57	49		58	57	60	10	
9	60	56	49	47	53	49	47	48	52	53	52	45	48	54	53	56	9	
8	56	51	45	43	49	45	42		48	49	48	42		51	50	52	8	
7	52	47	40	39	45	41	38	36	44	44	44	38	39	47	46	48	7	
6	48	43	36	35	41	37	34		40	40	40	34		43	42	44	6	
5	44	38	31	31	37	33	30	25	36	35	36	30	29	40	39	40	5	
4	40	34	27	27	33	28	26		32	30	31	26		36	35	36	4	
3	36	30	22		29	24	22	13	28	26	27	22	19	32	31		3	
2	32	25	18		25	20	18	8	23	21	23	18	15	29			2	
1	28	21	14		21	16	14	2	19	17	19	14	10				1	
0	17				12	10	0		12	15				20	20		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 45-49 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	93		88		90		86				87	92	91	86		19
18	89	94	84				82				83	88	87	83		18
17	84	89	80		81		78			78		84		79		17
16	80	85	76			73	74	71	78			79	79	75		16
15	76	80	72		72		70	68			71					15
14	72	76	68	66	68	66	66	64	69		67	71	70	68		14
13	67	71	64		63		61	60		63		67	66	64	60	13
12	63	67	60	59	58	58	57	56	60		60	62	62	57		12
11	59	62	56	55	54	54	53	53	55	55	56	58	58	57	53	11
10	55	58	52	52	49	50	49	49	51		52	54	54	53	50	10
9	50	53	48	48	45	46	45	45	46	47	48	50	50	49	46	9
8	46	49	44	45	40	42	41	41	42		44	45	46	45	43	8
7	42	44	39	41	35	38	37	37	37	39	40	41	42	42	39	7
6	37	40	35	38		34	33	34	33	35	37	38	38	36		6
5	33	35	31	35	26	30	28	30	28	31	32	33	34	34	32	5
4	29	31	27	31		26	24	26	24	27		28	30	31	28	4
3	25	26	23	28	17	22	20		20	23		24	26	27	25	3
2	20	22	19	24	13	18	16	19	15	19	20	22	23	21		2
1	16		15	21	8	14	12	15	11	15				19		1
0				17		10	8	11								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	87	85	83	82	92	88	86	88	88				84	84	19
18	83	81	78	77	88	84	82	84	84				80	80	18
17	79	77	73	72	84	80	77	80	80				77	77	17
16	74	73	68	67	80	76	73	75	75				73	73	16
15	70	69	63	62	75	72	69	71	71				70	70	15
14	66	65	58	57	71	68	65	67	66	64			66	66	14
13	62	61	53	52	67	64	61	63	62				63	63	13
12	58	57	47	47	62	60	57	59	58	56			59	59	12
11	54	53	42	42	58	56	53	54	53				56	56	11
10	49	49	37	37	54	52	49	50	49	49	51	51	52	52	10
9	45	45	32	32	50	48	44	46	45	45	47	48	49	49	9
8	41	41	27	27	45	44	40	42	40	41	43	44	45	45	8
7	37	36	22	22	41	40	36	37	36	37	39	41	42	42	7
6	33	32	17	17	37	36	32	33	31	34	35	38	38	38	6
5	28	28	12	12	33	32	28	29	27	30	31	34	35	35	5
4	24	24	7	8	28	28	24	25	23	26	28	31	31	31	4
3	20	20	2	3	24	24	20	21	18	22	24	28	28	27	3
2	16	16	0	0	20	20	16	16	14	18	20	25	24	24	2
1	12	12	0	0	16	16	11	12	9	15	16	21	21	20	1
0	8	8	0	0	11	12		8							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	91	100		92	94	90	84	90	87							19
18	87	91	100	88	90	86	80	86	84	80						18
17	83	87	96	84	86	82	76	81			83					17
16	79	82	90	80	81	79	73	77	76		79					16
15	74	78	85	76	77	75	69	73	72	70	76	72	67	70		15
14	70	74	80	72	72	71	66	69	68	67	72		64			14
13	66	69	74	68	68	67	62	64	64	64	68	65				13
12	62	65	69	64	63	63	58	60	60		64	62	57	59		12
11	57	61	63	60	59	60	55	56	56	57	60	58		55		11
10	53	57	58	56	54	56	51	51	52	54	56	55	51	51		10
9	49	52	53	52	50	52	48	47		51	52	51	48	47		9
8	45	48	47	48	46	48	44	43	44	48	49	48	45	43		8
7	41	44	42	44	41	44	40	39	41		45	44	42	39		7
6	36	39	37	40	37	41	37	34	37	41	41	41	39	35		6
5	32	35	31	36	32	37	33	30	33	38	37	38	35	31		5
4	28	31	26	32	28	33	30	26	29		33	34	32	27		4
3	24	26	21	28	23	29	26	22	25	32	29	31	29	23		3
2	19	22	15	24	19	25	23	17	21		26	27	26	19		2
1	15	18	10	20	14	22	19	13		25	22	24	23	15		1
0	13	5		16				9		22	18	20	20			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100		95		93		89		94								19	
18	96	97	91	85			85		90								18	
17	92	93	86	81	85		81		86	90				83	83		17	
16	88	88	82	77	81	79	77		82	85		74		80	79	83	16	
15	84	84	77	73	77	75	73		77	80				76	76		15	
14	80	80	73	69	73	71	69		73	76		66		72	72	75	14	
13	76	75	69	64	69	67	65		69	71	70	62		69	68	71	13	
12	72	71	64	60	65	63	61		65	67			63	65	65	67	12	
11	68	67	60	56	61	58	57	60	61	62	61	54		61	61	63	11	
10	64	62	55	52	57	54	52		57	58	57	51		58	57	59	10	
9	60	58	51	48	53	50	48	48	52	53	53	47	48	54	54	56	9	
8	56	54	46	44	49	46	44		48	49	48	43		50	50	52	8	
7	52	49	42	40	45	42	40	37	44	44	44	39	39	47	46	48	7	
6	48	45	37	36	41	38	36		40	40	40	35		43	43	44	6	
5	44	41	33	32	37	34	32	25	36	35	36	31	29	39	39	40	5	
4	40	36	29	28	33	30	28		32	30	32	27		36	35	36	4	
3	36	32	24		29	26	24	14	28	26	27	23	19	32	32		3	
2	32	28	20		25	21	20	8	23	21	23	19	15	28			2	
1	28	23	15		21	17	16	2	19	17	19	15	10				1	
0	19				13	12	0		12	15				21	20		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 50-54 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	94		88		92		88				88	94	92	87		19	
18	90	95	84				84				84	89	88	83		18	
17	85	90	80		82		79			80		85		80		17	
16	81	86	76			75	75	73	79			81	80	76		16	
15	77	81	72		73		71	69			73					15	
14	73	77	68	66	69	67	67	65	70		69	72	72	68		14	
13	68	72	64		64		63	61		64		68	68	65	60	13	
12	64	68	60	59	59	59	59	58	61		61	64	64	57	57	12	
11	60	63	56	56	55	55	55	54	57	56	57	60	60	57	53	11	
10	55	59	52	52	50	51	51	50	52		53	55	56	53	50	10	
9	51	54	48	49	46	47	46	46	48	48	50	51	52	50	46	9	
8	47	50	44	45	41	43	42	43	43		46	47	48	46	43	8	
7	43	45	40	42	37	39	38	39	39	40	42	43	44	42	39	7	
6	38	41	36	38		35	34	35	34		36	39	40	38	36	6	
5	34	36	32	35	27	31	30	31	30		32	34	34	36	35	5	
4	30	32	28	31		27	26	27	25		28		30	32	31	29	4
3	26	27	24	28	18	23	22		21		24		26	28	27	25	3
2	21	23	20	24	14	19	18	20	16		20		22	23	24	21	2
1	17		16	21	9	15	13	16	12		16			20		1	
0				17		11	9	12								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	87	85	84	95	90	87	90	90				84	84	19
18	84	83	80	79	90	86	83	86	86				80	81	18
17	80	79	75	74	86	82	79	81	82				77	77	17
16	75	75	70	69	82	78	75	77	77				73	73	16
15	71	70	64	64	78	74	71	73	73				68	70	15
14	67	66	59	59	73	70	66	69	68	65			66	66	14
13	63	62	54	54	69	66	62	65	64		64	62	63	63	13
12	59	58	49	49	65	62	58	60	60	57			59	59	12
11	54	54	44	44	60	58	54	56	55		56	55	56	56	11
10	50	50	39	39	56	54	50	52	51	50	52	52	52	52	10
9	46	46	34	34	52	50	46	48	47	46	48	49	49	49	9
8	42	42	29	29	48	46	42	44	42	42	44	45	45	45	8
7	38	38	24	24	43	42	38	39	38		40	42	42	42	7
6	34	34	19	19	39	38	33	35	33		36	39	38	38	6
5	29	30	13	14	35	34	29	31	29		31	32	36	35	5
4	25	26	8	9	31	30	25	27	25		27	28	32	31	4
3	21	22	3	4	26	26	21	22	20		23	25	29	28	3
2	17	17	0	0	22	22	17	18	16		19	21	26	24	2
1	13	13	0	0	18	18	13	14	11		16	17	22	21	1
0	8	9	0	0	14	14		10							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	90	100		94	96	91	84	91	85						19
18	85	90	100	90	92	87	81	87	81	81				84	18
17	81	86	99	86	87	83	77	83			84				17
16	77	81	93	82	83	79	73	78	74		80				16
15	73	77	88	78	79	76	70	74	70	71	76	73	67	72	15
14	69	73	83	74	74	72	66	70	66	68	73		64		14
13	64	68	77	70	70	68	63	66	62	64	69	66		64	13
12	60	64	72	66	65	64	59	61	58		65	62	58	60	12
11	56	60	67	62	61	60	55	57	54	58	61	59		56	11
10	52	55	61	58	56	57	52	53	50	55	57	55	52	52	10
9	47	51	56	54	52	53	48	49	51	53	52	49	48		9
8	43	47	50	50	47	49	45	44	42	48	50	49	45		8
7	39	42	45	46	43	45	41	40	38		46	45	42	40	7
6	35	38	40	42	39	41	38	36	34	42	42	42	39	36	6
5	30	34	34	38	34	38	34	32	31	39	38	38	36	32	5
4	26	30	29	34	30	34	30	27	27		34	35	33	29	4
3	22	25	24	30	25	30	27	23	23	32	30	31	30	25	3
2	18	21	18	26	21	26	23	19	19		27	28	27	21	2
1	14	17	13	22	16	22	20	14		26	23	24	24	17	1
0	12	8		18				10		22	19	21	20		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		97		95		92		93							19	
18	96	99	92	86			88		89							18	
17	92	95	88	82	87		83		84	90			83	83		17	
16	88	91	83	78	83	80	79		80	85		76	79	80	83	16	
15	84	86	79	74	79	76	75		76	80			76	76		15	
14	80	82	75	70	75	72	71		72	76		68	72	72	75	14	
13	76	78	70	66	71	68	67		68	71	70	64		68	69	71	13
12	72	73	66	62	67	64	63		64	67		63	65	65	67	12	
11	68	69	61	58	63	60	59	60	59	62	61	56		61	61	63	11
10	64	65	57	54	59	56	55		55	58	57	52		57	58	59	10
9	61	60	52	50	55	51	51	49	51	53	53	48	48	54	54	55	9
8	57	56	48	46	51	47	47		47	49	49	44		50	50	51	8
7	53	52	43	42	47	43	43	37	43	44	44	40	39	46	47	47	7
6	49	47	39	38	43	39	38		39	40	40	36		43	43	43	6
5	45	43	35	34	39	35	34	26	34	35	36	32	29	39	39	40	5
4	41	39	30	30	35	31	30		30	30	32	28		35	36	36	4
3	37	34	26		31	27	26	14	26	26	28	24	19	32	32		3
2	33	30	21		27	23	22	8	22	21	23	21	15	28			2
1	29	26	17		23	19	18	3	18	17	19	17	10				1
0	21				14	14	0		12	15				21	20		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 55-59 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	95		89		93		90				90	95	94	87		19
18	91	96	85				85				86	91	90	84		18
17	86	92	81		84		81				81	87		80		17
16	82	87	77			76	77	74	81			82	82	76		16
15	78	82	73		75		73	71				74				15
14	74	78	69	66	70	69	69	67	72		71	74	74	69		14
13	69	73	64		65		65	63			65	70	70	65	60	13
12	65	69	60	59	61	61	61	59	63		63	66	66	57	57	12
11	61	64	56	56	56	57	56	56	58		57	59	61	62	58	11
10	56	60	52	52	52	53	52	52	54		55	57	57	54	50	10
9	52	55	48	49	47	49	48	48	49		50	51	53	53	46	9
8	48	51	44	45	42	45	44	44	45		47	49	49	46	43	8
7	44	46	40	42	38	41	40	40	40		42	43	44	45	43	7
6	39	42	36	38		37	36	37	36		38	40	41	39	36	6
5	35	37	32	35	29	33	32	33	31		34	36	36	35	32	5
4	31	33	28	31		29	28	29	27		30	32	33	32	29	4
3	27	28	24	28	20	25	23		22		26	27	29	28	25	3
2	22	24	20	24	15	21	19	22	18		22	23	25	24	22	2
1	18		16	21	10	17	15	18	13		18			20		1
0				17		13	11	14								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	88	87	86	97	93	89	92	93				84	84	19
18	85	84	82	81	93	89	85	88	88				80	81	18
17	81	80	77	76	88	85	81	84	84				77	77	17
16	77	76	72	71	84	81	76	79	79				73	74	16
15	72	72	66	66	80	77	72	75	75				70	70	15
14	68	68	61	61	76	73	68	71	71	66			66	67	14
13	64	64	56	56	71	69	64	67	66				65	63	13
12	60	60	51	51	67	65	60	62	62				59	59	12
11	56	56	46	46	63	61	56	58	58				57	56	11
10	51	51	41	41	59	57	52	54	53	51	53	53	52	52	10
9	47	47	36	36	54	53	48	50	49	47	49	50	49	49	9
8	43	43	31	31	50	49	43	46	44	43	45	47	45	45	8
7	39	39	26	26	46	45	39	41	40	39	41	43	42	42	7
6	35	35	21	21	42	41	35	37	36	36	37	40	38	38	6
5	31	31	15	16	37	37	31	33	31	32	33	37	35	35	5
4	26	27	10	11	33	33	27	29	27	28	29	33	31	31	4
3	22	23	5	6	29	29	23	24	22	24	26	30	28	28	3
2	18	19	0	2	25	25	19	20	18	20	22	27	24	24	2
1	14	15	0	0	20	21	15	16	14	17	18	24	21	21	1
0	10	11	0	0	16	17		12							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	90	100		96	98	92	85	93	85						19	
18	85	89	100	92	94	88	81	88	81	81				85	18	
17	81	85	100	88	90	84	78	84			85				17	
16	77	80	97	84	85	80	74	80	74		81				16	
15	73	76	91	80	81	76	70	76	70	71	77	73	68	73	15	
14	69	72	86	76	76	73	67	71	66	68	73		65		14	
13	64	67	81	72	72	69	63	67	62	65	70	67		66	13	
12	60	63	75	68	67	65	60	63	58		66	63	58	62	12	
11	56	59	70	64	63	61	56	59	54	58	62	60		58	11	
10	52	54	64	60	58	57	53	54	50	55	58	56	52	54	10	
9	47	50	59	56	54	54	49	50	52	54	53	49	50		9	
8	43	46	54	52	50	50	45	46	42	49	50	49	46		8	
7	39	41	48	48	45	46	42	41	38		47	46	43	42		7
6	35	37	43	44	41	42	38	37	34	42	43	42	40	38		6
5	30	33	38	40	36	38	35	33	31	39	39	39	37	34		5
4	26	28	32	36	32	35	31	29	27		35	36	34	30		4
3	22	24	27	32	27	31	27	24	23	33	31	32	30	26		3
2	18	20	22	28	23	27	24	20	19		27	29	27	22		2
1	14	15	16	24	18	23	20	16	26	24	25	24	18			1
0	11	11		20				12	23	20	22	21				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		98		95		94		93								19
18	96	100	94	88			90		89								18
17	92	97	90	84	87		86		84	90				82	84		17
16	88	93	85	80	83	81	82		80	85		77		79	80	83	16
15	84	89	81	76	79	77	78		76	80				75	76		15
14	80	84	76	72	75	73	74		72	76		70		71	73	75	14
13	76	80	72	68	71	69	70		68	71	70	66		68	69	71	13
12	72	76	67	64	67	65	66		64	67			63	64	65	67	12
11	68	71	63	60	63	61	62	60	59	62	62	58		60	62	63	11
10	64	67	58	56	59	57	58		55	58	57	54		57	58	59	10
9	61	63	54	52	55	53	53	49	51	53	53	50	48	53	54	55	9
8	57	58	50	48	51	49	49		47	49	49	46		49	51	51	8
7	53	54	45	44	47	44	45	37	43	44	45	42	39	46	47	47	7
6	49	50	41	39	43	40	41		39	40	40	38		42	43	43	6
5	45	45	36	35	39	36	37	26	34	35	36	34	29	38	40	39	5
4	41	41	32	31	35	32	33		30	30	32	30		35	36	35	4
3	37	37	27		31	28	29	14	26	26	28	26	20	31	32		3
2	33	32	23		27	24	25	9	22	21	24	22	15	27			2
1	29	28	18		23	20	21	3	18	17	19	18	10				1
0	24				16	17	0		12	15				21	20		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 60-64 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	94		89		94		92				92	97	96	88		19
18	90	94	85				88				88	92	91	84		18
17	85	90	81		85		83				83	88		81		17
16	81	85	77			78	79	76	83			84	83	77		16
15	77	81	73		76		75	73				76				15
14	72	76	69	67	72	71	71	69	74		72	76	75	69		14
13	68	72	65		67		67	65			67	71	71	66	61	13
12	64	67	61	60	62	63	63	61	65		64	67	67	57	57	12
11	60	62	57	57	58	59	59	57	60		59	61	63	58	53	11
10	55	58	53	53	53	55	54	54	56		57	59	59	54	50	10
9	51	53	49	50	49	51	50	50	51		51	53	54	55	51	9
8	47	49	45	46	44	47	46	46	47		49	50	51	47	43	8
7	43	44	41	43	39	43	42	42	42		43	45	46	47	43	7
6	38	40	37	39		39	38	39	38		39	42	43	39	36	6
5	34	35	33	36	30	35	34	35	33		35	37	39	36	32	5
4	30	31	28	33		31	30	31	29		31	33	35	32	29	4
3	25	26	24	29	21	27	26		24		28	29	31	28	25	3
2	21	22	20	26	17	23	21	23	20		24	25	27	25	22	2
1	17		16	22	12	19	17	20	15		20			21		1
0				19		15	13	16								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	90	89	89	88	100	95	91	94	95				84	84	19
18	86	85	84	83	95	91	87	90	91				80	81	18
17	82	81	79	78	91	87	83	86	86				77	77	17
16	78	77	74	73	87	83	78	81	82				73	74	16
15	74	73	69	68	83	79	74	77	78				71	70	15
14	70	69	63	63	78	75	70	73	73	67			66	67	14
13	65	65	58	58	74	71	66	69	69		66	65	63	63	13
12	61	61	53	53	70	67	62	65	64	60		59	60	60	12
11	57	57	48	48	66	63	58	60	60		58	58	56	56	11
10	53	53	43	43	61	59	54	56	56	52	54	55	52	53	10
9	49	49	38	39	57	55	50	52	51	48	50	51	49	49	9
8	44	45	33	34	53	51	46	48	47	44	46	48	45	45	8
7	40	41	28	29	49	47	41	44	42	41	42	45	42	42	7
6	36	36	23	24	44	43	37	39	38	37	38	42	38	38	6
5	32	32	18	19	40	39	33	35	34	33	34	38	35	35	5
4	28	28	13	14	36	35	29	31	29	29	30	35	31	31	4
3	24	24	7	9	32	31	25	27	25	26	26	32	28	28	3
2	19	20	2	4	27	27	21	22	21	22	23	28	24	24	2
1	15	16	0	0	23	23	17	18	16	18	19	25	21	21	1
0	11	12	0	0	19	19		14							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	88	100		98	100	92	85	94	85						19
18	84	88	100	94	96	89	82	90	81	82				87	18
17	80	83	100	90	92	85	78	86			86				17
16	75	79	100	86	87	81	75	81	74		82				16
15	71	75	95	82	83	77	71	77	70	72	78	74	68	75	15
14	67	71	90	78	78	73	68	73	66	69	74		65		14
13	63	66	84	74	74	70	64	68	62	65	71	67		68	13
12	58	62	79	69	70	66	60	64	58		67	64	59	64	12
11	54	58	73	65	65	62	57	60	54	59	63	60		60	11
10	50	53	68	61	61	58	53	56	50	56	59	57	53	56	10
9	46	49	63	57	56	54	50	51	52	55	53	50	52		9
8	42	45	57	53	52	51	46	47	42	49	51	50	47	48	8
7	37	40	52	49	47	47	42	43	38		48	47	43	44	7
6	33	36	47	45	43	43	39	39	34	43	44	43	40	40	6
5	29	32	41	41	38	39	35	34	31	40	40	40	37	36	5
4	25	27	36	37	34	36	32	30	27		36	36	34	32	4
3	20	23	31	33	30	32	28	26	23	33	32	33	31	28	3
2	16	19	25	29	25	28	24	22	19		28	29	28	24	2
1	12	14	20	25	21	24	21	17	27	24	26	25	20		1
0	10	14		21				13	23	21	22	22			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		97		98		91							19	
18	99	100	96	90			93		87							18	
17	95	100	91	86	89		89		83	90			82	84		17	
16	91	95	87	82	85	83	85		79	85	79		78	80	83	16	
15	87	91	82	78	81	78	81		75	80			74	77		15	
14	83	87	78	74	77	74	77		71	76	72		71	73	75	14	
13	80	82	73	70	73	70	73		66	71	70	68		67	69	71	13
12	76	78	69	66	69	66	69		62	67		63	63	66	67	12	
11	72	74	65	62	65	62	65	61	58	62	62	60		60	62	63	11
10	68	69	60	58	61	58	61		54	58	58	56	56	58	59	10	
9	64	65	56	54	57	54	57		50	53	53	52	48	52	55	9	
8	60	61	51	50	53	50	53		46	49	49	48		49	51	51	8
7	56	56	47	46	49	46	48	38	41	44	45	44	39	45	47	47	7
6	52	52	42	42	45	42	44		37	40	41	40		41	44	43	6
5	48	48	38	38	41	37	40	26	33	35	36	36	29	38	40	39	5
4	44	43	33	34	37	33	36		29	30	32	32		34	36	35	4
3	40	39	29		33	29	32	15	25	26	28	28	20	30	33		3
2	36	35	25		29	25	28	9	21	24	24	15	27				2
1	32	30	20		25	21	24	3	17	17	20	20	10				1
0	26				17	20	0		12	15			22	19		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 65-69 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	95		90		96		94				93	98	97	88		19	
18	91	95	85				90				89	94	93	85		18	
17	86	91	81		87		86			85		90		81		17	
16	82	86	77			81	82	79	85			86	85	77		16	
15	78	82	73		78		78	75			78					15	
14	73	77	69	67	73	73	74	71	76		74	77	77	70		14	
13	69	73	65		69		69	67		70		73	73	66	61	13	
12	65	68	61	60	64	65	65	64	67		66	69	69	57	57	12	
11	61	64	57	57	60	61	61	60	62	62	62	64	65	59	54	11	
10	56	59	53	53	55	57	57	56	58		58	60	61	55	50	10	
9	52	54	49	50	51	53	53	52	53	54	54	56	57	51	47	9	
8	48	50	45	47	46	49	49	48	49		50	52	53	47	43	8	
7	43	45	41	43	41	45	45	45	44	46	47	47	49	44	39	7	
6	39	41	37	40		41	40	41	40	42		43	45	40	36	6	
5	35	36	33	36	32	37	36	37	35	38	39	39	40	36	32	5	
4	31	32	29	33		33	32	33	31		34		35	36	33	29	4
3	26	27	25	29	23	29	28		26		30		30	32	29	25	3
2	22	23	21	26	18	25	24	26	22		26		28	25	22	2	
1	18		17	22	14	21	20	22	17					21		1	
0				19		17	16	18								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	91	91	91	100	98	93	97	98				84	84	19
18	88	87	86	86	98	94	89	92	93				81	81	18
17	84	83	81	81	94	90	85	88	89				77	77	17
16	79	78	76	76	90	86	81	84	85				73	74	16
15	75	74	71	71	86	82	77	80	80				70	70	15
14	71	70	66	66	81	78	73	75	76	69			66	67	14
13	67	66	61	61	77	74	69	71	71		67	66	63	63	13
12	63	62	56	56	73	70	64	67	67	61		59	60	60	12
11	59	58	50	51	69	66	60	63	63		59	60	56	56	11
10	54	54	45	46	64	62	56	59	58	54	55	56	52	53	10
9	50	50	40	41	60	58	52	54	54	50	51	53	49	49	9
8	46	46	35	36	56	54	48	50	49	46	47	50	45	46	8
7	42	42	30	31	52	50	44	46	45	42	43	47	42	42	7
6	38	38	25	26	47	46	40	42	41	38	39	43	38	39	6
5	33	34	20	21	43	42	36	37	36	35	35	40	35	35	5
4	29	30	15	16	39	38	31	33	32	31	31	37	31	31	4
3	25	25	10	11	35	34	27	29	28	27	27	33	28	28	3
2	21	21	5	6	30	30	23	25	23	23	24	30	24	24	2
1	17	17	0	1	26	26	19	21	19	19	20	27	21	21	1
0	13	13	0	0	22	22		16							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	86	100		99	100	93	86	96	85							19
18	82	87	100	95	99	89	83	91	81	82						18
17	78	82	100	91	94	86	79	87			87					17
16	74	78	100	87	90	82	75	83	74		83					16
15	69	74	99	83	85	78	72	78	70	72	79	75	69	78		15
14	65	69	93	79	81	74	68	74	66	69	75		66			14
13	61	65	88	75	76	71	65	70	62	66	71	68		70		13
12	57	61	83	71	72	67	61	66	58		68	65	60	66		12
11	53	56	77	67	68	63	57	61	54	59	64	61		62		11
10	48	52	72	63	63	59	54	57	50	56	60	58	53	58		10
9	44	48	67	59	59	55	50	53	53	56	54	50	54	54		9
8	40	44	61	55	54	52	47	49	42	50	52	51	47	50		8
7	36	39	56	51	50	48	43	44	38		48	47	44	46		7
6	31	35	50	47	45	44	39	40	34	43	45	44	41	42		6
5	27	31	45	43	41	40	36	36	31	40	41	40	38	38		5
4	23	26	40	39	36	36	32	31	27		37	37	35	34		4
3	19	22	34	35	32	33	29	27	23	34	33	34	32	31		3
2	14	18	29	31	28	29	25	23	19		29	30	28	27		2
1	10	13	24	27	23	25	21	19	27	25	27	25	23	23		1
0	9	18		23				14	24	22	23	22				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100	100	100		99		100		90								19	
18	100	100	97	93			97		86								18	
17	99	100	93	89	91		93		82	90				81	84		17	
16	95	98	88	85	87	84	89		78	85	82		77	81	83		16	
15	91	93	84	81	83	80	85		73	80			74	77			15	
14	87	89	80	77	79	76	81		69	76	74		70	73	75		14	
13	83	85	75	73	75	71	77		65	71	70	70		66	70	71		13
12	79	80	71	69	71	67	73		61	67		63	63	66	67		12	
11	75	76	66	64	67	63	69	61	57	62	62	62		59	62	63		11
10	71	72	62	60	63	59	64		53	58	58	58		55	59	59		10
9	67	67	57	56	59	55	60	50	48	53	54	54	48	52	55	55		9
8	63	63	53	52	55	51	56		44	49	49	50		48	51	51		8
7	59	59	48	48	51	47	52	38	40	44	45	46	39	44	48	47		7
6	55	54	44	44	47	43	48		36	40	41	42		41	44	43		6
5	51	50	40	40	43	39	44	27	32	35	37	38	29	37	40	39		5
4	47	46	35	36	39	35	40		28	30	32	34		33	37	35		4
3	43	41	31		35	30	36	15	24	26	28	30	20	30	33		3	
2	39	37	26		31	26	32	9	19	21	24	26	15	26			2	
1	35	32	22		27	22	28	4	15	17	20	23	10				1	
0	28				18	24	0		12	16				22	19		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 70-74 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	96		90		98		97				95	100	99	89		19
18	91	96	86				93				91	96	95	85		18
17	87	92	82		89		89			88		91		82		17
16	83	87	78			83	85	81	87			87	87	78		16
15	79	83	74		80		81	78			79					15
14	74	78	70	68	76	76	76	74	78		75	79	79	70		14
13	70	74	66		71		72	70		72		74	74	67	61	13
12	66	69	62	61	66	68	68	66	69		68	70	70		57	12
11	62	65	58	57	62	64	64	62	65	64	64	66	66	59	54	11
10	57	60	54	54	57	60	60	59	60		60	62	62	55	50	10
9	53	56	49	50	53	56	56	55	56	56	56	57	58	52	47	9
8	49	51	45	47	48	52	52	51	51		52	53	54	48	43	8
7	44	46	41	43	43	48	48	47	47	48	48	49	50	44	40	7
6	40	42	37	40		44	43	44	42	44		45	46	40	36	6
5	36	37	33	36	34	40	39	40	38	40	40	41	42	37	32	5
4	32	33	29	33		36	35	36	33		36	38	33	29		4
3	27	28	25	29	25	32	31		29		32	32	34	29	25	3
2	23	24	21	26	21	28	27	28	24		28	28	30	26	22	2
1	19		17	22	16	24	23	25	20					22		1
0				19	20	19	21									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	92	94	93	100	100	96	99	100				84	85	19
18	90	88	88	88	100	97	92	95	96				81	81	18
17	86	84	83	83	97	93	88	91	92				77	77	17
16	81	80	78	78	93	89	84	86	87				74	74	16
15	77	76	73	73	89	85	80	82	83				75	70	15
14	73	71	68	68	85	81	75	78	79	70			67	67	14
13	69	67	63	63	80	77	71	74	74				68	68	13
12	65	63	58	58	76	73	67	70	70	63			60	60	12
11	60	59	53	53	72	69	63	65	65				60	62	11
10	56	55	48	48	67	65	59	61	61	55	56	58	52	53	10
9	52	51	43	43	63	61	55	57	57	52	52	55	49	49	9
8	48	47	38	38	59	57	51	53	52	48	48	52	45	46	8
7	44	43	32	33	55	53	47	48	48	44	44	49	42	42	7
6	40	39	27	28	50	49	42	44	43	40	40	45	38	39	6
5	35	35	22	23	46	45	38	40	39	36	36	42	35	35	5
4	31	31	17	18	42	41	34	36	35	33	32	39	31	32	4
3	27	27	12	13	38	37	30	32	30	29	28	35	28	28	3
2	23	23	7	9	33	33	26	27	26	25	24	32	24	25	2
1	19	18	2	4	29	29	22	23	22	21	21	29	21	21	1
0	14	14	0	0	25	25		19							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	85	100		100	100	94	87	97	85						19
18	81	86	100	97	100	90	83	93	81	83				92	18
17	76	81	100	93	97	87	80	88			88				17
16	72	77	100	89	92	83	76	84	74		84				16
15	68	73	100	85	88	79	72	80	70	73	80	76	70	80	15
14	64	68	98	81	84	75	69	76	66	70	76		66		14
13	59	64	92	77	79	71	65	71	62	66	72	69		72	13
12	55	60	87	73	75	68	62	67	58		68	65	60	69	12
11	51	55	81	69	70	64	58	63	54	60	65	62		65	11
10	47	51	76	65	66	60	54	58	50	57	61	58	54	61	10
9	42	47	71	61	61	56	51	54		53	57	55	51	57	9
8	38	42	65	57	57	52	47	50	42	50	53	51	48	53	8
7	34	38	60	53	52	49	44	46	38		49	48	45	49	7
6	30	34	55	49	48	45	40	41	34	44	45	45	42	45	6
5	26	29	49	45	43	41	36	37	31	41	42	41	38	41	5
4	21	25	44	41	39	37	33	33	27		38	38	35	37	4
3	17	21	39	37	35	33	29	29	23	34	34	34	32	33	3
2	13	16	33	33	30	30	26	24	19		30	31	29	29	2
1	9	12	28	29	26	26	22	20		28	26	27	26	25	1
0	8	8	22	25				16		24	22	24	23		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		89							19	
18	100	100	99	96			100		85							18	
17	100	100	95	92	93		97		80	90				80	85	17	
16	98	100	90	88	89	85	93		76	85		84		76	81	83	16
15	94	96	86	84	85	81	89		72	80				73	77		15
14	90	91	81	80	81	77	85		68	76		76		69	74	75	14
13	86	87	77	76	77	73	81		64	71	71	72		65	70	71	13
12	82	83	72	71	73	69	77		60	67			63	62	66	67	12
11	78	78	68	67	69	64	73	61	55	62	62	64		58	63	63	11
10	74	74	63	63	65	60	69		51	58	58	60		54	59	59	10
9	70	70	59	59	61	56	65	50	47	53	54	56	48	51	55	55	9
8	66	65	55	55	57	52	61		43	49	50	52		47	52	51	8
7	62	61	50	51	53	48	57	38	39	44	45	49	39	43	48	47	7
6	58	57	46	47	49	44	52		35	40	41	45		40	44	43	6
5	54	52	41	43	45	40	48	27	31	35	37	41	29	36	41	39	5
4	50	48	37	39	41	36	44		26	30	33	37		32	37	35	4
3	46	43	32		37	32	40	15	22	26	28	33	20	29	33		3
2	42	39	28		33	28	36	10	18	21	24	29	15	25			2
1	38	35	23		29	23	32	4	14	17	20	25	10				1
0	30				19	28	0		12	16				22	19		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 75-79 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	97		90		100		100				96	100	100	89		19
18	92	97	86				96				93	97	96	86		18
17	88	93	82		92		92				91	93		82		17
16	84	88	78			87	88	84	90			89	88	78		16
15	80	84	74		83		84	81				81				15
14	75	79	70	68	78	79	80	77	81		77	80	80	71		14
13	71	75	66		73		76	73			75		76	76	67	13
12	67	70	62	61	69	71	71	69	72			69	72	72	57	12
11	62	66	58	57	64	67	67	65	68		67	65	67	68	60	11
10	58	61	54	54	60	63	63	62	63			61	63	64	56	10
9	54	57	50	50	55	59	59	58	59		59	58	59	60	52	9
8	50	52	46	47	51	55	55	54	54			54	55	56	48	8
7	45	48	42	43	46	51	51	50	50		51	50	51	52	45	7
6	41	43	38	40		47	47	47	45		47	46	48	41	36	6
5	37	38	34	36	37	43	43	43	41		43	42	42	44	37	5
4	33	34	30	33		39	38	39	36			39	38	40	34	4
3	28	29	26	29	28	35	34		32			35	34	36	30	3
2	24	25	22	26	23	31	30	31	27			31	29	32	26	2
1	20		17	23	18	27	26	28	23					22		1
0			19		23	22	24									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	96	93	96	95	100	100	99	100	100				84	85	19	
18	92	89	91	90	100	100	95	98	99				81	81	18	
17	88	85	86	86	100	96	91	93	95				77	78	17	
16	83	81	81	81	96	92	87	89	90				74	74	16	
15	79	77	76	76	92	88	83	85	86				77	70	15	
14	75	73	70	71	88	84	79	81	82	72			67	67	14	
13	71	68	65	66	84	80	75	77	77				69	71	13	
12	67	64	60	61	79	76	70	72	73				65	60	12	
11	63	60	55	56	75	72	66	68	68				61	64	11	
10	58	56	50	51	71	68	62	64	64				57	61	10	
9	54	52	45	46	67	64	58	60	60				54	53	9	
8	50	48	40	41	62	60	54	55	55				50	49	8	
7	46	44	35	36	58	56	50	51	51				46	45	7	
6	42	40	30	31	54	52	46	47	47				42	41	6	
5	37	36	25	26	50	48	42	43	42				38	37	5	
4	33	32	20	21	45	44	37	39	38				35	33	4	
3	29	28	14	16	41	40	33	34	33				31	29	3	
2	25	24	9	11	37	36	29	30	29				27	25	2	
1	21	20	4	6	33	32	25	26	25				23	21	1	
0	17	15	0	1	28	28	22									0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 9-11 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	85	100		100	100	95	87	98	85						19	
18	81	84	100	99	100	91	84	94	81	83				95	18	
17	76	80	100	95	100	87	80	90			89				17	
16	72	76	100	91	96	84	77	86	74		85				16	
15	68	71	100	87	91	80	73	81	70	73	81	76	70	84	15	
14	64	67	100	83	87	76	69	77	66	70	77		67		14	
13	59	63	97	79	82	72	66	73	62	67	73	69		76	13	
12	55	58	92	75	78	68	62	69	58		69	66	61	72	12	
11	51	54	86	71	73	65	59	64	54	60	66	63		68	11	
10	47	50	81	67	69	61	55	60	50	57	62	59	55	64	10	
9	42	46	76	63	64	57	51	56	54	58	56	52	60		9	
8	38	41	70	59	60	53	48	52	42	51	54	52	48	56	8	
7	34	37	65	55	55	49	44	47	38		50	49	45	52		7
6	30	33	60	51	51	46	41	43	34	44	46	45	42	48		6
5	26	28	54	47	47	42	37	39	31	41	43	42	39	44		5
4	21	24	49	43	42	38	34	34	27		39	38	36	40		4
3	17	20	43	39	38	34	30	30	23	35	35	35	33	36		3
2	13	15	38	35	33	31	26	26	19		31	32	30	33		2
1	9	11	33	31	29	27	23	22		28	27	28	27	29		1
0	7	27		27				17		25	23	25	23			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		89							19	
18	100	100	100	99			100		85							18	
17	100	100	96	95	93		100		80	90			79	85		17	
16	98	100	92	91	89	86	99		76	85		87	75	81	83	16	
15	94	98	87	87	85	82	95		72	80			72	78		15	
14	90	94	83	83	81	78	91		68	76		79	68	74	75	14	
13	86	89	79	79	77	74	86		64	71	71	75		64	70	71	13
12	82	85	74	75	73	70	82		60	67			63	61	67	67	12
11	78	81	70	71	69	66	78	62	55	62	62	67		57	63	63	11
10	74	76	65	67	65	62	74		51	58	58	63		53	59	59	10
9	70	72	61	63	61	58	70	50	47	53	54	59	49	50	56	55	9
8	66	68	56	59	57	54	66		43	49	50	55		46	52	51	8
7	62	63	52	55	53	49	62	39	39	44	46	51	39	42	48	47	7
6	58	59	47	51	49	45	58		35	40	41	47		39	45	43	6
5	54	55	43	47	45	41	54	27	31	35	37	43	29	35	41	39	5
4	50	50	39	43	41	37	50		26	30	33	40		31	37	35	4
3	46	46	34		37	33	46	16	22	26	29	36	20	28	34		3
2	42	42	30		33	29	41	10	18	21	24	32	15	24			2
1	38	37	25		29	25	37	4	14	17	20	28	10				1
0	33				21	33	0		12	16				23	19		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 9-11 years

Age: 80-85 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	98		91		100		100				98	100	100	90		19
18	93	98	87				100				94	99	98	86		18
17	89	94	83		95		96			95		95		83		17
16	85	89	79			90	92	88	94			90	90	79		16
15	81	85	75		86		88	84			83					15
14	76	80	70	68	81	83	84	81	85		79	82	82	71		14
13	72	76	66		77		80	77		79		78	78	68	61	13
12	68	71	62	61	72	75	76	73	76		71	73	74		57	12
11	64	67	58	57	67	71	72	69	71	71	67	69	70	60	54	11
10	59	62	54	54	63	67	67	66	67		63	65	66	56	50	10
9	55	58	50	50	58	63	63	62	62	63	59	61	62	53	47	9
8	51	53	46	47	54	59	59	58	58		55	56	58	49	43	8
7	46	49	42	44	49	55	55	54	53	55	52	52	54	45	40	7
6	42	44	38	40		51	51	50	49	51	48	50	42	36		6
5	38	40	34	37	40	47	47	47	44	47	44	44	45	38	33	5
4	34	35	30	33		43	43	43	40		43	40	41	34	29	4
3	29	31	26	30	31	39	39		36		39	35	37	30	26	3
2	25	26	22	26	26	35	34	35	31		35	31	33	27	22	2
1	21		18	23	22	31	30	32	27	31				23		1
0				19		27	26	28								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	99	94	99	98	100	100	100	100	100				84	85	19
18	94	90	94	93	100	100	99	100	100				81	81	18
17	90	86	88	88	100	99	95	97	98				77	78	17
16	86	82	83	83	100	95	91	92	94				74	74	16
15	82	78	78	78	96	91	87	88	90				80	70	15
14	78	74	73	73	92	87	83	84	85	75			67	67	14
13	74	70	68	68	88	83	79	80	81		70	74	63	64	13
12	69	66	63	63	83	79	75	76	76	67			60	60	12
11	65	61	58	58	79	75	70	71	72		62	67	56	57	11
10	61	57	53	53	75	71	66	67	68	60	58	64	53	53	10
9	57	53	48	49	71	67	62	63	63	56	54	60	49	50	9
8	53	49	43	44	66	63	58	59	59	52	50	57	46	46	8
7	48	45	37	39	62	59	54	54	54	48	46	54	42	42	7
6	44	41	32	34	58	55	50	50	50	45	42	51	39	39	6
5	40	37	27	29	54	51	46	46	46	41	38	47	35	35	5
4	36	33	22	24	49	47	42	42	41	37	34	44	32	32	4
3	32	29	17	19	45	43	37	38	37	33	30	41	28	28	3
2	28	25	12	14	41	39	33	33	33	30	26	37	25	25	2
1	23	21	7	9	37	35	29	29	28	26	23	34	21	21	1
0	19	17	2	4	32	31									0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	89	91		82	84	83	79	81	82						19	
18	84	92	86	78	80	79	75	77	78	76				77	18	
17	80	87	80	74	75	76	72	73			77				17	
16	76	83	75	69	71	72	68	68	71		73				16	
15	72	79	70	65	66	68	64	64	67	66	69	66	60	65	15	
14	67	74	64	61	62	64	61	60	63	63	65		57		14	
13	63	70	59	57	57	60	57	55	59	59	61	59		57	13	
12	59	66	54	53	53	57	54	51	55		57	56	51	53	12	
11	55	61	48	49	48	53	50	47	51	53	53	52		49	11	
10	51	57	43	45	44	49	46	43	47	50	50	49	45	45	10	
9	46	53	38	41	39	45	43	38	47	46	45	42	41		9	
8	42	48	32	37	35	41	39	34	39	43	42	42	39	37	8	
7	38	44	27	33	31	38	36	30	35		38	38	36	33	7	
6	34	40	22	29	26	34	32	26	31	37	34	35	32	29	6	
5	29	35	16	25	22	30	28	21	28	34	30	32	29	26	5	
4	25	31	11	21	17	26	25	17	24		27	28	26	22	4	
3	21	27	5	17	13	23	21	13	20	27	23	25	23	18	3	
2	17	23	0	13	8	19	18	8	16		19	21	20	14	2	
1	12	18	0	9	4	15	14	4		21	15	18	17	10	1	
0	14	0		5				0		17	11	14	14		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	88		84		86		82		91							19	
18	84	83	80	80			78		86							18	
17	80	78	75	76	78		74		82	85				81	78	17	
16	76	74	71	72	74	71	70		78	80	72		77	74	79	16	
15	72	70	66	68	70	67	66		74	76				73	71	15	
14	68	65	62	64	66	62	62		70	71	64		70	67	72	14	
13	64	61	57	60	62	58	57		66	67	65	60		66	63	68	13
12	61	57	53	56	58	54	53		62	62		60	62	60	64	12	
11	57	52	49	52	54	50	49	56	57	57	52		59	56	60	11	
10	53	48	44	48	50	46	45		53	53	52	48	55	52	56	10	
9	49	44	40	44	46	42	41	44	49	48	48	44	46	51	49	52	9
8	45	39	35	40	42	38	37		45	44	40		48	45	48	8	
7	41	35	31	35	38	34	33	33	41	39	40	36	36	44	41	44	7
6	37	30	26	31	34	30	29		37	35	36	32		40	38	40	6
5	33	26	22	27	30	26	25	21	32	30	31	28	27	37	34	36	5
4	29	22	17	23	26	21	21		28	26	27	24	23	33	30	32	4
3	25	17	13		22	17	17	10	24	21	23	20	17	29	27		3
2	21	13	9		18	13	12	4	20	17	19	17	12	26			2
1	17	9	4		14	9	8	0	16	12	14	13	7				1
0	4				5	4	0		7	10				16	16	0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 20-34 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	87		85		87		81				79	83	82	83		19
18	83	87	81				77				75	79	78	79		18
17	78	83	77		78		73				74	75		76		17
16	74	78	73			68	69	67	73			71	70	72		16
15	70	73	69		69		65	63				64				15
14	66	69	65	65	64	60	61	59	64		60	62	62	64		14
13	61	64	61		60		56	55			58	58	58	61	59	13
12	57	60	57	58	55	53	52	52	55		52	54	54	56	56	12
11	53	55	53	55	50	49	48	48	51		50	48	49	50	53	11
10	49	51	49	51	46	45	44	44	46		44	45	45	50	49	10
9	44	46	45	48	41	41	40	40	42		42	40	41	41	46	9
8	40	42	41	44	37	37	36	37	37		37	37	37	42	42	8
7	36	37	37	41	32	33	32	33	33		34	33	32	33	38	7
6	31	33	32	37		29	28	29	28		30	28	29	35	35	6
5	27	28	28	34	23	25	23	25	24		26	25	25	31	31	5
4	23	24	24	30		21	19	21	19		22	20	21	27	28	4
3	19	19	20	27	14	17	15		15		18	16	17	23	24	3
2	14	15	16	23	9	13	11	14	10		14	11	13	20	21	2
1	10		12	20	5	9	7	10	6		10			16		1
0				17		5	3	6								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	80	82	80	84	81	82	81	81				82	82	19
18	79	76	77	75	80	77	78	77	77				79	79	18
17	75	72	72	70	76	73	74	73	72				75	75	17
16	71	68	66	66	72	69	70	69	68				72	72	16
15	66	64	61	61	67	65	65	65	64				68	68	15
14	62	60	56	56	63	61	61	60	59	61			65	64	14
13	58	56	51	51	59	57	57	56	55		59	58	61	61	13
12	54	52	46	46	55	53	53	52	50	53			58	57	12
11	50	48	41	41	50	49	49	48	46		51	51	54	54	11
10	46	44	36	36	46	45	45	43	42	46	47	48	51	50	10
9	41	40	31	31	42	41	41	39	37	42	43	44	47	47	9
8	37	36	26	26	38	37	37	35	33	38	39	41	44	43	8
7	33	32	21	21	33	33	32	31	28	35	35	38	40	40	7
6	29	27	15	16	29	29	28	27	24	31	31	35	36	36	6
5	25	23	10	11	25	25	24	22	20	27	27	31	33	33	5
4	20	19	5	6	21	21	20	18	15	23	23	28	29	29	4
3	16	15	0	1	16	17	16	14	11	19	19	25	26	26	3
2	12	11	0	0	12	13	12	10	7	16	15	21	22	22	2
1	8	7	0	0	8	9	8	5	2	12	11	18	19	19	1
0	4	3	0	0	4	5		1							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	87	95		85	86	85	80	84	82						19	
18	83	89	89	81	82	81	76	80	78	77				78	18	
17	78	85	84	77	77	77	73	75			78				17	
16	74	81	79	73	73	73	69	71	71		74				16	
15	70	77	73	69	68	70	66	67	67	67	71	67	62	66	15	
14	66	72	68	65	64	66	62	63	63	64	67	67	59		14	
13	62	68	63	61	60	62	58	58	59	60	63	61		58	13	
12	57	64	57	57	55	58	55	54	55		59	57	52	54	12	
11	53	59	52	53	51	55	51	50	51	54	55	54		50	11	
10	49	55	47	49	46	51	48	45	47	51	51	50	46	46	10	
9	45	51	41	45	42	47	44	41		48	48	47	43	42	9	
8	40	46	36	41	37	43	41	37	39	44	44	43	40	38	8	
7	36	42	30	37	33	39	37	33	35		40	40	37	34	7	
6	32	38	25	33	28	36	33	28	31	38	36	36	34	30	6	
5	28	33	20	29	24	32	30	24	28	35	32	33	30	27	5	
4	23	29	14	25	19	28	26	20	24		28	30	27	23	4	
3	19	25	9	21	15	24	23	16	20	28	25	26	24	19	3	
2	15	20	4	17	11	20	19	11	16		21	23	21	15	2	
1	11	16	0	13	6	17	15	7		22	17	19	18	11	1	
0	12	0		9				3		18	13	16	15		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	91	87			87		84		89							19	
18	87	90	83	81			79		85							18	
17	83	86	79	77	79		75		81	85			80	79		17	
16	80	82	74	73	75	73	71		77	80		70		77	75	79	16
15	76	77	70	69	71	69	67		73	76				73	71		15
14	72	73	65	65	67	65	63		68	71		62		69	68	71	14
13	68	69	61	61	63	61	59		64	67	65	58		66	64	67	13
12	64	64	56	57	59	57	55		60	62			60	62	60	63	12
11	60	60	52	53	55	53	51	56	56	57	57	50		58	57	59	11
10	56	56	47	49	51	48	47		52	53	53	46		55	53	55	10
9	52	51	43	45	47	44	43	45	48	48	49	42	46	51	49	51	9
8	48	47	39	41	43	40	39		44	44	44	38		47	46	47	8
7	44	42	34	37	39	36	34	33	39	39	40	34	36	44	42	43	7
6	40	38	30	33	35	32	30		35	35	36	30		40	38	39	6
5	36	34	25	28	31	28	26	22	31	30	32	26	27	36	35	36	5
4	32	29	21	24	27	24	22		27	26	28	22		33	31	32	4
3	28	25	16		23	20	18	10	23	21	23	18	17	29	27		3
2	24	21	12		19	16	14	5	19	17	19	15	12	25			2
1	20	16	7		15	12	10	0	14	12	15	11	7				1
0	12	0			7	6	0		7	11				16	16		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 35-39 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		86		88		82				82	86	85	84		19
18	85	89	82				78				79	82	81	80		18
17	80	85	78		79		74				75	78		77		17
16	76	80	74			70	70	68	74			74	73	73		16
15	72	76	70		70		66	64				67				15
14	67	71	66	65	65	62	62	60	65			63	65	65		14
13	63	67	62		60		58	57			59		61	61	60	13
12	59	62	58	58	56	54	54	53	56			55	57	57	56	12
11	55	57	53	55	51	50	49	49	52			51	51	53	53	11
10	50	53	49	52	47	46	45	45	47			48	48	49	50	10
9	46	48	45	48	42	42	41	41	43			43	44	44	45	9
8	42	44	41	45	38	38	37	38	38			40	40	41	43	8
7	38	39	37	41	33	34	33	34	34			35	36	36	39	7
6	33	35	33	38		30	29	30	29			31	31	33	36	6
5	29	30	29	34	24	26	25	26	25			27	28	28	32	5
4	25	26	25	31		22	21	23	20			23	23	24	28	4
3	20	21	21	27	15	18	16		16			19	19	20	24	3
2	16	17	17	24	10	14	12	15	11			15	14	16	21	2
1	12		13	20	5	10	8	11	7			11			17	1
0				17		6	4	7								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	81	81	80	87	84	83	84	84				82	82	19
18	80	77	76	75	83	80	79	80	79				79	79	18
17	76	73	71	70	79	76	75	75	75				75	75	17
16	71	69	66	65	75	72	71	71	71				72	72	16
15	67	65	60	60	70	68	67	67	66				65	68	15
14	63	61	55	55	66	64	62	63	62				65	65	14
13	59	57	50	50	62	60	58	58	57				60	58	13
12	55	52	45	45	57	56	54	54	53				54	58	12
11	50	48	40	40	53	52	50	50	49				53	54	11
10	46	44	35	35	49	48	46	46	44				47	49	10
9	42	40	30	30	45	44	42	42	40				43	45	9
8	38	36	25	25	40	40	38	37	35				39	41	8
7	34	32	20	20	36	36	34	33	31				35	37	7
6	30	28	15	15	32	32	30	29	27				32	33	6
5	25	24	9	10	28	28	25	25	22				28	29	5
4	21	20	4	5	23	24	21	21	18				24	25	4
3	17	16	0	0	19	20	17	16	14				20	21	3
2	13	12	0	0	15	16	13	12	9				16	17	2
1	9	8	0	0	11	12	9	8	5				13	19	1
0	4	4	0	0	6	8			4						0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	87	97		87	88	87	81	85	82						19	
18	83	88	92	83	83	83	77	81	78	77				78	18	
17	78	84	86	79	79	79	73	77			79				17	
16	74	80	81	75	74	75	70	72	71		75				16	
15	70	75	76	71	70	72	66	68	67	67	72	68	62	67	15	
14	66	71	70	67	65	68	63	64	63	64	68	68	59		14	
13	62	67	65	63	61	64	59	60	59	61	64	61		59	13	
12	57	62	59	59	56	60	56	55	55		60	58	53	55	12	
11	53	58	54	55	52	56	52	51	51	54	56	54		51	11	
10	49	54	49	51	48	53	48	47	47	51	52	51	47	47	10	
9	45	49	43	47	43	49	45	43		48	49	47	44	43	9	
8	40	45	38	43	39	45	41	38	39	45	45	44	40	39	8	
7	36	41	33	38	34	41	38	34	35		41	41	37	35	7	
6	32	37	27	34	30	37	34	30	31	38	37	37	34	31	6	
5	28	32	22	30	25	34	30	25	28	35	33	34	31	27	5	
4	23	28	17	26	21	30	27	21	24		29	30	28	23	4	
3	19	24	11	22	16	26	23	17	20	29	26	27	25	19	3	
2	15	19	6	18	12	22	20	13	16		22	23	22	15	2	
1	11	15	0	14	7	18	16	8		22	18	20	19	12	1	
0	11	0		10				4		19	14	16	15		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	91		89		87		85		89							19	
18	87	93	85	82			81		85							18	
17	83	88	80	78	79		77		81	85			80	79		17	
16	80	84	76	74	75	74	73		77	80	70		76	75	79	16	
15	76	80	71	70	71	70	68		73	76			73	72		15	
14	72	75	67	66	67	66	64		68	71	62		69	68	71	14	
13	68	71	62	62	63	62	60		64	67	66	58		65	64	67	13
12	64	67	58	58	59	58	56		60	62		60	62	61	63	12	
11	60	62	54	54	55	54	52	57	56	57	50		58	57	59	11	
10	56	58	49	50	51	50	48		52	53	53	46		54	53	55	10
9	52	53	45	46	47	46	44	45	48	48	49	42	46	51	50	51	9
8	48	49	40	41	43	42	40		44	44	45	38		47	46	47	8
7	44	45	36	37	39	37	36	34	39	39	40	34	36	43	42	43	7
6	40	40	31	33	35	33	32		35	35	36	30		40	39	39	6
5	36	36	27	29	31	29	28	22	31	30	32	27	27	36	35	35	5
4	32	32	22	25	27	25	23		27	26	28	23		32	31	31	4
3	28	27	18		23	21	19	11	23	21	24	19	17	29	28		3
2	24	23	14		19	17	15	5	19	17	19	15	12	25			2
1	20	19	9		15	13	11	0	14	12	15	11	8				1
0	14				9	7	0		7	11				17	16		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 40-44 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	90		86		89		83			84	88	87	85		19	
18	86	90	82				79			80	84	83	81		18	
17	81	86	78		79		75			76	80		77		17	
16	77	81	74			70	71	69	75			75	75	73	16	
15	73	77	70		70		67	65			69				15	
14	68	72	66	66	66	62	63	61	66		65	67	67	66	14	
13	64	68	62		61		59	57		60		63	62	62	60	13
12	60	63	58	59	57	55	55	54	57		57	58	58	56	12	
11	56	59	54	55	52	51	50	50	53	52	53	54	54	55	53	11
10	51	54	50	52	47	47	46	46	48		49	50	50	51	49	10
9	47	49	46	48	43	43	42	42	44	44	45	46	46	47	46	9
8	43	45	42	45	38	39	38	39	39		41	41	42	44	42	8
7	39	40	38	41	34	35	34	35	35	36	38	37	38	40	39	7
6	34	36	34	38		31	30	31	30		32	33	34	36	35	6
5	30	31	30	34	24	27	26	27	26	28	30	29	30	32	32	5
4	26	27	26	31		23	21	23	21		24		24	26	29	4
3	21	22	22	27	15	19	17		17	20		20	22	25	24	3
2	17	18	17	24	11	15	13	16	12	16		16	18	21	21	2
1	13		13	20	6	11	9	12	8	12				17		1
0				17	7	5	8									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	82	82	81	89	86	84	85	85				82	82	19
18	80	78	77	76	85	82	80	81	81				79	79	18
17	76	74	71	71	81	78	76	77	77				75	75	17
16	72	70	66	66	76	74	72	73	72				72	72	16
15	68	66	61	61	72	70	68	68	68		66	68	68	68	15
14	64	62	56	56	68	66	63	64	63	62			65	65	14
13	59	58	51	51	64	62	59	60	59	61	59	61	61	61	13
12	55	54	46	46	59	58	55	56	55	55	55	58	58	58	12
11	51	50	41	41	55	54	51	52	50	54	53	54	54	54	11
10	47	46	36	36	51	50	47	47	46	47	50	49	51	51	10
9	43	41	31	31	47	46	43	43	41	43	46	46	47	47	9
8	39	37	26	26	42	42	39	39	37	40	42	43	44	44	8
7	34	33	21	21	38	38	35	35	33	36	38	39	40	40	7
6	30	29	15	16	34	34	30	30	28	32	34	36	37	37	6
5	26	25	10	11	30	30	26	26	24	28	30	33	33	33	5
4	22	21	5	6	25	26	22	22	20	25	26	30	30	30	4
3	18	17	0	1	21	22	18	18	15	21	22	26	26	26	3
2	13	13	0	0	17	18	14	14	11	17	18	23	23	22	2
1	9	9	0	0	12	14	10	9	6	13	14	20	19	19	1
0	5	5	0	0	8	10		5							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	85	99		88	89	88	81	87	82						19	
18	81	87	94	84	85	84	78	82	78	78				79	18	
17	77	83	89	80	80	80	74	78			80				17	
16	73	79	83	76	76	76	71	74	71		76				16	
15	68	74	78	72	71	72	67	70	67	68	72	69	63	67	15	
14	64	70	73	68	67	69	63	65	63	65	69		60		14	
13	60	66	67	64	62	65	60	61	59	61	65	62		60	13	
12	56	61	62	60	58	61	56	57	55		61	59	53	56	12	
11	51	57	57	56	54	57	53	53	51	55	57	55		52	11	
10	47	53	51	52	49	53	49	48	47	52	53	52	47	48	10	
9	43	48	46	48	45	50	45	44		49	49	48	44	44	9	
8	39	44	40	44	40	46	42	40	39	45	46	45	41	40	8	
7	35	40	35	40	36	42	38	35	35		42	41	38	36	7	
6	30	35	30	36	31	38	35	31	31	39	38	38	35	32	6	
5	26	31	24	32	27	34	31	27	28	36	34	34	32	28	5	
4	22	27	19	28	22	31	27	23		24		30	31	29	24	4
3	18	22	14	24	18	27	24	18	20	29	26	28	25	20	3	
2	13	18	8	20	14	23	20	14	16		23	24	22	16	2	
1	9	14	3	16	9	19	17	10		23	19	21	19	13	1	
0	9	0		12				6		19	15	17	16		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	95		91		89		86		88							19	
18	91	95	86	83			82		84							18	
17	87	91	82	79	81		78		80	85			80	79		17	
16	83	86	77	75	77	76	74		75	80		71		76	76	79	16
15	79	82	73	71	73	71	70		71	76				72	72		15
14	75	78	68	67	69	67	66		67	71		63		69	68	71	14
13	71	73	64	63	65	63	62		63	67	66	59		65	65	67	13
12	67	69	60	59	61	59	58		59	62			60	61	61	63	12
11	63	64	55	55	57	55	54	57	55	57	57	51		58	57	59	11
10	59	60	51	51	53	51	50		51	53	53	47		54	54	55	10
9	55	56	46	47	49	47	45	46	46	48	49	43	46	50	50	51	9
8	51	51	42	42	45	43	41		42	44	45	39		47	46	47	8
7	47	47	37	38	41	39	37	34	38	39	41	35	36	43	43	43	7
6	43	43	33	34	37	35	33		34	35	36	31		39	39	39	6
5	39	38	29	30	33	30	29	23	30	30	32	27	27	36	35	35	5
4	35	34	24	26	29	26	25		26	26	28	23		32	32	31	4
3	31	30	20		25	22	21	11	21	21	24	19	17	28	28		3
2	27	25	15		21	18	17	5	17	17	20	15	12	25			2
1	23	21	11		17	14	13	0	13	12	15	11	8				1
0	17				10	9	0		7	11				17	15		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 45-49 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	91		87		90		85				86	90	88	85		19	
18	86	91	83				80				82	85	84	81		18	
17	82	87	78		80		76				77	81		78		17	
16	78	82	74			72	72	70	76			77	76	74		16	
15	74	78	70		71		68	66				70				15	
14	69	73	66	66	67	64	64	62	67			66	68	68	66	14	
13	65	69	62		62		60	58			61		64	64	63	60	13
12	61	64	58	59	57	56	56	55	58			59	60	60	56	12	
11	57	60	54	55	53	52	52	51	54			53	55	56	55	11	
10	52	55	50	52	48	48	47	47	49			51	51	52	51	10	
9	48	51	46	48	44	44	43	43	45			45	47	47	48	9	
8	44	46	42	45	39	40	39	40	40			43	43	44	42	8	
7	39	42	38	41	35	36	35	36	36			37	39	39	40	7	
6	35	37	34	38		32	31	32	31			33	34	36	37	6	
5	31	32	30	34	25	28	27	28	27			29	31	30	32	5	
4	27	28	26	31		24	23	25	22			25	26	28	29	4	
3	22	23	22	28	16	20	19		18			21	22	24	25	3	
2	18	19	18	24	12	16	14	17	13			17	18	20	22	2	
1	14		14	21	7	12	10	13	9			13			18	1	
0				17		8	6	9								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	84	83	82	91	87	85	87	87				82	83	19
18	81	80	78	77	87	83	81	83	83				79	79	18
17	77	75	73	72	83	79	77	78	78				75	76	17
16	73	71	68	67	78	75	73	74	74				72	72	16
15	69	67	63	63	74	71	69	70	70				67	68	15
14	64	63	58	58	70	67	65	66	65	63			65	65	14
13	60	59	52	53	66	63	60	62	61				62	60	13
12	56	55	47	48	61	59	56	57	56	55			58	58	12
11	52	51	42	43	57	55	52	53	52	54	53		54	54	11
10	48	47	37	38	53	51	48	49	48	48	51	50	51	51	10
9	43	43	32	33	49	47	44	45	43	44	47	47	47	47	9
8	39	39	27	28	44	43	40	40	39	40	43	44	44	44	8
7	35	35	22	23	40	39	36	36	35	37	39	40	40	40	7
6	31	31	17	18	36	35	32	32	30	33	35	37	37	37	6
5	27	27	12	13	32	31	27	28	26	29	31	34	33	33	5
4	23	22	7	8	27	27	23	24	21	25	27	30	30	30	4
3	18	18	2	3	23	23	19	19	17	21	23	27	26	26	3
2	14	14	0	0	19	19	15	15	13	18	19	24	23	23	2
1	10	10	0	0	15	15	11	11	8	14	15	21	19	19	1
0	6	6	0	0	10	11		7							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	85	100	90	91	88	82	88	82	82	78	78	81	80	19	
18	81	86	97	86	86	85	78	84	78	78	78	80	18	18	
17	77	82	91	82	82	81	75	80			81		17		
16	73	78	86	78	78	77	71	75	71		77		16		
15	68	73	81	74	73	73	68	71	67	68	73	70	63	15	
14	64	69	75	70	69	69	64	67	63	65	69	60	69	14	
13	60	65	70	66	64	66	60	62	59	62	66	63	61	13	
12	56	60	65	62	60	62	57	58	55	62	59	54	57	12	
11	51	56	59	58	55	58	53	54	51	55	58	56	53	11	
10	47	52	54	54	51	54	50	50	47	52	54	52	48	10	
9	43	47	49	50	46	50	46	45		49	50	49	45	9	
8	39	43	43	46	42	47	42	41	39	46	46	45	42	8	
7	35	39	38	42	38	43	39	37	35		43	42	38	37	
6	30	34	33	38	33	39	35	33	31	39	39	35	33	6	
5	26	30	27	34	29	35	32	28	28	36	35	35	32	5	
4	22	26	22	30	24	31	28	24			31	32	29	25	
3	18	21	16	26	20	28	24	20	20	30	27	28	26	3	
2	13	17	11	22	15	24	21	15	16		23	25	23	18	
1	9	13	6	18	11	20	17	11			23	20	21	14	
0	8	0		14				7		20	16	18	17	0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	95	92			89		88		88							19
18	91	97	88	84			84		84							18
17	87	93	83	80	81		80		80	85			79	80		17
16	83	88	79	76	77	77	76		75	80	72		76	76	79	16
15	79	84	75	72	73	73	72		71	76			72	72		15
14	75	80	70	68	69	69	68		67	71	64		68	69	71	14
13	71	75	66	64	65	64	64		63	67	66	60		65	65	67
12	67	71	61	60	61	60	60		59	62		60	61	61	63	12
11	63	67	57	56	57	56	55	57	55	57	58	52		57	58	59
10	59	62	52	52	53	52	51		51	53	53	48		54	54	55
9	55	58	48	48	49	48	47	46	46	48	49	44	46	50	50	9
8	51	54	43	44	45	44	43		42	44	45	40		46	47	47
7	47	49	39	40	41	40	39	34	38	39	41	36	36	43	43	7
6	43	45	35	36	37	36	35		34	35	37	32		39	39	6
5	39	41	30	32	33	32	31	23	30	30	32	28	27	35	36	5
4	35	36	26	28	29	28	27		26	26	28	24		32	32	31
3	31	32	21		25	23	23	11	21	21	24	20	17	28	28	3
2	27	28	17		21	19	19	6	17	17	20	17	12	24		2
1	23	23	12		17	15	15	0	13	12	16	13	8			1
0	19				11	11	0		7	11				17	15	0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 50-54 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		87		91		86				87	91	90	86		19
18	87	92	83				82				83	87	86	82		18
17	83	88	79		81		78			78		83		78		17
16	79	83	75			73	74	71	77			78	78	78		16
15	75	79	71		72		70	67				72				15
14	70	74	67	66	68	65	65	64	68		68	70	70	67		14
13	66	70	63		63		61	60		62		66	66	63	60	13
12	62	65	59	59	59	57	57	56	59		60	61	62	56		12
11	58	61	55	55	54	53	53	52	55	54	56	57	58	56	53	11
10	53	56	51	52	49	49	49	49	51		52	53	54	52	49	10
9	49	52	47	49	45	45	45	45	46	46	48	49	49	48	46	9
8	45	47	42	45	40	41	41	41	42		45	44	45	45	42	8
7	40	43	38	42	36	37	37	37	37	38	41	40	41	41	39	7
6	36	38	34	38		33	32	33	33	34	36	37	37	35		6
5	32	34	30	35	26	29	28	30	28	30	33	32	33	33	32	5
4	28	29	26	31		25	24	26	24	26		28	29	30	28	4
3	23	24	22	28	17	21	20		19	22		23	25	26	25	3
2	19	20	18	24	13	17	16	18	15	18	19	21	22	21		2
1	15		14	21	8	13	12	15	10	14				18		1
0				17		10	8	11								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	86	85	85	84	93	89	87	89	89				82	83	19
18	82	81	80	79	89	85	82	85	85				79	79	18
17	78	77	75	74	85	81	78	80	80				75	76	17
16	74	73	70	69	81	77	74	76	76				72	72	16
15	69	69	64	64	76	73	70	72	72				68	68	15
14	65	65	59	59	72	69	66	68	67	64			65	65	14
13	61	61	54	54	68	65	62	63	63				63	61	13
12	57	57	49	49	64	61	58	59	58	56			58	58	12
11	53	52	44	45	59	57	54	55	54				55	54	11
10	49	48	39	40	55	53	49	51	50	49	52	51	51	51	10
9	44	44	34	35	51	49	45	47	45	45	48	48	47	47	9
8	40	40	29	30	47	45	41	42	41	41	44	45	44	44	8
7	36	36	24	25	42	41	37	38	37				40	40	7
6	32	32	19	20	38	37	33	34	32	34	36	38	37	37	6
5	28	28	13	15	34	33	29	30	28	30	32	35	33	33	5
4	23	24	8	10	30	29	25	25	23	26	28	31	30	30	4
3	19	20	3	5	25	25	21	21	19	22	24	28	26	26	3
2	15	16	0	0	21	21	17	17	15	19	20	25	23	23	2
1	11	12	0	0	17	17	12	13	10	15	16	22	19	19	1
0	7	8	0	0	12	13		9							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	84	100	92	93	89	83	90	83	79	79					19	
18	79	85	100	88	88	85	79	85						82	18	
17	75	81	95	84	84	82	75	81			82				17	
16	71	76	89	80	79	78	72	77	71		78				16	
15	67	72	84	76	75	74	68	72	67	69	74	70	64	70	15	
14	63	68	78	72	71	70	65	68	63	66	70		61		14	
13	58	63	73	68	66	66	61	64	60	62	67	63		62	13	
12	54	59	68	64	62	63	57	60	56		63	60	55	58	12	
11	50	55	62	60	57	59	54	55	52	56	59	57		54	11	
10	46	51	57	56	53	55	50	51	48	53	55	53	48	50	10	
9	41	46	52	52	48	51	47	47	50	51	50	45	46		9	
8	37	42	46	48	44	47	43	43	40	46	47	46	42	43	8	
7	33	38	41	44	39	44	39	38	36		44	43	39	39	7	
6	29	33	36	40	35	40	36	34	32	40	40	39	36	35	6	
5	24	29	30	36	31	36	32	30	28	37	36	36	33	31	5	
4	20	25	25	32	26	32	29	25	24		32	32	30	27	4	
3	16	20	19	28	22	28	25	21	20	30	28	29	27	23	3	
2	12	16	14	24	17	25	21	17	16		24	26	23	19	2	
1	8	12	9	20	13	21	18	13	24	21	22	20	15		1	
0	7	3		16				8	20	17	19	17			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	98	94	94		92		90		87								19
18	94	96	90	86			86		82								18
17	90	92	85	82	84		82		78	85			79	80			17
16	86	88	81	78	80	78	78		74	80	73		75	76	79		16
15	82	83	76	74	76	74	74		70	76			72	73			15
14	78	79	72	70	72	70	70		66	71	65		68	69	71		14
13	74	75	67	66	68	66	66		62	67	66	61		64	65	67	13
12	70	70	63	62	64	62	62		58	62		60	61	62	63		12
11	66	66	58	58	60	57	58	58	53	57	58	53		57	58	59	11
10	62	62	54	53	56	53	54		49	53	54	50		53	54	55	10
9	58	57	50	49	52	49	50	46	45	48	49	46	46	50	51	51	9
8	54	53	45	45	48	45	46		41	44	45	42		46	47	47	8
7	50	49	41	41	44	41	41	35	37	39	41	38	36	42	43	43	7
6	46	44	36	37	40	37	37		33	35	37	34		39	40	39	6
5	42	40	32	33	36	33	33	23	28	30	33	30	27	35	36	35	5
4	38	36	27	29	32	29	29		24	26	28	26		31	32	31	4
3	34	31	23		28	25	25	12	20	21	24	22	17	28	29		3
2	30	27	18		24	21	21	6	16	17	20	18	13	24			2
1	26	23	14		20	16	17	0	12	12	16	14	8				1
0	18	18			12	13	0		7	12				18	15		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 55-59 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	93		87		92		88				89	93	92	86		19
18	88	93	83				84				85	88	88	82		18
17	84	89	79		83		80			80		84		79		17
16	80	84	75			75	75	73	79			80	79	75		16
15	76	80	71		74		71	69				73				15
14	71	75	67	66	69	67	67	65	70		70	71	71	67		14
13	67	71	63		64		63	61		64		67	67	64	60	13
12	63	66	59	59	60	59	59	58	61		62	63	63	57		12
11	58	62	55	56	55	55	55	54	57	56	58	59	59	56	53	11
10	54	57	51	52	51	51	51	50	52		54	55	55	52	49	10
9	50	53	47	49	46	47	47	46	48	48	50	50	51	49	46	9
8	46	48	43	45	42	43	42	43	43		46	46	47	45	42	8
7	41	44	39	42	37	39	38	39	39	40	42	42	43	41	39	7
6	37	39	35	38		35	34	35	34		36	38	39	38	35	6
5	33	35	31	35	28	31	30	31	30		32	35	33	35	32	5
4	29	30	27	31		27	26	27	25		28	29	31	30	28	4
3	24	26	23	28	19	23	22		21		24	25	27	26	25	3
2	20	21	19	24	14	19	18	20	16		20	21	23	23	21	2
1	16		15	21	9	15	14	16	12		16			19		1
0				17		11	9	12								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	87	86	87	86	96	92	88	91	91				82	83	19
18	83	82	82	81	92	88	84	87	87				79	79	18
17	79	78	77	76	87	84	80	82	83				75	76	17
16	75	74	72	71	83	80	76	78	78				72	72	16
15	71	70	66	66	79	76	72	74	74				69	68	15
14	66	66	61	61	75	72	68	70	69	65			65	65	14
13	62	62	56	57	70	68	64	65	65		64	62	61	62	13
12	58	58	51	52	66	64	59	61	61	57			58	58	12
11	54	54	46	47	62	60	55	57	56		56	56	54	55	11
10	50	50	41	42	58	56	51	53	52	50	52	52	51	51	10
9	46	46	36	37	53	52	47	49	48	46	49	49	47	48	9
8	41	42	31	32	49	48	43	44	43	42	45	46	44	44	8
7	37	37	26	27	45	44	39	40	39	39	41	42	40	40	7
6	33	33	21	22	41	40	35	36	34	35	37	39	37	37	6
5	29	29	15	17	36	36	31	32	30	31	33	36	33	33	5
4	25	25	10	12	32	32	26	27	26	27	29	33	30	30	4
3	20	21	5	7	28	28	22	23	21	23	25	29	26	26	3
2	16	17	0	2	23	24	18	19	17	20	21	26	23	23	2
1	12	13	0	0	19	20	14	15	12	16	17	23	19	19	1
0	8	9	0	0	15	16		11							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	84	100	94	95	89	83	91	83	79	79					19	
18	79	84	100	90	90	85	80	87						84	18	
17	75	80	98	86	86	81	76	82			83				17	
16	71	75	92	81	82	78	72	78	71		79				16	
15	67	71	87	77	77	74	69	74	67	69	75	71	65	72	15	
14	63	67	82	73	73	70	65	70	63	66	71		61		14	
13	58	62	76	69	68	66	62	65	60	63	67	64		64	13	
12	54	58	71	65	64	62	58	61	56		64	61	55	60	12	
11	50	54	66	61	59	59	54	57	52	56	60	57		56	11	
10	46	49	60	57	55	55	51	52	48	53	56	54	49	52	10	
9	41	45	55	53	50	51	47	48		50	52	50	46	48	9	
8	37	41	50	49	46	47	44	44	40	47	48	47	43	44	8	
7	33	36	44	45	42	44	40	40	36		44	43	40	40	7	
6	29	32	39	41	37	40	36	35	32	40	41	40	37	36	6	
5	24	28	33	37	33	36	33	31	28	37	37	37	33	32	5	
4	20	24	28	33	28	32	29	27	24		33	33	30	29	4	
3	16	19	23	29	24	28	26	23	20	31	29	30	27	25	3	
2	12	15	17	25	19	25	22	18	16		25	26	24	21	2	
1	8	11	12	21	15	21	19	14		24	21	23	21	17	1	
0	6	7		17				10		21	18	19	18		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	98	96			92		93		87								19
18	94	99	91	88			89		82								18
17	90	94	87	84	84		85		78	85				78	80		17
16	86	90	82	80	80	79	81		74	80		75		75	77	79	16
15	82	86	78	76	76	75	77		70	76				71	73		15
14	78	81	73	72	72	71	73		66	71		67		67	69	71	14
13	74	77	69	67	68	67	69		62	67	67	63		64	66	67	13
12	70	73	65	63	64	63	65		58	62			60	60	62	63	12
11	66	68	60	59	60	59	61	58	53	57	58	55		56	58	59	11
10	62	64	56	55	56	55	56		49	53	54	51		53	55	55	10
9	58	60	51	51	52	50	52	47	45	48	50	47	46	49	51	51	9
8	54	55	47	47	48	46	48		41	44	45	43		45	47	47	8
7	50	51	42	43	44	42	44	35	37	39	41	39	37	42	44	43	7
6	46	47	38	39	40	38	40		33	35	37	36		38	40	39	6
5	42	42	33	35	36	34	36	24	28	30	33	32	27	34	36	35	5
4	38	38	29	31	32	30	32		24	26	29	28		31	33	31	4
3	34	34	25		28	26	28	12	20	21	24	24	17	27	29		3
2	30	29	20		24	22	24	6	16	17	20	20	13	23			2
1	26	25	16		20	18	20	1	12	12	16	16	8				1
0	20	25			14	16	0		7	12				18	15		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 60-64 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	94		88		94		90				91	94	93	87		19
18	89	94	84				86				87	90	89	83		18
17	85	90	80		84		82				82	86		79		17
16	81	85	76			77	78	75	81			82	81	75		16
15	76	81	72		75		73	71				75				15
14	72	76	68	66	71	69	69	67	72			71	73	73	68	14
13	68	72	63		66		65	63			66	69	69	64	60	13
12	64	67	59	59	61	61	61	60	63			63	65	65	57	12
11	59	63	55	56	57	57	57	56	58			58	59	60	57	11
10	55	58	51	52	52	53	53	52	54			56	56	57	53	10
9	51	54	47	49	48	49	49	48	49			50	52	52	49	46
8	47	49	43	45	43	45	45	45	45			48	48	49	46	8
7	42	45	39	42	39	41	40	41	40			42	44	43	45	7
6	38	40	35	38		37	36	37	36			38	39	41	38	6
5	34	36	31	35	29	33	32	33	32			34	36	35	34	5
4	29	31	27	31		29	28	29	27			30	31	32	31	4
3	25	27	23	28	20	25	24		23			26	26	28	27	3
2	21	22	19	25	16	21	20	22	18			22	24	23	21	2
1	17		15	21	11	17	16	18	14			18			19	1
0				18		13	12	14								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	88	89	89	99	94	90	93	94				82	83	19
18	85	84	84	84	94	90	86	89	89				79	79	18
17	80	80	79	79	90	86	82	85	85				75	76	17
16	76	75	74	74	86	82	78	80	81				72	72	16
15	72	71	69	69	81	78	74	76	76				70	68	15
14	68	67	63	64	77	74	70	72	72	66			65	65	14
13	64	63	58	59	73	70	66	68	67				65	64	13
12	59	59	53	54	69	66	62	63	63	59			58	58	12
11	55	55	48	49	64	62	57	59	59				57	54	11
10	51	51	43	44	60	58	53	55	54	51	53	54	51	51	10
9	47	47	38	39	56	54	49	51	50	47	50	51	47	48	9
8	43	43	33	34	52	50	45	47	46	44	46	47	44	44	8
7	39	39	28	29	47	46	41	42	41				40	41	7
6	34	35	23	24	43	42	37	38	37	36	38	41	37	37	6
5	30	31	18	19	39	38	33	34	32	32	34	37	33	34	5
4	26	27	12	14	35	34	29	30	28				34	30	4
3	22	22	7	9	30	30	24	25	24				26	27	3
2	18	18	2	4	26	26	20	21	19	21	22	28	23	23	2
1	13	14	0	0	22	22	16	17	15	17	18	24	19	19	1
0	9	10	0	0	18	18		13							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	82	100	95	97	90	84	92	83							19	
18	78	83	100	91	93	86	80	88	79	80				85	18	
17	74	79	100	87	88	82	77	84			84				17	
16	69	74	96	83	84	78	73	80	71		80				16	
15	65	70	91	79	79	75	69	75	67	70	76	72	65	74	15	
14	61	66	85	75	75	71	66	71	63	67	72		62		14	
13	57	61	80	71	70	67	62	67	60	63	68	65		66	13	
12	52	57	75	67	66	63	59	62	56		64	61	56	62	12	
11	48	53	69	63	62	60	55	58	52	57	61	58		58	11	
10	44	48	64	59	57	56	51	54	48	54	57	55	50	54	10	
9	40	44	59	55	53	52	48	50	50	53	51	46	50		9	
8	36	40	53	51	48	48	44	45	40	47	49	48	43	46	8	
7	31	35	48	47	44	44	41	41	36		45	44	40	42	7	
6	27	31	42	43	39	41	37	37	32	41	41	41	37	38	6	
5	23	27	37	39	35	37	34	33	28	38	38	37	34	34	5	
4	19	22	32	35	30	33	30	28	24		34	34	31	30	4	
3	14	18	26	31	26	29	26	24	20	31	30	30	28	27	3	
2	10	14	21	27	22	25	23	20	16		26	27	25	23	2	
1	6	9	16	23	17	22	19	15	25	22	24	22	19		1	
0	5	10	19					11	21	18	20	18			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	100		97		94		96		85								19
18	97	100	93	90			92		81								18
17	93	97	88	86	86		88		77	85				78	81		17
16	89	92	84	82	82	80	84		73	80		77		74	77	79	16
15	85	88	80	78	78	76	80		69	76				70	73		15
14	81	84	75	74	74	72	76		65	71		69		67	70	71	14
13	77	79	71	70	70	68	72		60	67	67	65		63	66	67	13
12	73	75	66	66	66	64	68		56	62			61	59	62	63	12
11	69	71	62	62	62	60	64	59	52	57	58	57		56	59	59	11
10	65	66	57	57	58	56	60		48	53	54	53		52	55	55	10
9	61	62	53	53	54	52	56	47	44	48	50	49	46	48	51	51	9
8	57	58	48	49	50	48	51		40	44	46	45		45	48	47	8
7	53	53	44	45	46	43	47	36	35	39	41	41	37	41	44	43	7
6	49	49	40	41	42	39	43		31	35	37	38		37	40	39	6
5	45	45	35	37	38	35	39	24	27	30	33	34	27	34	37	35	5
4	41	40	31	33	34	31	35		23	26	29	30		30	33	31	4
3	37	36	26		30	27	31	13	19	21	25	26	17	26	29		3
2	33	31	22		26	23	27	7	15	17	20	22	13	23			2
1	29	27	17		22	19	23	1	10	12	16	18	8				1
0	23				15	19	0		7	12				19	15		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 65-69 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	95		88		95		92				92	96	95	87		19
18	90	96	84				88				88	92	91	83		18
17	86	91	80		86		84				84	87		80		17
16	82	86	76			79	80	77	83			83	83	76		16
15	77	82	72		77		76	73				77				15
14	73	77	68	66	72	71	72	69	74		73	75	75	68		14
13	69	73	64		68		68	66			68	70	71	65	60	13
12	65	68	60	59	63	63	64	62	65		65	66	66	57	52	12
11	60	64	56	56	59	59	59	58	61		60	61	62	57	53	11
10	56	59	52	52	54	55	55	54	56		57	58	58	53	50	10
9	52	55	48	49	50	51	51	51	52		52	53	53	54	50	9
8	48	50	44	46	45	47	47	47	47		49	49	50	46	43	8
7	43	46	40	42	40	43	43	43	43		44	46	45	46	42	7
6	39	41	36	39		39	39	39	38		40	41	42	39	36	6
5	35	37	31	35	31	35	35	36	34		36	38	36	35	32	5
4	30	32	27	32		31	31	32	29		32	32	34	31	29	4
3	26	28	23	28	22	27	26		25		28	28	30	27	25	3
2	22	23	19	25	18	23	22	24	20		24	26	24	21		2
1	18		15	21	13	19	18	20	16		20			20		1
0				18		15	14	17								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	90	89	91	91	100	97	93	95	96				82	83	19
18	86	85	86	86	97	93	89	91	92				79	80	18
17	82	81	81	81	93	89	85	87	88				75	76	17
16	78	77	76	76	89	85	80	83	83				72	73	16
15	74	73	71	71	84	81	76	78	79				68	69	15
14	69	69	66	66	80	77	72	74	74	68			65	65	14
13	65	64	61	61	76	73	68	70	70				66	65	13
12	61	60	56	56	72	69	64	66	66				58	58	12
11	57	56	50	51	67	65	60	62	61				54	55	11
10	53	52	45	46	63	61	56	57	57	53	54	56	51	51	10
9	48	48	40	41	59	57	52	53	53	49	50	52	47	48	9
8	44	44	35	36	55	53	47	49	48	45	47	49	44	44	8
7	40	40	30	31	50	49	43	45	44	41	43	46	40	41	7
6	36	36	25	26	46	45	39	41	39	38	39	39	37	37	6
5	32	32	20	21	42	41	35	36	35	34	35	39	33	34	5
4	28	28	15	16	38	37	31	32	31	30	31	36	30	30	4
3	23	24	10	11	33	33	27	28	26	26	27	33	26	27	3
2	19	20	5	6	29	29	23	24	22	22	23	29	23	23	2
1	15	16	0	1	25	25	19	19	17	19	19	26	19	20	1
0	11	11	0	0	21	21		15							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	80	100		97	100	91	84	94	83							19
18	76	82	100	93	95	87	81	89	79	80						18
17	72	77	100	89	91	83	77	85			85					17
16	68	73	100	85	86	79	74	81	71		81					16
15	64	69	95	81	82	76	70	77	67	70	77	72	66	76		15
14	59	65	89	77	77	72	66	72	63	67	73		63			14
13	55	60	84	73	73	68	63	68	60	64	69	66		68		13
12	51	56	78	69	68	64	59	64	56		65	62	56	64		12
11	47	52	73	65	64	60	56	60	52	57	62	59		60		11
10	42	47	68	61	60	57	52	55	48	54	58	55	50	56		10
9	38	43	62	57	55	53	49	51	51	54	52	47	52			9
8	34	39	57	53	51	49	45	47	40	48	50	48	44	48		8
7	30	34	52	49	46	45	41	42	36		46	45	41	45		7
6	25	30	46	45	42	41	38	38	32	41	42	41	38	41		6
5	21	26	41	41	37	38	34	34	28	38	39	38	35	37		5
4	17	21	36	37	33	34	31	30	24		35	35	31	33		4
3	13	17	30	33	28	30	27	25	20	32	31	31	28	29		3
2	9	13	25	29	24	26	23	21	16		27	28	25	25		2
1	4	8	20	25	20	22	20	17	25	23	24	22	21	21		1
0		4	14	21				13	22	19	21	19				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	100		99		96		100		84								19
18	100	100	95	92			96		80								18
17	96	99	90	88	88		92		76	85				77	81		17
16	92	95	86	84	84	82	88		72	80	79		73	77	79		16
15	88	90	81	80	80	78	84		67	76			70	74			15
14	84	86	77	76	76	73	80		63	71	71		66	70	71		14
13	80	82	72	72	72	69	76		59	67	67	67		62	66	67	13
12	76	77	68	68	68	65	72		55	62		61	59	63	63		12
11	72	73	63	64	64	61	67	59	51	57	59	59		55	59	59	11
10	68	69	59	60	60	57	63		47	53	54	56		51	55	55	10
9	64	64	55	56	56	53	59	47	42	48	50	52	46	48	52	51	9
8	60	60	50	52	52	49	55		38	44	46	48		44	48	47	8
7	56	56	46	48	48	45	51	36	34	39	42	44	37	40	44	43	7
6	52	51	41	44	44	41	47		30	35	37	40		37	41	39	6
5	48	47	37	40	40	36	43	24	26	30	33	36	27	33	37	35	5
4	45	42	32	36	36	32	39		22	26	29	32		29	33	31	4
3	41	38	28		32	28	35	13	17	21	25	28	17	26	30		3
2	37	34	23		28	24	31	7	13	17	21	24	13	22			2
1	33	29	19		24	20	27	1	9	12	16	20	8				1
0		25			16	22	0		7	12				19	15		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 70-74 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	95		88		98		95				94	97	96	88		19	
18	91	97	84				91				90	93	92	84		18	
17	87	92	80		88		87			86		89		80		17	
16	83	88	76			82	83	80	86			85	84	76		16	
15	78	83	72		79		79	76			78					15	
14	74	78	68	67	75	74	75	72	77		74	76	76	69		14	
13	70	74	64		70		71	68		70		72	72	65	60	13	
12	66	69	60	60	65	66	67	65	68		67	68	68	57		12	
11	61	65	56	56	61	62	62	61	63	62	63	63	64	58	53	11	
10	57	60	52	53	56	58	58	57	59		59	59	60	54	50	10	
9	53	56	48	49	52	54	54	53	54	54	55	55	56	50	46	9	
8	48	51	44	46	47	50	50	49	50		51	51	52	47	43	8	
7	44	47	40	42	43	46	46	46	45	46	47	46	48	43	39	7	
6	40	42	36	39		42	42	42	41	43		42	44	39	36	6	
5	36	38	32	35	33	38	38	38	36	39	39	38	40	35	32	5	
4	31	33	28	32		34	33	34	32		35		34	36	32	29	4
3	27	29	24	28	24	30	29		27		31		30	32	28	25	3
2	23	24	20	25	20	26	25	27	23		27		25	28	24	22	2
1	19		16	21	15	22	21	23	18		23				20		1
0				18		17	19									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	90	94	93	100	100	96	98	99				83	83	19
18	88	86	88	88	100	96	91	94	95				79	80	18
17	84	82	83	83	96	92	87	89	90				76	76	17
16	80	78	78	78	92	88	83	85	86				72	73	16
15	75	74	73	73	88	84	79	81	82				69	69	15
14	71	70	68	69	83	80	75	77	77	70			65	66	14
13	67	66	63	64	79	76	71	73	73				61	62	13
12	63	62	58	59	75	72	67	68	69	62			58	59	12
11	59	57	53	54	71	68	63	64	64				54	55	11
10	55	53	48	49	66	64	58	60	60	54	55	58	51	51	10
9	50	49	43	44	62	60	54	56	55	51	51	54	47	48	9
8	46	45	37	39	58	56	50	52	51	47	47	51	44	44	8
7	42	41	32	34	54	52	46	47	47				40	41	7
6	38	37	27	29	49	48	42	43	42				37	37	6
5	34	33	22	24	45	44	38	39	38				33	34	5
4	29	29	17	19	41	40	34	35	33				30	30	4
3	25	25	12	14	37	36	30	30	29				26	27	3
2	21	21	7	9	32	32	26	25	24				23	23	2
1	17	17	2	4	28	28	21	22	20				20	20	1
0	13	13	0	0	24	24		18							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	79	100		99	100	92	85	95	83						19	
18	75	81	100	95	98	88	81	91	79	81				90	18	
17	70	76	100	91	93	84	78	87			85				17	
16	66	72	100	87	89	80	74	82	71		82				16	
15	62	68	99	83	84	76	71	78	67	71	78	73	66	79	15	
14	58	63	93	79	80	73	67	74	63	68	74		63		14	
13	53	59	88	75	76	69	64	70	60	64	70	66		71	13	
12	49	55	83	71	71	65	60	65	56		66	63	57	67	12	
11	45	50	77	67	67	61	56	61	52	58	62	59		63	11	
10	41	46	72	63	62	57	53	57	48	55	59	56	51	59	10	
9	37	42	67	59	58	54	49	52		51	55	53	48	55	9	
8	32	38	61	54	53	50	46	48	40	48	51	49	45	51	8	
7	28	33	56	50	49	46	42	44	36		47	46	41	47	7	
6	24	29	50	46	44	42	38	40	32	42	43	42	38	43	6	
5	20	25	45	42	40	38	35	35	28	39	39	39	35	39	5	
4	15	20	40	38	35	35	31	31		24		36	35	32	35	4
3	11	16	34	34	31	31	28	27	20	32	32	32	29	31	3	
2	7	12	29	30	27	27	24	23	16		28	28	26	28	2	
1	3	7	24	26	22	23	20	18		26	24	25	23	24	1	
0	3	3	18	22				14		22	20	22	20		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		98		100		83							19	
18	100	100	96	95			100		78							18	
17	99	100	92	91	90		96		74	85				76	81	17	
16	95	97	87	87	86	83	92		70	80	82			72	78	79	16
15	91	93	83	83	82	79	88		66	76				69	74		15
14	87	88	78	79	78	75	84		62	71	74			65	70	71	14
13	83	84	74	75	74	71	80		58	67	67	70		61	67	67	13
12	79	80	70	71	70	66	76		54	62			61	58	63	63	12
11	75	75	65	67	66	62	72	59	49	57	59	62		54	59	59	11
10	71	71	61	63	62	58	68		45	53	55	58		50	56	55	10
9	67	67	56	59	58	54	64	48	41	48	50	54	46	47	52	51	9
8	64	62	52	55	54	50	59		37	44	46	50		43	48	47	8
7	60	58	47	51	50	46	55	36	33	39	42	46	37	39	45	43	7
6	56	53	43	47	46	42	51		29	35	38	42		36	41	39	6
5	52	49	38	43	42	38	47	25	24	30	33	38	27	32	37	35	5
4	48	45	34	39	38	34	43		20	26	29	34		28	34	31	4
3	44	40	30		34	29	39	13	16	21	25	30	18	25	30		3
2	40	36	25		30	25	35	7	12	17	21	26	13	21			2
1	36	32	21		26	21	31	2	8	12	17	22	8				1
0	27				17	27	0		7	12				19	15		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 75-79 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		89		100		99				95	99	98	88		19	
18	92	98	85				95				91	95	94	84		18	
17	88	93	81		91		90				89	90		81		17	
16	84	89	77			85	86	83	88			86	86	77		16	
15	79	84	73		82		82	79				80				15	
14	75	80	69	67	77	77	78	75	80			76	78	78	69	14	
13	71	75	65		73		74	71			73	73	74	66	60	13	
12	66	71	61	60	68	69	70	68	71			68	69	70	57	12	
11	62	66	57	56	63	65	66	64	66		65	64	65	66	58	11	
10	58	61	52	53	59	61	62	60	62			60	61	62	54	50	10
9	54	57	48	49	54	57	57	56	57		57	57	56	58	51	46	9
8	49	52	44	46	50	53	53	53	53			53	52	54	47	43	8
7	45	48	40	42	45	49	49	49	48			49	49	48	49	43	7
6	41	43	36	39		45	45	45	44			45	44	45	40	36	6
5	37	39	32	35	36	41	41	41	39			41	41	40	36	32	5
4	32	34	28	32		37	37	37	35			38	35	37	32	29	4
3	28	30	24	28	27	33	33		30			34	31	33	28	25	3
2	24	25	20	25	22	29	29	30	26			30	27	29	25	22	2
1	19		16	22	18	25	24	26	21						21	1	
0				18		21	20	22								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	91	96	96	100	100	99	100	100				83	83	19
18	90	87	91	91	100	99	95	96	98				79	80	18
17	86	83	86	86	99	95	91	92	93				76	76	17
16	82	79	81	81	95	91	86	88	89				72	73	16
15	78	75	76	76	91	87	82	84	85			76	69	69	15
14	73	71	70	71	87	83	78	80	80	72			65	66	14
13	69	67	65	66	82	79	74	75	76			68	70	62	13
12	65	63	60	61	78	75	70	71	72			64		58	12
11	61	59	55	56	74	71	66	67	67			60	63	55	11
10	57	55	50	51	70	67	62	63	63			56	60	51	10
9	52	50	45	46	65	63	58	59	58			53	52	48	9
8	48	46	40	41	61	59	53	54	54			49	48	53	8
7	44	42	35	36	57	55	49	50	50			45	45	41	7
6	40	38	30	31	53	51	45	46	45			41	41	37	6
5	36	34	25	26	48	47	41	42	41			38	37	44	5
4	32	30	20	21	44	43	37	37	36			34	33	40	4
3	27	26	14	16	40	39	33	33	32			30	29	37	3
2	23	22	9	11	36	35	29	29	28			26	25	34	2
1	19	18	4	6	31	31	25	25	23			22	21	19	1
0	15	14	0	1	27	27			21						0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 12 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	79	100		100	100	92	86	97	83						19	
18	75	80	100	97	100	89	82	92	79	81				94	18	
17	70	75	100	93	96	85	79	88			86				17	
16	66	71	100	89	92	81	75	84	71		83				16	
15	62	67	100	84	88	77	71	80	67	71	79	74	67	82	15	
14	58	62	98	80	83	73	68	75	63	68	75		64		14	
13	53	58	93	76	79	70	64	71	60	65	71	67		74	13	
12	49	54	87	72	74	66	61	67	56		67	64	58	70	12	
11	45	49	82	68	70	62	57	63	52	58	63	60		66	11	
10	41	45	77	64	65	58	53	58	48	55	60	57	51	62	10	
9	37	41	71	60	61	54	50	54		52	56	53	48	58	9	
8	32	36	66	56	56	51	46	50	40	49	52	50	45	54	8	
7	28	32	61	52	52	47	43	45	36		48	46	42	50	7	
6	24	28	55	48	47	43	39	41	32	42	44	43	39	47	6	
5	20	23	50	44	43	39	35	37	28	39	40	40	36	43	5	
4	15	19	45	40	39	36	32	33		24		37	36	33	39	4
3	11	15	39	36	34	32	28	28	20	33	33	33	30	35	3	
2	7	10	34	32	30	28	25	24	16		29	29	26	31	2	
1	3	6	29	28	25	24	21	20		26	25	26	23	27	1	
0	2	2	23	24				16		23	21	22	20		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		98		100		83							19	
18	100	100	98	99			100		78							18	
17	99	100	94	95	90		100		74	85				75	82	17	
16	95	99	89	91	86	84	98		70	80	84			71	78	78	16
15	91	95	85	87	82	80	94		66	76				68	75		15
14	87	91	80	83	78	76	89		62	71	76			64	71	70	14
13	83	86	76	79	74	72	85		58	67	72			60	67	67	13
12	79	82	71	75	70	68	81		54	62		61		57	64	63	12
11	75	78	67	71	66	64	77	60	49	57	59	65		53	60	59	11
10	71	73	62	67	62	60	73		45	53	55	61		49	56	55	10
9	67	69	58	63	58	55	69	48	41	48	51	57	46	46	53	51	9
8	64	65	54	58	54	51	65		37	44	46	53		42	49	47	8
7	60	60	49	54	50	47	61	37	33	39	42	49	37	38	45	43	7
6	56	56	45	50	46	43	57		29	35	38	45		35	42	39	6
5	52	52	40	46	42	39	53	25	24	30	34	41	27	31	38	35	5
4	48	47	36	42	38	35	49		20	26	29	37		27	34	31	4
3	44	43	31		34	31	44	14	16	21	25	33	18	24	31		3
2	40	39	27		30	27	40	8	12	17	21	29	13	20			2
1	36	34	22		26	23	36	2	8	12	17	25	8				1
0	30	30			19	32	0		7	13				20	15		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 12 years

Age: 80-85 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	97		89		100		100				97	100	100	89		19	
18	93	99	85				99				93	96	96	85		18	
17	89	94	81		94		95				93	92		81		17	
16	85	90	77			89	91	87	92			88	88	77		16	
15	80	85	73		85		86	83			82					15	
14	76	81	69	67	80	81	82	79	83		78	79	80	70		14	
13	72	76	65		76		78	75			77		75	76	66	61	13
12	68	72	61	60	71	73	74	71	74		70	71	71		57	12	
11	63	67	57	56	66	69	70	68	70		69	66	67	67	59	54	11
10	59	63	53	53	62	65	66	64	65		62	62	63	55	50		10
9	55	58	49	49	57	61	62	60	61		61	58	58	59	51	46	9
8	50	54	45	46	53	57	58	56	56		54	54	55	48	43		8
7	46	49	41	43	48	53	53	53	52		53	51	50	51	44	39	7
6	42	45	37	39		49	49	49	47		49	45	47	40	36		6
5	38	40	33	36	39	45	45	45	43		45	43	41	43	36	32	5
4	33	35	29	32		41	41	41	38		41		37	39	33	29	4
3	29	31	25	29	30	37	37		34		37		33	35	29	25	3
2	25	26	21	25	25	33	33	34	29		33		29	31	25	22	2
1	21		17	22	21	29	29	30	25		29				21		1
0				18		25	25	26									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	97	92	99	99	100	100	100	100	100				83	83	19	
18	93	88	94	94	100	100	99	100	100				79	80	18	
17	89	84	88	89	100	98	95	96	97				76	76	17	
16	84	80	83	84	99	94	91	91	93				72	73	16	
15	80	76	78	79	95	90	86	87	88				79	69	15	
14	76	72	73	74	91	86	82	83	84	74			65	66	14	
13	72	68	68	69	86	82	78	79	79		69	73	62	62	13	
12	68	64	63	64	82	78	74	74	75		67		58	59	12	
11	64	60	58	59	78	74	70	70	71		61	66	55	55	11	
10	59	56	53	54	74	70	66	66	66		59	57	63	51	52	10
9	55	52	48	49	69	66	62	62	62		55	53	60	48	48	9
8	51	47	43	44	65	62	58	58	58		51	50	56	44	45	8
7	47	43	37	39	61	58	53	53	53		48	46	53	41	41	7
6	43	39	32	34	57	54	49	49	49		44	42	50	37	38	6
5	38	35	27	29	52	50	45	45	44		40	38	46	34	34	5
4	34	31	22	24	48	46	41	41	40		36	34	43	30	31	4
3	30	27	17	19	44	42	37	36	36		33	30	40	27	27	3
2	26	23	12	14	40	38	33	32	31		29	26	37	23	23	2
1	22	19	7	9	35	34	29	28	27		25	22	33	20	20	1
0	18	15	2	4	31	30		24								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	83	88		79	81	81	77	79	78							19
18	78	87	83	75	77	77	74	75	75	74						18
17	74	82	77	71	72	73	70	71			74					17
16	70	78	72	67	68	69	66	66	67		70					16
15	66	74	67	63	63	65	63	62	63	64	67	65	58	63		15
14	61	69	61	59	59	62	59	58	59	61	63		55			14
13	57	65	56	55	54	58	56	54	55	57	59	58				13
12	53	61	50	51	50	54	52	49	51		55	54	48	51		12
11	49	56	45	47	46	50	48	45	47	51	51	51				11
10	45	52	40	43	41	47	45	41	43	48	47	47	42	43		10
9	40	48	34	39	37	43	41	37		45	44	44	39	40		9
8	36	44	29	35	32	39	38	32	35	41	40	40	36	36		8
7	32	39	24	31	28	35	34	28	32		36	37	33	32		7
6	28	35	18	27	23	31	30	24	28	35	32	34	30	28		6
5	23	31	13	23	19	28	27	19	24	32	28	30	27	24		5
4	19	26	8	19	14	24	23	15	20		24	27	23	20		4
3	15	22	2	15	10	20	20	11	16	25	21	23	20	16		3
2	11	18	0	11	6	16	16	7	12		17	20	17	12		2
1	6	13	0	7	1	12	12	2		19	13	16	14	8		1
0	9	0		3				0		15	9	13	11			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	84		82		83		81		85								19
18	80	80	78	80			77		80								18
17	76	75	73	76	75		73		76	80				77	75		17
16	72	71	69	72	71	69	69		72	75	69		73	71	75		16
15	68	67	64	68	67	64	65		68	71			69	68			15
14	64	62	60	63	63	60	60		64	66	61		66	64	67		14
13	60	58	55	59	59	56	56		60	62	57		62	60	63		13
12	57	54	51	55	55	52	52		55	57			58	57	59		12
11	53	49	47	51	51	48	48	54	51	53	55	50		55	53	55	11
10	49	45	42	47	47	44	44		47	48	50	46		51	49	51	10
9	45	40	38	43	43	40	40	43	43	44	46	42	43	47	46	47	9
8	41	36	33	39	39	36	36		39	39	42	38		44	42	43	8
7	37	32	29	35	35	32	32	31	35	34	38	34	34	40	38	39	7
6	33	27	24	31	31	27	28		31	30	33	30		36	35	35	6
5	29	23	20	27	27	23	24	20	26	25	29	26	24	33	31	31	5
4	25	19	15	23	23	19	20		22	21	25	22		29	27	27	4
3	21	14	11		19	15	15	8	18	16	21	18	15	25	24		3
2	17	10	7		15	11	11	3	14	12	17	14	10	22			2
1	13	6	2		11	7	7	0	10	7	12	10	5				1
0	1				3	3	0		3	8				13	11		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 20-34 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	85		84		86		80			78	81	80	82		19	
18	80	84	80				75			74	77	76	78		18	
17	76	80	76		77		71			72		72		74		17
16	72	75	72			66	67	65	72			68	67	70		16
15	68	71	67		68		63	61			63					15
14	63	66	63	65	63	59	59	58	63		59	60	59	63		14
13	59	62	59		59		55	54		56		55	55	59	59	13
12	55	57	55	58	54	51	51	50	54		51	51	51		56	12
11	51	53	51	55	49	47	47	46	49	48	47	47	47	52	52	11
10	46	48	47	51	45	43	42	42	45		43	43	43	48	49	10
9	42	44	43	48	40	39	38	39	40	40	39	38	39	44	45	9
8	38	39	39	44	36	35	34	35	36		35	34	35	41	41	8
7	33	35	35	41	31	31	30	31	31	32	32	30	31	37	38	7
6	29	30	31	37		27	26	27	27	28		26	27	33	34	6
5	25	26	27	34	22	23	22	24	22	24	24	22	23	29	31	5
4	21	21	23	30		19	18	20	18	20		17	19	26	27	4
3	16	16	19	27	13	15	14		13		16	13	15	22	24	3
2	12	12	15	23	8	11	9	12	9	12		9	11	18	20	2
1	8		11	20	4	7	5	8	4	8				15		1
0				16		3	1	5								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	82	79	82	81	83	80	81	80	80				81	81	19
18	78	75	77	76	79	76	77	76	75				77	77	18
17	74	71	72	71	75	72	73	72	71				74	74	17
16	70	67	66	66	70	68	69	68	67				70	70	16
15	65	63	61	61	66	64	65	63	62		63	67	67	67	15
14	61	59	56	56	62	60	61	59	58	60		63	63	63	14
13	57	55	51	51	58	56	57	55	54		58	57	60	60	13
12	53	51	46	46	53	52	53	51	49	53		56	56	56	12
11	49	47	41	41	49	48	48	47	45		50	50	53	53	11
10	44	43	36	36	45	44	44	42	40	45	46	47	49	49	10
9	40	39	31	31	41	40	40	38	36	41	42	44	45	45	9
8	36	35	26	26	36	36	36	34	32	37	38	40	42	42	8
7	32	31	21	21	32	32	32	30	27	34	34	37	38	38	7
6	28	26	15	16	28	28	28	25	23	30	30	34	35	35	6
5	24	22	10	11	24	24	24	21	18	26	26	30	31	31	5
4	19	18	5	6	19	20	20	17	14	22	22	27	28	28	4
3	15	14	0	1	15	16	15	13	10	19	18	24	24	24	3
2	11	10	0	0	11	12	11	9	5	15	15	21	21	21	2
1	7	6	0	0	7	8	7	4	1	11	11	17	17	17	1
0	3	2	0	0	2	4		0							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	81	92		83	83	82	78	82	78	75	75			76	19
18	77	85	86	79	79	79	75	78	75	75	75			76	18
17	73	80	81	75	75	75	71	74			76				17
16	68	76	75	71	70	71	68	69	67		72				16
15	64	72	70	67	66	67	64	65	63	65	68	66	59	64	15
14	60	67	65	63	61	63	60	61	59	62	65		56		14
13	56	63	59	59	57	60	57	56	55	58	61	59		56	13
12	51	59	54	54	52	56	53	52	51		57	56	49	52	12
11	47	54	49	50	48	52	50	48	47	52	53	52		48	11
10	43	50	43	46	43	48	46	44	43	49	49	49	43	44	10
9	39	46	38	42	39	44	42	39	46	45	45	40	41		9
8	34	41	33	38	34	41	39	35	35	42	42	42	37	37	8
7	30	37	27	34	30	37	35	31	32		38	38	34	33	7
6	26	33	22	30	26	33	32	27	28	36	34	35	31	29	6
5	22	28	16	26	21	29	28	22	24	33	30	32	28	25	5
4	18	24	11	22	17	25	25	18	20		26	28	25	21	4
3	13	20	6	18	12	22	21	14	16	26	22	25	21	17	3
2	9	15	0	14	8	18	17	9	12		19	21	18	13	2
1	5	11	0	10	3	14	14	5		20	15	18	15	9	1
0	7	0		6				1	16	11	14	12			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	87		85		83		82		83							19
18	83	87	81	81			78		79							18
17	79	83	77	77	75		74		75	80				76	76	17
16	76	79	72	73	71	71	70		71	75	67			73	72	16
15	72	74	68	69	67	67	66		67	71				69	68	15
14	68	70	63	65	64	63	62		62	66	59			65	65	14
13	64	66	59	61	60	59	58		58	62	63	55		62	61	13
12	60	61	54	56	56	55	54		54	57			58	58	57	12
11	56	57	50	52	52	50	50	55	50	53	55	48		54	54	11
10	52	52	45	48	48	46	46		46	48	51	44		51	50	10
9	48	48	41	44	44	42	42		42	44	47	40		44	47	9
8	44	44	37	40	40	38	37		38	39	42	36		43	43	8
7	40	39	32	36	36	34	33	32	33	34	38	32	34	40	39	7
6	36	35	28	32	32	30	29		29	30	34	28		36	35	6
5	32	31	23	28	28	26	25	21	25	25	30	24	24	32	32	5
4	28	26	19	24	24	22	21		21	21	25	20		29	28	4
3	24	22	14		20	18	17	9	17	16	21	16	15	25	24	3
2	20	18	10		16	13	13	3	13	12	17	12	10	21		2
1	16	13	5		12	9	9	0	8	7	13	8	5			1
0	9				5	5	5	0	3	9				13	11	0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 35-39 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	87		84		87		81			81	84	83	83			19
18	82	86	80				77			78	80	79	79			18
17	78	82	76		78		73			73		75		75		17
16	74	77	72			68	68	66	73			71	71	71		16
15	70	73	68		69		64	62			66					15
14	65	68	64	65	64	60	60	59	64		62	63	63	64		14
13	61	64	60		60		56	55		57		59	59	60	59	13
12	57	59	56	58	55	52	52	51	55		54	54	54	56		12
11	52	55	52	55	50	48	48	47	50	49	50	50	50	53	52	11
10	48	50	48	52	46	44	44	44	46		46	46	46	49	49	10
9	44	46	44	48	41	40	40	40	41	41	43	42	42	45	45	9
8	40	41	40	45	37	36	35	36	37		39	37	38	42	42	8
7	35	37	36	41	32	32	31	32	32		33	35	33	34	38	7
6	31	32	32	38		28	27	29	28		29	30	34	35		6
5	27	28	28	34	23	24	23	25	23		25	27	25	30	31	5
4	23	23	24	31		20	19	21	19		21		20	22	27	4
3	18	19	20	27	14	16	15		14		17		16	18	23	3
2	14	14	16	24	9	12	11	13	10		13		12	14	19	2
1	10		12	20	5	8	7	10	5		9			16		1
0				17		4	2	6								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	80	81	80	86	83	83	83	82				81	81	19
18	79	76	76	75	82	79	78	78	78				77	77	18
17	75	72	71	70	78	75	74	74	74				74	74	17
16	70	68	66	65	73	71	70	70	69				70	70	16
15	66	64	60	60	69	67	66	66	65		64	67	67	67	15
14	62	60	55	55	65	63	62	62	60	61			63	63	14
13	58	56	50	50	61	59	58	57	56		60	58	60	60	13
12	54	51	45	45	56	55	54	53	52	53			56	56	12
11	49	47	40	40	52	51	50	49	47		52	51	53	53	11
10	45	43	35	35	48	47	46	45	43	46	48	48	49	49	10
9	41	39	30	31	44	43	41	40	39	42	44	44	46	46	9
8	37	35	25	26	39	39	37	36	34	38	40	41	42	42	8
7	33	31	20	21	35	35	33	32	30	34	36	38	39	39	7
6	29	27	15	16	31	31	29	28	25	31	32	35	35	35	6
5	24	23	9	11	27	27	25	24	21	27	28	31	32	32	5
4	20	19	4	6	22	23	21	19	17	23	24	28	28	28	4
3	16	15	0	1	18	19	17	15	12	19	20	25	25	25	3
2	12	11	0	0	14	15	13	11	8	16	16	21	21	21	2
1	8	7	0	0	10	11	8	7	4	12	13	18	18	17	1
0	3	2	0	0	5	7		2							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	81	94		84	85	84	79	83	78						19
18	77	83	88	80	80	80	75	79	75	75				77	18
17	73	79	83	76	76	77	72	75			77				17
16	68	75	78	72	71	73	68	71	67		73				16
15	64	70	72	68	67	69	65	66	63	65	69	67	59	65	15
14	60	66	67	64	63	65	61	62	59	62	66		56		14
13	56	62	62	60	58	61	57	58	55	59	62	60		57	13
12	51	58	56	56	54	58	54	54	51		58	56	50	53	12
11	47	53	51	52	49	54	50	49	47	52	54	53		49	11
10	43	49	45	48	45	50	47	45	43	49	50	49	44	45	10
9	39	45	40	44	40	46	43	41	46	46	46	46	41	41	9
8	34	40	35	40	36	42	40	37	35	43	42	43	38	37	8
7	30	36	29	36	31	39	36	32	32		39	39	35	33	7
6	26	32	24	32	27	35	32	28	28	36	35	36	31	29	6
5	22	27	19	28	23	31	29	24	24	33	31	32	28	26	5
4	18	23	13	24	18	27	25	19	20		27	29	25	22	4
3	13	19	8	20	14	23	22	15	16	27	23	25	22	18	3
2	9	14	3	16	9	20	18	11	12		19	22	19	14	2
1	5	10	0	12	5	16	14	7	20	16	18	16	10		1
0	6	0		8				2	17	12	15	13			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	87		87		83		84		83							19
18	83	90	83	82			80		79							18
17	79	85	78	78	75		75		75	80				76	76	17
16	76	81	74	73	71	72	71		71	75		67		73	72	16
15	72	77	69	69	67	68	67		67	71				69	69	15
14	68	72	65	65	64	64	63		62	66		59		65	65	14
13	64	68	60	61	60	60	59		58	62	64	56		62	61	13
12	60	63	56	57	56	56	55		54	57			58	58	59	12
11	56	59	52	53	52	52	51	55	50	53	55	48		54	54	11
10	52	55	47	49	48	48	47		46	48	51	44		51	50	10
9	48	50	43	45	44	43	43		42	44	47	40	44	47	47	9
8	44	46	38	41	40	39	39		38	39	43	36		43	43	8
7	40	42	34	37	36	35	35	32	33	34	38	32	34	40	39	7
6	36	37	29	33	32	31	31		29	30	34	28		36	36	6
5	32	33	25	29	28	27	26	21	25	25	30	24	25	32	32	5
4	28	29	20	25	24	23	22		21	21	26	20		28	28	4
3	24	24	16		20	19	18	9	17	16	21	16	15	25	25	3
2	20	20	12		16	15	14	4	13	12	17	12	10	21		2
1	16	16	7		12	11	10	0	8	7	13	8	5			1
0	11				7	6	0		3	9				14	11	0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 40-44 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	88		85		88		82				83	85	84	83		19
18	83	88	81				78				79	81	80	79		18
17	79	83	77		79		74				74		77		76	17
16	75	79	73			68	69	67	73			73	72	72		16
15	70	74	69		69		65	63				68				15
14	66	69	65	66	65	61	61	60	64		64	64	64	65		14
13	62	65	61		60		57	56			58		60	60	59	13
12	58	60	56	59	56	53	53	52	55		56	56	56	56		12
11	53	56	52	55	51	49	49	48	51		50	52	52	53	52	11
10	49	51	48	52	46	45	45	44	47		48	47	48	50	49	10
9	45	47	44	48	42	41	40	41	42		42	44	43	44	46	9
8	41	42	40	45	37	37	36	37	38		40	39	40	42	42	8
7	36	38	36	41	33	33	32	33	33		34	36	35	36	38	7
6	32	33	32	38		29	28	29	29		30	30	32	35	35	6
5	28	29	28	34	24	25	24	26	24		26	29	26	28	31	5
4	23	24	24	31		21	20	22	20		22		22	24	27	4
3	19	20	20	27	14	17	16		15		18		18	20	23	3
2	15	15	16	24	10	13	12	14	11		14		13	16	20	2
1	11		12	20	5	9	7	10	6		10			16		1
0				17		5	3	7								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	81	82	81	88	85	84	84	84				81	81	19
18	79	77	77	76	84	81	79	80	80				77	78	18
17	75	73	71	71	79	77	75	76	75				74	74	17
16	71	69	66	66	75	73	71	71	71				70	71	16
15	67	65	61	61	71	69	67	67	66				65	67	15
14	63	61	56	56	67	65	63	63	62	61			63	63	14
13	58	57	51	51	62	61	59	59	58		61	58	60	60	13
12	54	53	46	46	58	57	55	55	53	54		53	56	56	12
11	50	49	41	41	54	53	51	50	49		53	52	53	53	11
10	46	45	36	37	50	49	46	46	45	46	49	48	49	49	10
9	42	40	31	32	45	45	42	42	40	43	45	45	46	46	9
8	37	36	26	27	41	41	38	38	36	39	41	42	42	42	8
7	33	32	21	22	37	37	34	33	31	35	37	39	39	39	7
6	29	28	15	17	33	33	30	29	27	31	33	35	35	35	6
5	25	24	10	12	28	29	26	25	23	27	29	32	32	32	5
4	21	20	5	7	24	25	22	21	18	24	25	29	28	28	4
3	17	16	0	2	20	21	18	17	14	20	21	25	25	25	3
2	12	12	0	0	16	17	13	12	9	16	17	22	21	21	2
1	8	8	0	0	11	13	9	8	5	12	13	19	18	18	1
0	4	4	0	0	7	9	4								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	79	96	86	86	86	85	80	85	78	75	76					19
18	75	82	91	82	82	81	76	81								18
17	71	78	85	78	77	77	72	76								17
16	67	74	80	74	73	74	69	72								16
15	62	69	75	70	69	70	65	68								15
14	58	65	69	66	64	66	62	64								14
13	54	61	64	62	60	62	58	59								13
12	50	56	59	58	55	58	55	55								12
11	46	52	53	54	51	55	51	51								11
10	41	48	48	50	46	51	47	46								10
9	37	43	43	46	42	47	44	42								9
8	33	39	37	42	37	43	40	38								8
7	29	35	32	38	33	39	37	34								7
6	24	31	26	34	29	36	33	29								6
5	20	26	21	30	24	32	29	25								5
4	16	22	16	26	20	28	26	21								4
3	12	18	10	22	15	24	22	17								3
2	7	13	5	18	11	20	19	12								2
1	3	9	0	14	6	17	15	8								1
0	5	0		10				4								0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	91	89			85		85		82									19
18	87	92	84	83			81		78									18
17	83	87	80	79	77		77		74	80						76	76	17
16	79	83	75	75	73	73	73		69	75	68					72	73	16
15	75	79	71	70	69	69	69		65	71						69	69	15
14	71	74	66	66	65	65	65		61	66	60					65	65	14
13	67	70	62	62	61	61	61		57	62	56					61	62	13
12	63	66	58	58	57	57	57		53	57						58	58	12
11	59	61	53	54	53	53	52	56	49	53	55	48				54	54	11
10	55	57	49	50	50	49	48		44	48	51	44				50	51	10
9	51	53	44	46	46	45	44	44	40	44	47	41	44			47	47	9
8	47	48	40	42	42	41	40		36	39	43	37				43	43	8
7	43	44	35	38	38	36	36	33	32	34	39	33	34			39	40	7
6	39	40	31	34	34	32	32		28	30	34	29				36	36	6
5	35	35	27	30	30	28	28	21	24	25	30	25	25			32	32	5
4	31	31	22	26	26	24	24		20	21	26	21				28	29	4
3	27	27	18		22	20	20	10	15	16	22	17	15			25	25	3
2	23	22	13		18	16	16	4	11	12	17	13	10			21		2
1	19	18	9		14	12	12	0	7	7	13	9	5					1
0	14	14			8	8	8	0	3	9						14	11	0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 45-49 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	88		85		89		83				85	87	86	84		19	
18	84	89	81				79				81	83	82	80		18	
17	80	84	77		79		75				75	79		76		17	
16	76	80	73			70	71	68	74			74	74	72		16	
15	71	75	69		70		66	64				69				15	
14	67	71	65	66	66	62	62	61	65		65	66	66	65		14	
13	63	66	61		61		58	57			59	62	62	61	60	13	
12	59	61	57	59	57	54	54	53	57		57	57	58	56	56	12	
11	54	57	53	55	52	50	50	49	52		51	54	53	54	52	11	
10	50	52	49	52	47	46	46	46	48		50	49	50	50	49	10	
9	46	48	45	48	43	42	42	42	43		43	46	45	46	45	9	
8	41	43	41	45	38	38	38	38	39		42	40	42	43	42	8	
7	37	39	37	41	34	34	33	34	34		35	38	36	37	39	7	
6	33	34	33	38		30	29	30	30		31	32	33	35	35	6	
5	29	30	29	34	24	26	25	27	25		27	30	28	29	31	5	
4	24	25	25	31		22	21	23	21			23	23	25	28	28	4
3	20	21	20	28	15	18	17		16			19	19	21	24	24	3
2	16	16	16	24	11	14	13	15	12			15	15	17	20	21	2
1	12		12	21	6	10	9	12	7			11			17		1
0				17		6	5	8								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	83	83	83	90	87	85	86	86				81	81	19
18	80	79	78	78	86	83	81	82	81				77	78	18
17	76	74	73	73	81	79	76	77	77				74	74	17
16	72	70	68	68	77	75	72	73	73				70	71	16
15	68	66	63	63	73	71	68	69	68				66	67	15
14	63	62	58	58	69	67	64	65	64	62			63	64	14
13	59	58	52	53	64	63	60	60	60				62	60	13
12	55	54	47	48	60	59	56	56	55	55			56	57	12
11	51	50	42	43	56	55	52	52	51				54	53	11
10	47	46	37	38	52	51	48	48	46	47	50	49	49	50	10
9	42	42	32	33	47	47	43	44	42	43	46	46	46	46	9
8	38	38	27	28	43	43	39	39	38	40	42	43	42	42	8
7	34	34	22	23	39	39	35	35	33				36	38	7
6	30	30	17	18	35	35	31	31	29	32	34	36	35	35	6
5	26	26	12	13	30	31	27	27	24	28	30	33	32	32	5
4	22	21	7	8	26	27	23	22	20	24	26	30	28	28	4
3	17	17	2	3	22	23	19	18	16	21	22	26	25	25	3
2	13	13	0	0	18	19	15	14	11	17	18	23	21	21	2
1	9	9	0	0	13	15	10	10	7	13	14	20	18	18	1
0	5	5	0	0	9	11			6						0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	79	99		88	88	86	80	86	78						19	
18	75	81	94	84	84	82	77	82	75	76				79	18	
17	71	77	88	80	79	78	73	78			79				17	
16	67	73	83	76	75	74	70	73	67		75				16	
15	62	68	77	72	70	71	66	69	63	66	71	68	61	67	15	
14	58	64	72	68	66	67	62	65	59	63	67		57		14	
13	54	60	67	64	61	63	59	61	55	60	63	61		59	13	
12	50	55	61	60	57	59	55	56	51		60	58	51	55	12	
11	46	51	56	56	53	55	52	52	47	53	56	54		51	11	
10	41	47	51	52	48	52	48	48	43	50	52	51	45	47	10	
9	37	42	45	48	44	48	44	44		47	48	47	42	43	9	
8	33	38	40	44	39	44	41	39	35	44	44	44	39	39	8	
7	29	34	35	40	35	40	37	35	32		40	41	36	36	7	
6	24	29	29	36	30	36	34	31	28	37	37	37	33	32	6	
5	20	25	24	32	26	33	30	27	24	34	33	34	29	28	5	
4	16	21	19	28	21	29	26	22	20		29	30	26	24	4	
3	12	16	13	23	17	25	23	18	16	28	25	27	23	20	3	
2	7	12	8	19	12	21	19	14	12		21	23	20	16	2	
1	3	8	2	15	8	18	16	9		21	17	20	17	12	1	
0	3	0		11				5		18	14	16	14		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	91		90		85		87		82								19
18	87	94	86	84			83		78								18
17	83	90	81	80	77		79		74	80				76	77	17	
16	79	85	77	76	73	75	75		69	75	69			72	73	75	16
15	75	81	73	72	69	71	71		65	71				68	69	15	
14	71	77	68	68	65	66	67		61	66	61			64	66	67	14
13	67	72	64	64	61	62	63		57	62	64	57		61	62	63	13
12	63	68	59	60	57	58	58		53	57			58	57	58	59	12
11	59	64	55	56	53	54	54	56	49	53	56	50		53	55	55	11
10	55	59	50	51	50	50	50		44	48	51	46		50	51	51	10
9	51	55	46	47	46	46	46	45	40	44	47	42	44	46	47	47	9
8	47	51	41	43	42	42	42		36	39	43	38		42	44	43	8
7	43	46	37	39	38	38	38	33	32	34	39	34	34	39	40	39	7
6	39	42	33	35	34	34	34		28	30	35	30		35	36	35	6
5	35	38	28	31	30	29	30	22	24	25	30	26	25	31	33	31	5
4	31	33	24	27	26	25	26		20	21	26	22		28	29	27	4
3	27	29	19		22	21	22	10	15	16	22	18	15	24	25		3
2	23	25	15		18	17	18	4	11	12	18	14	10	20			2
1	19	20	10		14	13	13	0	7	7	13	10	5				1
0	16				9	9	0		3	9				14	11		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 50-54 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		86		90		84				86	89	88	84		19
18	85	90	82				80				82	84	84	80		18
17	81	85	77		81		76				76	80		77		17
16	77	81	73			71	72	70	76			76	76	73		16
15	72	76	69		71		68	66				71				15
14	68	72	65	66	67	63	64	62	67		67	67	67	66		14
13	64	67	61		62		60	58			60	63	63	62	60	13
12	60	63	57	59	58	55	56	54	58			59	59	59	56	12
11	55	58	53	55	53	51	51	51	53		52	55	55	55	54	11
10	51	53	49	52	48	47	47	47	49			51	50	51	49	10
9	47	49	45	49	44	43	43	43	44		45	47	46	47	46	9
8	42	44	41	45	39	39	39	39	40			44	42	43	42	8
7	38	40	37	42	35	35	35	36	35		37	40	38	39	38	7
6	34	35	33	38		31	31	32	31			33	34	35	36	6
5	30	31	29	35	26	27	27	28	26		29	32	29	31	32	5
4	25	26	25	31		23	23	24	22			25	25	27	28	4
3	21	22	21	28	16	19	18		17			21	21	23	24	3
2	17	17	17	24	12	15	14	17	13			17	19	21	21	2
1	13		13	21	7	12	10	13	8					17		1
0				17		8	6	9								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	84	85	85	92	89	86	88	88				81	81	19
18	81	80	80	80	88	85	82	83	83				77	78	18
17	77	76	75	75	84	81	78	79	79				74	74	17
16	73	72	70	70	79	77	74	75	75				70	71	16
15	68	68	64	65	75	73	70	71	70				67	67	15
14	64	64	59	60	71	69	65	66	66	63			63	64	14
13	60	60	54	55	67	65	61	62	62				63	60	13
12	56	55	49	50	62	61	57	58	57	56			56	57	12
11	52	51	44	45	58	57	53	54	53				55	53	11
10	48	47	39	40	54	53	49	50	48	48	51	50	49	50	10
9	43	43	34	35	50	49	45	45	44	44	47	47	46	46	9
8	39	39	29	30	45	45	41	41	40	40	43	44	42	43	8
7	35	35	24	25	41	41	37	37	35	37	39	40	39	39	7
6	31	31	19	20	37	37	33	33	31	33	35	37	35	36	6
5	27	27	13	15	33	33	28	29	26	29	31	34	32	32	5
4	22	23	8	10	28	29	24	24	22	25	27	31	28	28	4
3	18	19	3	5	24	25	20	20	18	21	23	27	25	25	3
2	14	15	0	0	20	21	16	16	13	18	19	24	21	21	2
1	10	11	0	0	16	17	12	12	9	14	15	21	18	18	1
0	6	7	0	0	11	13		7							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	78	100	89	90	87	81	88	79	75	77					19	
18	74	80	97	85	86	83	77	83						80	18	
17	69	76	91	81	81	79	74	79			80				17	
16	65	72	86	77	77	75	70	75	67		76				16	
15	61	67	81	73	72	71	67	71	63	67	72	69	61	68	15	
14	57	63	75	69	68	68	63	66	60	64	68	58			14	
13	52	59	70	65	63	64	59	62	56	60	64	62		60	13	
12	48	54	64	61	59	60	56	58	52		61	59	52	57	12	
11	44	50	59	57	54	56	52	54	48	54	57	55		53	11	
10	40	46	54	53	50	52	49	49	44	51	53	52	46	49	10	
9	35	41	48	49	46	49	45	45	48	49	48	48	42	45	9	
8	31	37	43	45	41	45	41	41	36	44	45	45	39	41	8	
7	27	33	38	41	37	41	38	36	32		41	41	36	37	7	
6	23	28	32	37	32	37	34	32	28	38	38	38	33	33	6	
5	18	24	27	33	28	34	31	28	24	35	34	34	30	29	5	
4	14	20	22	29	23	30	27	24	20		30	31	27	25	4	
3	10	15	16	25	19	26	23	19	17	28	26	28	24	21	3	
2	6	11	11	21	14	22	20	15	13		22	24	21	17	2	
1	2	7	5	17	10	18	16	11		22	18	21	18	13	1	
0	2	0		13				7		18	14	17	14		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	94	92			88		89		81								19
18	90	93	88	85			85		76								18
17	86	89	83	81	80		81		72	80				75	77		17
16	82	85	79	77	76	76	77		68	75		71		71	73	75	16
15	78	80	74	73	72	72	73		64	71				68	70		15
14	74	76	70	69	68	68	69		60	66		63		64	66	67	14
13	70	72	65	65	64	64	65		56	62	64	59		60	62	63	13
12	66	67	61	61	60	59	61		51	57			58	57	59	59	12
11	62	63	56	57	56	55	57	56	47	53	56	51		53	55	55	11
10	58	59	52	53	52	51	53		43	48	52	47		49	51	51	10
9	54	54	48	49	48	47	49	45	39	44	47	43	44	46	48	47	9
8	50	50	43	45	45	43	44		35	39	43	39		42	44	43	8
7	46	46	39	41	41	39	40	33	31	34	39	35	34	38	40	39	7
6	42	41	34	37	37	35	36		27	30	35	31		35	37	35	6
5	38	37	30	33	33	31	32	22	22	25	31	27	25	31	33	31	5
4	34	33	25	29	29	27	28		18	21	26	23		27	29	27	4
3	30	28	21		25	22	24	10	14	16	22	19	15	24	26		3
2	26	24	16		21	18	20	5	10	12	18	16	10	20			2
1	22	20	12		17	14	16	0	6	7	14	12	6				1
0	15				10	12	0		3	9				15	11		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 55-59 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	90		86		91		86			88	90	89	85			19
18	86	91	82				82			84	86	85	81			18
17	82	86	78		82		78			78	82			77		17
16	78	82	74			73	74	71	77			77	77	73		16
15	73	77	70		73		70	67			72					15
14	69	73	66	66	68	65	66	64	68		68	69	69	66		14
13	65	68	62		64		61	60		62		65	65	62	60	13
12	60	64	58	59	59	57	57	56	59		61	60	61		56	12
11	56	59	54	56	54	53	53	52	55	54	57	56	57	55	53	11
10	52	55	50	52	50	49	49	49	50		53	52	53	51	49	10
9	48	50	45	49	45	45	45	45	46	46	49	48	49	47	46	9
8	43	45	41	45	41	41	41	41	41		45	44	45	44	42	8
7	39	41	37	42	36	37	37	37	37	38	41	39	41	40	39	7
6	35	36	33	38		33	33	33	32		34	35	37	36	35	6
5	31	32	29	35	27	29	28	30	28	30	34	31	33	32	32	5
4	26	27	25	31		25	24	26	23		26		27	29	28	4
3	22	23	21	28	18	21	20		19		22		22	25	24	3
2	18	18	17	24	13	17	16	18	15		18	18	20	21	21	2
1	13		13	21	9	13	12	15	10					18		1
0				17		9	8	11								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	86	85	87	87	95	91	88	90	90				81	82	19	
18	82	81	82	82	90	87	84	85	86				77	78	18	
17	78	77	77	77	86	83	80	81	81				74	74	17	
16	74	73	72	72	82	79	75	77	77				70	71	16	
15	70	69	66	67	78	75	71	73	73				68	67	15	
14	65	65	61	62	73	71	67	68	68	64			63	64	14	
13	61	61	56	57	69	67	63	64	64		64	61	60	60	13	
12	57	57	51	52	65	63	59	60	59	57			56	57	12	
11	53	53	46	47	61	59	55	56	55		56	55	53	53	11	
10	49	49	41	42	56	55	51	52	51	49	52	52	49	50	10	
9	45	45	36	37	52	51	47	47	46	45	48	48	46	46	9	
8	40	41	31	32	48	47	42	43	42	41	44	45	42	43	8	
7	36	36	26	27	44	43	38	39	37		38	40	42	39	7	
6	32	32	21	22	39	39	34	35	33	34	36	38	35	36	6	
5	28	28	15	17	35	35	30	31	29	30	32	35	32	32	5	
4	24	24	10	12	31	31	26	26	24		26	28	32	28	29	4
3	19	20	5	7	27	27	22	22	20	23	24	29	25	25	3	
2	15	16	0	2	22	23	18	18	16	19	20	25	21	22	2	
1	11	12	0	0	18	19	14	14	11	15	16	22	18	18	1	
0	7	8	0	0	14	15		9							0	

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	78	100	91	92	86	82	89	79	75	77					19	
18	74	79	100	87	88	83	78	85	75	77				82	18	
17	69	75	95	83	83	79	74	81			81				17	
16	65	70	89	79	79	75	71	76	67	77					16	
15	61	66	84	75	74	71	67	72	63	67	73	70	62	70	15	
14	57	62	78	71	70	67	64	68	60	64	69	59			14	
13	52	57	73	67	65	64	60	64	56	61	65	63		62	13	
12	48	53	68	63	61	60	56	59	52	61	59	52	58		12	
11	44	49	62	59	57	56	53	55	48	54	58	56		54	11	
10	40	45	57	55	52	52	49	51	44	51	54	52	46	50	10	
9	35	40	52	51	48	49	46	46	48	50	49	43	46		9	
8	31	36	46	47	43	45	42	42	36	45	46	45	40	43	8	
7	27	32	41	43	39	41	38	38	32	42	42	37	39		7	
6	23	27	36	39	34	37	35	34	28	38	38	39	34	35	6	
5	18	23	30	35	30	33	31	29	24	35	35	35	31	31	5	
4	14	19	25	31	25	30	28	25	20	31	32	27	27		4	
3	10	14	20	27	21	26	24	21	17	29	27	28	24	23	3	
2	6	10	14	23	16	22	20	17	13	23	25	21	19		2	
1	2	6	9	19	12	18	17	12	22	19	21	18	15		1	
0	1	3		15				8	19	15	18	15			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	94	94			88		92		81								19
18	90	96	89	87			88		76								18
17	86	91	85	83	80		84		72	80				74	77		17
16	82	87	80	79	76	77	80		68	75	72			71	74	74	16
15	78	83	76	75	72	73	76		64	71				67	70		15
14	74	78	71	71	68	69	72		60	66	65			63	66	67	14
13	70	74	67	67	64	65	68		56	62	64	61		60	63	63	13
12	66	70	63	63	60	61	64		51	57			58	56	59	59	12
11	62	65	58	59	56	57	59	57	47	53	56	53		52	55	55	11
10	58	61	54	55	52	52	55		43	48	52	49		49	52	51	10
9	54	57	49	51	48	48	51	45	39	44	48	45	44	45	48	47	9
8	50	52	45	47	45	44	47		35	39	43	41		41	44	43	8
7	46	48	40	43	41	40	43	34	31	34	39	37	34	38	41	39	7
6	42	44	36	39	37	36	39		27	30	35	33		34	37	35	6
5	38	39	31	35	33	32	35	22	22	25	31	29	25	30	33	31	5
4	34	35	27	31	29	28	31		18	21	27	25		27	30	27	4
3	30	30	23		25	24	27	11	14	16	22	21	15	23	26		3
2	26	26	18		21	20	23	5	10	12	18	17	10	19			2
1	22	22	14		17	15	19	0	6	7	14	13	6				1
0	17				11	14	0		3	10				15	11		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 60-64 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	91		86		93		88				89	92	91	85		19	
18	87	92	82				84				86	87	87	81		18	
17	83	87	78		83		80			80		83		78		17	
16	79	83	74			75	76	73	79			79	79	74		16	
15	74	78	70		74		72	69				74				15	
14	70	74	66	66	70	67	68	66	70		70	71	71	67		14	
13	66	69	62		65		64	62			64		66	67	63	60	13
12	61	65	58	59	61	59	59	58	61			62	62	63	56	12	
11	57	60	54	56	56	55	55	54	57		56	58	58	58	55	53	11
10	53	56	50	52	51	51	51	50	52			55	54	54	52	49	10
9	49	51	46	49	47	47	47	47	48		48	51	49	50	48	46	9
8	44	47	42	45	42	43	43	43	43			47	45	46	44	42	8
7	40	42	38	42	38	39	39	39	39		40	43	41	42	40	39	7
6	36	38	34	38		35	35	35	34			36	37	38	37	35	6
5	31	33	30	35	28	31	31	32	30			32	35	32	33	32	5
4	27	28	26	31		27	26	28	25			28	28	30	29	28	4
3	23	24	22	28	19	23	22		21			24	24	26	25	25	3
2	19	19	18	25	15	19	18	20	16			20	20	22	22	21	2
1	14		14	21	10	15	14	16	12					18		1	
0				18		11	10	13								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	87	89	89	97	93	90	92	92				81	82	19
18	83	83	84	84	93	89	86	88	88				77	78	18
17	79	79	79	79	89	85	82	83	84				74	75	17
16	75	74	74	74	85	81	78	79	79				70	71	16
15	71	70	69	69	80	77	73	75	75				69	67	15
14	67	66	63	64	76	73	69	71	71	65			63	64	14
13	63	62	58	59	72	69	65	66	66				65	63	13
12	58	58	53	54	68	65	61	62	62	58			56	57	12
11	54	54	48	49	63	61	57	58	57				57	53	11
10	50	50	43	44	59	57	53	54	53	50	53	53	49	50	10
9	46	46	38	39	55	53	49	50	49	47	49	50	46	46	9
8	42	42	33	34	51	49	45	45	44	43	45	46	42	43	8
7	38	38	28	29	46	45	40	41	40	39	41	43	39	39	7
6	33	34	23	24	42	41	36	37	35	35	37	40	35	36	6
5	29	30	18	19	38	37	32	33	31	31	33	37	32	32	5
4	25	26	12	14	34	33	28	29	27	28	29	33	28	29	4
3	21	21	7	9	29	29	24	24	22	24	25	30	25	25	3
2	17	17	2	4	25	25	20	20	18	20	21	27	21	22	2
1	12	13	0	0	21	21	16	16	14	16	17	23	18	18	1
0	8	9	0	0	16	17			12						0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	76	100	93	94	87	82	91	79							19
18	72	78	100	89	90	84	79	86	75	78				84	18
17	68	74	98	85	86	80	75	82			81				17
16	63	69	93	81	81	76	71	78	67		78				16
15	59	65	87	77	77	72	68	73	63	68	74	70	62	72	15
14	55	61	82	73	72	68	64	69	60	65	70		59		14
13	51	56	77	69	68	65	61	65	56	61	66	63		64	13
12	46	52	71	65	63	61	57	61	52		62	60	53	60	12
11	42	48	66	61	59	57	53	56	48	55	58	57		56	11
10	38	43	61	57	54	53	50	52	44	52	55	53	47	52	10
9	34	39	55	53	50	49	46	48		49	51	50	44	48	9
8	30	35	50	49	45	46	43	44	36	45	47	46	41	44	8
7	25	30	45	45	41	42	39	39	32		43	43	37	41	7
6	21	26	39	41	37	38	35	35	28	39	39	39	34	37	6
5	17	22	34	37	32	34	32	31	24	36	35	36	31	33	5
4	13	17	28	33	28	30	28	26	20		32	32	28	29	4
3	8	13	23	29	23	27	25	22	17	29	28	29	25	25	3
2	4	9	18	25	19	23	21	18		13	24	26	22	21	2
1	0	5	12	21	14	19	18	14		23	20	22	19	17	1
0	0	7		17				9		19	16	19	16		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97	95			90		95		79							19	
18	93	98	91	90			91		75							18	
17	89	94	86	85	82		87		71	80				74	78	17	
16	85	89	82	81	78	78	83		67	75	74		70	74	74	16	
15	81	85	78	77	74	74	79		63	71			66	70		15	
14	77	81	73	73	70	70	75		58	66	67		63	67	66	14	
13	73	76	69	69	66	66	71		54	62	65	63		59	63	62	13
12	69	72	64	65	62	62	67		50	57			58	55	59	58	12
11	65	68	60	61	58	58	63	57	46	53	56	55		52	56	54	11
10	61	63	55	57	54	54	59		42	48	52	51		48	52	50	10
9	57	59	51	53	50	50	54	46	38	44	48	47	44	44	48	47	9
8	53	55	46	49	46	45	50		34	39	44	43		41	45	43	8
7	49	50	42	45	42	41	46	34	29	34	39	39	34	37	41	39	7
6	45	46	38	41	38	37	42		25	30	35	35		33	37	35	6
5	41	41	33	37	34	33	38	23	21	25	31	31	25	30	34	31	5
4	37	37	29	33	31	29	34		17	21	27	27		26	30	27	4
3	33	33	24		27	25	30	11	13	16	23	23	15	22	26		3
2	29	28	20		23	21	26	5	9	12	18	19	10	19			2
1	25	24	15		19	17	22	0	4	7	14	15	6				1
0	20	24			13	18	0		3	10				15	11		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 65-69 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		87		94		91				91	93	92	86		19
18	88	93	83				87				87	89	88	82		18
17	84	88	79		85		83				82	85		78		17
16	79	84	75			77	78	75	81			81	80	74		16
15	75	79	71		76		74	72				76				15
14	71	75	66	66	72	69	70	68	72		72	72	72	67		14
13	67	70	62		67		66	64			66	68	68	63	60	13
12	62	66	58	59	62	61	62	60	63		64	64	64	56	56	12
11	58	61	54	56	58	57	58	57	59		58	60	59	60	56	11
10	54	57	50	52	53	53	54	53	54		56	55	56	52	49	10
9	50	52	46	49	49	49	50	49	50		50	52	51	52	48	9
8	45	48	42	45	44	45	45	45	45		48	47	48	45	42	8
7	41	43	38	42	39	41	41	41	41		42	45	42	44	41	7
6	37	39	34	39		37	37	38	36		38	38	40	37	35	6
5	32	34	30	35	30	33	33	34	32		34	37	34	36	33	5
4	28	30	26	32		29	29	30	28		30	30	32	30	28	4
3	24	25	22	28	21	25	25		23		26	25	28	26	25	3
2	20	20	18	25	17	21	21	23	19		22	21	24	22	21	2
1	15		14	21	12	17	17	19	14		18			19		1
0				18		14	12	15								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	88	91	91	100	96	92	94	95				81	82	19
18	85	84	86	86	96	92	88	90	91				77	78	18
17	81	80	81	81	92	88	84	86	86				74	75	17
16	77	76	76	76	87	84	80	82	82				70	71	16
15	73	72	71	71	83	80	76	77	78				71	67	15
14	68	68	66	66	79	76	72	73	73	67			63	64	14
13	64	63	61	61	75	72	68	69	69		66	65	60	61	13
12	60	59	56	57	70	68	63	65	64	59			56	57	12
11	56	55	50	52	66	64	59	60	60		58	58	53	54	11
10	52	51	45	47	62	60	55	56	56	52	54	55	49	50	10
9	47	47	40	42	58	56	51	52	51	48	50	51	46	46	9
8	43	43	35	37	53	52	47	48	47	44	46	48	42	43	8
7	39	39	30	32	49	48	43	44	42	41	42	45	39	39	7
6	35	35	25	27	45	44	39	39	38	37	38	42	35	36	6
5	31	31	20	22	41	40	35	35	34	33	34	38	32	32	5
4	27	27	15	17	36	36	30	31	29	29	30	35	28	29	4
3	22	23	10	12	32	32	26	27	25	25	26	32	25	25	3
2	18	19	5	7	28	28	22	22	21	22	22	28	21	22	2
1	14	15	0	2	24	24	18	18	16	18	18	25	18	18	1
0	10	10	0	0	19	20		14							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	74	100	95	97	88	83	92	79	75	78						19
18	70	77	100	91	92	84	79	88								18
17	66	73	100	87	88	81	76	83								17
16	62	68	97	83	84	77	72	79	67							16
15	58	64	91	79	79	73	68	75	63	68	75	71	63	74		15
14	53	60	86	75	75	69	65	71	60	65	71		60			14
13	49	55	81	71	70	65	61	66	56	62	67	64				13
12	45	51	75	66	66	62	58	62	52		63	61	54	62		12
11	41	47	70	62	61	58	54	58	48	55	59	57		59		11
10	36	42	64	58	57	54	50	54	44	52	56	54	47	55		10
9	32	38	59	54	52	50	47	49	49	52	50	44	51			9
8	28	34	54	50	48	46	43	45	36	46	48	47	41	47		8
7	24	29	48	46	43	43	40	41	32		44	43	38	43		7
6	19	25	43	42	39	39	36	36	28	39	40	40	35	39		6
5	15	21	38	38	35	35	33	32	24	36	36	37	32	35		5
4	11	16	32	34	30	31	29	28	20		33	33	29	31		4
3	7	12	27	30	26	27	25	24	17	30	29	30	26	27		3
2	3	8	22	26	21	24	22	19	13		25	26	22	23		2
1	0	3	16	22	17	20	18	15		23	21	23	19	19		1
0	0	11	18					11		20	17	19	16			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100	97		92		99			78								19	
18	96	100	93	92		95			74								18	
17	92	96	88	88	84	91			70	80				73	78		17	
16	88	92	84	84	80	79	87		65	75	77		69	74	74		16	
15	84	87	79	80	76	75	83		61	71			66	71			15	
14	80	83	75	76	72	71	79		57	66	69		62	67	66		14	
13	76	79	70	72	68	67	75		53	62	65	65		58	63	62		13
12	72	74	66	68	64	63	70		49	57			58	55	60	58		12
11	68	70	61	64	60	59	66	58	45	53	56	57		51	56	54		11
10	64	66	57	60	56	55	62		41	48	52	53		47	52	50		10
9	60	61	53	56	52	51	58	46	36	44	48	49	44	44	49	46		9
8	56	57	48	51	48	47	54		32	39	44	45		40	45	42		8
7	52	52	44	47	44	43	50	35	28	34	40	41	34	36	41	38		7
6	48	48	39	43	40	38	46		24	30	35	37		33	38	34		6
5	44	44	35	39	36	34	42	23	20	25	31	33	25	29	34	31		5
4	41	39	30	35	32	30	38		16	21	27	29		25	30	27		4
3	37	35	26		28	26	34	12	11	16	23	25	15	22	27		3	
2	33	31	21		24	22	30	6	7	12	19	22	10	18			2	
1	29	26	17		20	18	25	0	3	7	14	18	6				1	
0	22				14	21	0		3	10				16	11		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 70-74 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	93		87		97		94				93	95	94	86		19	
18	89	94	83				90				89	91	90	82		18	
17	85	89	79		87		85			85		86		79		17	
16	80	85	75			80	81	78	84			82	82	75		16	
15	76	80	71		78		77	74			77					15	
14	72	76	67	66	74	72	73	71	75		73	74	74	68		14	
13	68	71	63		69		69	67		69		69	70	64	60	13	
12	63	67	59	60	65	64	65	63	66		66	65	66	57	57	12	
11	59	62	55	56	60	60	61	59	61	61	62	61	62	56	53	11	
10	55	58	51	53	55	56	57	55	57		58	57	58	53	49	10	
9	50	53	47	49	51	52	52	52	52	53	54	52	54	49	46	9	
8	46	49	43	46	46	48	48	48	48		50	48	50	45	42	8	
7	42	44	39	42	42	44	44	44	44	45	46	44	46	41	39	7	
6	38	40	35	39		40	40	40	39	41	40	41	38	35	6		
5	33	35	30	35	32	36	36	37	35	37	38	35	37	34	32	5	
4	29	31	26	32		32	32	33	30		33		31	33	30	28	4
3	25	26	22	28	23	28	28		26		29		27	29	26	25	3
2	21	22	18	25	19	24	24	25	21		25		23	25	23	21	2
1	16		14	21	14	20	19	21	17		21			19		1	
0				18		16	15	18								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	91	89	94	94	100	99	95	97	98				81	82	19
18	87	85	88	89	99	95	91	93	94				78	78	18
17	83	81	83	84	95	91	87	88	89				74	75	17
16	79	77	78	79	91	87	83	84	85				70	71	16
15	74	73	73	74	86	83	79	80	80				73	67	15
14	70	69	68	69	82	79	74	76	76	69			63	64	14
13	66	65	63	64	78	75	70	71	72				67	67	13
12	62	61	58	59	74	71	66	67	67	61			56	57	12
11	58	56	53	54	69	67	62	63	63				59	53	11
10	53	52	48	49	65	63	58	59	58	54	55	57	49	50	10
9	49	48	43	44	61	59	54	55	54	50	51	53	46	47	9
8	45	44	37	39	57	55	50	50	50	46	47	50	42	43	8
7	41	40	32	34	52	51	46	46	45	42	43	47	39	40	7
6	37	36	27	29	48	47	42	42	41	38	39	44	35	36	6
5	33	32	22	24	44	43	37	38	37	35	35	40	32	32	5
4	28	28	17	19	40	39	33	33	32	31	31	37	28	29	4
3	24	24	12	14	35	35	29	29	28	27	27	34	25	25	3
2	20	20	7	9	31	31	25	25	23	23	23	30	21	22	2
1	16	16	2	4	27	27	21	21	19	20	19	27	18	18	1
0	12	12	0	0	23	23		17							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	73	100		96	99	89	83	93	79							19
18	69	76	100	92	95	85	80	89	75	79						18
17	64	71	100	88	91	81	76	85			83					17
16	60	67	100	84	86	78	73	81	67		79					16
15	56	63	95	80	82	74	69	76	63	69	76	72	64	77		15
14	52	59	90	76	77	70	65	72	60	66	72		60			14
13	47	54	85	72	73	66	62	68	56	62	68	65		69		13
12	43	50	79	68	68	62	58	63	52		64	61	54	65		12
11	39	46	74	64	64	59	55	59	48	56	60	58		61		11
10	35	41	69	60	59	55	51	55	44	53	56	55	48	57		10
9	31	37	63	56	55	51	48	51		49	53	51	45	53		9
8	26	33	58	52	51	47	44	46	36	46	49	48	42	49		8
7	22	28	53	48	46	43	40	42	32		45	44	39	45		7
6	18	24	47	44	42	40	37	38	28	40	41	41	35	42		6
5	14	20	42	40	37	36	33	34	24	37	37	37	32	38		5
4	9	15	36	36	33	32	30	29	20		33	34	29	34		4
3	5	11	31	32	28	28	26	25	17	30	30	30	26	30		3
2	1	7	26	28	24	24	22	21	13		26	27	23	26		2
1	0	2	20	24	19	21	19	16	24	22	24	20	22			1
0	0	15		20				12	20	18	20	17				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100		99		94		100		77									19
18	99	100	94	95			99		72									18
17	95	98	90	91	86		95		68	80				72	78			17
16	91	94	85	87	82	81	91		64	75	79			68	75	74		16
15	87	90	81	83	78	77	87		60	71				65	71			15
14	83	85	76	79	74	72	83		56	66	71			61	67	66		14
13	79	81	72	75	70	68	79		52	62	65	67		57	64	62		13
12	75	77	68	71	66	64	75		48	57			58	54	60	58		12
11	71	72	63	67	62	60	71	58	43	53	57	59		50	56	54		11
10	67	68	59	62	58	56	67		39	48	52	55		46	53	50		10
9	63	63	54	58	54	52	62	46	35	44	48	51	44	43	49	46		9
8	60	59	50	54	50	48	58		31	39	44	48		39	45	42		8
7	56	55	45	50	46	44	54	35	27	34	40	44	35	35	42	38		7
6	52	50	41	46	42	40	50		23	30	36	40		32	38	34		6
5	48	46	36	42	38	36	46	23	18	25	31	36	25	28	34	30		5
4	44	42	32	38	34	31	42		14	21	27	32		24	31	26		4
3	40	37	28		30	27	38	12	10	16	23	28	15	21	27			3
2	36	33	23		26	23	34	6	6	12	19	24	11	17				2
1	32	29	19		22	19	30	0	2	7	15	20	6					1
0	24				15	26	0		3	10				16	11			0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 75-79 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	94		87		99		97				94	96	96	87		19
18	90	95	83				93				90	92	92	83		18
17	86	90	79		90		89			88		88		79		17
16	81	86	75			83	85	81	87			84	84	75		16
15	77	81	71		81		81	77			79					15
14	73	77	67	67	76	75	76	74	78		75	75	75	68		14
13	69	72	63		72		72	70		72		71	71	64	60	13
12	64	68	59	60	67	67	68	66	69		67	67	67	57	57	12
11	60	63	55	56	62	63	64	62	64	64	63	62	63	57	53	11
10	56	59	51	53	58	59	60	58	60		59	58	59	53	50	10
9	51	54	47	49	53	55	56	55	55	56	56	54	55	49	46	9
8	47	50	43	46	49	51	52	51	51		52	50	51	46	43	8
7	43	45	39	42	44	47	48	47	46	48	48	46	47	42	39	7
6	39	41	35	39		43	43	43	42	44		41	43	38	35	6
5	34	36	31	35	35	39	39	40	37	40	40	37	39	34	32	5
4	30	32	27	32		35	35	36	33			33	35	31	28	4
3	26	27	23	28	26	31	31		28		32	29	31	27	25	3
2	22	23	19	25	21	27	27	28	24		28	24	27	23	21	2
1	17		15	21	17	23	23	24	20					20		1
0				18		19	19	21								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	90	96	96	100	100	98	100	100				81	82	19
18	89	86	91	91	100	98	94	95	97				78	78	18
17	85	82	86	86	98	94	90	91	92				74	75	17
16	81	78	81	81	94	90	86	87	88				71	71	16
15	77	74	76	76	90	86	82	83	83				76	67	15
14	72	70	70	71	86	82	78	78	79	71			64	64	14
13	68	66	65	66	81	78	74	74	75				68	69	13
12	64	62	60	61	77	74	69	70	70	63			57	57	12
11	60	58	55	56	73	70	65	66	66	60	62	53	54	54	11
10	56	53	50	51	68	66	61	62	61	56	56	59	50	50	10
9	51	49	45	46	64	62	57	57	57	52	52	56	46	47	9
8	47	45	40	42	60	58	53	53	53	48	48	53	42	43	8
7	43	41	35	37	56	54	49	49	48	44	44	49	39	40	7
6	39	37	30	32	51	50	45	45	44	40	40	46	35	36	6
5	35	33	25	27	47	46	41	40	40	37	36	43	32	33	5
4	31	29	19	22	43	42	37	36	35	33	32	39	28	29	4
3	26	25	14	17	39	38	32	32	31	29	28	36	25	26	3
2	22	21	9	12	34	34	28	28	26	25	24	33	21	22	2
1	18	17	4	7	30	30	24	24	22	22	20	30	18	18	1
0	14	13	0	2	26	26		19							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 13-15 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	73	100		98	100	90	84	95	79						19
18	69	75	100	94	98	86	81	91	75	79				92	18
17	64	70	100	90	94	82	77	86			84				17
16	60	66	100	86	89	78	73	82	67		80				16
15	56	62	100	82	85	75	70	78	63	69	77	73	64	80	15
14	52	57	95	78	80	71	66	74	60	66	73		61		14
13	47	53	90	74	76	67	63	69	56	63	69	66		72	13
12	43	49	84	70	71	63	59	65	52		65	62	55	68	12
11	39	44	79	66	67	60	55	61	48	56	61	59		64	11
10	35	40	74	62	63	56	52	56	44	53	57	55	49	61	10
9	31	36	68	58	58	52	48	52	50	54		52	45	57	9
8	26	31	63	54	54	48	45	48	36	47	50	48	42	53	8
7	22	27	57	50	49	44	41	44	32		46	45	39	49	7
6	18	23	52	46	45	41	37	39	28	40	42	42	36	45	6
5	14	18	47	42	40	37	34	35	24	37	38	38	33	41	5
4	9	14	41	38	36	33	30	31	20		34	35	30	37	4
3	5	10	36	34	31	29	27	27	17	31	31	31	27	33	3
2	1	5	31	30	27	25	23	22	13		27	28	24	29	2
1	0	1	25	26	22	22	19	18	24	23	24	21	21	25	1
0	0	0	20	22				14	21	19	21	17			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	100	100			94		100		77							19
18	99	100	96	99			100		72							18
17	95	100	92	95	86		100		68	80			71	79		17
16	91	96	87	91	82	82	97		64	75	82		67	75	74	16
15	87	92	83	86	78	78	92		60	71			64	71		15
14	83	88	78	82	74	74	88		56	66	74		60	68	66	14
13	79	83	74	78	70	70	84		52	62	65	70		56	64	62
12	75	79	69	74	66	66	80		48	57			59	53	60	12
11	71	75	65	70	62	62	76	58	43	53	57	62		49	57	54
10	67	70	60	66	58	57	72		39	48	53	58		45	53	50
9	63	66	56	62	54	53	68	47	35	44	48	54	44	42	49	9
8	60	62	52	58	50	49	64		31	39	44	50		38	46	42
7	56	57	47	54	46	45	60	35	27	34	40	46	35	34	42	7
6	52	53	43	50	42	41	56		23	30	36	42		31	38	34
5	48	49	38	46	38	37	52	24	18	25	32	39	25	27	35	5
4	44	44	34	42	34	33	47		14	21	27	35		23	31	26
3	40	40	29		30	29	43	12	10	16	23	31	15	20	27	3
2	36	36	25		26	25	39	6	6	12	19	27	11	16		2
1	32	31	20		22	20	35	1	2	7	15	23	6			1
0	27				16	31	0		3	11				16	10	0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 13-15 years

Age: 80-85 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	95		88		100		100				96	98	97	87		19		
18	91	96	84				97				92	94	93	83		18		
17	87	92	80		93		93				91	90		80		17		
16	82	87	76			87	89	85	90			85	85	76		16		
15	78	83	72		84		85	81				81				15		
14	74	78	68	67	79	79	81	77	81		77	77	77	69		14		
13	70	74	64		75		77	74			75		73	73	65	60	13	
12	65	69	60	60	70	71	72	70	73			69	68	69	57	12		
11	61	64	56	56	66	67	68	66	68		67	65	64	65	57	53	11	
10	57	60	51	53	61	63	64	62	64			61	60	61	54	50	10	
9	52	55	47	49	56	59	60	59	59		59	57	56	57	50	46	9	
8	48	51	43	46	52	55	56	55	55			53	51	53	46	43	8	
7	44	46	39	42	47	51	52	51	50		51	50	47	49	42	39	7	
6	40	42	35	39		47	48	47	46		47		43	45	39	36	6	
5	35	37	31	36	38	43	43	43	41		43	42	39	41	35	32	5	
4	31	33	27	32		39	39	40	37			40		35	37	31	29	4
3	27	28	23	29	29	35	35		32			36		30	33	28	25	3
2	23	24	19	25	24	31	31	32	28			32		26	29	24	21	2
1	18		15	22	20	27	27	28	23			28			20		1	
0				18		23	23	25									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	96	91	99	99	100	100	100	100	100				81	82	19	
18	92	87	94	94	100	100	98	99	100				78	79	18	
17	88	83	88	89	100	98	94	94	96				74	75	17	
16	83	79	83	84	98	94	90	90	91				71	72	16	
15	79	75	78	79	94	90	86	86	87				78	67	15	
14	75	71	73	74	89	86	82	82	83	73			64	64	14	
13	71	67	68	69	85	82	78	77	78				69	72	13	
12	67	63	63	64	81	78	74	73	74				57	57	12	
11	62	59	58	59	77	74	69	69	69				61	53	11	
10	58	55	53	54	72	70	65	65	65				62	50	10	
9	54	50	48	49	68	66	61	61	61				54	59	9	
8	50	46	43	44	64	62	57	56	56				49	43	8	
7	46	42	37	39	60	58	53	52	52				47	45	7	
6	42	38	32	34	55	54	49	48	48				43	41	6	
5	37	34	27	29	51	50	45	44	43				39	37	5	
4	33	30	22	24	47	46	41	39	39				42	29	4	
3	29	26	17	19	43	42	36	35	34				32	29	3	
2	25	22	12	14	38	38	32	31	30				25	36	2	
1	21	18	7	9	34	34	28	27	26				21	18	1	
0	16	14	2	5	30	30										0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	77	85		76	78	77	75	77	75	71	71					19
18	72	81	79	72	74	74	71	73	71	73						18
17	68	76	74	68	70	70	68	68				72				17
16	64	72	69	64	65	66	64	64	63		68					16
15	60	68	63	60	61	62	61	60	59	61	64	63	56	61		15
14	55	63	58	56	56	58	57	56	55	58	60		53			14
13	51	59	53	52	52	55	54	51	51	55	56	57			53	13
12	47	55	47	48	47	51	50	47	47		52	53	46	49		12
11	43	50	42	44	43	47	46	43	43	49	49	50			45	11
10	39	46	37	40	38	43	43	39	39	45	45	46	40	41		10
9	34	42	31	36	34	39	39	34		42	41	43	37	37		9
8	30	37	26	32	30	36	36	30	32	39	37	39	34	33		8
7	26	33	20	28	25	32	32	26	28		33	36	31	30		7
6	22	29	15	24	21	28	28	21	24	32	29	32	28	26		6
5	17	24	10	20	16	24	25	17	20	29	26	29	25	22		5
4	13	20	4	16	12	21	21	13	16		22	26	21	18		4
3	9	16	0	12	7	17	18	9	12	23	18	22	18	14		3
2	5	11	0	8	3	13	14	4	8		14	19	15	10		2
1	0	7	0	4	0	9	10	0		16	10	15	12	6		1
0		3	0	0				0		13	6	12	9			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	80	80			79		79		78								19	
18	76	76	76	79			75		74								18	
17	72	71	71	75	71		71		70	74			72	71			17	
16	68	67	67	71	67	66	67		66	69	67		68	67	70		16	
15	64	63	63	67	63	62	63		62	65			65	64			15	
14	60	58	58	63	59	58	59		58	60	59		61	60	62		14	
13	56	54	54	59	55	54	55		54	56	61	55		57	56	58	13	
12	52	50	49	55	51	49	51		49	51			55	54	53	54	12	
11	49	45	45	51	47	45	47	53	45	47	53	47		50	49	50	11	
10	45	41	40	47	43	41	43		41	42	49	43		46	45	46	10	
9	41	37	36	43	39	37	39	42	37	37	44	40	41	43	42	42	9	
8	37	32	31	39	35	33	35		33	33	40	36		39	38	38	8	
7	33	28	27	35	31	29	30	30	29	28	36	32	31	35	34	34	7	
6	29	24	23	30	27	25	26		24	24	32	28		31	31	30	6	
5	25	19	18	26	23	21	22	19	20	19	28	24	22	28	27	26	5	
4	21	15	14	22	19	17	18		16	15	23	20		24	23	22	4	
3	17	11	9		15	12	14	7	12	10	19	16	12	20	20		3	
2	13	6	5		11	8	10	2	8	6	15	12	7	17			2	
1	9	2	0		7	4	6	0	4	1	11	8	2				1	
0	0	0			0	2	0		0	7			9	6			0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 16-17 years

Age: 20-34 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	82		82		85		78				77	78	77	80		19		
18	78	81	78				73				73	73	73	76		18		
17	73	77	74		76		69			70		69		72		17		
16	69	72	70			64	65	63	69			65	65	69		16		
15	65	67	66		67		61	59			61					15		
14	61	63	62	65	62	56	57	56	60		57	57	56	61		14		
13	56	58	58		57		53	52			54		52	52	58	59	13	
12	52	54	54	58	53	48	49	48	51		50		48	48	55	55	12	
11	48	49	50	55	48	44	45	44	47		46		44	44	50	52	11	
10	43	45	45	51	44	40	40	40	42		42		40	40	46	48	10	
9	39	40	41	48	39	36	36	37	38	38	38		35	36	43	45	9	
8	35	36	37	44	35	32	32	33	34		34		31	32	39	41	8	
7	31	31	33	41	30	28	28	29	29		30		27	28	35	38	7	
6	26	27	29	37		24	24	25	25		26		23	24	31	34	6	
5	22	22	25	34	21	20	20	22	20		22		18	20	28	30	5	
4	18	18	21	30		16	16	18	16			18		14	16	24	27	4
3	14	13	17	27	12	13	11		11			14		10	12	20	23	3
2	9	9	13	23	7	9	7	10	7		10		6	8	16	20	2	
1	5		9	20	2	5	3	6	2		6				13		1	
0				16		1	0	3									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	81	79	82	81	82	79	81	79	78				79	79	19
18	77	75	77	76	77	75	77	75	74				75	76	18
17	73	70	72	71	73	71	73	70	69				72	72	17
16	69	66	66	66	69	67	68	66	65				68	69	16
15	65	62	61	61	65	63	64	62	61				62	65	15
14	60	58	56	56	60	59	60	58	56	59			61	61	14
13	56	54	51	51	56	55	56	53	52				57	56	13
12	52	50	46	46	52	51	52	49	48	52			54	54	12
11	48	46	41	41	48	47	48	45	43				49	51	11
10	44	42	36	36	43	43	44	41	39	44			45	46	10
9	39	38	31	32	39	39	40	37	34	40			41	43	9
8	35	34	26	27	35	35	35	32	30	36			37	40	8
7	31	30	21	22	31	31	31	28	26	33			36	37	7
6	27	26	15	17	26	27	27	24	21	29			33	33	6
5	23	22	10	12	22	23	23	20	17	25			26	29	5
4	19	17	5	7	18	19	19	15	12	21			22	26	4
3	14	13	0	2	14	15	15	11	8	18			18	23	3
2	10	9	0	0	9	11	11	7	4	14			20	19	2
1	6	5	0	0	5	7	7	3	0	10			16	16	1
0	2	1	0	0	1	3		0							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	75	88	80	81	79	76	80	75	71	72					74	19
18	71	75	83	76	76	75	73	76	71	72					74	18
17	67	70	78	72	72	72	69	71			73				74	17
16	62	66	72	68	67	68	66	67	63		70				74	16
15	58	62	67	64	63	64	62	63	59	62	66	65	57	62	74	15
14	54	57	62	60	58	60	58	58	55	59	62				74	14
13	50	53	56	56	54	56	55	54	51	56	58	58			74	13
12	45	49	51	52	50	53	51	50	47		54	55	48	50	74	12
11	41	44	45	48	45	49	48	46	43	50	50	51			74	11
10	37	40	40	44	41	45	44	41	39	46	47	48	41	42	74	10
9	33	36	35	39	36	41	40	37	43	43	44	38			74	9
8	28	31	29	35	32	37	37	33	32	40	39	41			74	8
7	24	27	24	31	27	34	33	29	28		35	37	32	31		7
6	20	23	19	27	23	30	30	24	24	33	31	34	29	27		6
5	16	18	13	23	18	26	26	20	20	30	27	30	26	23		5
4	12	14	8	19	14	22	22	16	16		24	27	23	19		4
3	7	10	3	15	10	18	19	12	12	24	20	24	20	15		3
2	3	5	0	11	5	15	15	7	8		16	20	16	11		2
1	0	1	0	7	1	11	12	3	17		12	17	13	7		1
0	0	0	0	3				0	14	8	13	10				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	83	84		81		81			77								19	
18	79	80	79	80			77		73								18	
17	75	76	75	76	73		73		69	74				72	72		17	
16	71	72	70	72	69	68	69		65	69		65		68	68	69	16	
15	68	67	66	68	65	64	65		61	65				64	64		15	
14	64	63	61	64	61	60	61		56	60		57		61	61	62	14	
13	60	59	57	60	57	56	57		52	56	62	53		57	57	58	13	
12	56	54	53	56	53	52	52		48	51			55	53	53	54	12	
11	52	50	48	52	49	48	48	54	44	47	53	45		50	50	50	11	
10	48	46	44	48	45	44	44		40	42	49	41		46	46	46	10	
9	44	41	39	44	41	40	40	43	36	37	45	38	41	42	42	42	9	
8	40	37	35	40	37	35	36		31	33	41	34		38	39	38	8	
7	36	33	30	36	33	31	32	31	27	28	36	30	31	35	35	34	7	
6	32	28	26	32	29	27	28		23	24	32	26		31	31	30	6	
5	28	24	21	28	25	23	24	20	19	19	28	22	22	27	28	26	5	
4	24	20	17	23	21	19	20		15	15	24	18		24	24	22	4	
3	20	15	13		17	15	16	8	11	10	20	14	12	20	20		3	
2	16	11	8		13	11	12	2	7	6	15	10	7	16			2	
1	12	7	4		9	7	7	0	2	1	11	6	3				1	
0	2				3	3	0		0	7				9	6		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 16-17 years

Age: 35-39 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	84		83		86		79				80	81	80	81		19	
18	80	83	79				75				76	77	76	77		18	
17	75	79	75		77		71				71	72		73		17	
16	71	74	71			65	66	64	70			68	68	70		16	
15	67	70	66		68		62	60				65				15	
14	62	65	62	65	63	57	58	57	62			61	60	60	62	14	
13	58	61	58		58		54	53			55	55	56	59	59	13	
12	54	56	54	58	54	49	50	49	53		53	51	52		55	12	
11	50	51	50	55	49	45	46	45	48		47	49	47	48	51	11	
10	45	47	46	51	45	41	42	42	44			45	43	43	47	48	10
9	41	42	42	48	40	37	37	38	39		39	41	38	39	44	9	
8	37	38	38	45	35	33	33	34	35			37	34	35	40	41	8
7	33	33	34	41	31	30	29	30	30		31	34	30	31	36	7	
6	28	29	30	38		26	25	26	26			27	26	27	32	34	6
5	24	24	26	34	22	22	21	23	21		23	26	21	23	29	5	
4	20	20	22	31		18	17	19	17			19	17	19	25	27	4
3	15	15	18	27	13	14	13		12			15	13	15	21	24	3
2	11	11	14	24	8	10	9	11	8			11	9	11	17	20	2
1	7		10	20	3	6	4	8	3		7				14	1	
0				17		2	0	4								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	82	79	81	81	85	82	82	81	81				79	79	19
18	78	75	76	76	80	78	78	77	76				75	76	18
17	74	71	71	71	76	74	74	73	72				72	72	17
16	70	67	65	66	72	70	70	69	68				68	69	16
15	65	63	60	61	68	66	66	64	63			63	65	65	15
14	61	59	55	56	63	62	61	60	59	60			61	62	14
13	57	55	50	51	59	58	57	56	55		59	57	58	58	13
12	53	51	45	46	55	54	53	52	50	52			54	55	12
11	49	47	40	41	51	50	49	47	46		51	50	51	51	11
10	44	42	35	36	46	46	45	43	41	45	47	47	47	48	10
9	40	38	30	31	42	42	41	39	37	41	43	43	44	44	9
8	36	34	25	26	38	38	37	35	33	37	39	40	40	41	8
7	32	30	20	21	34	34	33	31	28	33	35	37	37	37	7
6	28	26	15	16	29	30	28	26	24	30	31	34	33	33	6
5	24	22	9	11	25	26	24	22	19	26	27	30	30	30	5
4	19	18	4	6	21	22	20	18	15	22	24	27	26	26	4
3	15	14	0	1	17	18	16	14	11	18	20	24	23	23	3
2	11	10	0	0	12	14	12	9	6	14	16	20	19	19	2
1	7	6	0	0	8	10	8	5	2	11	12	17	16	16	1
0	3	2	0	0	4	6	1								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	75	91		81	82	80	77	81	75						19
18	71	73	85	77	78	76	73	77	71	73				74	18
17	67	69	80	73	73	72	70	73			74				17
16	62	65	74	69	69	69	66	68	63		70				16
15	58	61	69	65	64	65	63	64	59	63	67	66	57	63	15
14	54	56	64	61	60	61	59	60	55	60	63		54		14
13	50	52	58	57	55	57	55	56	51	56	59	59		55	13
12	45	48	53	53	51	53	52	51	47		55	55	48	51	12
11	41	43	48	49	47	50	48	47	43	50	51	52		47	11
10	37	39	42	45	42	46	45	43	39	47	47	48	42	43	10
9	33	35	37	41	38	42	41	39		44	44	45	39	39	9
8	28	30	32	37	33	38	37	34	32	40	40	41	36	35	8
7	24	26	26	33	29	34	34	30	28		36	38	33	31	7
6	20	22	21	29	24	31	30	26	24	34	32	35	29	27	6
5	16	17	15	25	20	27	27	21	20	31	28	31	26	23	5
4	12	13	10	21	15	23	23	17	16		24	28	23	19	4
3	7	9	5	17	11	19	19	13	12	24	21	24	20	16	3
2	3	4	0	13	6	15	16	9	8		17	21	17	12	2
1	0	0	0	9	2	12	12	4		18	13	17	14	8	1
0	0	0		5				0		14	9	14	11		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	83	85			81		82		77							19	
18	79	83	81	81			78		73							18	
17	75	78	76	77	73		74		69	74				71	72	17	
16	71	74	72	73	69	69	70		65	69	64		68	68	69	16	
15	68	70	67	69	65	65	66		61	65			64	65		15	
14	64	65	63	65	61	61	62		56	60	56		60	61	61	14	
13	60	61	59	61	57	57	58		52	56	52		57	57	57	13	
12	56	57	54	57	53	53	54		48	51			55	53	54	12	
11	52	52	50	53	49	49	50	54	44	47	54	45		49	50	11	
10	48	48	45	49	45	45	45		40	42	49	41		46	46	45	10
9	44	44	41	45	41	41	41	43	36	37	45	37	41	42	43	9	
8	40	39	36	40	37	37	37		31	33	41	33		38	39	8	
7	36	35	32	36	33	33	33	31	27	28	37	29	31	35	35	7	
6	32	31	27	32	29	28	29		23	24	32	25		31	32	6	
5	28	26	23	28	25	24	25	20	19	19	28	21	22	27	28	5	
4	24	22	19	24	21	20	21		15	15	24	17		24	24	22	
3	20	17	14		17	16	17	8	11	10	20	13	12	20	21	3	
2	16	13	10		13	12	13	3	7	6	16	9	7	16		2	
1	12	9	5		9	8	9	0	2	1	11	5	3			1	
0	4				4	5	0		0	7				10	6	0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 16-17 years

Age: 40-44 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	85		83		87		80			81	82	82	81		19	
18	80	84	79				76			77	78	77	78		18	
17	76	80	75		77		71			72		74		74	17	
16	72	75	71			66	67	65	71			70	69	70	16	
15	68	71	67		68		63	61			65				15	
14	63	66	63	66	64	58	59	58	62		61	61	61	63	14	
13	59	62	59		59		55	54		56		57	57	59	59	13
12	55	57	55	59	54	50	51	50	53		54	53	53	56	12	
11	51	53	51	55	50	46	47	46	49	48	50	48	49	52	52	11
10	46	48	47	52	45	42	43	42	44		46	44	45	48	48	10
9	42	44	43	48	41	38	38	39	40	40	42	40	41	44	45	9
8	38	39	39	45	36	34	34	35	35		38	36	37	40	41	8
7	33	34	35	41	32	30	30	31	31	32	34	32	33	37	38	7
6	29	30	30	38		26	26	27	26		28	27	29	33	34	6
5	25	25	26	34	22	22	22	24	22	24	26	23	25	29	31	5
4	21	21	22	31		18	18	20	17	20		19	21	25	27	4
3	16	16	18	27	13	15	14		13	16		15	17	22	24	3
2	12	12	14	24	9	11	10	12	9	12		10	13	18	20	2
1	8		10	20	4	7	5	8	4	8				14		1
0				17		3	1	5								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	80	82	82	86	84	83	83	82				79	79	19
18	79	76	77	77	82	80	79	78	78				75	76	18
17	74	72	71	72	78	76	75	74	74				72	72	17
16	70	68	66	67	74	72	71	70	69				68	69	16
15	66	64	61	62	69	68	66	66	65		64		65	65	15
14	62	60	56	57	65	64	62	62	61	60			61	62	14
13	58	56	51	52	61	60	58	57	56		60	57	58	58	13
12	53	52	46	47	57	56	54	53	52	53			54	55	12
11	49	48	41	42	52	52	50	49	47		52	51	51	51	11
10	45	44	36	37	48	48	46	45	43	45	48	47	47	48	10
9	41	40	31	32	44	44	42	40	39	42	44	44	44	44	9
8	37	36	26	27	40	40	38	36	34	38	40	41	40	41	8
7	33	31	20	22	35	36	33	32	30	34	36	38	37	37	7
6	28	27	15	17	31	32	29	28	25	30	32	34	33	34	6
5	24	23	10	12	27	28	25	24	21	26	28	31	30	30	5
4	20	19	5	7	23	24	21	19	17	23	25	28	26	27	4
3	16	15	0	2	18	20	17	15	12	19	21	24	23	23	3
2	12	11	0	0	14	16	13	11	8	15	17	21	19	19	2
1	7	7	0	0	10	12	9	7	4	11	13	18	16	16	1
0	3	3	0	0	6	8		2							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	73		93	83	84	81	78	83	75							19
18	69	72	88	79	79	77	74	78	71	73						18
17	65	68	82	75	75	73	70	74			75					17
16	61	64	77	71	70	69	67	70	63		71					16
15	56	59	72	67	66	66	63	66	59	63	67	66	58	64		15
14	52	55	66	63	61	62	60	61	55	60	64		55			14
13	48	51	61	59	57	58	56	57	51	57	60	59		56		13
12	44	46	55	55	53	54	52	53	47		56	56	49	52		12
11	40	42	50	51	48	50	49	48	43	51	52	53		48		11
10	35	38	45	47	44	47	45	44	39	47	48	49	42	44		10
9	31	34	39	43	39	43	42	40	44	44	44	46	39	40		9
8	27	29	34	39	35	39	38	36	32	41	41	42	36	36		8
7	23	25	29	35	30	35	34	31	28		37	39	33	32		7
6	18	21	23	31	26	31	31	27	24	34	33	35	30	28		6
5	14	16	18	27	21	28	27	23	20	31	29	32	27	24		5
4	10	12	13	23	17	24	24	19	16		25	28	24	20		4
3	6	8	7	19	12	20	20	14	12	25	21	25	21	16		3
2	1	3	2	15	8	16	17	10	8		18	22	18	13		2
1	0	0	0	11	4	12	13	6	18	14	18	14	9			1
0	0	0	0	7				2	15	10	15	11				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	87		87		83		84		76								19	
18	83	85	82	82			80		72								18	
17	79	81	78	78	75		76		68	74				71	72		17	
16	75	76	74	74	71	71	72		63	69		65		67	69	69	16	
15	71	72	69	70	67	67	67		59	65				64	65		15	
14	67	68	65	66	63	62	63		55	60		57		60	61	61	14	
13	63	63	60	62	59	58	59		51	56	62	53		56	58	57	13	
12	59	59	56	58	55	54	55		47	51			55	53	54	53	12	
11	55	55	51	54	51	50	51	55	43	47	54	45		49	50	49	11	
10	51	50	47	50	47	46	47		38	42	50	41		45	47	45	10	
9	47	46	42	46	43	42	43		34	37	45	37	41	42	43	41	9	
8	43	42	38	42	39	38	39		30	33	41	33		38	39	37	8	
7	39	37	34	37	35	34	35	32	26	28	37	30	31	34	36	33	7	
6	35	33	29	33	31	30	31		22	24	33	26		31	32	29	6	
5	31	28	25	29	27	26	27	20	18	19	28	22	22	27	28	26	5	
4	27	24	20	25	23	21	22		13	15	24	18		23	25	22	4	
3	23	20	16		19	17	18	9	9	10	20	14	12	20	21		3	
2	19	15	11		15	13	14	3	5	6	16	10	7	16			2	
1	15	11	7		11	9	10	0	1	1	12	6	3				1	
0	7				5	6	0		0	7				10	6		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 16-17 years

Age: 45-49 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	86		83		87		81				82	84	83	82		19
18	81	85	79				77				78	80	79	78		18
17	77	81	75		78		73				73	75		74		17
16	73	76	71			67	69	66	72			71	71	71		16
15	69	72	67		69		64	62			67					15
14	64	67	63	66	65	59	60	59	63		63	63	63	63		14
13	60	63	59		60		56	55			57	58	59	60	59	13
12	56	58	55	59	55	51	52	51	54		55	54	55	56	56	12
11	51	54	51	55	51	47	48	47	50		49	51	50	51	52	11
10	47	49	47	52	46	43	44	44	45		47	46	47	48	49	10
9	43	45	43	48	42	39	40	40	41		41	44	42	43	45	9
8	39	40	39	45	37	35	35	36	36		40	37	39	41	41	8
7	34	36	35	41	32	31	31	32	32		33	36	33	35	37	7
6	30	31	31	38		28	27	28	27		29	29	31	33	34	6
5	26	26	27	34	23	24	23	25	23		25	28	25	26	30	5
4	22	22	23	31		20	19	21	19		21	20	22	26	27	4
3	17	17	19	27	14	16	15		14		17	16	18	22	24	3
2	13	13	15	24	10	12	11	13	10		13	12	14	18	20	2
1	9		11	21	5	8	7	10	5		9			15		1
0				17		4	2	6								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	82	83	83	88	86	84	84	84				79	80	19
18	79	78	78	78	84	82	80	80	80				75	76	18
17	75	74	73	73	80	78	76	76	75				72	73	17
16	71	70	68	68	76	74	72	72	71				68	69	16
15	67	65	63	63	71	70	68	67	67				65	65	15
14	63	61	58	58	67	66	63	63	62	61			61	62	14
13	58	57	52	53	63	62	59	59	58		61	58	58	58	13
12	54	53	47	48	59	58	55	55	54	54		53	54	55	12
11	50	49	42	43	54	54	51	51	49		53	52	51	51	11
10	46	45	37	38	50	50	47	46	45	46	49	48	47	48	10
9	42	41	32	34	46	46	43	42	40	42	45	45	44	44	9
8	37	37	27	29	42	42	39	38	36	38	41	42	40	41	8
7	33	33	22	24	37	38	35	34	32	35	37	38	37	37	7
6	29	29	17	19	33	34	30	29	27	31	33	35	33	34	6
5	25	25	12	14	29	30	26	25	23	27	29	32	30	30	5
4	21	21	7	9	25	26	22	21	18	23	25	28	26	27	4
3	17	17	2	4	20	22	18	17	14	20	22	25	23	23	3
2	12	12	0	0	16	18	14	13	10	16	18	22	19	20	2
1	8	8	0	0	12	14	10	8	5	12	14	19	16	16	1
0	4	4	0	0	8	10	4								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	73		96	85	85	82	78	84	75							19
18	69	71	90	81	81	78	75	80	71	74						18
17	65	67	85	77	77	74	71	76			76					17
16	61	63	80	73	72	70	67	71	63		72					16
15	56	58	74	69	68	66	64	67	59	64	68	67	59	65		15
14	52	54	69	65	63	63	60	63	55	61	65		56			14
13	48	50	64	61	59	59	57	58	51	57	61	60		57		13
12	44	45	58	57	54	55	53	54	47		57	57	49	53		12
11	40	41	53	53	50	51	49	50	43	51	53	53		49		11
10	35	37	47	49	45	47	46	46	39	48	49	50	43	45		10
9	31	32	42	45	41	44	42	41	45	45	45	46	40	41		9
8	27	28	37	41	36	40	39	37	32	41	42	43	37	37		8
7	23	24	31	37	32	36	35	33	28		38	39	34	33		7
6	18	19	26	33	28	32	32	29	24	35	34	36	31	29		6
5	14	15	21	29	23	28	28	24	20	32	30	33	28	25		5
4	10	11	15	25	19	25	24	20	16		26	29	24	22		4
3	6	6	10	21	14	21	21	16	12	25	22	26	21	18		3
2	1	2	5	17	10	17	17	11	8		19	22	18	14		2
1	0	0	0	12	5	13	14	7	19	15	19	15	10			1
0	0	0	0	8				3	15	11	15	12				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	87		89		83		86		76								19
18	83	87	84	83			82		72								18
17	79	83	80	79	75		78		68	74				71	73		17
16	75	79	75	75	71	72	73		63	69	66		67	69	69		16
15	71	74	71	71	67	68	69		59	65			63	65			15
14	67	70	66	67	63	64	65		55	60	58		60	62	61		14
13	63	66	62	63	59	60	61		51	56	54		56	58	57		13
12	59	61	57	59	55	55	57		47	51			55	52	54		12
11	55	57	53	55	51	51	53	55	43	47	54	46		49	51		11
10	51	53	49	51	47	47	49		38	42	50	42	45	47	45		10
9	47	48	44	47	43	43	45	44	34	37	46	39	41	41	43		9
8	43	44	40	43	39	39	41		30	33	41	35		38	40		8
7	39	39	35	39	35	35	37	32	26	28	37	31	31	34	36		7
6	35	35	31	35	31	31	33		22	24	33	27		30	32		6
5	31	31	26	31	27	27	28	21	18	19	29	23	22	27	29		5
4	27	26	22	27	23	23	24		13	15	24	19		23	25		4
3	23	22	17		19	19	20	9	9	10	20	15	12	19	21		3
2	19	18	13		15	14	16	3	5	6	16	11	8	16			2
1	15	13	9		11	10	12	0	1	1	12	7	3				1
0	9				6	8	0		0	8				10	6		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 16-17 years

Age: 50-54 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	87		84		89		82				84	85	85	82		19
18	82	86	80				78				80	81	81	79		18
17	78	82	76		79		74				74		77		75	17
16	74	77	72			68	70	68	74			73	73	71		16
15	70	73	68		70		66	64				68				15
14	65	68	64	66	66	61	62	60	65			65	64	65	64	14
13	61	64	60		61		58	56			58		60	60	59	13
12	57	59	55	59	56	53	53	52	56			57	56	56	56	12
11	52	55	51	55	52	49	49	49	51			50	53	52	53	11
10	48	50	47	52	47	45	45	45	47			49	47	48	49	10
9	44	46	43	48	43	41	41	41	42			42	45	43	45	9
8	40	41	39	45	38	37	37	37	38			41	39	40	41	8
7	35	37	35	42	34	33	33	34	33			34	37	35	38	7
6	31	32	31	38		29	29	30	29			30	30	32	34	6
5	27	28	27	35	24	25	25	26	24			26	30	28	30	5
4	23	23	23	31		21	20	22	20			22	22	24	26	4
3	18	18	19	28	15	17	16		15			18	18	20	23	3
2	14	14	15	24	11	13	12	15	11			15	13	16	19	2
1	10		11	21	6	9	8	11	6			11			15	1
0				17		5	4	7								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	83	85	85	91	88	85	86	86				79	80	19
18	80	79	80	80	86	84	81	82	82				75	76	18
17	76	75	75	75	82	80	77	78	77				72	73	17
16	72	71	70	70	78	76	73	73	73				68	69	16
15	68	67	64	65	74	72	69	69	69				66	65	15
14	63	63	59	60	69	68	65	65	64	62			61	62	14
13	59	59	54	55	65	64	61	61	60				62	59	13
12	55	55	49	50	61	60	57	57	56	54			54	55	12
11	51	51	44	45	57	56	53	52	51				54	51	11
10	47	46	39	40	52	52	48	48	47	47	50	49	47	48	10
9	43	42	34	35	48	48	44	44	44	42	43	46	44	44	9
8	38	38	29	30	44	44	40	40	38	39	42	43	40	41	8
7	34	34	24	25	40	40	36	35	34				36	38	7
6	30	30	19	20	35	36	32	31	29				32	34	6
5	26	26	13	15	31	32	28	27	25				28	30	5
4	22	22	8	11	27	28	24	23	20				24	26	4
3	17	18	3	6	23	24	20	19	16				20	22	3
2	13	14	0	1	18	20	15	14	12	17	19	23	19	20	2
1	9	10	0	0	14	16	11	10	7	13	15	20	16	16	1
0	5	6	0	0	10	12		6							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	72	99		87	87	82	79	85	77						19
18	68	74	93	82	83	79	75	81	74	74				78	18
17	63	70	88	78	78	75	72	77			77				17
16	59	65	83	74	74	71	68	73	66		73				16
15	55	61	77	70	70	67	64	68	62	64	69	68	59	66	15
14	51	57	72	66	65	63	61	64	58	61	65		56		14
13	46	52	67	62	61	60	57	60	54	58	62	61		58	13
12	42	48	61	58	56	56	54	56	50		58	57	50	54	12
11	38	44	56	54	52	52	50	51	46	51	54	54		50	11
10	34	39	51	50	47	48	47	47	42	48	50	51	44	47	10
9	29	35	45	46	43	44	43	43		45	46	47	41	43	9
8	25	31	40	42	38	41	39	38	34	42	42	44	37	39	8
7	21	27	34	38	34	37	36	34	31		39	40	34	35	7
6	17	22	29	34	29	33	32	30	27	35	35	37	31	31	6
5	13	18	24	30	25	29	29	26	23	32	31	33	28	27	5
4	8	14	18	26	21	26	25	21	19		27	30	25	23	4
3	4	9	13	22	16	22	21	17	15	26	23	26	22	19	3
2	0	5	8	18	12	18	18	13	11		19	23	19	15	2
1	0	1	2	14	7	14	14	9		19	16	20	16	11	1
0	0	0		10				4		16	12	16	13		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93	97	90		88		88		75							19	
18	90	93	86	85			84		70							18	
17	86	88	81	81	80		80		66	74			70	73		17	
16	82	84	77	77	76	77	76		62	69	68		66	69	69	16	
15	78	80	72	73	72	73	72		58	65			63	66		15	
14	74	75	68	69	68	69	68		54	60	60		59	62	61	14	
13	70	71	64	65	64	65	63		50	56	63	56		55	58	57	13
12	66	67	59	61	60	60	59		45	51			55	52	55	12	
11	62	62	55	57	56	56	55	55	41	47	54	48		48	51	49	11
10	58	58	50	52	52	52	51		37	42	50	44		44	47	45	10
9	54	54	46	48	48	48	47	44	33	37	46	40	41	41	44	41	9
8	50	49	41	44	44	44	43		29	33	42	36		37	40	37	8
7	46	45	37	40	40	40	39	32	25	28	37	32	32	33	36	33	7
6	42	41	32	36	36	36	35		20	24	33	28		30	33	29	6
5	38	36	28	32	32	32	31	21	16	19	29	24	22	26	29	25	5
4	34	32	24	28	28	28	27		12	15	25	20		22	25	21	4
3	30	28	19		24	24	23	9	8	10	20	16	12	19	22		3
2	26	23	15		20	19	19	4	4	6	16	12	8	15			2
1	22	19	10		16	15	14	0	0	1	12	9	3				1
0	15				11	10	0		0	8				11	5		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 16-17 years

Age: 55-59 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	88		84		90		84				86	87	86	83		19	
18	83	87	80				80				82	83	82	79		18	
17	79	83	76		81		76			76		79		75		17	
16	75	78	72			70	72	69	75			74	74	72		16	
15	70	74	68		72		68	65			70					15	
14	66	69	64	66	67	62	64	62	66		66	66	66	64		14	
13	62	65	60		62		59	58		60		62	62	61	59	13	
12	58	60	56	59	58	54	55	54	57		58	57	58	56		12	
11	53	56	52	56	53	50	51	50	53	52	55	53	54	53	52	11	
10	49	51	48	52	49	46	47	47	48		51	49	50	49		10	
9	45	47	44	49	44	42	43	43	44	44	47	45	46	46		9	
8	41	42	40	45	39	38	39	39	39		43	40	42	42		8	
7	36	38	36	42	35	35	35	35	35	36	39	36	38	38		7	
6	32	33	32	38		31	30	31	30		32	32	34	34		6	
5	28	29	28	35	26	27	26	28	26	28	31	28	30	31		5	
4	23	24	24	31		23	22	24	21			23	26	27	28		4
3	19	20	19	28	17	19	18		17	20		19	22	23	24		3
2	15	15	15	24	12	15	14	16	12	16		15	18	19	21		2
1	11		11	21	7	11	10	13	8	12				16		1	
0				17		7	6	9								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	86	85	87	87	93	90	87	88	88				79	80	19	
18	81	80	82	82	89	86	83	84	84				75	76	18	
17	77	76	77	77	85	82	79	80	80				72	73	17	
16	73	72	71	72	80	78	75	75	75				68	69	16	
15	69	68	66	67	76	74	71	71	71		67	65	66		15	
14	65	64	61	62	72	70	67	67	67	63			61	62	14	
13	60	60	56	57	68	66	62	63	62		63	60	58	59		13
12	56	56	51	52	63	62	58	59	58	56			54	55		12
11	52	52	46	47	59	58	54	54	53		55	54	51	52		11
10	48	48	41	42	55	54	50	50	49	48	51	50	47	48		10
9	44	44	36	37	51	50	46	46	45	44	47	47	44	45		9
8	40	40	31	32	46	46	42	42	40	40	43	44	40	41		8
7	35	36	26	28	42	42	38	37	36	37	39	41	37	37		7
6	31	32	21	23	38	38	34	33	31	33	35	37	33	34		6
5	27	27	15	18	34	34	30	29	27	29	31	34	30	30		5
4	23	23	10	13	29	30	25	25	23	25	27	31	26	27		4
3	19	19	5	8	25	26	21	21	18	22	23	27	23	23		3
2	14	15	0	3	21	22	17	16	14	18	20	24	19	20		2
1	10	11	0	0	17	18	13	12	10	14	16	21	16	16		1
0	6	7	0	0	12	14		8								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	72	100	89	90	83	79	87	77							19
18	68	98	85	86	79	76	83	74	75					80	18
17	63	92	81	82	76	72	78			78					17
16	59	87	77	77	72	69	74	66		74					16
15	55	82	73	73	68	65	70	62	65	70	68	60	68		15
14	51	76	69	68	64	62	66	58	62	66	57				14
13	46	71	65	64	60	58	61	54	58	63	62			60	13
12	42	66	61	59	57	54	57	50		59	58	50	56		12
11	38	60	57	55	53	51	53	46	52	55	55			52	11
10	34	55	53	50	49	47	48	42	49	51	51	44	48		10
9	29	49	49	46	45	44	44	46	47	48	41	44			9
8	25	44	45	41	42	40	40	34	42	43	44	38	40		8
7	21	39	41	37	38	36	36	31		40	41	35	36		7
6	17	33	37	33	34	33	31	27	36	36	37	32	32		6
5	13	28	33	28	30	29	27	23	33	32	34	29	29		5
4	8	23	29	24	26	26	23	19		28	31	26	25		4
3	4	17	25	19	23	22	19	15	26	24	27	22	21		3
2	0	12	21	15	19	18	14	11		20	24	19	17		2
1	0	7	17	10	15	15	10	20	16	20	16	13	13		1
0	0	1	13				6	16	13	17	13				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93	93			88		91		75							19	
18	90	95	88	87			87		70							18	
17	86	91	84	83	80		83		66	74			70	73		17	
16	82	86	80	79	76	78	78		62	69	69		66	70	69	16	
15	78	82	75	75	72	74	74		58	65			62	66		15	
14	74	78	71	71	68	70	70		54	60	61		59	62	61	14	
13	70	73	66	67	64	66	66		50	56	63	58		55	59	57	13
12	66	69	62	62	60	62	62		45	51			56	51	55	53	12
11	62	65	57	58	56	58	58	56	41	47	54	50		48	51	49	11
10	58	60	53	54	52	53	54		37	42	50	46		44	48	45	10
9	54	56	48	50	48	49	50	44	33	37	46	42	41	40	44	41	9
8	50	52	44	46	44	45	46		29	33	42	38		37	40	37	8
7	46	47	40	42	40	41	42	33	25	28	38	34	32	33	37	33	7
6	42	43	35	38	36	37	38		20	24	33	30		29	33	29	6
5	38	39	31	34	32	33	34	21	16	19	29	26	22	25	29	25	5
4	34	34	26	30	28	29	29		12	15	25	22		22	26	21	4
3	30	30	22		24	25	25	10	8	10	21	18	12	18	22		3
2	26	26	17		20	21	21	4	4	6	16	14	8	14			2
1	22	21	13		16	17	17	0	0	1	12	10	3				1
0	17				12	13	0		0	8				11	5	0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 16-17 years

Age: 60-64 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		85		91		86				88	89	88	83		19
18	84	88	80				82				84	84	84	80		18
17	80	84	76		82		78			78		80		76		17
16	76	79	72			72	74	71	77			76	76	72		16
15	71	75	68		73		70	67			73					15
14	67	70	64	66	69	64	66	64	68		69	67	68	65		14
13	63	66	60		64		62	60		62		63	64	61	59	13
12	59	61	56	59	59	56	57	56	59		61	59	60	56		12
11	54	57	52	56	55	52	53	52	55	54	57	55	56	54	52	11
10	50	52	48	52	50	48	49	48	50		53	50	52	50	49	10
9	46	48	44	49	46	44	45	45	46	46	49	46	48	46	45	9
8	41	43	40	45	41	40	41	41	41		45	42	43	42	42	8
7	37	39	36	42	36	36	37	37	37	38	42	38	39	39	38	7
6	33	34	32	38		33	33	33	32	34		33	35	35	35	6
5	29	30	28	35	27	29	28	30	28	30	34	29	31	31	31	5
4	24	25	24	31		25	24	26	23	26		25	27	27	28	4
3	20	21	20	28	18	21	20		19	22		21	23	24	24	3
2	16	16	16	24	14	17	16	18	14	18		17	19	20	21	2
1	12		12	21	9	13	12	14	10	14				16		1
0				18	9	8	11									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	87	86	89	89	96	92	89	90	91				79	80	19
18	83	82	84	84	92	88	85	86	86				76	76	18
17	79	78	79	79	87	84	81	82	82				72	73	17
16	74	74	74	74	83	80	77	78	78				68	69	16
15	70	70	69	70	79	76	73	73	73				65	66	15
14	66	65	63	65	75	72	69	69	69	64			61	62	14
13	62	61	58	60	70	68	65	65	65		64	62	58	59	13
12	58	57	53	55	66	64	60	61	60	57			54	55	12
11	53	53	48	50	62	60	56	57	56		56	55	51	52	11
10	49	49	43	45	58	56	52	52	51	49	52	52	47	48	10
9	45	45	38	40	53	52	48	48	47	46	48	49	44	45	9
8	41	41	33	35	49	48	44	44	43	42	44	45	40	41	8
7	37	37	28	30	45	44	40	40	38	38	40	42	37	38	7
6	33	33	23	25	41	40	36	35	34	34	36	39	33	34	6
5	28	29	18	20	36	36	32	31	29	30	32	36	30	31	5
4	24	25	12	15	32	32	27	27	25	27	28	32	26	27	4
3	20	21	7	10	28	28	23	23	21	23	24	29	23	24	3
2	16	17	2	5	24	24	19	19	16	19	20	26	19	20	2
1	12	12	0	0	19	20	15	14	12	15	17	22	16	16	1
0	7	8	0	0	15	16		10							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	70	100	91	93	84	80	88	77								19
18	66	72	100	87	88	80	77	84	74	75						18
17	62	68	96	83	84	76	73	80			79					17
16	57	63	91	79	79	73	69	75	66		75					16
15	53	59	85	75	75	69	66	71	62	65	71	69	60	70		15
14	49	55	80	71	70	65	62	67	58	62	67		57			14
13	45	50	75	67	66	61	59	63	54	59	63	62		62		13
12	41	46	69	63	62	58	55	58	50		60	59	51	58		12
11	36	42	64	59	57	54	51	54	46	52	56	55		54		11
10	32	37	58	55	53	50	48	50	42	49	52	52	45	50		10
9	28	33	53	51	48	46	44	46	46	48	49	42	46			9
8	24	29	48	47	44	42	41	41	34	43	44	45	39	42		8
7	19	24	42	43	39	39	37	37	31		40	42	35	38		7
6	15	20	37	39	35	35	33	33	27	36	37	38	32	34		6
5	11	16	32	35	30	31	30	29	23	33	33	35	29	31		5
4	7	11	26	31	26	27	26	24	19		29	31	26	27		4
3	2	7	21	27	21	23	23	20	15	27	25	28	23	23		3
2	0	3	16	23	17	20	19	16	11		21	24	20	19		2
1	0	0	10	19	13	16	15	11	20	17	21	17	15			1
0	0	5	15					7	17	14	18	14				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	97	94			89		94		73								19	
18	93	97	90	89			90		69								18	
17	89	93	86	85	81		86		65	74				69	74		17	
16	85	89	81	81	78	79	82		61	69	71		65	70	69		16	
15	81	84	77	77	74	75	78		57	65			62	66			15	
14	77	80	72	73	70	71	74		52	60	63		58	63	61		14	
13	73	76	68	69	66	67	69		48	56	63	60		54	59	57	13	
12	69	71	63	65	62	63	65		44	51			56	51	55	53	12	
11	65	67	59	61	58	59	61	56	40	47	55	52		47	52	49	11	
10	61	63	55	57	54	55	57		36	42	50	48		43	48	45	10	
9	57	58	50	52	50	51	53	45	32	37	46	44	41	40	44	41	9	
8	53	54	46	48	46	47	49		27	33	42	40		36	41	37	8	
7	49	50	41	44	42	42	45	33	23	28	38	36	32	32	37	33	7	
6	45	45	37	40	38	38	41		19	24	34	32		28	33	29	6	
5	41	41	32	36	34	34	37	22	15	19	29	28	22	25	30	25	5	
4	37	37	28	32	30	30	33		11	15	25	24		21	26	21	4	
3	33	32	23		26	26	29	10	7	10	21	20	12	17	22		3	
2	29	28	19		22	22	24	4	3	6	17	16	8	14			2	
1	25	24	15		18	18	20	0	0	1	12	12	3				1	
0	19	24	15		14	16	0		0	8				11	5		0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 16-17 years

Age: 65-69 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		85		93		89				90	90	90	84		19
18	85	90	81				85				86	86	86	80		18
17	81	85	77		84		81			80		82		76		17
16	77	81	73			74	76	73	79			77	77	73		16
15	72	76	69		75		72	70			74					15
14	68	71	65	66	70	67	68	66	70		70	69	69	65		14
13	64	67	61		66		64	62		64		65	65	62	60	13
12	60	62	57	59	61	59	60	58	61		63	60	61	56		12
11	55	58	53	56	57	55	56	55	57	56	59	56	57	54	52	11
10	51	53	49	52	52	51	52	51	52		55	52	53	50	49	10
9	47	49	44	49	47	47	48	47	48	48	51	48	49	47	45	9
8	42	44	40	45	43	43	43	43	43		47	44	45	43	42	8
7	38	40	36	42	38	39	39	39	39	40	43	39	41	39	38	7
6	34	35	32	39		35	35	36	34		36	35	37	35	35	6
5	30	31	28	35	29	31	31	32	30		32	35	31	33	32	5
4	25	26	24	32		27	27	28	25		28		27	29	28	4
3	21	22	20	28	20	23	23		21		24		22	25	24	3
2	17	17	16	25	15	19	19	21	16		20		18	21	20	2
1	13		12	21	11	15	14	17	12		16			17		1
0				18		11	10	13								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	88	87	91	92	99	95	92	93	93				79	80	19	
18	84	83	86	87	95	91	88	89	89				76	77	18	
17	80	79	81	82	90	87	83	84	85				72	73	17	
16	76	75	76	77	86	83	79	80	80				69	70	16	
15	72	71	71	72	82	79	75	76	76		70		65	66	15	
14	68	67	66	67	77	75	71	72	72	66			62	62	14	
13	63	63	61	62	73	71	67	67	67		65		64	58	13	
12	59	59	56	57	69	67	63	63	63		58		55	55	12	
11	55	54	50	52	65	63	59	59	58		57		57	51	11	
10	51	50	45	47	60	59	55	55	54	51	53	54	48	48	10	
9	47	46	40	42	56	55	50	51	50	47	49	50	44	45	9	
8	42	42	35	37	52	51	46	46	45	43	45	47	40	41	8	
7	38	38	30	32	48	47	42	42	41		39	41	44	37	38	7
6	34	34	25	27	43	43	38	38	37		36	37	41	33	34	6
5	30	30	20	22	39	39	34	34	32		33	37	30	31	5	
4	26	26	15	17	35	35	30	29	28		28	29	34	26	27	4
3	22	22	10	12	31	31	26	25	23		24	25	31	23	24	3
2	17	18	5	7	26	27	22	21	19		21	21	27	19	20	2
1	13	14	0	2	22	23	18	17	15		17	17	24	16	17	1
0	9	10	0	0	18	19		13								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	69	100		93	95	85	81	90	77						19
18	64	71	100	89	91	81	77	85	74	76				84	18
17	60	66	100	85	86	77	74	81			80				17
16	56	62	94	81	82	74	70	77	66		76				16
15	52	58	89	77	77	70	66	73	62	66	72	70	61	72	15
14	47	53	84	73	73	66	63	68	58	63	68		58		14
13	43	49	78	69	68	62	59	64	54	59	64	63		64	13
12	39	45	73	65	64	58	56	60	50		60	60	52	60	12
11	35	41	68	61	60	55	52	56	46	53	57	56		56	11
10	30	36	62	56	55	51	48	51	42	50	53	53	45	52	10
9	26	32	57	52	51	47	45	47	47	49	49	49	42	49	9
8	22	28	52	48	46	43	41	43	34	43	45	46	39	45	8
7	18	23	46	44	42	39	38	38	31		41	42	36	41	7
6	13	19	41	40	37	36	34	34	27	37	37	39	33	37	6
5	9	15	35	36	33	32	30	30	23	34	34	35	30	33	5
4	5	10	30	32	28	28	27	26	19		30	32	27	29	4
3	1	6	25	28	24	24	23	21	15	27	26	29	24	25	3
2	0	2	19	24	19	20	20	17	11		22	25	20	21	2
1	0	0	14	20	15	17	16	13		21	18	22	17	17	1
0	0	0	9	16				9		17	14	18	14		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		96		91		98		72							19	
18	96	100	92	92			94		68							18	
17	92	95	87	87	83		90		64	74				68	74	17	
16	88	91	83	83	79	81	85		59	69	74		64	70	69	16	
15	84	87	78	79	75	76	81		55	65			61	67		15	
14	80	82	74	75	71	72	77		51	60	66		57	63	61	14	
13	76	78	69	71	67	68	73		47	56	63	62		53	59	13	
12	72	74	65	67	64	64	69		43	51			56	50	56	12	
11	68	69	61	63	60	60	65	56	39	47	55	54		46	52	11	
10	64	65	56	59	56	56	61		34	42	51	50		42	48	45	10
9	60	61	52	55	52	52	57	45	30	37	46	46	41	39	45	9	
8	56	56	47	51	48	48	53		26	33	42	42		35	41	8	
7	52	52	43	47	44	44	49	33	22	28	38	38	32	31	37	7	
6	48	48	38	43	40	40	45		18	24	34	34		28	34	6	
5	44	43	34	39	36	35	40	22	14	19	30	30	22	24	30	5	
4	40	39	30	35	32	31	36		10	15	25	26		20	26	4	
3	36	35	25		28	27	32	10	5	10	21	22	13	17	23	3	
2	32	30	21		24	23	28	5	1	6	17	18	8	13		2	
1	28	26	16		20	19	24	0	0	1	13	15	3			1	
0	21				15	20	0		0	8				12	5	0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 16-17 years

Age: 70-74 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	90		85		95		92				91	92	91	84		19
18	86	91	81				88				88	87	87	81		18
17	82	86	77		86		83			82		83		77		17
16	78	82	73			77	79	76	82			79	79	73		16
15	73	77	69		77		75	72			76					15
14	69	73	65	66	73	69	71	69	73		72	71	71	66		14
13	65	68	61		68		67	65		67		66	67	62	60	13
12	60	63	57	59	63	61	63	61	64		64	62	63	56	56	12
11	56	59	53	56	59	57	59	57	59	59	60	58	59	55	53	11
10	52	54	49	53	54	53	55	53	55		56	54	55	51	49	10
9	48	50	45	49	50	49	50	50	50	51	53	49	51	47	46	9
8	43	45	41	46	45	45	46	46	46		49	45	47	43	42	8
7	39	41	37	42	40	42	42	42	41		43	45	41	43	40	7
6	35	36	33	39		38	38	38	37		39	37	39	36	35	6
5	31	32	29	35	31	34	34	35	32		35	37	32	35	31	5
4	26	27	25	32		30	30	31	28		31		28	31	28	4
3	22	23	21	28	22	26	26		23		27		24	26	25	3
2	18	18	17	25	18	22	22	23	19		23		20	22	21	2
1	13		13	21	13	18	17	19	14		19			17		1
0				18		14	13	16								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	90	88	94	94	100	98	94	95	96				79	80	19
18	86	84	88	89	98	94	90	91	92				76	77	18
17	82	80	83	84	93	90	86	87	88				72	73	17
16	78	76	78	79	89	86	82	83	83				69	70	16
15	74	72	73	74	85	82	78	78	79	72			65	66	15
14	69	68	68	69	81	78	74	74	74	68			62	63	14
13	65	64	63	64	76	74	70	70	70	66	66	66	58	59	13
12	61	60	58	59	72	70	66	66	66	60			55	56	12
11	57	56	53	54	68	66	62	62	61	58	59	51	52		11
10	53	52	48	49	64	62	57	57	57	53	54	56	48	48	10
9	49	47	43	44	59	58	53	53	52	49	50	52	44	45	9
8	44	43	37	40	55	54	49	49	48	45	46	49	41	41	8
7	40	39	32	35	51	50	45	45	44	41	42	46	37	38	7
6	36	35	27	30	47	46	41	40	39	37	38	43	34	34	6
5	32	31	22	25	42	42	37	36	35	34	34	39	30	31	5
4	28	27	17	20	38	38	33	32	31	30	30	36	27	27	4
3	23	23	12	15	34	34	29	28	26	26	26	33	23	24	3
2	19	19	7	10	30	30	24	24	22	22	22	29	19	20	2
1	15	15	2	5	25	26	20	19	17	19	18	26	16	17	1
0	11	11	0	0	21	22		15							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	67	100		94	98	86	81	91	77							19
18	63	70	100	90	93	82	78	87	74	76						18
17	58	65	100	86	89	78	74	83			81					17
16	54	61	99	82	84	74	71	78	66		77					16
15	50	57	93	78	80	71	67	74	62	66	73	71	62	75		15
14	46	52	88	74	75	67	63	70	58	63	69		58			14
13	41	48	83	70	71	63	60	65	54	60	65	64				13
12	37	44	77	66	67	59	56	61	50		61	60	52	63		12
11	33	39	72	62	62	55	53	57	46	53	58	57		59		11
10	29	35	66	58	58	52	49	53	42	50	54	53	46	55		10
9	25	31	61	54	53	48	45	48	47	50	50	43	51			9
8	20	26	56	50	49	44	42	44	34	44	46	47	40	47		8
7	16	22	50	46	44	40	38	40	31		42	43	37	43		7
6	12	18	45	42	40	36	35	36	27	37	38	40	34	39		6
5	8	13	40	38	35	33	31	31	23	34	35	36	30	35		5
4	3	9	34	34	31	29	27	27	19		31	33	27	31		4
3	0	5	29	30	27	25	24	23	15	28	27	29	24	28		3
2	0	1	24	26	22	21	20	19	11		23	26	21	24		2
1	0	0	18	22	18	17	17	14		21	19	22	18	20		1
0	0	0	13	18				10		18	15	19	15			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100		98		93		100		71									19
18	99	100	93	94			98		66									18
17	95	98	89	90	85		94		62	74				67	74			17
16	91	93	84	86	81	82	90		58	69	76		64	71	69			16
15	87	89	80	82	77	78	86		54	65			60	67				15
14	83	85	76	78	73	74	82		50	60	68		56	63	61			14
13	79	80	71	74	69	69	77		46	56	63	64		53	60	57		13
12	75	76	67	70	65	65	73		41	51			56	49	56	53		12
11	71	72	62	66	61	61	69	57	37	47	55	56		45	52	49		11
10	67	67	58	62	57	57	65		33	42	51	52		42	49	45		10
9	63	63	53	58	53	53	61	45	29	37	47	48	41	38	45	41		9
8	59	59	49	54	50	49	57		25	33	42	44		34	41	37		8
7	55	54	44	50	46	45	53	34	21	28	38	41	32	31	38	33		7
6	51	50	40	46	42	41	49		17	24	34	37		27	34	29		6
5	47	46	36	42	38	37	45	22	12	19	30	33	22	23	30	25		5
4	43	41	31	38	34	33	41		8	15	26	29		19	27	21		4
3	39	37	27		30	28	37	11	4	10	21	25	13	16	23			3
2	36	32	22		26	24	32	5	0	6	17	21	8	12				2
1	32	28	18		22	20	28	0	0	1	13	17	3					1
0	24				16	24	0		0	9				12	5			0

(continued)

APPENDIX D (*continued*)

Sex: Male
Education: 16-17 years
Age: 75-79 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	91		86		98		95				93	93	93	85		19
18	87	92	82				91				89	89	89	81		18
17	83	87	78		89		87			85		85		77		17
16	79	83	74			80	83	79	85			81	81	74		16
15	74	78	70		80		79	75			77					15
14	70	74	65	67	75	72	74	72	76		74	72	73	66		14
13	66	69	61		70		70	68		69		68	69	63	60	13
12	61	65	57	60	66	64	66	64	67		66	64	64	56		12
11	57	60	53	56	61	60	62	60	62	62	62	59	60	55	53	11
10	53	55	49	53	57	56	58	56	58		58	55	56	51	49	10
9	49	51	45	49	52	53	54	53	53	54	54	51	52	48	46	9
8	44	46	41	46	48	49	50	49	49		50	47	48	44	42	8
7	40	42	37	42	43	45	45	45	44	46	46	42	44	40	39	7
6	36	37	33	39		41	41	41	40		42	38	40	36	35	6
5	32	33	29	35	34	37	37	38	35		38	39	34	36	33	5
4	27	28	25	32		33	33	34	31		34	30	32	29	28	4
3	23	24	21	28	25	29	29		26		30	25	28	25	24	3
2	19	19	17	25	20	25	25	26	22		26	21	24	21	21	2
1	14		13	21	15	21	21	22	17		22			18		1
0				18		17	17	19								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	89	96	97	100	100	98	98	99				79	80	19
18	88	85	91	92	100	97	94	94	95				76	77	18
17	84	81	86	87	97	93	89	90	91				72	73	17
16	80	77	81	82	93	89	85	85	86				69	70	16
15	76	73	76	77	88	85	81	81	82			75	65	66	15
14	72	69	70	72	84	81	77	77	77	70			62	63	14
13	67	65	65	67	80	77	73	73	73		67	68	58	59	13
12	63	61	60	62	76	73	69	69	69		62		55	56	12
11	59	57	55	57	71	69	65	64	64		59	61	51	52	11
10	55	53	50	52	67	65	61	60	60		55	55	58	48	10
9	51	49	45	47	63	61	57	56	56		51	51	55	44	9
8	46	44	40	42	59	57	52	52	51		47	47	51	41	8
7	42	40	35	37	54	53	48	47	47		43	43	48	37	7
6	38	36	30	32	50	49	44	43	42		39	39	45	34	6
5	34	32	25	27	46	45	40	39	38		36	35	42	30	5
4	30	28	19	22	41	41	36	35	34		32	31	38	27	4
3	26	24	14	17	37	37	32	31	29		28	27	35	23	3
2	21	20	9	12	33	33	28	26	25		24	23	32	20	2
1	17	16	4	7	29	29	24	22	20		19	19	28	16	1
0	13	12	0	2	24	25		18							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 16-17 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	67	100		96	100	87	82	93	77						19	
18	63	68	100	92	96	83	78	88	74	77				90	18	
17	58	64	100	88	92	79	75	84			82				17	
16	54	60	100	84	87	75	71	80	66		78				16	
15	50	56	98	80	83	71	68	76	62	67	74	71	62	78	15	
14	46	51	93	76	79	68	64	71	58	64	70		59		14	
13	41	47	87	72	74	64	61	67	54	60	66	65		70	13	
12	37	43	82	68	70	60	57	63	50		62	61	53	66	12	
11	33	38	77	64	65	56	53	58	46	54	59	58		62	11	
10	29	34	71	60	61	53	50	54	42	51	55	54	47	58	10	
9	25	30	66	56	56	49	46	50	48	51	51	44	54		9	
8	20	25	61	52	52	45	43	46	34	44	47	47	40	51	8	
7	16	21	55	48	47	41	39	41	31		43	44	37	47		7
6	12	17	50	44	43	37	35	37	27	38	39	40	34	43		6
5	8	12	45	40	39	34	32	33	23	35	36	37	31	39		5
4	3	8	39	36	34	30	28	29	19		32	34	28	35		4
3	0	4	34	32	30	26	25	24	15	28	28	30	25	31		3
2	0	0	28	28	25	22	21	20	11		24	27	22	27		2
1	0	0	23	24	21	18	17	16	22	20	23	19	23			1
0	0	0	18	20	17	30	0	12	18	16	20	15				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score	
19	100	100			93		100		71								19	
18	99	100	95	98			100		66								18	
17	95	100	91	94	85		99		62	74				66	75		17	
16	91	96	86	90	81	83	95		58	69	79		62	71	69		16	
15	87	92	82	86	77	79	91		54	65			59	67			15	
14	83	87	77	82	73	75	87		50	60	71		55	64	61		14	
13	79	83	73	78	69	71	83		46	56	64	67		51	60	57		13
12	75	78	68	74	65	67	79		41	51			56	48	56	53		12
11	71	74	64	70	61	63	75	57	37	47	55	59		44	53	49		11
10	67	70	60	66	57	58	71		33	42	51	55		40	49	45		10
9	63	65	55	62	53	54	67	46	29	37	47	51	41	37	45	41		9
8	59	61	51	58	50	50	62		25	33	43	47		33	42	37		8
7	55	57	46	53	46	46	58	34	21	28	38	43	32	29	38	33		7
6	51	52	42	49	42	42	54		17	24	34	39		26	34	29		6
5	47	48	37	45	38	38	50	23	12	19	30	35	22	22	31	25		5
4	43	44	33	41	34	34	46		8	15	26	31		18	27	21		4
3	39	39	29		30	30	42	11	4	10	22	28	13	15	23			3
2	36	35	24		26	26	38	5	0	6	17	24	8	11				2
1	32	31	20		22	22	34	0	0	1	13	20	3					1
0	26	26			17	30	0		0	9				12	5			0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 16-17 years

Age: 80-85 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	92		86		100		99				95	95	95	85		19	
18	88	93	82				95				91	91	91	82		18	
17	84	88	78		92		91				89	86		78		17	
16	80	84	74			84	87	83	88			82	82	74		16	
15	75	79	70		83		83	79				79				15	
14	71	75	66	67	78	76	79	75	79		75	74	74	67		14	
13	67	70	62		74		74	72			73	70	70	63	60	13	
12	62	66	58	60	69	68	70	68	70			68	65	66	56	12	
11	58	61	54	56	64	64	66	64	66		65	64	61	62	56	11	
10	54	57	50	53	60	60	62	60	61			60	57	58	52	49	10
9	50	52	46	49	55	56	58	57	57		57	56	53	54	48	46	9
8	45	48	42	46	51	52	54	53	52			52	48	50	44	42	8
7	41	43	38	42	46	49	50	49	48		49	48	44	46	41	39	7
6	37	39	34	39		45	46	45	44			45	40	42	37	35	6
5	33	34	29	36	37	41	41	41	39		41	40	36	38	33	32	5
4	28	30	25	32		37	37	38	35			37	31	34	29	28	4
3	24	25	21	29	28	33	33		30			33	27	30	26	25	3
2	20	20	17	25	23	29	29	30	26			29	23	26	22	21	2
1	15		13	22	19	25	25	26	21			25			18		1
0				18		21	21	23								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	95	90	99	99	100	100	100	100	100				79	80	19	
18	91	86	94	94	100	100	98	97	99				76	77	18	
17	87	82	88	89	100	97	94	93	94				72	73	17	
16	83	78	83	84	97	93	89	89	90				69	70	16	
15	78	74	78	80	92	89	85	84	85			77	65	66	15	
14	74	70	73	75	88	85	81	80	81	72			62	63	14	
13	70	66	68	70	84	81	77	76	77			68	71	58	59	13
12	66	62	63	65	80	77	73	72	72			65	55	56	12	
11	62	58	58	60	75	73	69	68	68			60	64	51	52	11
10	57	54	53	55	71	69	65	63	63	57	56	61	48	49	10	
9	53	50	48	50	67	65	61	59	59	53	52	58	44	45	9	
8	49	46	43	45	62	61	56	55	55	50	48	54	41	42	8	
7	45	42	37	40	58	57	52	51	50	46	44	51	37	38	7	
6	41	37	32	35	54	53	48	46	46	42	40	48	34	35	6	
5	37	33	27	30	50	49	44	42	42	38	36	45	30	31	5	
4	32	29	22	25	45	45	40	38	37	34	32	41	27	28	4	
3	28	25	17	20	41	41	36	34	33	31	28	38	23	24	3	
2	24	21	12	15	37	37	32	30	28	27	24	35	20	20	2	
1	20	17	7	10	33	33	28	25	24	23	20	31	16	17	1	
0	16	13	2	5	28	29	21								0	

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	77		82	73	76	74	73	75	75							19
18	72	74	77	69	72	70	69	71	71	69						18
17	68	70	71	65	67	67	66	66			69					17
16	64	66	66	61	63	63	62	62	63		65					16
15	60	62	61	57	59	59	59	58	59	59	61	63	57	59		15
14	55	57	55	53	54	55	55	53	55	56	57		54			14
13	51	53	50	49	50	51	51	49	51	53	54	56				13
12	47	49	45	45	45	48	48	45	47	50	52	47	47			12
11	43	44	39	41	41	44	44	41	43	46	46	49				11
10	39	40	34	37	36	40	41	36	39	43	42	45	41	39		10
9	34	36	29	33	32	36	37	32	40	38	42	38	35			9
8	30	31	23	29	27	32	33	28	32	36	34	39	35	31		8
7	26	27	18	25	23	29	30	24	28	31	35	32	27			7
6	22	23	13	21	18	25	26	19	24	30	27	32	29	23		6
5	17	18	7	17	14	21	23	15	20	27	23	28	26	20		5
4	13	14	2	13	10	17	19	11	16	19	25	22	16			4
3	9	10	0	9	5	14	16	6	12	20	15	21	19	12		3
2	5	5	0	5	1	10	12	2	8	11	18	16	8			2
1	0	1	0	1	0	6	8	0	14	7	14	13	4			1
0	0	0	0	0	0	0	0	0	11	4	11	10				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	80		79		79		78		78									19
18	76	72	75	79			74		74									18
17	72	68	70	75	71		70		70	68				67	67			17
16	68	63	66	71	67	63	66		66	63		64		63	63	64		16
15	64	59	61	66	63	59	62		62	59				60	59			15
14	60	55	57	62	59	55	58		58	54		56		56	56	56		14
13	56	50	52	58	55	51	54		54	50	60	52		52	52	52		13
12	52	46	48	54	51	47	49		49	45			52	49	49	48		12
11	49	42	43	50	47	43	45	53	45	41	52	44		45	45	44		11
10	45	37	39	46	43	39	41		41	36	48	40		41	41	40		10
9	41	33	35	42	39	34	37	41	37	31	43	36	38	38	38	36		9
8	37	29	30	38	35	30	33		33	27	39	33		34	34	32		8
7	33	24	26	34	31	26	29	30	29	22	35	29	28	30	30	28		7
6	29	20	21	30	27	22	25		24	18	31	25		27	27	24		6
5	25	15	17	26	23	18	21	18	20	13	27	21	19	23	23	20		5
4	21	11	12	22	19	14	17		16	9	22	17		19	19	16		4
3	17	7	8		15	10	13	7	12	4	18	13	9	16	16			3
2	13	2	3		11	6	9	1	8	0	14	9	4	12				2
1	9	0	0		7	2	5	0	4	0	10	5	0					1
0	0	0	0		0	0	0		0	6				5	1			0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 20-34 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	79		80		84		75				76	75	74	78		19
18	75	78	76				71				72	70	74			18
17	71	73	72		75		67				68	66		71		17
16	66	69	68			62	63	61	67			62	62	67		16
15	62	64	64		65		59	57			60					15
14	58	60	60	65	61	54	55	54	58		56	53	54	60		14
13	53	55	56		56		51	50			52	49	49	56	58	13
12	49	51	52	58	52	46	47	46	49		48	45	45		55	12
11	45	46	48	55	47	42	42	42	45		44	45	41	48	51	11
10	41	42	44	51	43	38	38	38	40		41	36	37	45	48	10
9	36	37	40	48	38	34	34	35	36		36	37	32	33	41	9
8	32	32	36	44	33	30	30	31	31		33	28	29	37	41	8
7	28	28	32	41	29	26	26	27	27		28	29	24	25	33	7
6	24	23	28	37		22	22	23	22		24		20	21	30	6
5	19	19	24	34	20	18	18	20	18		20	21	15	17	26	5
4	15	14	19	30		14	14	16	13			11	13	22	27	4
3	11	10	15	27	10	10	9		9			12	7	9	18	3
2	6	5	11	23	6	6	5	8	5			8	3	5	15	20
1	2		7	20	1	2	1	4	0			4			11	1
0				16		0	0	1								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	81	78	82	82	80	78	80	77	77				77	77	19
18	77	74	77	77	76	74	76	73	72				73	74	18
17	72	70	72	72	72	70	72	69	68				70	70	17
16	68	66	66	67	67	66	68	65	63				66	67	16
15	64	62	61	62	63	62	64	60	59				61	63	15
14	60	58	56	57	59	58	60	56	55	58			59	60	14
13	56	54	51	52	55	54	55	52	50				56	55	13
12	52	50	46	47	50	50	51	48	46	51			52	53	12
11	47	45	41	42	46	46	47	44	42				48	49	11
10	43	41	36	37	42	42	43	39	37	43	44	45	45	46	10
9	39	37	31	32	38	38	39	35	33	39	41	42	42	42	9
8	35	33	26	27	33	34	35	31	28	35	37	38	38	39	8
7	31	29	21	22	29	30	31	27	24	32	33	35	35	35	7
6	26	25	15	17	25	26	27	22	20	28	29	32	31	32	6
5	22	21	10	12	21	22	22	18	15	24	25	28	28	28	5
4	18	17	5	7	16	18	18	14	11	20	21	25	24	24	4
3	14	13	0	2	12	14	14	10	6	16	17	22	21	21	3
2	10	9	0	0	8	10	10	6	2	13	13	19	17	17	2
1	6	5	0	0	4	6	6	1	0	9	9	15	14	14	1
0	1	1	0	0	0	2		0							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	75		86	77	79	76	74	78	75							19
18	71	72	80	73	74	72	71	73	71	70						18
17	67	68	75	69	70	68	67	69			71					17
16	62	64	70	65	65	65	63	65	63			67				16
15	58	59	64	61	61	61	60	61	59	60	63	64	58	60		15
14	54	55	59	57	56	57	56	56	55	57	59		55			14
13	50	51	54	53	52	53	53	52	51	54	55	57		52		13
12	45	46	48	49	47	49	49	48	47		51	54	49	48		12
11	41	42	43	45	43	46	46	43	43	47	48	50		44		11
10	37	38	38	41	39	42	42	39	39	44	44	47	42	40		10
9	33	33	32	37	34	38	38	35		41	40	43	39	36		9
8	28	29	27	33	30	34	35	31	32	37	36	40	36	32		8
7	24	25	21	29	25	30	31	26	28		32	37	33	28		7
6	20	20	16	24	21	27	28	22	24	31	28	33	30	24		6
5	16	16	11	20	16	23	24	18	20	28	25	30	27	21		5
4	12	12	5	16	12	19	20	14	16		21	26	24	17		4
3	7	7	0	12	7	15	17	9	12	21	17	23	21	13		3
2	3	3	0	8	3	11	13	5	8		13	19	17	9		2
1	0	0	0	4	0	8	10	1		15	9	16	14	5		1
0	0	0	0	0	0	0	0		12	5	12	11				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score	
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	83		82		81		80		77								19	
18	79	77	78	80			76		73								18	
17	75	72	73	76	73		72		69	68				67	68		17	
16	71	68	69	72	69	66	67		65	63	62		63	64	64		16	
15	68	64	64	68	65	61	63		61	59			59	60			15	
14	64	59	60	64	61	57	59		56	54	54		56	57	56		14	
13	60	55	56	59	57	53	55		52	50	61	50		52	53	52		13
12	56	51	51	55	53	49	51		48	45			52	48	49	48		12
11	52	46	47	51	49	45	47	53	44	41	52	42		45	46	44		11
10	48	42	42	47	45	41	43		40	36	48	38		41	42	40		10
9	44	37	38	43	41	37	39	42	36	31	44	34	38	37	38	36		9
8	40	33	33	39	37	33	35		31	27	40	31		34	35	32		8
7	36	29	29	35	33	29	31	30	27	22	35	27	29	30	31	28		7
6	32	24	25	31	29	25	27		23	18	31	23		26	27	24		6
5	28	20	20	27	25	20	22	19	19	13	27	19	19	23	24	20		5
4	24	16	16	23	21	16	18		15	9	23	15		19	20	16		4
3	20	11	11		17	12	14	7	11	4	19	11	9	15	16			3
2	16	7	7		13	8	10	2	7	0	14	7	5	12				2
1	12	3	2		9	4	6	0	2	0	10	3	0					1
0	0	0	0		0	2	0		0	6				5	0	0		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 35-39 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	81		81		85		77				79	78	77	79		19	
18	77	80	77				73				75	73	73	75		18	
17	72	75	73		76		68			69		69		72		17	
16	68	71	69			63	64	62	68			65	65	68		16	
15	64	66	65		66		60	58			63					15	
14	60	62	61	65	62	55	56	55	59		59	57	57	60		14	
13	55	57	57		57		52	51		53		52	53	57	59	13	
12	51	53	53	58	53	47	48	47	50		52	48	49		55	12	
11	47	48	49	55	48	43	44	43	46	45	48	44	45	49	51	11	
10	43	44	44	51	43	39	40	40	41		44	40	41	46	48	10	
9	38	39	40	48	39	35	35	36	37	37	40	35	37	42	44	9	
8	34	35	36	44	34	31	31	32	33		36	31	32	38	41	8	
7	30	30	32	41	30	27	27	28	28	29	32	27	28	34	37	7	
6	25	26	28	38		23	23	24	24	25		23	24	31	34	6	
5	21	21	24	34	21	19	19	21	19	21	24	18	20	27	30	5	
4	17	17	20	31		15	15	17	15		17		14	16	23	27	4
3	13	12	16	27	11	11	11		10		13		10	12	19	23	3
2	8	7	12	24	7	7	7	9	6		9		6	8	16	20	2
1	4		8	20	2	3	2	6	1		5				12	1	
0				17	0	0	2	2								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	82	79	81	81	83	81	81	80	79				77	78	19
18	77	75	76	76	79	77	77	75	75				73	74	18
17	73	70	71	71	75	73	73	71	70				70	71	17
16	69	66	65	66	70	69	69	67	66				66	67	16
15	65	62	60	61	66	65	65	63	62				62	63	15
14	61	58	55	56	62	61	61	59	57	59			59	60	14
13	56	54	50	51	58	57	57	54	53				58	56	13
12	52	50	45	46	53	53	53	50	49	51			52	53	12
11	48	46	40	41	49	49	48	46	44				50	49	11
10	44	42	35	36	45	45	44	42	40	44	46	46	45	46	10
9	40	38	30	31	41	41	40	37	35	40	42	42	42	42	9
8	36	34	25	26	36	37	36	33	31	36	39	39	38	39	8
7	31	30	20	21	32	33	32	29	27	32	35	36	35	35	7
6	27	26	15	17	28	29	28	25	22	29	31	33	31	32	6
5	23	22	9	12	24	25	24	21	18	25	27	29	28	28	5
4	19	17	4	7	19	21	20	16	13	21	23	26	24	25	4
3	15	13	0	2	15	17	15	12	9	17	19	23	21	21	3
2	10	9	0	0	11	13	11	8	5	13	15	19	17	18	2
1	6	5	0	0	7	9	7	4	0	10	11	16	14	14	1
0	2	1	0	0	2	5		0							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	75		88	78	80	77	75	79	75	71	70				72	19
18	71	71	83	74	75	73	71	75	71	70					72	18
17	67	67	77	70	71	69	68	70			72					17
16	62	63	72	66	67	65	64	66	63		68					16
15	58	58	67	62	62	62	61	62	59	60	64	65	59	61		15
14	54	54	61	58	58	58	57	58	55	57	60		55			14
13	50	50	56	54	53	54	53	53	51	54	56	58			53	13
12	45	45	50	50	49	50	50	49	47		52	55	49	49		12
11	41	41	45	46	44	46	46	45	43	48	49	51			45	11
10	37	37	40	42	40	43	43	41	39	44	45	48	43	41		10
9	33	32	34	38	35	39	39	36		41	41	44	40		37	9
8	28	28	29	34	31	35	35	32	32	38	37	41	37	33		8
7	24	24	24	30	27	31	32	28	28		33	37	34	29		7
6	20	19	18	26	22	27	28	23	24	31	29	34	30	25		6
5	16	15	13	22	18	24	25	19	20	28	26	30	27	21		5
4	12	11	8	18	13	20	21	15	16		22	27	24	17		4
3	7	6	2	14	9	16	17	11	12	22	18	24	21	13		3
2	3	2	0	10	4	12	14	6	8		14	20	18	9		2
1	0	0	0	6	0	8	10	2		15	10	17	15	6		1
0	0	0	0	2				0		12	6	13	12			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	83		84		81		81		77								19	
18	79	79	79	81			77		73								18	
17	75	75	75	77	73		73		69	68				66	68		17	
16	71	70	71	72	69	67	69		65	63	61		63	64	64		16	
15	68	66	66	68	65	63	65		61	59			59	61			15	
14	64	62	62	64	61	59	60		56	54	53		55	57	56		14	
13	60	57	57	60	57	54	56		52	50	49		52	53	52		13	
12	56	53	53	56	53	50	52		48	45			53	48	50		12	
11	52	48	48	52	49	46	48	54	44	41	53	41		44	46	44	11	
10	48	44	44	48	45	42	44		40	36	48	38		41	42	40		10
9	44	40	39	44	41	38	40	42	36	31	44	34	38	37	39	36		9
8	40	35	35	40	37	34	36		31	27	40	30		33	35	32		8
7	36	31	31	36	33	30	32	31	27	22	36	26	29	30	31	28		7
6	32	27	26	32	29	26	28		23	18	31	22		26	28	24		6
5	28	22	22	28	25	22	24	19	19	13	27	18	19	22	24	20		5
4	24	18	17	24	21	18	20		15	9	23	14		19	20	16		4
3	20	14	13		17	13	15	8	11	4	19	10	9	15	17			3
2	16	9	8		13	9	11	2	7	0	15	6	5	11				2
1	12	5	4		9	5	7	0	2	0	10	2	0					1
0	1				1	3	0		0	6				6	0			0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 40-44 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	82		81		85		78				79	79	79	80		19
18	78	81	77				74				76	75	75	76		18
17	73	76	73		76		69			70		71		72		17
16	69	72	69			64	65	63	69			67	66	68		16
15	65	67	65		67		61	59				64				15
14	61	63	61	65	62	56	57	56	60		60	58	58	61		14
13	56	58	57		58		53	52		54		54	54	57	59	13
12	52	54	53	59	53	48	49	48	51		52	50	50	55		12
11	48	49	49	55	49	44	45	44	47	46	48	45	46	50	52	11
10	43	45	45	52	44	40	40	40	42		44	41	42	46	48	10
9	39	40	41	48	40	36	36	37	38	38	41	37	38	42	45	9
8	35	36	37	45	35	32	32	33	33		37	33	34	39	41	8
7	31	31	33	41	30	28	28	29	29	30	33	28	30	35	37	7
6	26	27	29	38		24	24	25	24		26	24	26	31	34	6
5	22	22	25	34	21	20	20	22	20	22	25	20	22	27	30	5
4	18	18	21	31		16	16	18	15			16	18	24	27	4
3	14	13	17	27	12	12	12		11			11	14	20	23	3
2	9	9	13	24	7	8	7	10	6	10		7	10	16	20	2
1	5		8	20	3	4	3	6	2	6				12		1
0				17	0	0	3									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	82	80	82	82	85	83	82	81	81				77	78	19
18	78	76	77	77	81	79	78	77	76				73	74	18
17	74	72	71	72	76	75	74	73	72				70	71	17
16	70	68	66	67	72	71	70	68	68				66	67	16
15	65	64	61	62	68	67	66	64	63				63	63	15
14	61	59	56	57	64	63	62	60	59	59			59	60	14
13	57	55	51	52	59	59	58	56	55				59	56	13
12	53	51	46	47	55	55	53	52	50	52			52	53	12
11	49	47	41	42	51	51	49	47	46				51	50	11
10	45	43	36	37	47	47	45	43	41	44	47	46	45	46	10
9	40	39	31	32	42	43	41	39	37	40	43	43	42	43	9
8	36	35	26	27	38	39	37	35	33	37	39	40	38	39	8
7	32	31	20	23	34	35	33	31	28	33	36	36	35	35	7
6	28	27	15	18	30	31	29	26	24	29	32	33	31	32	6
5	24	23	10	13	25	27	25	22	19	25	28	30	28	28	5
4	19	19	5	8	21	23	20	18	15	22	24	27	24	25	4
3	15	15	0	3	17	19	16	14	11	18	20	23	21	21	3
2	11	11	0	0	13	15	12	9	6	14	16	20	17	18	2
1	7	6	0	0	8	11	8	5	2	10	12	17	14	14	1
0	3	2	0	0	4	7		1							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	73	90	80	80	82	78	76	80	75	71	71	69	66	59	19
18	69	70	85	76	77	74	72	76	71	71	72	73	73	18	18
17	65	66	80	72	73	70	68	72							17
16	61	61	74	68	68	66	65	68	63			69			16
15	56	57	69	64	64	62	61	63	59	61	65	66	59	61	15
14	52	53	64	60	59	59	58	59	55	58	61	56	56		14
13	48	48	58	56	55	55	54	55	51	54	57	59	54	54	13
12	44	44	53	52	50	51	50	51	47		53	55	50	50	12
11	40	40	48	48	46	47	47	46	43	48	49	52	46	46	11
10	35	36	42	44	41	43	43	42	39	45	46	48	44	42	10
9	31	31	37	40	37	40	40	38		42	42	45	40	38	9
8	27	27	31	36	33	36	36	33	32	38	38	41	37	34	8
7	23	23	26	32	28	32	32	29	28		34	38	34	30	7
6	18	18	21	28	24	28	29	25	24	32	30	35	31	26	6
5	14	14	15	24	19	24	25	21	20	29	26	31	28	22	5
4	10	10	10	20	15	21	22	16	16		23	28	25	18	4
3	6	5	5	16	10	17	18	12	12	22	19	24	22	14	3
2	1	1	0	12	6	13	14	8	8		15	21	19	10	2
1	0	0	0	8	1	9	11	4		16	11	17	15	6	1
0	0	0	0	4				0		12	7	14	12		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	87	86			83		82		76							19
18	83	81	81	82			78		72							18
17	79	77	77	78	75		74		68	68			66	68		17
16	75	72	72	73	71	68	70		63	63		62	62	65	64	16
15	71	68	68	69	67	64	66		59	59			59	61		15
14	67	64	63	65	63	60	62		55	54		54	54	57	56	14
13	63	59	59	61	59	56	58		51	50	61	50	51	54	52	13
12	59	55	54	57	55	52	54		47	45			53	48	50	12
11	55	51	50	53	51	47	50	54	43	41	53	42	44	46	44	11
10	51	46	46	49	47	43	46		38	36	49	38	40	43	40	10
9	47	42	41	45	43	39	42	43	34	31	44	34	38	37	39	9
8	43	38	37	41	39	35	37		30	27	40	30	33	35	32	8
7	39	33	32	37	35	31	33	31	26	22	36	26	29	32	28	7
6	35	29	28	33	31	27	29		22	18	32	23	26	28	24	6
5	31	25	23	29	27	23	25	20	18	13	27	19	19	22	24	5
4	27	20	19	25	23	19	21		13	9	23	15	18	21	16	4
3	23	16	14		19	15	17	8	9	4	19	11	9	15	17	3
2	19	12	10		15	11	13	2	5	0	15	7	5	11		2
1	15	7	6		11	6	9	0	1	0	11	3	0			1
0	3				2	5	0		0	6			6	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 45-49 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	83		82		86		79				81	81	80	80		19
18	79	82	78				75				77	77	76	76		18
17	74	77	74		77		71				71	72		73		17
16	70	73	70			65	66	64	70			68	68	69		16
15	66	68	65		68		62	60				66				15
14	61	64	61	66	63	57	58	57	61			62	60	60	61	14
13	57	59	57		59		54	53			55	55	56	58	59	13
12	53	55	53	59	54	49	50	49	52			54	51	52	55	12
11	49	50	49	55	50	45	46	45	48		47	50	47	48	50	11
10	44	46	45	52	45	41	42	42	43			46	43	44	47	10
9	40	41	41	48	40	37	38	38	39		39	42	38	40	43	9
8	36	37	37	45	36	33	33	34	34			38	34	36	39	8
7	32	32	33	41	31	29	29	30	30			31	34	30	35	7
6	27	28	29	38		25	25	26	25			27	26	28	32	6
5	23	23	25	34	22	21	21	23	21			23	27	21	24	5
4	19	19	21	31		17	17	19	16			19	17	20	24	4
3	14	14	17	27	13	13	13		12			15	13	15	20	3
2	10	10	13	24	8	9	9	11	7			11	9	11	17	2
1	6		9	20	4	5	5	8	3			7			13	1
0				17		1	0	4								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	81	83	84	87	85	83	83	83				77	78	19
18	79	77	78	79	83	81	79	79	78				73	74	18
17	75	73	73	74	78	77	75	74	74				70	71	17
16	70	69	68	69	74	73	71	70	69				66	67	16
15	66	65	63	64	70	69	67	66	65				64	63	15
14	62	61	58	59	66	65	63	62	61	60			59	60	14
13	58	57	52	54	61	61	59	57	56			60	57	56	13
12	54	53	47	49	57	57	55	53	52	53			52	53	12
11	49	49	42	44	53	53	50	49	48			52	50	49	11
10	45	45	37	39	49	49	46	45	43	45	48	47	45	46	10
9	41	40	32	34	44	45	42	41	39	41	44	44	42	43	9
8	37	36	27	29	40	41	38	36	34	37	40	41	38	39	8
7	33	32	22	24	36	37	34	32	30	34	37	37	35	36	7
6	29	28	17	19	32	33	30	28	26	30	33	34	31	32	6
5	24	24	12	14	27	29	26	24	21	26	29	31	28	29	5
4	20	20	7	9	23	25	22	20	17	22	25	27	24	25	4
3	16	16	1	4	19	21	18	15	12	19	21	24	21	21	3
2	12	12	0	0	15	17	13	11	8	15	17	21	17	18	2
1	8	8	0	0	10	13	9	7	4	11	13	18	14	14	1
0	3	4	0	0	6	9		3							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	73	93		82	83	78	76	82	75						19	
18	69	69	88	78	79	75	73	78	71	71				74	18	
17	65	65	82	74	74	71	69	73			73				17	
16	61	60	77	70	70	67	65	69	63		69				16	
15	56	56	72	66	65	63	62	65	59	61	66	66	60	63	15	
14	52	52	66	62	61	59	58	60	55	58	62		57		14	
13	48	47	61	58	57	56	55	56	51	55	58	59		55	13	
12	44	43	56	54	52	52	51	52	47		54	56	50	51	12	
11	40	39	50	50	48	48	47	48	43	49	50	53		47	11	
10	35	34	45	46	43	44	44	43	39	45	46	49	44	43	10	
9	31	30	40	42	39	40	40	39		42	43	46	41	39	9	
8	27	26	34	38	34	37	37	35	32	39	39	42	38	35	8	
7	23	21	29	34	30	33	33	31	28		35	39	35	31	7	
6	18	17	24	30	25	29	29	26	24	32	31	35	32	27	6	
5	14	13	18	26	21	25	26	22	20	29	27	32	29	23	5	
4	10	9	13	22	16	21	22	18	16		23	28	25	19	4	
3	6	4	7	18	12	18	19	13	12	23	20	25	22	15	3	
2	1	0	2	14	8	14	15	9	8		16	22	19	12	2	
1	0	0	0	10	3	10	12	5		16	12	18	16	8	1	
0	0	0	0	6				1		13	8	15	13		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	87	87			83		84		76							19	
18	83	83	83	83			80		72							18	
17	79	79	78	79	75		76		68	68				66	69	17	
16	75	75	74	75	71	69	72		63	63		63		62	65	64	16
15	71	70	69	71	67	65	68		59	59				58	61	15	
14	67	66	65	67	63	61	64		55	54		55		55	58	56	14
13	63	62	61	63	59	57	60		51	50	61	51		51	54	52	13
12	59	57	56	59	55	53	56		47	45			53	47	50	48	12
11	55	53	52	54	51	49	52	54	43	41	53	43		44	47	44	11
10	51	49	47	50	47	45	48		38	36	49	39		40	43	40	10
9	47	44	43	46	43	40	43		34	31	45	35	38	36	39	36	9
8	43	40	38	42	39	36	39		30	27	40	32		33	36	32	8
7	39	36	34	38	35	32	35	31	26	22	36	28	29	29	32	28	7
6	35	31	29	34	31	28	31		22	18	32	24		25	28	24	6
5	31	27	25	30	27	24	27	20	18	13	28	20	19	22	25	20	5
4	27	23	21	26	23	20	23		13	9	23	16		18	21	16	4
3	23	18	16		19	16	19	8	9	4	19	12	10	14	17		3
2	19	14	12		15	12	15	3	5	0	15	8	5	11			2
1	15	10	7		11	8	11	0	1	0	11	4	0				1
0	5				4	7	0		0	7				6	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 50-54 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	84		82		87		80				83	82	82	81		19
18	80	83	78				76				79	78	78	77		18
17	75	79	74		78		72				72	74		73		17
16	71	74	70			66	68	66	72			70	70	69		16
15	67	69	66		69		64	62				67				15
14	62	65	62	66	64	58	60	58	63			63	61	62		14
13	58	60	58		60		56	54			56	57	58	58	59	13
12	54	56	54	59	55	50	51	50	54			55	53	54	55	12
11	50	51	50	55	51	46	47	47	49			48	52	48	51	52
10	45	47	46	52	46	42	43	43	45			48	44	45	47	48
9	41	42	42	48	42	38	39	39	40			40	44	40	41	45
8	37	38	38	45	37	34	35	35	36			40	36	37	40	41
7	33	33	34	41	32	30	31	32	31			32	36	32	33	36
6	28	29	29	38		26	27	28	27			28	27	29	32	34
5	24	24	25	35	23	22	23	24	22			24	28	23	25	31
4	20	20	21	31		19	18	20	18			20	19	21	25	27
3	15	15	17	28	14	15	14		13			16	15	17	21	24
2	11	11	13	24	9	11	10	13	9			12	10	13	17	20
1	7		9	21	5	7	6	9	4			8			13	1
0				17		3	2	5								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	83	85	86	89	87	85	85	85				77	78	19
18	80	79	80	81	85	83	81	80	80				74	75	18
17	76	75	75	76	81	79	77	76	76				70	71	17
16	71	70	69	71	76	75	73	72	71				66	67	16
15	67	66	64	66	72	71	68	68	67				65	63	15
14	63	62	59	61	68	67	64	64	63	61			59	60	14
13	59	58	54	56	64	63	60	59	58				61	58	13
12	55	54	49	51	59	59	56	55	54	53			52	53	12
11	50	50	44	46	55	55	52	51	50				53	51	11
10	46	46	39	41	51	51	48	47	45	46	49	48	45	46	10
9	42	42	34	36	47	47	44	42	41	42	45	45	42	43	9
8	38	38	29	31	42	43	40	38	36	38	41	42	38	39	8
7	34	34	24	26	38	39	35	34	32	35	37	38	35	36	7
6	30	30	19	21	34	35	31	30	28	31	34	35	31	32	6
5	25	26	13	16	30	31	27	26	23	27	30	32	28	29	5
4	21	22	8	11	25	27	23	21	19	23	26	28	24	25	4
3	17	17	3	6	21	23	19	17	14	19	22	25	21	22	3
2	13	13	0	1	17	19	15	13	10	16	18	22	17	18	2
1	9	9	0	0	13	15	11	9	6	12	14	19	14	15	1
0	4	5	0	0	8	11		4							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	72		96	84	85	79	77	83	77						19	
18	68	68	91	80	81	75	73	79	74	72				76	18	
17	63	64	85	76	76	72	70	75			74				17	
16	59	59	80	72	72	68	66	70	66		70				16	
15	55	55	75	67	67	64	62	66	62	62	67	67	60	64	15	
14	51	51	69	63	63	60	59	62	58	59	63		57		14	
13	46	46	64	59	58	56	55	58	54	55	59	60		56	13	
12	42	42	59	55	54	53	52	53	50		55	57	51	52	12	
11	38	38	53	51	50	49	48	49	46	49	51	53		48	11	
10	34	33	48	47	45	45	44	45	42	46	47	50	45	44	10	
9	29	29	43	43	41	41	41	41	43	44	44	46	42	40	9	
8	25	25	37	39	36	37	37	36	34	39	40	43	38	37	8	
7	21	20	32	35	32	34	34	32	31		36	39	35	33	7	
6	17	16	27	31	27	30	30	28	27	33	32	36	32	29	6	
5	13	12	21	27	23	26	27	23	23	30	28	33	29	25	5	
4	8	7	16	23	18	22	23	19	19		24	29	26	21	4	
3	4	3	10	19	14	19	19	15	15	23	21	26	23	17	3	
2	0	0	5	15	10	15	16	11	11		17	22	20	13	2	
1	0	0	0	11	5	11	12	6		17	13	19	17	9	1	
0				7				2		13	9	15	14		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93		89		88		87		75							19	
18	90	89	84	84			83		70							18	
17	86	85	80	80	80		78		66	68				65	69	17	
16	82	80	76	76	76	74	74		62	63	64		62	65	64	16	
15	78	76	71	72	72	70	70		58	59			58	62		15	
14	74	72	67	68	68	66	66		54	54	57		54	58	56	14	
13	70	67	62	64	64	62	62		50	50	53		50	54	52	13	
12	66	63	58	60	60	58	58		45	45			53	47	51	12	
11	62	59	53	56	56	54	54	55	41	41	45		43	47	44	11	
10	58	54	49	52	52	50	50		37	36	41		39	43	40	10	
9	54	50	44	48	48	45	46	43	33	31	45	37	38	36	40	9	
8	50	46	40	44	43	41	42		29	27	41	33		32	36	8	
7	46	41	36	40	39	37	38	32	25	22	36	29	29	28	32	7	
6	42	37	31	36	35	33	33		20	18	32	25		25	29	6	
5	38	33	27	32	31	29	29	20	16	13	28	21	19	21	25	5	
4	34	28	22	28	27	25	25		12	9	24	17		17	21	4	
3	30	24	18		23	21	21	9	8	4	19	13	10	14	18	3	
2	26	19	13		19	17	17	3	4	0	15	9	5	10		2	
1	22	15	9		15	13	13	0	0	0	11	5	0			1	
0		11			9	9	0		0	7				7	0	0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 55-59 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	85		82		89		82				84	84	83	81		19
18	80	84	78				78				80	80	79	77		18
17	76	80	74		80		74				74	75		74		17
16	72	75	70			68	70	67	73			71	71	70		16
15	68	71	66		70		66	63				69				15
14	63	66	62	66	66	60	61	60	64			65	63	62		14
13	59	61	58		61		57	56			58	58	59	59		13
12	55	57	54	59	57	52	53	52	55			57	54	55	55	12
11	51	52	50	56	52	48	49	48	51			50	53	50	51	11
10	46	48	46	52	47	44	45	45	46			49	46	47	48	10
9	42	43	42	49	43	40	41	41	42			42	45	42	44	9
8	38	39	38	45	38	36	37	37	37			42	37	39	40	8
7	33	34	34	42	34	32	33	33	33			34	38	33	36	7
6	29	30	30	38		28	28	29	28			30	29	31	33	6
5	25	25	26	35	25	24	24	26	24			26	30	25	29	5
4	21	21	22	31		20	20	22	19			22	20	23	25	4
3	16	16	18	28	15	16	16		15			18	16	19	21	3
2	12	12	14	24	11	12	12	14	10			14	12	15	18	2
1	8		10	21	6	8	8	11	6			10			14	1
0				17		4	4	7								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	84	87	88	92	89	87	87	87				77	78	19
18	81	80	82	83	87	85	82	82	82				74	75	18
17	77	76	77	78	83	81	78	78	78				70	71	17
16	72	72	71	73	79	77	74	74	74				67	68	16
15	68	68	66	68	75	73	70	70	69				66	63	15
14	64	64	61	63	70	69	66	66	65	62			60	61	14
13	60	60	56	58	66	65	62	61	61				62	59	13
12	56	56	51	53	62	61	58	57	56	55			53	53	12
11	52	51	46	48	58	57	54	53	52				54	49	11
10	47	47	41	43	53	53	50	49	47	47	50	49	45	46	10
9	43	43	36	38	49	49	45	44	43	43	46	46	42	43	9
8	39	39	31	33	45	45	41	40	39	39	42	43	38	39	8
7	35	35	26	28	41	41	37	36	34				36	38	7
6	31	31	21	23	36	37	33	32	30	32	34	36	31	32	6
5	26	27	15	18	32	33	29	28	25	28	31	33	28	29	5
4	22	23	10	13	28	29	25	23	21	24	27	30	24	25	4
3	18	19	5	8	24	25	21	19	17	20	23	26	21	22	3
2	14	15	0	3	19	21	17	15	12	17	19	23	17	18	2
1	10	11	0	0	15	17	12	11	8	13	15	20	14	15	1
0	6	7	0	0	11	13		6							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	72		100	86	88	80	77	85	77							19
18	68	67	95	82	84	76	74	80	74	72						18
17	63	62	90	78	79	72	70	76			75					17
16	59	58	84	74	75	69	67	72	66	71						16
15	55	54	79	70	70	65	63	68	62	62	67	68	61	66		15
14	51	50	74	66	66	61	59	63	58	59	64		58			14
13	46	45	68	62	62	57	56	59	54	56	60	61		58		13
12	42	41	63	58	57	53	52	55	50	56	57	52	54			12
11	38	37	58	54	53	50	49	50	46	50	52	54		50		11
10	34	32	52	50	48	46	45	46	42	46	48	51	45	46		10
9	29	28	47	46	44	42	42	42	43	44	47	42	42			9
8	25	24	42	42	39	38	38	38	34	40	41	44	39	38		8
7	21	19	36	38	35	35	34	33	31	37	40	36	34			7
6	17	15	31	34	30	31	31	29	27	33	33	37	33	30		6
5	13	11	25	30	26	27	27	25	23	30	29	33	30	26		5
4	8	6	20	26	22	23	24	21	19	25	30	27	22			4
3	4	2	15	22	17	19	20	16	15	24	21	26	23	19		3
2	0	0	9	18	13	16	16	12	11	18	23	20	15			2
1	0	0	4	14	8	12	13	8	17	14	20	17	11			1
0	0	0	0	10				3	14	10	16	14				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	93		91		88		89		75								19
18	90	91	87	86			85		70								18
17	86	87	83	82	80		81		66	68				65	69		17
16	82	83	78	78	76	75	77		62	63	66		61	66	64		16
15	78	78	74	74	72	71	73		58	59			57	62			15
14	74	74	69	70	68	67	69		54	54	58		54	58	56		14
13	70	70	65	66	64	63	65		50	50	54		50	55	52		13
12	66	65	60	62	60	59	61		45	45			53	46	51	48	12
11	62	61	56	58	56	55	57	55	41	41	53	47		43	47	44	11
10	58	57	52	54	52	51	53		37	36	49	43		39	44	40	10
9	54	52	47	50	48	47	48	44	33	31	45	39	38	35	40	36	9
8	50	48	43	46	44	43	44		29	27	41	35		32	36	32	8
7	46	44	38	42	40	38	40	32	25	22	37	31	29	28	33	28	7
6	42	39	34	38	36	34	36		20	18	32	27		24	29	24	6
5	38	35	29	34	32	30	32	21	16	13	28	23	19	21	25	20	5
4	34	30	25	29	28	26	28		12	9	24	19		17	22	16	4
3	30	26	20		24	22	24	9	8	4	20	15	10	13	18		3
2	26	22	16		20	18	20	3	4	0	15	11	5	10			2
1	22	17	12		16	14	16	0	0	0	11	7	0				1
0	13				10	12	0		0	7				7	0		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 60-64 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	86		83		90		84				87	85	85	82		19
18	81	85	79				80				83	81	81	78		18
17	77	81	75		81		76			76		77		74		17
16	73	76	71			70	72	69	75			73	73	70		16
15	69	72	67		72		68	65			71					15
14	64	67	63	66	67	62	64	62	66		67	64	65	63		14
13	60	63	59		63		59	58		60		60	61	59	59	13
12	56	58	54	59	58	54	55	54	57		60	56	57	56	56	12
11	52	53	50	56	54	50	51	50	53	52	56	52	53	52	52	11
10	47	49	46	52	49	46	47	46	48		52	47	49	48	48	10
9	43	44	42	49	44	42	43	43	44	44	48	43	45	44	45	9
8	39	40	38	45	40	38	39	39	39		44	39	41	41	41	8
7	34	35	34	42	35	34	35	35	35	36	40	35	37	37	38	7
6	30	31	30	38		30	31	31	30		32	30	32	33	34	6
5	26	26	26	35	26	26	26	28	26	28	33	26	28	29	31	5
4	22	22	22	31		22	22	24	21			22	24	26	27	4
3	17	17	18	28	17	18	18		17	20		18	20	22	24	3
2	13	13	14	24	12	14	14	16	12	16		13	16	18	20	2
1	9		10	21	8	10	10	12	8	12				14		1
0				17		6	6	9								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	86	85	89	90	94	91	89	89	89				77	78	19
18	82	81	84	85	90	87	85	85	85				74	75	18
17	78	77	79	80	86	83	80	80	81				70	71	17
16	74	73	74	75	82	79	76	76	76				67	68	16
15	70	69	69	70	77	75	72	72	72				67	63	15
14	65	65	63	65	73	71	68	68	67	63			60	61	14
13	61	61	58	60	69	67	64	64	63				63	61	13
12	57	57	53	55	65	63	60	59	59	56			55	54	12
11	53	53	48	50	60	59	56	55	54				55	49	11
10	49	49	43	45	56	55	52	51	50	48	51	51	46	47	10
9	45	45	38	40	52	51	47	47	45	44	47	48	42	43	9
8	40	41	33	35	48	47	43	42	41	41	43	44	39	39	8
7	36	36	28	30	43	43	39	38	37	37	39	41	35	36	7
6	32	32	23	25	39	39	35	34	32	33	35	38	32	32	6
5	28	28	18	20	35	35	31	30	28	29	32	35	28	29	5
4	24	24	12	15	31	31	27	26	24	26	28	31	25	25	4
3	19	20	7	10	26	27	23	21	19	22	24	28	21	22	3
2	15	16	2	5	22	23	19	17	15	18	20	25	17	18	2
1	11	12	0	0	18	19	14	13	10	14	16	21	14	15	1
0	7	8	0	0	14	15		9							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	70	100	88	91	81	78	86	77	74	73	76	72	68	61	60	19
18	66	66	99	84	86	77	74	82	74	73	76	72	68	61	68	18
17	62	61	93	80	82	73	71	78	62	63	68	68	61	61	68	17
16	57	57	88	76	77	69	67	73	66	63	68	68	61	61	68	16
15	53	53	83	72	73	66	64	69	62	63	68	68	61	61	68	15
14	49	48	77	68	68	62	60	65	58	60	65	65	58	58	58	14
13	45	44	72	64	64	58	57	60	54	56	61	62	62	60	60	13
12	41	40	67	60	59	54	53	56	50	57	58	58	52	56	56	12
11	36	35	61	56	55	51	49	52	46	50	53	55	55	52	52	11
10	32	31	56	52	50	47	46	48	42	47	49	51	46	48	48	10
9	28	27	51	48	46	43	42	43	44	45	48	48	43	44	44	9
8	24	23	45	44	42	39	39	39	34	40	42	44	40	40	40	8
7	19	18	40	40	37	35	35	35	31	38	41	37	36	36	36	7
6	15	14	34	36	33	32	31	31	27	34	34	37	33	32	32	6
5	11	10	29	32	28	28	28	26	23	31	30	34	30	28	28	5
4	7	5	24	28	24	24	24	22	19	26	31	27	24	24	24	4
3	2	1	18	24	19	20	21	18	15	24	22	27	24	21	21	3
2	0	0	13	20	15	16	17	13	11	18	24	21	21	17	17	2
1	0	0	8	16	10	13	13	9	18	15	20	18	13	13	1	
0	0	0	2	12	11	15	0	5	14	11	17	15	15	15	0	0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97	93	89	88	89	89	83	73	73	73	68	68	60	66	63	19	
18	93	94	89	88	89	89	89	69	69	69	68	68	64	70	70	18	
17	89	89	84	84	81	84	84	65	65	65	68	68	64	70	70	17	
16	85	85	80	80	78	77	80	61	61	63	63	68	60	66	63	16	
15	81	81	75	76	74	73	76	57	57	59	59	57	57	62	62	15	
14	77	76	71	72	70	68	72	52	52	54	54	60	53	59	56	14	
13	73	72	66	68	66	64	68	48	48	50	52	56	49	55	52	13	
12	69	68	62	64	62	60	64	44	44	45	45	53	46	51	48	12	
11	65	63	58	60	58	56	60	40	40	41	49	49	42	48	44	11	
10	61	59	53	56	54	52	56	36	36	49	45	38	44	40	40	10	
9	57	55	49	52	50	48	52	32	32	31	45	41	38	35	40	9	
8	53	50	44	48	46	44	48	27	27	41	37	31	31	37	32	8	
7	49	46	40	44	42	40	44	23	23	22	37	33	27	33	28	7	
6	45	41	35	40	38	36	39	19	19	18	33	29	24	29	24	6	
5	41	37	31	36	34	31	35	15	15	13	28	25	19	20	20	5	
4	37	33	27	32	30	27	31	11	11	9	24	21	16	22	16	4	
3	33	28	22	26	23	27	9	7	7	4	20	17	10	13	18	3	
2	29	24	18	22	19	23	4	3	0	16	13	5	9	9	2		
1	25	20	13	18	15	19	0	0	0	11	9	0	7	0	0	1	
0	15	15	13	11	15	0	0	0	0	7	0	0	7	0	0	0	

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 65-69 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	87		83		92		87				88	87	87	82		19
18	82	86	79				83				85	83	83	78		18
17	78	82	75		83		78			78		79		75		17
16	74	77	71			72	74	71	77			74	75	71		16
15	70	73	67		74		70	68			73					15
14	65	68	63	66	69	64	66	64	68		69	66	66	63		14
13	61	64	59		65		62	60		62		62	62	60	59	13
12	57	59	55	59	60	56	58	56	59		61	57	58	56	56	12
11	52	55	51	56	55	52	54	53	55	54	57	53	54	52	52	11
10	48	50	47	52	51	48	50	49	50		54	49	50	49	49	10
9	44	46	43	49	46	44	45	45	46	46	50	45	46	45	45	9
8	40	41	39	45	42	40	41	41	41		46	40	42	41	41	8
7	35	36	35	42	37	36	37	37	37	38	42	36	38	37	38	7
6	31	32	31	38		32	33	34	32		34	32	34	34	34	6
5	27	27	27	35	28	28	29	30	28	30	34	28	30	30	31	5
4	23	23	23	32		24	25	26	23		26		23	26	27	4
3	18	18	18	28	19	21	21		19		22		19	22	24	3
2	14	14	14	25	14	17	17	19	14		18		15	18	19	2
1	10		10	21	10	13	12	15	10		14			15		1
0				18		9	8	11								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	87	91	92	97	94	91	91	92				77	78	19
18	84	83	86	87	93	90	87	87	88				74	75	18
17	80	78	81	82	89	86	83	83	83				70	71	17
16	75	74	76	77	85	82	79	79	79				67	68	16
15	71	70	71	72	80	78	75	74	74				69	63	15
14	67	66	66	67	76	74	70	70	70	65			60	61	14
13	63	62	61	62	72	70	66	66	66		64	63	56	57	13
12	59	58	56	57	67	66	62	62	61	57			53	54	12
11	55	54	50	52	63	62	58	57	57		56	56	49	50	11
10	50	50	45	47	59	58	54	53	52	50	52	53	46	47	10
9	46	46	40	43	55	54	50	49	48	46	48	49	42	43	9
8	42	42	35	38	50	50	46	45	44	42	44	46	39	40	8
7	38	38	30	33	46	46	42	41	39	38	40	43	35	36	7
6	34	34	25	28	42	42	38	36	35	35	36	40	32	33	6
5	29	30	20	23	38	38	33	32	31	31	32	36	28	29	5
4	25	25	15	18	33	34	29	28	26	27	29	33	25	25	4
3	21	21	10	13	29	30	25	24	22	23	25	30	21	22	3
2	17	17	5	8	25	26	21	20	17	19	21	26	18	18	2
1	13	13	0	3	21	22	17	15	13	16	17	23	14	15	1
0	9	9	0	0	16	18		11							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	69	100		90	93	82	79	87	77						19
18	64	65	100	86	89	78	75	83	74	73				82	18
17	60	60	97	82	84	74	72	79			77				17
16	56	56	92	78	80	70	68	75	66		73				16
15	52	52	87	74	75	67	64	70	62	63	69	69	62	70	15
14	47	47	81	70	71	63	61	66	58	60	65		59		14
13	43	43	76	66	66	59	57	62	54	57	62	62		62	13
12	39	39	70	62	62	55	54	58	50		58	59	53	58	12
11	35	34	65	58	57	51	50	53	46	50	54	55		54	11
10	30	30	60	54	53	48	46	49	42	47	50	52	46	50	10
9	26	26	54	50	48	44	43	45	44	46	49	43	46		9
8	22	21	49	46	44	40	39	40	34	41	42	45	40	42	8
7	18	17	44	41	40	36	36	36	31		39	42	37	39	7
6	13	13	38	37	35	32	32	32	27	34	35	38	34	35	6
5	9	8	33	33	31	29	28	28	23	31	31	35	31	31	5
4	5	4	28	29	26	25	25	23	19		27	31	28	27	4
3	1	0	22	25	22	21	21	19	15	25	23	28	25	23	3
2	0	0	17	21	17	17	18	15	11		19	24	22	19	2
1	0	0	11	17	13	13	14	11		18	16	21	18	15	1
0	0	0	6	13				6		15	12	18	15		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		95		91		96		72							19	
18	96	96	90	91			92		68							18	
17	92	92	86	87	83		88		64	68				63	70	17	
16	88	87	81	83	79	78	84		59	63	70		60	66	63	16	
15	84	83	77	79	75	74	80		55	59			56	63		15	
14	80	79	73	75	71	70	76		51	54	63		52	59	55	14	
13	76	74	68	71	67	66	72		47	50	62	59		48	55	51	13
12	72	70	64	67	64	61	68		43	45			53	45	52	47	12
11	68	65	59	63	60	57	64	56	39	41	54	51		41	48	43	11
10	64	61	55	59	56	53	60		34	36	50	47		37	44	39	10
9	60	57	50	54	52	49	55	44	30	31	45	43	39	34	41	36	9
8	56	52	46	50	48	45	51		26	27	41	39		30	37	32	8
7	52	48	41	46	44	41	47	33	22	22	37	35	29	26	33	28	7
6	48	44	37	42	40	37	43		18	18	33	31		23	30	24	6
5	44	39	33	38	36	33	39	21	14	13	29	27	19	19	26	20	5
4	40	35	28	34	32	29	35		10	9	24	23		15	22	16	4
3	36	31	24		28	24	31	10	5	4	20	19	10	12	19		3
2	32	26	19		24	20	27	4	1	0	16	15	5	8			2
1	28	22	15		20	16	23	0	0	0	12	11	0				1
0	18				12	19	0		0	7				8	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 70-74 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	88		84		94		90				90	89	88	83		19
18	83	87	79				86				86	84	84	79		18
17	79	83	75		85		81			80		80		75		17
16	75	78	71			75	77	74	80			76	76	71		16
15	70	74	67		76		73	70			75					15
14	66	69	63	66	71	67	69	66	71		71	67	68	64		14
13	62	65	59		67		65	63		64		63	64	60	59	13
12	58	60	55	59	62	59	61	59	62		63	59	60		56	12
11	53	56	51	56	58	55	57	55	57	56	59	55	56	53	52	11
10	49	51	47	53	53	51	52	51	53		55	50	52	49	49	10
9	45	47	43	49	48	47	48	48	48	48	51	46	48	45	45	9
8	41	42	39	46	44	43	44	44	44		47	42	44	42	42	8
7	36	38	35	42	39	39	40	40	39	41	44	38	40	38	38	7
6	32	33	31	39		35	36	36	35		37	33	36	34	35	6
5	28	28	27	35	30	31	32	33	30		33	36	29	32	30	5
4	23	24	23	32		27	28	29	26	29		25	28	27	27	4
3	19	19	19	28	21	23	24		21	25		21	24	23	24	3
2	15	15	15	25	16	19	19	21	17	21		17	20	19	20	2
1	11		11	21	12	15	15	17	12		17			15		1
0				18		11	11	14								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	90	88	94	95	100	97	94	94	95				77	79	19
18	86	84	88	90	96	93	90	90	90				74	75	18
17	81	80	83	85	92	89	86	85	86				70	71	17
16	77	76	78	80	88	85	82	81	82				67	68	16
15	73	71	73	75	83	81	77	77	77		71		63	64	15
14	69	67	68	70	79	77	73	73	73	67			60	61	14
13	65	63	63	65	75	73	69	69	68		65	65	56	57	13
12	61	59	58	60	71	69	65	64	64	59			53	54	12
11	56	55	53	55	66	65	61	60	60		57	58	49	50	11
10	52	51	48	50	62	61	57	56	55	52	53	55	46	47	10
9	48	47	43	45	58	57	53	52	51	48	49	51	42	43	9
8	44	43	37	40	54	53	49	47	46	44	45	48	39	40	8
7	40	39	32	35	49	49	44	43	42	40	41	45	35	36	7
6	35	35	27	30	45	45	40	39	38	36	37	42	32	33	6
5	31	31	22	25	41	41	36	35	33	33	33	38	28	29	5
4	27	27	17	20	37	37	32	31	29	29	29	35	25	26	4
3	23	23	12	15	32	33	28	26	25	25	26	32	21	22	3
2	19	18	7	10	28	29	24	22	20	21	22	28	18	19	2
1	15	14	2	5	24	25	20	18	16	17	18	25	14	15	1
0	10	10	0	0	20	21		14							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	67	100	91	96	83	79	89	77								19
18	63	64	100	87	91	79	76	74	74	74						18
17	58	59	100	83	87	75	72	80			78					17
16	54	55	96	79	82	71	69	76	66		74					16
15	50	51	91	75	78	67	65	72	62	64	70	70	63	73		15
14	46	46	85	71	73	64	61	68	58	61	66		60			14
13	41	42	80	67	69	60	58	63	54	57	62	63				13
12	37	38	75	63	64	56	54	59	50		59	60	53	61		12
11	33	33	69	59	60	52	51	55	46	51	55	56				11
10	29	29	64	55	56	48	47	50	42	48	51	53	47	53		10
9	25	25	59	51	51	45	43	46	45	47	49	44	49			9
8	20	20	53	47	47	41	40	42	34	41	43	46	41	45		8
7	16	16	48	43	42	37	36	38	31		39	42	38	41		7
6	12	12	42	39	38	33	33	33	27	35	36	39	35	37		6
5	8	7	37	35	33	29	29	29	23	32	32	35	31	33		5
4	3	3	32	31	29	26	25	25	19		28	32	28	29		4
3	0	0	26	27	24	22	22	21	15	25	24	29	25	25		3
2	0	0	21	23	20	18	18	16	11		20	25	22	21		2
1	0	0	16	19	15	14	15	12		19	16	22	19	18		1
0	0	0	10	15				8		15	13	18	16			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	100	96	93	100					71								19
18	99	98	92	94			97		66								18
17	95	94	88	90	85		92		62	68				62	70		17
16	91	90	83	86	81	79	88		58	63	73			59	67	63	16
15	87	85	79	82	77	75	84		54	59				55	63		15
14	83	81	74	78	73	71	80		50	54	65			51	59	55	14
13	79	76	70	74	69	67	76		46	50	62	61		48	56	51	13
12	75	72	65	70	65	63	72		41	45			53	44	52	47	12
11	71	68	61	66	61	59	68	56	37	41	54	53		40	48	43	11
10	67	63	56	61	57	54	64		33	36	50	49		37	45	39	10
9	63	59	52	57	53	50	60	45	29	31	46	45	39	33	41	35	9
8	59	55	48	53	50	46	56		25	27	41	41		29	37	31	8
7	55	50	43	49	46	42	52	33	21	22	37	37	29	26	34	27	7
6	51	46	39	45	42	38	47		17	18	33	33		22	30	23	6
5	47	42	34	41	38	34	43	22	12	13	29	30	19	18	26	20	5
4	43	37	30	37	34	30	39		8	9	25	26		15	23	16	4
3	39	33	25		30	26	35	10	4	4	20	22	10	11	19		3
2	36	29	21		26	22	31	4	0	0	16	18	5	7			2
1	32	24	16		22	17	27	0	0	0	12	14	0				1
0	20	20			13	23	0		0	8				8	0		0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 75-79 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		84		97		93				92	90	90	83		19
18	84	88	80				89				88	86	86	79		18
17	80	84	76		88		85			83		82		76		17
16	76	79	72			78	81	77	83			77	78	72		16
15	71	75	68		78		76	73			76					15
14	67	70	64	67	74	70	72	70	74		72	69	70	64		14
13	63	66	60		69		68	66		67		65	66	61	59	13
12	59	61	56	60	65	62	64	62	65		65	60	62		56	12
11	54	57	52	56	60	58	60	58	60	59	61	56	58	53	52	11
10	50	52	48	53	56	54	56	54	56		57	52	53	50	49	10
9	46	48	43	49	51	50	52	51	51	51	53	48	49	46	45	9
8	42	43	39	46	46	46	48	47	47		49	44	45	42	42	8
7	37	39	35	42	42	42	43	43	42	43	45	39	41	38	38	7
6	33	34	31	39		38	39	39	38		39	35	37	35	35	6
5	29	30	27	35	33	34	35	36	33		35	37	31	33	31	5
4	24	25	23	32		30	31	32	29		32		27	29	27	4
3	20	20	19	28	23	26	27		24		28		22	25	23	3
2	16	16	15	25	19	22	23	24	20		24		18	21	20	2
1	12		11	21	14	18	19	20	15		20			16		1
0				18		14	15	17								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	89	96	97	100	100	97	97	98				77	79	19
18	88	85	91	92	100	96	93	92	93				74	75	18
17	84	81	86	87	95	92	89	88	89				70	72	17
16	79	77	81	82	91	88	85	84	85				67	68	16
15	75	73	76	77	87	84	81	80	80			73	63	65	15
14	71	68	70	72	83	80	77	75	76	69			60	61	14
13	67	64	65	67	78	76	72	71	71			66	67	56	13
12	63	60	60	62	74	72	68	67	67	61			53	54	12
11	58	56	55	57	70	68	64	63	63			58	60	49	11
10	54	52	50	52	66	64	60	59	58	54	54	57	46	47	10
9	50	48	45	47	61	60	56	54	54	50	50	54	42	43	9
8	46	44	40	42	57	56	52	50	50	46	46	50	39	40	8
7	42	40	35	37	53	52	48	46	45	42	42	47	35	36	7
6	38	36	30	32	49	48	44	42	41	38	38	44	32	33	6
5	33	32	25	28	44	44	39	38	36	35	34	41	28	29	5
4	29	28	19	23	40	40	35	33	32	31	30	37	25	26	4
3	25	24	14	18	36	36	31	29	28	27	27	34	21	22	3
2	21	20	9	13	31	32	27	25	23	23	23	31	18	19	2
1	17	15	4	8	27	28	23	21	19	19	19	27	14	15	1
0	12	11	0	3	23	24		16							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Male

Education: 18-20 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	67	100		93	99	83	80	90	77						19
18	63	62	100	89	94	80	76	86	74	74				88	18
17	58	58	100	85	90	76	73	82			79				17
16	54	54	100	81	85	72	69	78	66		75				16
15	50	49	96	77	81	68	66	73	62	64	71	71	63	76	15
14	46	45	90	73	76	64	62	69	58	61	67		60		14
13	41	41	85	69	72	61	58	65	54	58	63	64		68	13
12	37	36	79	65	68	57	55	61	50		60	60	54	64	12
11	33	32	74	61	63	53	51	56	46	52	56	57		60	11
10	29	28	69	57	59	49	48	52	42	48	52	53	48	56	10
9	25	23	63	53	54	46	44	48	45	48	50	45	52		9
8	20	19	58	49	50	42	40	43	34	42	44	47	41	48	8
7	16	15	53	45	45	38	37	39	31		40	43	38	44	7
6	12	10	47	41	41	34	33	35	27	35	37	40	35	40	6
5	8	6	42	37	36	30	30	31	23	32	33	36	32	37	5
4	3	2	37	33	32	27	26	26	19		29	33	29	33	4
3	0	0	31	29	27	23	23	22	15	26	25	29	26	29	3
2	0	0	26	25	23	19	19	18	11		21	26	23	25	2
1	0	0	21	21	19	15	15	14		19	17	22	20	21	1
0	0	15		17				9		16	14	19	17		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		98		93		100		71							19	
18	99	100	94	98			100		66							18	
17	95	96	89	94	85		98		62	68				61	71	17	
16	91	92	85	89	81	80	94		58	63	76			58	67	63	16
15	87	88	80	85	77	76	90		54	59				54	63		15
14	83	83	76	81	73	72	86		50	54	68			50	60	55	14
13	79	79	72	77	69	68	82		46	50	63	64		46	56	51	13
12	75	75	67	73	65	64	77		41	45			53	43	52	47	12
11	71	70	63	69	61	60	73	57	37	41	54	56		39	49	43	11
10	67	66	58	65	57	56	69		33	36	50	52		35	45	39	10
9	63	62	54	61	53	52	65	45	29	31	46	48	39	32	41	35	9
8	59	57	49	57	50	48	61		25	27	42	44		28	38	31	8
7	55	53	45	53	46	43	57	34	21	22	37	40	29	24	34	27	7
6	51	49	41	49	42	39	53		17	18	33	36		21	30	23	6
5	47	44	36	45	38	35	49	22	12	13	29	32	20	17	27	19	5
4	43	40	32	41	34	31	45		8	9	25	28		13	23	15	4
3	39	36	27		30	27	41	11	4	4	21	24	10	10	19		3
2	36	31	23		26	23	37	5	0	0	16	21	5	6			2
1	32	27	18		22	19	32	0	0	0	12	17	0				1
0	23				15	28	0		0	8				8	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Male

Education: 18-20 years

Age: 80-85 years

Race: Caucasian

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	90		84		100		97				93	92	92	84		19	
18	85	90	80				93				90	88	88	80		18	
17	81	85	76		91		89			87		83		76		17	
16	77	80	72			82	85	81	86			79	80	72		16	
15	72	76	68		82		81	77			78					15	
14	68	71	64	67	77	74	77	73	77		74	71	71	65		14	
13	64	67	60		72		72	70			71		66	67	61	59	13
12	60	62	56	60	68	66	68	66	68		66	62	63		56	12	
11	55	58	52	56	63	62	64	62	64		63	62	58	59	54	52	11
10	51	53	48	53	59	58	60	58	59		59	54	55	50	49		10
9	47	49	44	49	54	54	56	55	55		55	55	49	51	46	45	9
8	43	44	40	46	49	50	52	51	50		51	45	47	43	42		8
7	38	40	36	42	45	46	48	47	46		47	47	41	43	39	38	7
6	34	35	32	39		42	44	43	41		43		37	39	35	35	6
5	30	31	28	35	36	38	39	39	37		39	39	33	35	31	31	5
4	25	26	24	32		34	35	36	32		35		28	31	28	28	4
3	21	22	20	29	27	30	31		28		31		24	27	24	24	3
2	17	17	16	25	22	26	27	28	23		27		20	23	20	21	2
1	13		12	22	17	22	23	24	19		23				17		1
0				18		18	19	21									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	95	90	99	100	100	100	100	100	100				77	79	19	
18	90	86	94	95	100	100	97	96	97				74	75	18	
17	86	82	88	90	99	96	93	91	93				70	72	17	
16	82	78	83	85	95	92	89	87	88				67	68	16	
15	78	74	78	80	91	88	85	83	84		76		63	65	15	
14	74	70	73	75	87	84	81	79	79	71			60	61	14	
13	70	65	68	70	82	80	76	75	75		67	70	56	58	13	
12	65	61	63	65	78	76	72	70	71	64			53	54	12	
11	61	57	58	60	74	72	68	66	66		59	63	49	51	11	
10	57	53	53	55	70	68	64	62	62		56	55	60	46	47	10
9	53	49	48	50	65	64	60	58	57	52	51	57	42	44	9	
8	49	45	43	45	61	60	56	53	53	48	47	53	39	40	8	
7	44	41	37	40	57	56	52	49	49		45	43	50	35	36	7
6	40	37	32	35	52	52	48	45	44	41	39	47	32	33	6	
5	36	33	27	30	48	48	43	41	40	37	35	44	28	29	5	
4	32	29	22	25	44	44	39	37	36		33	32	40	25	26	4
3	28	25	17	20	40	40	35	32	31	30	28	37	21	22	3	
2	24	21	12	15	35	36	31	28	27	26	24	34	18	19	2	
1	19	17	7	10	31	32	27	24	22	22	20	30	14	15	1	
0	15	12	2	5	27	28	20									0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	100	100	100	89	93	90	81	83	91						19
18	98	100	96	85	88	86	77	79	87	80				80	18
17	94	98	91	81	84	82	74	75			84				17
16	89	94	86	77	79	78	70	71	80		80				16
15	85	90	80	73	75	75	66	66	76	70	76	73	69	69	15
14	81	85	75	69	70	71	63	62	72	67	73		66		14
13	77	81	70	65	66	67	59	58	68	64	69	66		61	13
12	72	77	64	61	61	63	56	54	64		65	63	59	57	12
11	68	72	59	57	57	59	52	49	60	57	61	59		53	11
10	64	68	53	52	53	56	48	45	56	54	57	56	53	49	10
9	60	64	48	48	48	52	45	41		51	53	53	50	45	9
8	55	59	43	44	44	48	41	37	48	48	50	49	47	41	8
7	51	55	37	40	39	44	38	32	44		46	46	44		7
6	47	51	32	36	35	40	34	28	40	41	42	42	41	33	6
5	43	47	27	32	30	37	30	24	37	38	38	39	37	29	5
4	38	42	21	28	26	33	27	19	33		34	35	34	25	4
3	34	38	16	24	21	29	23	15	29	32	30	32	31	21	3
2	30	34	11	20	17	25	20	11	25		27	28	28	17	2
1	26	29	5	16	13	21	16	7		25	23	25	25	14	1
0	25	0		12				2		22	19	22	22		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93	93			95		85		100							19	
18	89	90	88	78			81		99							18	
17	85	86	84	74	87		77		94	96				88	83	17	
16	81	82	79	70	83	78	73		90	91	81		84	79	83	16	
15	77	77	75	66	79	74	69		86	87			80	76		15	
14	73	73	70	61	75	70	65		82	82	73		77	72	75	14	
13	69	69	66	57	71	66	61		78	77	72	69		73	68	71	13
12	65	64	61	53	67	62	57		74	73			63	69	65	67	12
11	61	60	57	49	64	58	53	64	69	68	64	61		66	61	63	11
10	57	56	53	45	60	54	49		65	64	59	57		62	57	59	10
9	53	51	48	41	56	49	45	52	61	59	55	53	48	58	54	56	9
8	49	47	44	37	52	45	40		57	55	51	49		55	50	52	8
7	45	43	39	33	48	41	36	41	53	50	47	45	39	51	46	48	7
6	41	38	35	29	44	37	32		49	46	43	41		47	43	44	6
5	37	34	30	25	40	33	28	29	45	41	38	37	29	44	39	40	5
4	33	30	26	21	36	29	24		40	37	34	33		40	35	36	4
3	30	25	22		32	25	20	17	36	32	30	29	20	36	32		3
2	26	21	17		28	21	16	12	32	27	26	25	15	33			2
1	22	16	13		24	17	12	6	28	23	21	22	10				1
0	12				13	8	0		18	17				21	20		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 20-34 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	92		87		85		80			81	91	89	86		19		
18	87	92	83				76			77	87	85	82		18		
17	83	88	79		76		71			79	83		78		17		
16	79	83	75			68	67	66	73			79	76	75	16		
15	74	79	71		67		63	62			66				15		
14	70	74	67	63	62	60	59	58	64		62	70	68	67	14		
13	66	70	63		58		55	55		63		66	64	63	59	13	
12	62	65	59	56	53	52	51	51	55		54	62	60		55	12	
11	57	61	55	53	48	48	47	47	50	55	50	57	56	56	52	11	
10	53	56	50	49	44	44	43	43	46		46	53	52	52	48	10	
9	49	52	46	46	39	40	38	40	41	47	42	49	48	49	45	9	
8	45	47	42	43	35	36	34	36	37		38	45	44	45	41	8	
7	40	43	38	39	30	32	30	32	32	39	34	40	40	41	38	7	
6	36	38	34	36		28	26	28	28		35	36	36	37	34	6	
5	32	34	30	32	21	24	22	24	23	31	27	32	32	34	31	5	
4	27	29	26	29		20	18	21	19		27		28	28	30	27	4
3	23	25	22	25	12	16	14		14		23		23	24	26	24	3
2	19	20	18	22	7	12	10	13	10	19		19	20	22	20	2	
1	15		14	18	3	8	5	9	5	15				19		1	
0				15		4	1	6								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	97	100	100	83	82	83	85	85				94	93	19
18	96	93	100	96	79	78	79	81	80				90	90	18
17	92	89	94	92	75	74	75	77	76				87	86	17
16	88	85	89	87	71	70	71	73	71				83	82	16
15	83	80	84	82	66	66	67	69	67		63	80	79		15
14	79	76	79	77	62	62	63	64	63	61		76	75		14
13	75	72	74	72	58	58	59	60	58	57	57	73	72		13
12	71	68	69	67	54	54	55	56	54	53		69	68		12
11	67	64	64	62	49	50	50	52	49	50	50	66	65		11
10	63	60	59	57	45	46	46	47	45	46	46	47	62	61	10
9	58	56	54	52	41	42	42	43	41	42	42	43	59	58	9
8	54	52	49	47	37	38	38	39	36	38	38	40	55	54	8
7	50	48	43	42	32	34	34	35	32	34	34	37	52	51	7
6	46	44	38	37	28	30	30	31	28	31	30	34	48	47	6
5	42	40	33	32	24	26	26	23	27	26	30	45	44		5
4	37	36	28	27	20	22	22	19	23	22	27	41	40		4
3	33	32	23	22	15	18	18	14	19	18	24	38	37		3
2	29	27	18	17	11	14	13	14	10	16	14	20	34	33	2
1	25	23	13	12	7	10	9	10	6	12	10	17	31	30	1
0	21	19	8	7	3	6		5							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	100	100	100	92	95	91	82	86	91						19
18	96	100	100	88	90	88	78	82	87	81				81	18
17	92	96	95	84	86	84	75	78			86				17
16	88	92	89	80	82	80	71	73	80		82				16
15	83	88	84	76	77	76	68	69	76	71	78	75	70	70	15
14	79	83	78	72	73	72	64	65	72	68	74		67		14
13	75	79	73	68	68	69	60	61	68	65	71	68		62	13
12	71	75	68	64	64	65	57	56	64		67	64	60	58	12
11	66	70	62	60	59	61	53	52	60	58	63	61		54	11
10	62	66	57	56	55	57	50	48	56	55	59	57	54	50	10
9	58	62	52	52	50	53	46	44		52	55	54	51	46	9
8	54	57	46	48	46	50	43	39	48	49	51	51	48	42	8
7	50	53	41	44	41	46	39	35	44		48	47	45	38	7
6	45	49	36	40	37	42	35	31	40	42	44	44	42	34	6
5	41	44	30	36	33	38	32	27	37	39	40	40	39	30	5
4	37	40	25	32	28	35	28	22	33		36	37	36	26	4
3	33	36	19	28	24	31	25	18	29	33	32	33	32	22	3
2	28	31	14	24	19	27	21	14	25		28	30	29	18	2
1	24	27	9	20	15	23	17	9		26	25	26	26	15	1
0	23	3		16				5		23	21	23	23		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97		96		97		87		100							19	
18	93	90	91	79			83		97							18	
17	89	85	87	75	89		79		93	96				87	84	17	
16	85	81	83	71	85	81	75		89	91	79		84	80	83	16	
15	81	77	78	67	81	77	71		85	87			80	76		15	
14	77	72	74	63	77	72	67		81	82	71		76	73	75	14	
13	73	68	69	58	73	68	62		76	77	72	67		73	69	71	13
12	69	63	65	54	69	64	58		72	73			63	69	65	67	12
11	65	59	60	50	65	60	54	64	68	68	64	59		65	62	63	11
10	61	55	56	46	61	56	50		64	64	60	55		62	58	59	10
9	57	50	51	42	57	52	46	53	60	59	56	51	49	58	54	55	9
8	53	46	47	38	53	48	42		56	55	51	47		54	51	51	8
7	49	42	43	34	50	44	38	41	52	50	47	43	39	51	47	47	7
6	45	37	38	30	46	40	34		47	46	43	39		47	43	43	6
5	41	33	34	26	42	36	30	30	43	41	39	35	29	43	40	39	5
4	37	29	29	22	38	31	26		39	37	35	31		40	36	35	4
3	33	24	25		34	27	22	18	35	32	30	27	20	36	32		3
2	29	20	20		30	23	17	12	31	27	26	23	15	32			2
1	25	16	16		26	19	13	7	27	23	22	20	10				1
0	11				15	9	1		18	18				21	20		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 35-39 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	93		88		86		81				84	94	92	87		19	
18	89	95	84				77				80	90	88	83		18	
17	85	90	80		77		73				80		86		79	17	
16	81	86	75			69	69	67	74			82	80	76		16	
15	76	81	71		68		64	63				69				15	
14	72	77	67	64	63	61	60	60	65		65	73	72	68		14	
13	68	72	63		58		56	56			64		69	68	64	59	13
12	63	67	59	57	54	53	52	52	56		57	65	64		56	12	
11	59	63	55	53	49	49	48	48	51		56	53	60	59	57	52	11
10	55	58	51	50	45	45	44	44	47		49	56	55	53	49		10
9	51	54	47	46	40	41	40	41	42		48	45	52	51	50	45	9
8	46	49	43	43	36	37	36	37	38		42	48	47	46	42		8
7	42	45	39	39	31	33	31	33	33		40	38	43	43	42	38	7
6	38	40	35	36		29	27	29	29		36		39	39	38	35	6
5	34	36	31	32	22	25	23	26	24		32	30	35	35	35	31	5
4	29	31	27	29		21	19	22	20		28		31	31	31	27	4
3	25	27	23	25	13	17	15		16		24		27	27	27	24	3
2	21	22	19	22	8	13	11	14	11		20		22	23	23	20	2
1	16		15	19	4	9	7	10	7		16				20		1
0				15		5	3	7								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	100	97	100	100	86	85	85	88	87				94	93	19	
18	97	93	99	96	82	81	81	84	83				90	90	18	
17	93	89	93	91	78	77	76	79	78				87	86	17	
16	88	85	88	86	74	73	72	75	74				83	83	16	
15	84	81	83	81	69	69	68	71	70				64	80	79	15
14	80	77	78	76	65	65	64	67	65	62			76	76	14	
13	76	73	73	71	61	61	60	63	61		59	57	73	72	13	
12	72	69	68	66	57	57	56	58	56		54		69	69	12	
11	67	65	63	61	52	53	52	54	52		52	51	66	65	11	
10	63	61	58	56	48	49	48	50	48		47	48	48	62	62	10
9	59	57	53	51	44	45	43	46	43		43	44	44	59	58	9
8	55	52	48	46	40	41	39	41	39		39	40	41	55	54	8
7	51	48	43	41	35	37	35	37	35		35	36	38	52	51	7
6	47	44	37	36	31	33	31	33	30		31	32	34	48	47	6
5	42	40	32	31	27	29	27	29	26		28	28	31	45	44	5
4	38	36	27	26	22	25	23	25	21		24	24	28	41	40	4
3	34	32	22	21	18	21	19	20	17		20	20	25	38	37	3
2	30	28	17	16	14	17	15	16	13		16	16	21	34	33	2
1	26	24	12	11	10	13	10	12	8		13	12	18	31	30	1
0	21	20	7	6	5	9		8								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	100	100		94	96	89	83	88	91						19
18	96	99	100	90	92	85	79	83	87	82				82	18
17	92	95	97	86	87	82	75	79			87				17
16	88	91	91	82	83	78	72	75	80		83				16
15	83	86	86	78	78	74	68	71	76	72	79	75	70	70	15
14	79	82	81	74	74	70	65	66	72	69	75		67		14
13	75	78	75	70	70	66	61	62	68	65	72	69		62	13
12	71	73	70	66	65	63	58	58	64		68	65	61	58	12
11	66	69	65	62	61	59	54	54	60	59	64	62		55	11
10	62	65	59	58	56	55	50	49	56	56	60	58	55	51	10
9	58	61	54	54	52	51	47	45		52	56	55	52	47	9
8	54	56	48	50	47	48	43	41	48	49	52	51	49	43	8
7	50	52	43	46	43	44	40	36	44		48	48	45	39	7
6	45	48	38	42	38	40	36	32	40	43	45	44	42	35	6
5	41	43	32	38	34	36	32	28	37	40	41	41	39	31	5
4	37	39	27	34	30	32	29	24	33		37	38	36	27	4
3	33	35	22	30	25	29	25	19	29	33	33	34	33	23	3
2	28	30	16	25	21	25	22	15	25		29	31	30	19	2
1	24	26	11	21	16	21	18	11		27	25	27	27	15	1
0	22	22	6	17				7	23	22	24	24			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97		98		97		88		100							19	
18	93	92	93	80			84		97							18	
17	89	88	89	76	89		80		93	96				87	84	17	
16	85	83	84	71	85	82	76		89	91	76		84	80	83	16	
15	81	79	80	67	81	78	72		85	87			80	77		15	
14	77	74	75	63	77	74	68		81	82	68		76	73	75	14	
13	73	70	71	59	73	70	64		76	77	73	64		73	69	71	13
12	69	66	66	55	69	65	60		72	73			63	69	66	67	12
11	65	61	62	51	65	61	56	65	68	68	64	56		65	62	63	11
10	61	57	58	47	61	57	51		64	64	60	52		61	58	59	10
9	57	53	53	43	57	53	47	53	60	59	56	48	49	58	55	55	9
8	53	48	49	39	53	49	43		56	55	52	44		54	51	51	8
7	49	44	44	35	50	45	39	42	52	50	47	40	39	50	47	47	7
6	45	40	40	31	46	41	35		47	46	43	36		47	44	43	6
5	41	35	35	27	42	37	31	30	43	41	39	32	30	43	40	39	5
4	37	31	31	23	38	33	27		39	37	35	28		39	36	35	4
3	33	27	26		34	29	23	19	35	32	31	25	20	36	33		3
2	29	22	22		30	24	19	13	31	27	26	21	15	32			2
1	25	18	18		26	20	15	7	27	23	22	17	10				1
0	14				16	11	1		18	18				22	19		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 40-44 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	94		88		87		82				86	96	93	87		19
18	90	96	84				78				82	92	89	84		18
17	86	91	80		78		74				81	87		80		17
16	82	87	76			70	70	68	75			83	81	76		16
15	77	82	72		68		65	64				70				15
14	73	78	68	64	64	62	61	60	66		66	75	73	69		14
13	69	73	64		59		57	57			65	70	69	65	59	13
12	64	69	60	57	55	54	53	53	57		59	66	65	56	56	12
11	60	64	56	53	50	50	49	49	52		57	55	62	61	57	11
10	56	59	52	50	45	46	45	45	48		51	58	57	54	49	10
9	52	55	48	46	41	42	41	42	43		49	47	54	53	50	9
8	47	50	44	43	36	38	37	38	39		43	49	49	46	42	8
7	43	46	39	39	32	34	32	34	34		41	39	45	45	38	7
6	39	41	35	36		30	28	30	30		37	41	41	39	35	6
5	35	37	31	33	23	26	24	26	25		33	32	37	35	31	5
4	30	32	27	29		22	20	23	21		29	32	33	31	28	4
3	26	28	23	26	13	18	16		16		25	28	29	28	24	3
2	22	23	19	22	9	14	12	15	12		21	24	25	24	21	2
1	17		15	19	4	10	8	11	7		17			20		1
0				15		6	3	8								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	99	100	100	88	85	86	89	89				90	89	19
18	97	94	99	97	84	81	81	85	84				86	86	18
17	93	90	94	92	80	77	77	81	80				83	82	17
16	89	86	89	87	75	73	73	77	76				79	79	16
15	85	82	84	82	71	69	69	72	71				65	76	15
14	81	78	79	77	67	65	65	68	67	62			72	72	14
13	76	74	74	72	63	61	61	64	62		60	58	69	68	13
12	72	70	69	67	58	57	57	60	58	55			65	65	12
11	68	66	64	62	54	53	53	56	54		52	52	62	61	11
10	64	62	59	57	50	49	48	51	49	47	49	48	58	58	10
9	60	58	54	52	46	45	44	47	45	43	45	45	55	54	9
8	56	54	48	47	41	41	40	43	41	40	41	42	51	51	8
7	51	50	43	42	37	37	36	39	36	36	37	38	48	47	7
6	47	46	38	37	33	33	32	34	32	32	33	35	44	44	6
5	43	41	33	32	29	29	28	30	27	28	29	32	41	40	5
4	39	37	28	27	24	25	24	26	23	24	25	29	37	36	4
3	35	33	23	22	20	21	20	22	19	21	21	25	34	33	3
2	30	29	18	17	16	17	16	18	14	17	17	22	30	29	2
1	26	25	13	12	12	13	11	13	10	13	13	19	27	26	1
0	22	21	8	8	7	9		9							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	99		100	95	98	90	83	89	91						19	
18	94	98	100	91	93	86	80	85	87	82				83	18	
17	90	94	99	87	89	82	76	81			88				17	
16	86	90	94	83	84	79	73	76	80		84				16	
15	82	85	88	79	80	75	69	72	76	72	80	76	71	71	15	
14	78	81	83	75	76	71	65	68	72	69	76	68			14	
13	73	77	78	71	71	67	62	64	68	66	72	69		63	13	
12	69	72	72	67	67	64	58	59	64		69	66	62	59	12	
11	65	68	67	63	62	60	55	55	60	59	65	62		55	11	
10	61	64	62	59	58	56	51	51	56	56	61	59	55	52	10	
9	56	59	56	55	53	52	47	46	53	57	55	52	48		9	
8	52	55	51	51	49	48	44	42	48	50	53	52	49		8	
7	48	51	46	47	44	45	40	38	44		49	49	46	40		7
6	44	46	40	43	40	41	37	34	40	43	46	45	43	36		6
5	39	42	35	39	36	37	33	29	37	40	42	42	40	32		5
4	35	38	30	35	31	33	29	25	33		38	38	37	28		4
3	31	34	24	31	27	29	26	21	29	34	34	35	34	24		3
2	27	29	19	27	22	26	22	17	25		30	31	30	20		2
1	23	25	13	23	18	22	19	12		27	26	28	27	16		1
0	21	8		19				8		24	23	24	24			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		99		99		90		100								19
18	96	94	95	81			86		96								18
17	92	90	90	77	91		82		92	96				87	84		17
16	88	85	86	73	87	83	77		88	91		76		83	81	83	16
15	84	81	81	68	83	79	73		83	87				80	77		15
14	80	77	77	64	79	75	69		79	82		69		76	73	75	14
13	76	72	73	60	75	71	65		75	77	73	65		72	70	71	13
12	72	68	68	56	71	67	61		71	73			63	69	66	67	12
11	68	64	64	52	67	63	57	65	67	68	64	57		65	62	63	11
10	64	59	59	48	63	58	53		63	64	60	53		61	59	59	10
9	60	55	55	44	59	54	49	53	59	59	56	49	49	58	55	55	9
8	56	51	50	40	55	50	45		54	55	52	45		54	51	51	8
7	52	46	46	36	51	46	41	42	50	50	48	41	39	50	48	47	7
6	48	42	41	32	47	42	37		46	46	43	37		46	44	43	6
5	44	38	37	28	43	38	32	30	42	41	39	33	30	43	40	39	5
4	40	33	33	24	39	34	28		38	37	35	29		39	37	35	4
3	36	29	28		36	30	24	19	34	32	31	25	20	35	33		3
2	32	25	24		32	26	20	13	29	27	27	21	15	32			2
1	28	20	19		28	22	16	7	25	23	22	17	10				1
0	16				17	12	2		18	18				22	19		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 45-49 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	95		88		88		83				87	97	95	88		19	
18	91	97	84				79				84	93	91	84		18	
17	87	92	80		78		75				82	89		80		17	
16	82	88	76			71	71	69	76			85	83	77		16	
15	78	83	72		69		67	65			72					15	
14	74	79	68	64	65	63	62	62	67		68	76	75	69		14	
13	70	74	64		60		58	58			66		72	71	65	59	13
12	65	70	60	57	55	55	54	54	58		60	68	67		56	12	
11	61	65	56	54	51	51	50	50	53		58	56	64	63	58	52	11
10	57	61	52	50	46	47	46	46	49		53	59	59	54	49	10	
9	53	56	48	47	42	43	42	43	44		50	49	55	55	51	45	9
8	48	52	44	43	37	39	38	39	40		45	51	51	47	42	8	
7	44	47	40	40	33	35	34	35	35		42	41	47	47	43	38	7
6	40	42	36	36		31	29	31	31		38	42	42	39	35	6	
5	35	38	32	33	23	27	25	28	26		34	33	38	38	36	31	5
4	31	33	28	29		23	21	24	22		30		34	34	32	28	4
3	27	29	24	26	14	19	17		17		26		30	30	28	24	3
2	23	24	20	22	10	15	13	16	13		22		25	26	24	21	2
1	18		16	19	5	11	9	12	8		18				21	1	
0				15		7	5	9								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	90	87	87	91	91				90	90	19
18	98	96	100	98	86	83	83	87	86				86	86	18
17	94	92	96	93	82	79	78	83	82				83	82	17
16	90	88	91	89	77	75	74	78	77				79	79	16
15	86	84	86	84	73	71	70	74	73				66	76	15
14	81	80	80	79	69	67	66	70	69	63			72	72	14
13	77	75	75	74	65	63	62	66	64		61	59	69	68	13
12	73	71	70	69	60	59	58	61	60	55			65	65	12
11	69	67	65	64	56	55	54	57	55		53	52	62	61	11
10	65	63	60	59	52	51	50	53	51	48	50	49	58	58	10
9	60	59	55	54	48	47	46	49	47	44	46	46	55	54	9
8	56	55	50	49	43	43	41	45	42	40	42	43	51	51	8
7	52	51	45	44	39	39	37	40	38	37	38	39	48	47	7
6	48	47	40	39	35	35	33	36	34	33	34	36	44	44	6
5	44	43	35	34	31	31	29	32	29	29	30	33	41	40	5
4	40	39	29	29	26	27	25	28	25	25	26	29	37	37	4
3	35	35	24	24	22	23	21	23	20	21	22	26	34	33	3
2	31	31	19	19	18	19	17	19	16	18	18	23	30	30	2
1	27	27	14	14	14	15	13	15	12	14	14	20	27	26	1
0	23	22	9	9	9	11		11							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	99		100	97	100	91	84	91	91						19
18	94	97	100	93	95	87	80	86	87	83				84	18
17	90	93	100	89	91	83	77	82			89				17
16	86	89	97	85	86	80	73	78	80		85				16
15	82	84	91	81	82	76	70	73	76	73	81	77	72	72	15
14	78	80	86	77	77	72	66	69	72	70	77		68		14
13	73	76	81	73	73	68	62	65	68	66	73	70		64	13
12	69	71	75	69	68	64	59	61	64		69	67	62	61	12
11	65	67	70	65	64	61	55	56	60	60	66	63		57	11
10	61	63	64	61	60	57	52	52	56	57	62	60	56	53	10
9	56	58	59	57	55	53	48	48		53	58	56	53	49	9
8	52	54	54	53	51	49	44	44	48	50	54	53	50	45	8
7	48	50	48	49	46	45	41	39	44		50	49	47	41	7
6	44	45	43	45	42	42	37	35	40	44	46	46	44	37	6
5	39	41	38	41	37	38	34	31	37	41	43	42	40	33	5
4	35	37	32	37	33	34	30	26	33		39	39	37	29	4
3	31	32	27	33	28	30	26	22	29	34	35	36	34	25	3
2	27	28	22	29	24	26	23	18	25		31	32	31	21	2
1	23	24	16	25	19	23	19	14		28	27	29	28	17	1
0	19	11		21				9		24	23	25	25		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		99		92		100							19	
18	96	96	96	82			88		96							18	
17	92	92	92	78	91		83		92	96				86	85	17	
16	88	88	87	74	87	84	79		88	91	78		83	81	83	16	
15	84	83	83	70	83	80	75		83	87			79	77		15	
14	80	79	79	66	79	76	71		79	82	70		75	74	75	14	
13	76	75	74	62	75	72	67		75	77	73	66		72	70	71	13
12	72	70	70	58	71	68	63		71	73			63	68	66	67	12
11	68	66	65	53	67	64	59	65	67	68	65	58		64	63	63	11
10	64	62	61	49	63	60	55		63	64	60	54		61	59	59	10
9	60	57	56	45	59	56	51	54	59	59	56	50	49	57	55	55	9
8	56	53	52	41	55	51	47		54	55	52	46		53	52	51	8
7	52	49	48	37	51	47	43	42	50	50	48	42	39	50	48	47	7
6	48	44	43	33	47	43	38		46	46	44	38		46	44	43	6
5	44	40	39	29	43	39	34	31	42	41	39	34	30	42	41	39	5
4	40	36	34	25	39	35	30		38	37	35	30		39	37	35	4
3	36	31	30		36	31	26	19	34	32	31	26	20	35	33		3
2	32	27	25		32	27	22	14	29	27	27	22	15	31			2
1	28	23	21		28	23	18	8	25	23	23	19	10				1
0	18				19	14	2		18	18				22	19		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 50-54 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		89		89		85				89	99	97	88		19	
18	92	98	85				80				85	95	93	85		18	
17	88	93	81		79		76			83		91		81		17	
16	83	89	77			72	72	70	77			86	85	77		16	
15	79	84	73		70		68	67			74					15	
14	75	80	69	64	66	64	64	63	68		70	78	76	70		14	
13	71	75	64		61		60	59		67		74	72	66	60	13	
12	66	71	60	57	57	56	56	55	59		62	69	68	56		12	
11	62	66	56	54	52	52	52	52	55	59	58	65	64	58	52	11	
10	58	62	52	50	47	48	47	48	50		54	61	60	55	49	10	
9	53	57	48	47	43	44	43	44	46	51	50	57	56	51	45	9	
8	49	53	44	43	38	40	39	40	41		46	52	52	47	42	8	
7	45	48	40	40	34	37	35	36	37	43	43	48	48	44	38	7	
6	41	44	36	36		33	31	33	32		39	44	44	40	35	6	
5	36	39	32	33	25	29	27	29	28	35	35	40	40	36	31	5	
4	32	34	28	29		25	23	25	23		31		35	36	32	28	4
3	28	30	24	26	15	21	19		19		27		31	32	29	24	3
2	24	25	20	22	11	17	14	18	14	23		27	28	25	21	2	
1	19		16	19	6	13	10	14	10		19			21		1	
0				15		9	6	10								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	92	89	88	93	93				90	90	19
18	99	97	100	100	88	85	84	89	88				86	86	18
17	95	93	97	95	84	81	80	84	84				83	83	17
16	91	89	92	90	80	77	76	80	79				79	79	16
15	87	85	87	85	75	73	72	76	75		67		76	76	15
14	82	81	82	80	71	69	68	72	71	64			72	72	14
13	78	77	77	75	67	65	63	67	66		62		60	69	13
12	74	73	72	71	63	61	59	63	62	56			65	65	12
11	70	69	67	66	58	57	55	59	58		54		53	62	11
10	66	65	62	61	54	53	51	55	53	49	50		58	58	10
9	61	61	57	56	50	49	47	51	49	45	47		55	54	9
8	57	56	52	51	46	45	43	46	44	41	43		51	51	8
7	53	52	47	46	41	41	39	42	40	37	39		40	48	7
6	49	48	41	41	37	37	35	38	36	34	35		37	44	6
5	45	44	36	36	33	33	30	34	31	30	31		34	41	5
4	41	40	31	31	29	29	26	29	27	26	27		30	37	4
3	36	36	26	26	24	25	22	25	22	22	23		27	34	3
2	32	32	21	21	20	21	18	21	18	18	19		24	30	2
1	28	28	16	16	16	17	14	17	14	15	15		21	27	1
0	24	24	11	11	12	13		13							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	97	100		99	100	92	85	92	89						19
18	93	96	100	95	97	88	81	88	85	83				86	18
17	89	92	100	91	93	84	77	83			90				17
16	84	87	100	87	88	80	74	79	77		86				16
15	80	83	94	83	84	77	70	75	73	73	82	78	72	74	15
14	76	79	89	79	79	73	67	71	70	70	78		69		14
13	72	75	84	75	75	69	63	66	66	67	74	71		66	13
12	67	70	78	71	70	65	59	62	62		70	67	63	62	12
11	63	66	73	67	66	61	56	58	58	60	67	64		58	11
10	59	62	67	63	61	58	52	54	54	57	63	60	57	54	10
9	55	57	62	59	57	54	49	49		54	59	57	53	50	9
8	51	53	57	55	53	50	45	45	46	51	55	53	50	46	8
7	46	49	51	51	48	46	41	41	42		51	50	47	42	7
6	42	44	46	47	44	42	38	36	38	44	47	47	44	38	6
5	38	40	41	43	39	39	34	32	34	41	44	43	41	34	5
4	34	36	35	39	35	35	31	28	30		40	40	38	31	4
3	29	31	30	35	30	31	27	24	27	35	36	36	35	27	3
2	25	27	25	31	26	27	23	19	23		32	33	32	23	2
1	21	23	19	27	21	23	20	15		28	28	29	29	19	1
0	18	14		23				11		25	24	26	25		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100			100		94		99								19
18	96	99	98	83			90		95								18
17	92	94	94	79	93		86		90	96				86	85	17	
16	89	90	89	75	89	86	82		86	91	79		82	81	83	16	
15	85	86	85	71	85	81	78		82	87			79	78		15	
14	81	81	80	67	81	77	73		78	82	71		75	74	75	14	
13	77	77	76	63	77	73	69		74	77	73	67		71	70	71	13
12	73	73	71	59	73	69	65		70	73		63	68	67	67	12	
11	69	68	67	55	69	65	61	66	65	68	65	59		64	63	63	11
10	65	64	62	51	65	61	57		61	64	61	55		60	59	59	10
9	61	60	58	47	61	57	53	54	57	59	56	51	49	57	56	55	9
8	57	55	54	43	57	53	49		53	55	52	48		53	52	51	8
7	53	51	49	39	53	49	45	43	49	50	48	44	39	49	48	47	7
6	49	47	45	35	49	44	41		45	46	44	40		46	45	43	6
5	45	42	40	31	45	40	37	31	41	41	40	36	30	42	41	39	5
4	41	38	36	27	41	36	33		36	37	35	32		38	37	35	4
3	37	34	31		37	32	29	20	32	32	31	28	20	35	34		3
2	33	29	27		33	28	24	14	28	27	27	24	15	31			2
1	29	25	23		29	24	20	8	24	23	23	20	11				1
0	21				20	16	2		18	19				23	19		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 55-59 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	97		89		90		86				91	100	98	89		19		
18	93	99	85				82				87	96	94	85		18		
17	89	94	81		81		78				84	92		81		17		
16	84	90	77			74	74	72	79			88	86	78		16		
15	80	85	73		72		70	68				75				15		
14	76	81	69	64	67	66	66	64	70		71	79	78	70		14		
13	72	76	65		62		62	61			69		75	74	66	60	13	
12	67	72	61	57	58	58	57	57	61			64	71	70	56	12		
11	63	67	57	54	53	54	53	53	56		61	60	67	66	59	53	11	
10	59	63	53	50	49	50	49	49	52			56	62	62	55	49	10	
9	54	58	49	47	44	46	45	46	47		53	52	58	58	52	46	9	
8	50	54	45	43	40	42	41	42	43			48	54	54	48	42	8	
7	46	49	41	40	35	38	37	38	38		45	44	50	50	44	38	7	
6	42	45	37	36		34	33	34	34		41		45	46	40	35	6	
5	37	40	33	33	26	30	29	30	29		37	36	41	42	37	31	5	
4	33	36	28	30		26	24	27	25			33		37	38	33	28	4
3	29	31	24	26	17	22	20		20			29		33	34	29	24	3
2	25	26	20	23	12	18	16	19	16			25		29	30	25	21	2
1	20		16	19	8	14	12	15	11			21			22		1	
0				16		10	8	12									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	100	100	100	100	95	91	90	95	95				90	90	19	
18	100	99	100	100	91	87	86	91	90				86	86	18	
17	96	95	99	97	86	83	82	86	86				83	83	17	
16	92	90	94	92	82	79	78	82	82				79	79	16	
15	88	86	89	87	78	75	73	78	77				68	76	15	
14	83	82	84	83	74	71	69	74	73	65			72	72	14	
13	79	78	79	78	69	67	65	69	68		63	61	69	69	13	
12	75	74	74	73	65	63	61	65	64	57			65	65	12	
11	71	70	69	68	61	59	57	61	60		55	55	62	62	11	
10	67	66	64	63	57	55	53	57	55	50	51	51	58	58	10	
9	63	62	59	58	52	51	49	53	51	46	47	48	55	54	9	
8	58	58	54	53	48	47	45	48	47	42	44	45	51	51	8	
7	54	54	49	48	44	43	40	44	42		38	40	42	48	47	7
6	50	50	43	43	40	39	36	40	38	35	36	38	44	44	6	
5	46	46	38	38	35	35	32	36	33	31	32	35	41	40	5	
4	42	42	33	33	31	31	28	32	29	27	28	32	37	37	4	
3	37	37	28	28	27	27	24	27	25	23	24	28	34	33	3	
2	33	33	23	23	23	23	20	23	20	20	20	25	30	30	2	
1	29	29	18	18	18	19	16	19	16	16	16	22	27	26	1	
0	25	25	13	13	14	15		15							0	

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	97	100		100	100	93	85	93	89							19
18	93	95	100	97	99	89	82	89	85	84						18
17	89	91	100	93	95	85	78	85			90					17
16	84	86	100	89	90	81	74	81	77		87					16
15	80	82	98	85	86	77	71	76	73	74	83	78	73	75		15
14	76	78	92	81	81	74	67	72	70	71	79		70			14
13	72	73	87	77	77	70	64	68	66	67	75	71			68	13
12	67	69	82	73	72	66	60	63	62		71	68	63	64		12
11	63	65	76	68	68	62	56	59	58	61	67	65		60		11
10	59	60	71	64	64	58	53	55	54	58	64	61	57	56		10
9	55	56	65	60	59	55	49	51		54	60	58	54	52		9
8	51	52	60	56	55	51	46	46	46	51	56	54	51	48		8
7	46	48	55	52	50	47	42	42	42		52	51	48	44		7
6	42	43	49	48	46	43	38	38	38	45	48	47	45	40		6
5	38	39	44	44	41	39	35	34	34	42	44	44	42	36		5
4	34	35	39	40	37	36	31	29	30		41	40	38	32		4
3	29	30	33	36	32	32	28	25	27	35	37	37	35	28		3
2	25	26	28	32	28	28	24	21	23		33	33	32	24		2
1	21	22	23	28	23	24	21	16		29	29	30	29	20		1
0	17	17		24				12		25	25	27	26			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100	100			100		97		99								19	
18	96	100	100	85			93		95								18	
17	92	97	95	81	93		88		90	96				85	85		17	
16	89	92	91	77	89	87	84		86	91	81		82	82	83		16	
15	85	88	86	73	85	83	80		82	87			78	78			15	
14	81	84	82	69	81	79	76		78	82	73		74	74	75		14	
13	77	79	77	65	77	74	72		74	77	74	69		71	71	71	13	
12	73	75	73	61	73	70	68		70	73		63	67	67	67		12	
11	69	71	69	57	69	66	64	66	65	68	65	61		63	63	63	11	
10	65	66	64	53	65	62	60		61	64	61	57		60	60	59	10	
9	61	62	60	49	61	58	56	54	57	59	57	53	49	56	56	55	9	
8	57	58	55	45	57	54	52		53	55	52	49		52	52	51	8	
7	53	53	51	41	53	50	48	43	49	50	48	45	39	49	49	47	7	
6	49	49	46	37	49	46	44		45	46	44	41		45	45	43	6	
5	45	45	42	33	45	42	39	31	41	41	40	38	30	41	41	39	5	
4	41	40	37	28	41	37	35		36	37	36	34		38	38	35	4	
3	37	36	33		37	33	31	20	32	32	31	30	20	34	34		3	
2	33	32	29		33	29	27	14	28	27	27	26	15	30			2	
1	29	27	24		29	25	23	8	24	23	23	22	11				1	
0	23				21	19	3		18	19				23	19		0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 60-64 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		90		92		89				92	100	100	89		19	
18	92	97	85				84				88	98	96	86		18	
17	88	92	81		82		80			86		94		82		17	
16	83	88	77			76	76	74	80			89	88	78		16	
15	79	83	73		73		72	70			77					15	
14	75	79	69	65	69	68	68	66	71		73	81	80	71		14	
13	70	74	65		64		64	63		70		77	76	67	60	13	
12	66	70	61	58	59	60	60	59	62		65	72	72		56	12	
11	62	65	57	55	55	56	55	55	58	62	61	68	68	59	53	11	
10	58	61	53	52	50	52	51	51	53		57	64	64	56	49	10	
9	53	56	49	48	46	48	47	48	49	54	54	60	59	52	46	9	
8	49	52	45	45	41	44	43	44	45		50	55	55	48	42	8	
7	45	47	41	41	37	40	39	40	40	47	46	51	51	45	39	7	
6	41	43	37	38		36	35	36		43	47	47	47	41	35	6	
5	36	38	33	34	27	32	31	32	31	39	38	43	43	37	32	5	
4	32	34	29	31		28	27	29	27		35		39	39	33	28	4
3	28	29	25	27	18	24	22		22		31		34	35	30	24	3
2	23	25	21	24	14	20	18	21	18	27		30	31	26	21	2	
1	19		17	20	9	16	14	17	13					22		1	
0				17		12	10	14								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	98	94	92	97	97				90	90	19
18	100	100	100	100	93	90	88	93	93				87	86	18
17	97	96	100	100	89	86	84	89	88				83	83	17
16	93	92	97	95	85	82	80	84	84				80	79	16
15	89	88	91	90	81	78	75	80	80		69	76	76	76	15
14	85	84	86	85	76	74	71	76	75	66		72	72	72	14
13	81	80	81	80	72	70	67	72	71	64	63	69	69	69	13
12	76	75	76	75	68	66	63	67	67	59		65	65	65	12
11	72	71	71	70	64	62	59	63	62	56	56	62	62	62	11
10	68	67	66	65	59	58	55	59	58	51	52	53	58	58	10
9	64	63	61	60	55	54	51	55	53	47	48	50	55	55	9
8	60	59	56	55	51	50	47	51	49	44	45	46	51	51	8
7	56	55	51	50	46	46	42	46	45	40	41	43	48	48	7
6	51	51	46	45	42	42	38	42	40	36	37	40	44	44	6
5	47	47	40	40	38	38	34	38	36	32	33	36	41	41	5
4	43	43	35	35	34	34	30	34	31	28	29	33	37	37	4
3	39	39	30	30	29	30	26	29	27	25	25	30	34	33	3
2	35	35	25	25	25	26	22	25	23	21	21	27	30	30	2
1	30	31	20	20	21	22	18	21	18	17	17	23	27	26	1
0	26	27	15	15	17	18		17							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	95	100		100	100	93	86	95	89						19
18	91	94	100	98	100	90	82	90	85	84				89	18
17	87	90	100	94	97	86	79	86			91				17
16	83	85	100	90	93	82	75	82	77		87				16
15	79	81	100	86	88	78	71	78	73	74	84	79	73	77	15
14	74	77	96	82	84	74	68	73	70	71	80		70		14
13	70	72	90	78	79	71	64	69	66	68	76	72		70	13
12	66	68	85	74	75	67	61	65	62		72	69	64	66	12
11	62	64	80	70	70	63	57	61	58	61	68	65		62	11
10	57	59	74	66	66	59	53	56	54	58	64	62	58	58	10
9	53	55	69	62	61	55	50	52		55	61	58	55	54	9
8	49	51	64	58	57	52	46	48	46	52	57	55	51	50	8
7	45	46	58	54	52	48	43	44	42		53	51	48	46	7
6	40	42	53	50	48	44	39	39	38	45	49	48	45	42	6
5	36	38	48	46	44	40	36	35	34	42	45	45	42	38	5
4	32	33	42	42	39	36	32	31	30		41	41	39	34	4
3	28	29	37	38	35	33	28	26	27	36	38	38	36	30	3
2	24	25	31	34	30	29	25	22	23		34	34	33	26	2
1	19	20	26	30	26	25	21	18		29	30	31	30	22	1
0	16	21		26				14		26	26	27	27		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	100	100	100		100		100		97							19
18	100	100	100	88			96		93							18
17	96	99	97	83	95		92		89	96				85	86	17
16	92	95	92	79	91	88	88		85	91	83		81	82	83	16
15	88	90	88	75	87	84	84		81	87			77	78		15
14	84	86	84	71	83	80	79		77	82	75		74	75	75	14
13	80	82	79	67	79	76	75		72	77	74	71	70	71	71	13
12	76	77	75	63	75	72	71		68	73		63	66	67	67	12
11	72	73	70	59	71	67	67	66	64	68	65	63	63	64	63	11
10	68	69	66	55	67	63	63		60	64	61	59	59	60	59	10
9	64	64	61	51	63	59	59	55	56	59	57	55	49	55	56	9
8	60	60	57	47	59	55	55		52	55	53	51	52	53	51	8
7	56	56	52	43	55	51	51	43	48	50	48	47	39	48	49	7
6	52	51	48	39	51	47	47		43	46	44	43	44	45	43	6
5	48	47	44	35	47	43	43	32	39	41	40	40	30	41	42	5
4	44	43	39	31	43	39	39		35	37	36	36	37	38	35	4
3	40	38	35		39	35	34	20	31	32	32	32	20	33	34	3
2	36	34	30		35	30	30	15	27	27	28	15	30			2
1	32	29	26		31	26	26	9	23	23	23	24	11			1
0	25				22	22	3		18	19			23	19		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 65-69 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	97		90		93		91			94	100	100	90		19	
18	93	98	86				87			90	99	97	86		18	
17	89	93	82		84		83			89		95		82		17
16	84	89	78			78	79	76	83			91	89	79		16
15	80	84	74		75		74	72			78					15
14	76	80	70	66	71	70	70	69	74		75	82	81	71		14
13	71	75	66		66		66	65		73		78	77	67	60	13
12	67	71	62	59	61	62	62	61	65		67	74	73		56	12
11	63	66	58	55	57	58	58	57	60	65	63	70	69	60	53	11
10	59	62	54	52	52	54	54	54	56		59	66	65	56	49	10
9	54	57	49	48	48	50	50	50	51	57	55	61	61	52	46	9
8	50	53	45	45	43	46	46	46	47		51	57	57	49	42	8
7	46	48	41	41	38	43	41	42	42	49	47	53	53	45	39	7
6	42	44	37	38		39	37	39	38	45		49	49	41	35	6
5	37	39	33	34	29	35	33	35	33	41	40	44	45	38	32	5
4	33	35	29	31		31	29	31	29	37		40	41	34	28	4
3	29	30	25	27	20	27	25		24	33		36	37	30	25	3
2	24	26	21	24	16	23	21	23	20	29		32	33	26	21	2
1	20		17	20	11	19	17	20	15	25				23		1
0				17	15	13	16									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	97	94	99	100				90	90	19
18	100	100	100	100	96	93	90	95	95				87	87	18
17	99	97	100	100	92	89	86	91	91				83	83	17
16	95	93	99	97	88	85	82	87	87				80	79	16
15	91	89	94	92	83	81	78	83	82		71		76	76	15
14	86	85	89	87	79	77	74	78	78	68			73	72	14
13	82	81	84	82	75	73	70	74	74	65	64	64	69	69	13
12	78	77	78	77	71	69	66	70	69	60			66	65	12
11	74	73	73	72	66	65	61	66	65	57	58	62	62	62	11
10	70	69	68	67	62	61	57	61	60	53	53	55	59	58	10
9	66	64	63	62	58	57	53	57	56	49	49	51	55	55	9
8	61	60	58	57	54	53	49	53	52	45	45	48	52	51	8
7	57	56	53	52	49	49	45	49	47	41	42	45	48	48	7
6	53	52	48	47	45	45	41	45	43	38	38	41	44	44	6
5	49	48	43	42	41	41	37	40	38	34	34	38	41	41	5
4	45	44	38	37	37	37	33	36	34	30	30	35	37	37	4
3	40	40	33	32	32	33	28	32	30	26	26	32	34	34	3
2	36	36	27	27	28	29	24	28	25	22	22	28	30	30	2
1	32	32	22	23	24	25	20	23	21	19	18	25	27	27	1
0	28	28	17	18	20	21		19							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	94	100		100	100	94	86	96	89						19	
18	90	93	100	100	100	90	83	92	85	85				91	18	
17	85	89	100	96	99	87	79	88			92				17	
16	81	84	100	92	95	83	76	83	77		88				16	
15	77	80	100	88	90	79	72	79	73	75	85	80	74	80	15	
14	73	76	100	84	86	75	68	75	70	72	81		71		14	
13	68	71	94	80	82	71	65	71	66	68	77	73		72	13	
12	64	67	89	76	77	68	61	66	62		73	69	65	68	12	
11	60	63	84	72	73	64	58	62	58	62	69	66		64	11	
10	56	58	78	68	68	60	54	58	54	59	65	62	58	60	10	
9	52	54	73	64	64	56	51	53		55	62	59	55	56	9	
8	47	50	68	60	59	53	47	49	46	52	58	56	52	52	8	
7	43	45	62	56	55	49	43	45	42		54	52	49	48	7	
6	39	41	57	52	50	45	40	41	38	46	50	49	46	44	6	
5	35	37	51	48	46	41	36	36	34	43	46	45	43	40	5	
4	30	32	46	44	42	37	33	32	30		42	42	40	36	4	
3	26	28	41	40	37	34	29	28	27	36	39	38	37	33	3	
2	22	24	35	36	33	30	25	24	23		35	35	33	29	2	
1	18	19	30	32	28	26	22	19		30	31	31	30	25	1	
0	15	25		28				15		26	27	28	27		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		100		100		96							19	
18	100	100	100	90			100		92							18	
17	99	100	99	86	97		95		88	96				84	86	17	
16	95	97	94	82	93	89	91		84	91		85		80	82	83	16
15	91	93	90	78	89	85	87		79	87				77	79	15	
14	87	88	85	74	85	81	83		75	82		77		73	75	75	14
13	83	84	81	70	81	77	79		71	77	74	73		69	71	71	13
12	79	80	76	66	77	73	75		67	73			63	66	68	67	12
11	75	75	72	62	73	69	71	67	63	68	66	65		62	64	63	11
10	71	71	67	58	69	65	67		59	64	61	61		58	60	59	10
9	67	67	63	53	65	60	63	55	55	59	57	57	49	55	57	55	9
8	63	62	59	49	61	56	59		50	55	53	54		51	53	51	8
7	59	58	54	45	57	52	55	44	46	50	49	50	39	47	49	47	7
6	55	54	50	41	53	48	50		42	46	44	46		44	46	43	6
5	51	49	45	37	49	44	46	32	38	41	40	42	30	40	42	39	5
4	47	45	41	33	45	40	42		34	37	36	38		36	38	35	4
3	43	40	36		41	36	38	21	30	32	32	34	20	33	35		3
2	39	36	32		37	32	34	15	25	27	28	30	15	29			2
1	35	32	27		33	28	30	9	21	23	23	26	11				1
0	27				23	26	3		18	19				24	19		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 70-74 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	98		90		96		94				96	100	100	90		19
18	94	99	86				90				92	100	99	87		18
17	89	95	82		86		86				91	97		83		17
16	85	90	78			81	82	79	85			92	91	79		16
15	81	85	74		77		77	75			80					15
14	77	81	70	66	73	73	73	71	76		76	84	83	72		14
13	72	76	66		68		69	68			75		80	79	68	13
12	68	72	62	59	64	65	65	64	67		68	76	75		56	12
11	64	67	58	55	59	61	61	60	63		67	65	71	71	60	11
10	60	63	54	52	54	57	57	56	58		61	67	67	57	49	10
9	55	58	50	48	50	53	53	52	54		59	57	63	63	53	9
8	51	54	46	45	45	49	49	49	49		53	59	59	49	42	8
7	47	49	42	41	41	45	44	45	45		51	49	54	55	46	7
6	42	45	38	38		41	40	41	40		47		50	51	42	6
5	38	40	34	34	31	37	36	37	36		43	41	46	46	38	5
4	34	36	30	31		33	32	34	31		39		42	42	34	4
3	30	31	26	28	22	29	28		27		35		37	38	31	3
2	25	27	22	24	18	25	24	26	22		31		33	34	27	2
1	21		18	21	13	21	20	22	18		27			23		1
0				17		17	15	19								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	99	97	100	100				90	90	19
18	100	100	100	100	99	95	93	98	98				87	87	18
17	100	98	100	100	95	91	89	94	94				83	83	17
16	97	94	100	99	91	87	85	89	90				80	80	16
15	92	90	96	95	87	83	81	85	85				73	76	15
14	88	86	91	90	82	79	77	81	81	70			73	73	14
13	84	82	86	85	78	75	72	77	76		66	66	69	69	13
12	80	78	81	80	74	71	68	72	72		62		66	65	12
11	76	74	76	75	70	67	64	68	68		58	60	62	62	11
10	72	70	71	70	65	63	60	64	63	54	54	57	59	58	10
9	67	66	65	65	61	59	56	60	59	51	50	53	55	55	9
8	63	62	60	60	57	55	52	56	54	47	46	50	52	51	8
7	59	57	55	55	53	51	48	51	50	43	42	47	48	48	7
6	55	53	50	50	48	47	44	47	46	39	39	43	45	44	6
5	51	49	45	45	44	43	39	43	41	35	35	40	41	41	5
4	46	45	40	40	39	35	39	37	32	31	37	38	37		4
3	42	41	35	35	36	35	31	34	33	28	27	34	34	34	3
2	38	37	30	30	31	31	27	30	28	24	23	30	31	30	2
1	34	33	25	25	27	27	23	26	24	20	19	27	27	27	1
0	30	29	20		20	23	23		22						0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	92	92	100	100	100	95	87	98	89	85	85	93	94	19	19
18	88	92	100	100	100	91	83	93	85	85			94	18	18
17	84	87	100	98	100	87	80	89			93			17	17
16	80	83	100	94	98	84	76	85	77		89			16	16
15	75	79	100	90	93	80	73	81	73	75	85	80	74	82	15
14	71	74	100	86	89	76	69	76	70	72	82		71		14
13	67	70	98	82	84	72	66	72	66	69	78	74	74	13	13
12	63	66	93	78	80	69	62	68	62		74	70	65	70	12
11	58	62	88	74	75	65	58	63	58	62	70	67		67	11
10	54	57	82	70	71	61	55	59	54	59	66	63	59	63	10
9	50	53	77	66	66	57	51	55		56	62	60	56	59	9
8	46	49	72	62	62	53	48	51	46	53	59	56	53	55	8
7	41	44	66	58	58	50	44	46	42		55	53	50	51	7
6	37	40	61	54	53	46	40	42	38	46	51	49	46	47	6
5	33	36	56	50	49	42	37	38	34	43	47	46	43	43	5
4	29	31	50	46	44	38	33	34	30		43	43	40	39	4
3	25	27	45	42	40	34	30	29	27	37	39	39	37	35	3
2	20	23	40	37	35	31	26	25	23		36	36	34	31	2
1	16	18	34	33	31	27	22	21		30	32	32	31	27	1
0	14	14	29	29				16		27	28	29	28		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	100	100	100		100		100		95							19
18	100	100	100	93			100		91							18
17	100	100	100	89	99		100		86	96				83	86	17
16	98	99	96	85	95	90	96		82	91	87		79	83	82	16
15	94	95	91	81	91	86	92		78	87			76	79		15
14	90	91	87	77	87	82	87		74	82	80		72	75	74	14
13	86	86	82	73	83	78	83		70	77	74	76	68	72	71	13
12	82	82	78	69	79	74	79		66	73			63	65	68	12
11	78	78	74	65	75	70	75	67	62	68	66	68	61	64	63	11
10	74	73	69	60	71	66	71		57	64	62	64	57	61	59	10
9	70	69	65	56	67	62	67	56	53	59	57	60	49	54	57	9
8	66	65	60	52	63	58	63		49	55	53	56	50	53	51	8
7	62	60	56	48	59	53	59	44	45	50	49	52	40	46	50	7
6	58	56	51	44	55	49	55		41	46	45	48	43	46	43	6
5	54	51	47	40	51	45	51	33	37	41	40	44	30	39	42	5
4	50	47	42	36	47	41	47		32	37	36	40	35	39	35	4
3	46	43	38		43	37	42	21	28	32	32	36	20	32	35	3
2	42	38	34		39	33	38	15	24	27	28	32	16	28		2
1	38	34	29		35	29	34	10	20	23	24	28	11			1
0	30	30			25	30	4		18	19			24	19		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 75-79 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	99		91		98		97				97	100	100	91		19
18	95	100	87				93				93	100	100	87		18
17	90	96	83		89		89			94		98		83		17
16	86	91	79			84	85	82	88			94	93	80		16
15	82	87	74		80		81	78			82		93	80		15
14	78	82	70	66	75	76	77	74	79		78	86	85	72		14
13	73	78	66		71		72	71			78		81	80	68	13
12	69	73	62	59	66	68	68	67	70		70	77	76	57		12
11	65	68	58	55	61	64	64	63	66		70	66	73	72	61	11
10	60	64	54	52	57	60	60	59	61		62	69	68	57		10
9	56	59	50	49	52	56	56	56	57	62	58	64	64	53		9
8	52	55	46	45	48	52	52	52	52		54	60	60	50		8
7	48	50	42	42	43	48	48	48	48		54	51	56	46		7
6	43	46	38	38		44	44	44	43		50	52	52	42		6
5	39	41	34	35	34	40	39	40	39	46	43	47	48	39		5
4	35	37	30	31		36	35	37	34		42	43	44	35		4
3	31	32	26	28	25	32	31		30		38	39	40	31		3
2	26	28	22	24	20	29	27	29	25		34	35	36	27		2
1	22		18	21	16	25	23	25	21		30			24		1
0				17		21	19	22								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	100	100	100				90	90	19
18	100	100	100	100	100	98	96	100	100				87	87	18
17	100	99	100	100	98	94	92	96	97				83	83	17
16	99	95	100	100	94	90	88	92	93				80	80	16
15	95	91	98	97	90	86	84	88	88		75	76	76	76	15
14	90	87	93	92	86	82	80	84	84	72			73	73	14
13	86	83	88	87	81	78	76	79	79		67	69	69	69	13
12	82	79	83	82	77	74	72	75	75	64		66	66	66	12
11	78	75	78	77	73	70	67	71	71	59	62	62	62	62	11
10	74	71	73	72	69	66	63	67	66	56	55	59	59	59	10
9	69	67	68	67	64	62	59	63	62	53	51	56	55	55	9
8	65	63	63	62	60	58	55	58	57	49	47	52	52	51	8
7	61	59	58	57	56	54	51	54	53	45	43	49	48	48	7
6	57	54	53	52	50	47	50	49	49	41	40	46	45	44	6
5	53	50	47	47	47	46	43	46	44	37	36	43	41	41	5
4	49	46	42	42	43	42	39	41	40	34	32	39	38	37	4
3	44	42	37	37	39	38	34	37	36	30	28	36	34	34	3
2	40	38	32	32	35	34	30	33	31	26	24	33	31	30	2
1	36	34	27	27	30	30	26	29	27	22	20	29	27	27	1
0	32	30	22	22	26	26		25							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 7-8 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	92	100		100	100	96	88	99	89						19
18	88	91	100	100	100	92	84	95	85	86				97	18
17	84	86	100	100	100	88	81	91			94				17
16	80	82	100	96	100	85	77	86	77		90				16
15	75	78	100	92	96	81	73	82	73	76	86	81	75	86	15
14	71	73	100	88	92	77	70	78	70	73	83		72		14
13	67	69	100	84	87	73	66	74	66	69	79	74		78	13
12	63	65	98	80	83	69	63	69	62		75	71	66	74	12
11	58	60	93	76	78	66	59	65	58	63	71	67		70	11
10	54	56	87	72	74	62	55	61	54	60	67	64	60	66	10
9	50	52	82	67	69	58	52	56		56	63	61	56	62	9
8	46	47	77	63	65	54	48	52	46	53	60	57	53	58	8
7	41	43	71	59	61	50	45	48	42		56	54	50	54	7
6	37	39	66	55	56	47	41	44	38	47	52	50	47	50	6
5	33	34	60	51	52	43	37	39	34	44	48	47	44	46	5
4	29	30	55	47	47	39	34	35	30		44	43	41	42	4
3	25	26	50	43	43	35	30	31	27	37	40	40	38	38	3
2	20	21	44	39	38	31	27	27	23		37	36	35	35	2
1	16	17	39	35	34	28	23	22		31	33	33	32	31	1
0	13	13	34	31				18		27	29	30	28		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		100		100		95							19	
18	100	100	100	97			100		91							18	
17	100	100	100	93	99		100		86	96				82	87	17	
16	98	100	98	88	95	92	100		82	91	90		78	83	82	16	
15	94	97	93	84	91	88	97		78	87			75	79		15	
14	90	93	89	80	87	84	93		74	82	82		71	76	74	14	
13	86	89	84	76	83	79	89		70	77	74	78		67	72	70	13
12	82	84	80	72	79	75	85		66	73			64	64	68	66	12
11	78	80	75	68	75	71	81	67	62	68	66	71		60	65	62	11
10	74	76	71	64	71	67	77		57	64	62	67		56	61	58	10
9	70	71	66	60	67	63	72	56	53	59	58	63	49	53	57	54	9
8	66	67	62	56	63	59	68		49	55	53	59		49	54	51	8
7	62	63	58	52	59	55	64	44	45	50	49	55	40	45	50	47	7
6	58	58	53	48	55	51	60		41	46	45	51		42	46	43	6
5	54	54	49	44	51	47	56	33	37	41	41	47	30	38	43	39	5
4	50	50	44	40	47	42	52		32	37	37	43		34	39	35	4
3	46	45	40		43	38	48	21	28	32	32	39	20	31	35		3
2	42	41	35		39	34	44	16	24	27	28	35	16	27			2
1	38	37	31		35	30	40	10	20	23	24	31	11				1
0	32	32			26	36	4		18	20				24	19		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 7-8 years
Age: 80-85 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		91		100		100				99	100	100	91		19
18	96	100	87				97				95	100	100	88		18
17	91	97	83		92		93			98		100		84		17
16	87	92	79				88	89	86	92		96	94	80		16
15	83	88	75		83		85	82			83					15
14	79	83	71	66	78	80	81	78	83		80	87	86	73		14
13	74	79	67		74		77	74		82		83	82	69	60	13
12	70	74	63	59	69	72	73	71	74		72	79	78	57	57	12
11	66	70	59	56	65	68	68	67	69	74	68	75	74	62	53	11
10	62	65	55	52	60	64	64	63	65		64	70	70	58	50	10
9	57	61	51	49	55	60	60	59	60	66	60	66	66	54	46	9
8	53	56	47	45	51	56	56	56	56		56	62	62	50	43	8
7	49	52	43	42	46	52	52	52	51	58	52	58	58	47	39	7
6	44	47	39	38		48	48	48	47	54		53	54	43	35	6
5	40	42	34	35	37	44	44	44	42	50	45	49	50	39	32	5
4	36	38	30	31		40	40	41	38		45	46	35	28		4
3	32	33	26	28	28	36	35		33		42	41	42	32	25	3
2	27	29	22	24	23	32	31	33	29		36	38	28	21		2
1	23		18	21	19	28	27	29	24	34				24		1
0				17		24	23	25								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	100	100	100				90	90	19
18	100	100	100	100	100	100	100	100	100				87	87	18
17	100	100	100	100	100	98	96	100	100				83	83	17
16	100	96	100	100	98	94	92	95	96				80	80	16
15	97	92	100	100	94	90	88	91	92	78			76	76	15
14	93	88	96	95	90	86	84	87	87	74			73	73	14
13	89	84	91	90	85	82	80	83	83	68	72	69	69	69	13
12	85	80	86	85	81	78	76	78	79	67			66	66	12
11	81	76	81	80	77	74	71	74	74	60	65	62	62	62	11
10	76	72	76	75	73	70	67	70	70	59	62	59	59	59	10
9	72	68	71	70	68	66	63	66	65	55	52	59	55	55	9
8	68	64	65	65	64	62	59	62	61	51	48	55	52	52	8
7	64	60	60	60	58	55	57	57	48	45	52	48	48	48	7
6	60	56	55	55	56	54	51	53	52	44	41	49	45	45	6
5	55	52	50	50	51	50	47	49	48	40	37	45	41	41	5
4	51	47	45	45	47	46	43	45	43	36	33	42	38	37	4
3	47	43	40	40	43	42	39	40	39	32	29	39	34	34	3
2	43	39	35	35	39	38	34	36	35	29	25	36	31	30	2
1	39	35	30	30	34	34	30	32	30	25	21	32	27	27	1
0	35	31	25	25	30	30		28							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	96	94		86	86	87	79	81	87							19	
18	92	97	89	82	82	83	75	77	83	78						18	
17	88	92	84	78	77	79	72	73			81					17	
16	83	88	78	74	73	75	68	68	76		78					16	
15	79	84	73	70	69	71	64	64	72	68	74	67	65	66		15	
14	75	79	67	66	64	68	61	60	68	65	70		62			14	
13	71	75	62	62	60	64	57	56	64	61	66	60			59	13	
12	66	71	57	58	55	60	54	51	60		62	57	55	55		12	
11	62	66	51	54	51	56	50	47	56	55	58	53		51		11	
10	58	62	46	50	46	52	46	43	52	52	55	50	49	47		10	
9	54	58	41	46	42	49	43	39		49	51	46	46	43		9	
8	49	53	35	42	37	45	39	34	44	45	47	43	43	39		8	
7	45	49	30	37	33	41	36	30	40		43	40	40		35		7
6	41	45	25	33	28	37	32	26	37	39	39	36	37	31		6	
5	37	40	19	29	24	33	28	21	33	36	35	33	34	27		5	
4	33	36	14	25	20	30	25	17	29		32	29	30	23		4	
3	28	32	9	21	15	26	21	13	25	29	28	26	27	19		3	
2	24	27	3	17	11	22	18	9	21		24	22	24	15		2	
1	20	23	0	13	6	18	14	4		23	20	19	21	11		1	
0	19	0		9				0		19	16	15	18			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	89		87		92		84		97								19
18	85	87	83	77			80		93								18
17	81	82	78	73	84		76		88	90				83	79		17
16	77	78	74	69	80	76	72		84	85	77		79	75	78		16
15	73	74	69	65	76	71	68		80	80			75	72			15
14	69	69	65	61	72	67	64		76	76	70		72	68	70		14
13	65	65	60	57	68	63	60		72	71	66		68	64	66		13
12	61	60	56	53	64	59	55		68	67		60	64	61	62		12
11	57	56	51	49	60	55	51	58	63	62	55	58	61	57	58		11
10	53	52	47	45	56	51	47		59	58	51	54	57	53	54		10
9	49	47	43	41	52	47	43	46	55	53	46	50	46	53	50		9
8	45	43	38	37	48	43	39		51	49	42	46	50	46	46		8
7	41	39	34	33	44	39	35	35	47	44	38	42	36	46	42		7
6	37	34	29	28	40	34	31		43	40	34	38	42	39	38		6
5	33	30	25	24	36	30	27	23	38	35	30	34	27	39	35	34	5
4	29	26	20	20	32	26	23		34	30	25	30	35	31	30		4
3	26	21	16		28	22	19	12	30	26	21	26	17	31	28		3
2	22	17	11		24	18	15	6	26	21	17	22	12	28			2
1	18	13	7		20	14	10	0	22	17	13	18	7				1
0	8				10	6	0		12	9			17	14			0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 20-34 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		85		84		78				80	88	86	84		19
18	84	89	81				74				76	84	82	80		18
17	80	85	77		75		69				76	80		77		17
16	76	80	73			65	65	64	71			75	74	73		16
15	72	76	69		66		61	60				64				15
14	67	71	65	63	61	57	57	56	62		60	67	65	65		14
13	63	67	61		56		53	53			61	63	61	62	59	13
12	59	62	57	56	52	49	49	49	53		53	58	57		55	12
11	55	57	53	53	47	45	45	45	48		53	49	54	53	54	11
10	50	53	49	49	43	41	41	41	44		45	50	49	50	48	10
9	46	48	45	46	38	38	36	38	39		45	41	46	45	47	9
8	42	44	41	42	33	34	32	34	35		37	41	41	43	41	8
7	37	39	37	39	29	30	28	30	30		37	33	37	39	37	7
6	33	35	33	36		26	24	26	26		33	33	33	36	34	6
5	29	30	28	32	20	22	20	22	21		29	25	29	32	30	5
4	25	26	24	29		18	16	19	17		25	25	25	28	27	4
3	20	21	20	25	11	14	12		12		21	20	21	24	23	3
2	16	17	16	22	6	10	8	11	8		17	16	17	21	20	2
1	12		12	18	1	6	3	7	3		13			17		1
0				15		2	0	4								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	96	92	100	100	82	81	83	84	83				92	91	19
18	92	88	100	97	78	77	79	80	79				88	88	18
17	87	84	94	92	73	73	75	76	74				85	84	17
16	83	80	89	87	69	69	70	71	70				81	81	16
15	79	76	84	82	65	65	66	67	65			62	78	77	15
14	75	72	79	77	61	61	62	63	61	60			74	74	14
13	71	68	74	72	56	57	58	59	57		57	56	71	70	13
12	67	64	69	67	52	53	54	54	52		52		67	67	12
11	62	60	64	62	48	49	50	50	48		49	49	64	63	11
10	58	56	59	57	44	45	46	46	43	45	45	46	60	60	10
9	54	52	54	52	39	41	42	42	39	41	41	42	57	56	9
8	50	48	49	47	35	37	38	38	35	37	37	39	53	53	8
7	46	43	43	42	31	33	33	33	30	33	33	36	50	49	7
6	41	39	38	37	27	29	29	29	26	30	29	33	46	45	6
5	37	35	33	32	22	25	25	25	22	26	25	29	43	42	5
4	33	31	28	27	18	21	21	21	17	22	21	26	39	38	4
3	29	27	23	22	14	17	17	16	13	18	17	23	36	35	3
2	25	23	18	17	10	13	13	12	8	15	13	19	32	31	2
1	21	19	13	12	5	9	9	8	4	11	9	16	29	28	1
0	16	15	8	7	1	5		4							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	94	98		89	89	88	80	84	87							19	
18	90	94	92	85	84	84	76	80	84	79					79	18	
17	86	90	87	81	80	81	73	76			83					17	
16	82	86	82	77	75	77	69	71	76	79						16	
15	77	81	76	73	71	73	66	67	72	69	76	69	66	67		15	
14	73	77	71	69	66	69	62	63	68	66	72		63			14	
13	69	73	66	65	62	65	58	58	64	62	68	62			60	13	
12	65	68	60	61	57	62	55	54	60	64	58	57	56			12	
11	61	64	55	57	53	58	51	50	56	56	60	55		52		11	
10	56	60	50	53	49	54	48	46	52	53	56	51	50	48		10	
9	52	55	44	49	44	50	44	41	50	53	48	47	44			9	
8	48	51	39	45	40	46	40	37	44	46	49	44	44	40		8	
7	44	47	34	41	35	43	37	33	41		45	41	41		36		7
6	39	43	28	37	31	39	33	29	37	40	41	38	38		32		6
5	35	38	23	33	26	35	30	24	33	37	37	34	35		28		5
4	31	34	17	29	22	31	26	20	29		33	31	32	24			4
3	27	30	12	25	17	28	22	16	25	30	30	27	29	20			3
2	22	25	7	21	13	24	19	11	21		26	24	25	16			2
1	18	21	1	17	8	20	15	7	24	22	20	22	12				1
0	17	0		13				3	20	18	17	19					0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	93		90		94		86		95									19
18	89	86	86	78			82		91									18
17	85	81	81	74	86		77		87	90				83	80			17
16	81	77	77	70	82	78	73		83	85		75		79	76	78		16
15	77	73	73	66	78	74	69		79	80				75	72			15
14	73	68	68	62	74	70	65		75	76		68		71	69	70		14
13	69	64	64	58	70	66	61		70	71	64	64		68	65	66		13
12	65	60	59	54	66	62	57		66	67			60	64	61	62		12
11	61	55	55	50	62	57	53	59	62	62	55	56		60	58	58		11
10	57	51	50	46	58	53	49		58	58	51	52		57	54	54		10
9	53	47	46	42	54	49	45	47	54	53	47	48	46	53	50	50		9
8	49	42	41	38	50	45	41		50	49	43	44		49	47	46		8
7	45	38	37	34	46	41	37	36	45	44	38	40	36	46	43	42		7
6	41	34	33	30	42	37	32		41	40	34	36		42	39	38		6
5	37	29	28	25	38	33	28	24	37	35	30	32	27	38	36	34		5
4	33	25	24	21	34	29	24		33	30	26	28		35	32	30		4
3	29	21	19		30	25	20	13	29	26	22	24	17	31	28			3
2	25	16	15		26	20	16	7	25	21	17	20	12	27				2
1	21	12	10		22	16	12	1	21	17	13	16	8					1
0	8				12	8	0		12	9				17	14			0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 35-39 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	91		86		85		79			83	91	89	85		19	
18	86	91	82				75			79	87	85	81		18	
17	82	87	78		76		71			78		83		78		17
16	78	82	74			66	67	65	72			79	77	74		16
15	73	78	70		64	62	62	61			67					15
14	69	73	66	64	62	58	58	58	63		64	70	69	66		14
13	65	69	62		57		54	54		62		66	65	63	59	13
12	61	64	58	57	53	51	50	50	54		56	62	61		55	12
11	56	60	54	53	48	47	46	46	49	54	52	57	57	55	52	11
10	52	55	49	50	44	43	42	42	45		48	53	53	51	48	10
9	48	51	45	46	39	39	38	39	40	46	44	49	48	48	45	9
8	44	46	41	43	34	35	34	35	36		40	45	44	44	41	8
7	39	42	37	39	30	31	29	31	31		38	36	40	40	38	7
6	35	37	33	36		27	25	27	27		34		36	36	37	6
5	31	32	29	32	21	23	21	24	22		30	29	32	32	31	5
4	26	28	25	29		19	17	20	18			26	28	28	27	4
3	22	23	21	25	12	15	13		13			22	23	24	25	3
2	18	19	17	22	7	11	9	12	9		18		19	20	20	2
1	14		13	18	2	7	5	8	4		14			18		1
0				15		3	0	5								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	97	93	100	100	85	84	84	86	86				92	92	19
18	92	89	99	96	81	80	80	82	81				88	88	18
17	88	85	93	91	76	76	76	78	77				85	85	17
16	84	81	88	86	72	72	72	74	72				81	81	16
15	80	77	83	81	68	68	68	69	68			63	78	78	15
14	76	73	78	76	64	64	63	65	64	61			74	74	14
13	71	68	73	72	59	60	59	61	59		59		71	70	13
12	67	64	68	67	55	56	55	57	55	53			67	67	12
11	63	60	63	62	51	52	51	53	50		51	50	64	63	11
10	59	56	58	57	47	48	47	48	46	46	47	47	60	60	10
9	55	52	53	52	42	44	43	44	42	42	43	43	57	56	9
8	51	48	48	47	38	40	39	40	37	38	39	40	53	53	8
7	46	44	42	42	34	36	35	36	33	34	35	37	50	49	7
6	42	40	37	37	30	32	30	32	29	30	31	33	46	46	6
5	38	36	32	32	25	28	26	27	24	27	27	30	43	42	5
4	34	32	27	27	21	24	22	23	20	23	23	27	39	39	4
3	30	28	22	22	17	20	18	19	15	19	19	24	36	35	3
2	25	24	17	17	12	16	14	15	11	15	15	20	32	32	2
1	21	19	12	12	8	12	10	10	7	11	11	17	29	28	1
0	17	15	7	7	4	8		6							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	94		100	91	90	86	81	85	87							19	
18	90	93	95	87	86	82	77	81	84	79						18	
17	86	89	89	83	81	78	73	77			84					17	
16	82	85	84	79	77	75	70	73	76		80					16	
15	77	80	79	75	72	71	66	68	72	69	76	69	66	68		15	
14	73	76	73	71	68	67	63	64	68	66	73		63			14	
13	69	72	68	67	63	63	59	60	64	63	69	62				13	
12	65	67	63	63	59	59	55	56	60		65	59	57	56		12	
11	61	63	57	59	54	56	52	51	56	56	61	56		52		11	
10	56	59	52	55	50	52	48	47	52	53	57	52	51	48		10	
9	52	54	46	51	45	48	45	43		50	53	49	48	45		9	
8	48	50	41	47	41	44	41	38	44	47	50	45	45	41		8	
7	44	46	36	43	37	41	37	34	41		46	42	42		37		7
6	39	41	30	39	32	37	34	30	37	40	42	38	38		33		6
5	35	37	25	35	28	33	30	26	33	37	38	35	35	29		5	
4	31	33	20	31	23	29	27	21	29		34	31	32	25		4	
3	27	28	14	27	19	25	23	17	25	31	30	28	29	21		3	
2	22	24	9	23	14	22	20	13	21		27	25	26	17		2	
1	18	20	4	19	10	18	16	9		24	23	21	23	13		1	
0	16	0		15				4		21	19	18	20			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	93		92		94		87		95									19
18	89	88	87	79			83		91									18
17	85	84	83	75	86		79		87	90				82	80			17
16	81	79	79	71	82	79	75		83	85		73		79	76	78		16
15	77	75	74	67	78	75	70		79	80				75	73			15
14	73	71	70	63	74	71	66		75	76		65		71	69	70		14
13	69	66	65	59	70	67	62		70	71	64	61		68	65	66		13
12	65	62	61	55	66	63	58		66	67			60	64	62		12	
11	61	58	56	51	62	59	54	59	62	62	56	53		60	58	58		11
10	57	53	52	47	58	55	50		58	58	51	49		57	54	54		10
9	53	49	48	43	54	50	46	47	54	53	47	45	46	53	51	50		9
8	49	45	43	38	50	46	42		50	49	43	41		49	47	46		8
7	45	40	39	34	46	42	38	36	45	44	39	37	36	46	43	42		7
6	41	36	34	30	42	38	34		41	40	34	33		42	40	38		6
5	37	32	30	26	38	34	30	24	37	35	30	29	27	38	36	34		5
4	33	27	25	22	34	30	26		33	30	26	25		35	32	30		4
3	29	23	21		30	26	21	13	29	26	22	21	17	31	29			3
2	25	19	16		26	22	17	7	25	21	18	18	12	27				2
1	21	14	12		22	18	13	1	21	17	13	14	8					1
0	10				13	9	0		12	9				18	14			0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 40-44 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	92		86		86		80				85	93	91	86		19	
18	87	92	82				76				81	89	87	82		18	
17	83	88	78		76		72				78	84		78		17	
16	79	83	74			67	67	66	73			80	78	74		16	
15	74	79	70		67		63	62				69				15	
14	70	74	66	64	63	59	59	58	64			65	72	70	67	14	
13	66	70	62		58		55	55			62		67	66	63	59	13
12	62	65	58	57	53	51	51	51	55			57	63	62	55	12	
11	57	61	54	53	49	47	47	47	50		54	54	59	58	56	52	11
10	53	56	50	50	44	44	43	43	46			50	55	54	52	48	10
9	49	52	46	46	40	40	39	40	41		47	46	50	50	48	45	9
8	45	47	42	43	35	36	34	36	37			42	46	46	45	41	8
7	40	43	38	39	31	32	30	32	32			39	38	42	41	38	7
6	36	38	34	36		28	26	28	28			35	38	38	37	34	6
5	32	34	30	33	21	24	22	24	23			31	30	33	34	31	5
4	27	29	26	29		20	18	21	19			27		29	30	27	4
3	23	24	22	26	12	16	14		14			23		25	26	24	3
2	19	20	18	22	8	12	10	13	10			19		21	22	20	2
1	15		13	19	3	8	6	9	5			15			18		1
0				15		4	1	6								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	97	94	100	100	87	84	85	88	87				88	88	19
18	93	90	99	97	82	80	81	84	83				84	84	18
17	89	86	94	92	78	76	77	79	78				81	81	17
16	85	82	89	87	74	72	73	75	74				77	77	16
15	80	78	84	82	70	68	68	71	70			64	74	74	15
14	76	74	79	78	65	64	64	67	65	61			70	70	14
13	72	70	74	73	61	60	60	63	61			60	57	67	13
12	68	66	69	68	57	56	56	58	56	54			63	63	12
11	64	62	64	63	53	52	52	54	52			52	51	60	11
10	60	57	59	58	48	48	48	50	48	46			48	47	10
9	55	53	54	53	44	44	44	46	43	42			44	44	9
8	51	49	48	48	40	40	40	41	39	39			40	41	8
7	47	45	43	43	36	36	36	37	35	35			36	37	7
6	43	41	38	38	31	32	31	33	30	31			32	34	6
5	39	37	33	33	27	28	27	29	26	27			28	31	5
4	34	33	28	28	23	24	23	25	21	23			24	28	4
3	30	29	23	23	19	20	19	20	17	20			20	24	3
2	26	25	18	18	14	16	15	16	13	16			16	21	2
1	22	21	13	13	10	12	11	12	8	12			18	25	1
0	18	17	8	8	6	8		8							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	93	90	100	93	92	87	81	87	87	84	80				19
18	89	92	97	89	87	83	78	83	84	80				81	18
17	84	88	92	85	83	79	74	78			85				17
16	80	84	86	80	78	75	70	74	76		81				16
15	76	79	81	76	74	72	67	70	72	70	77	70	67	69	15
14	72	75	76	72	69	68	63	66	68	67	74		64		14
13	67	71	70	68	65	64	60	61	64	63	70	63		61	13
12	63	66	65	64	60	60	56	57	60		66	60	58	57	12
11	59	62	60	60	56	57	52	53	56	57	62	56		53	11
10	55	58	54	56	51	53	49	48	52	54	58	53	51	49	10
9	50	53	49	52	47	49	45	44		50	54	49	48	45	9
8	46	49	44	48	43	45	42	40	44	47	50	46	45	42	8
7	42	45	38	44	38	41	38	36	41		47	42	42	38	7
6	38	40	33	40	34	38	35	31	37	41	43	39	39	34	6
5	34	36	27	36	29	34	31	27	33	38	39	36	36	30	5
4	29	32	22	32	25	30	27	23	29		35	32	33	26	4
3	25	27	17	28	20	26	24	19	25	31	31	29	30	22	3
2	21	23	11	24	16	22	20	14	21		27	25	27	18	2
1	17	19	6	20	11	19	17	10		25	24	22	23	14	1
0	14	1		16				6		21	20	18	20		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	96		94		96		88		94							19
18	92	90	89	80			84		90							18
17	88	86	85	76	88		80		86	90				82	80	17
16	84	82	80	72	84	80	76		82	85	73		78	77	78	16
15	80	77	76	68	80	76	72		77	80			75	73		15
14	76	73	71	64	76	72	68		73	76	65		71	69	70	14
13	72	69	67	60	72	68	64		69	71	62		67	66	66	13
12	68	64	62	56	68	64	60		65	67		60	64	62	62	12
11	64	60	58	52	64	60	56	59	61	62	56	54	60	58	58	11
10	60	56	54	48	60	56	52		57	58	52	50	56	55	54	10
9	56	51	49	44	56	52	47	48	52	53	47	46	46	53	51	9
8	52	47	45	40	52	48	43		48	49	43	42	49	47	46	8
7	48	43	40	35	48	43	39	36	44	44	39	38	36	45	44	7
6	44	38	36	31	44	39	35		40	40	35	34	42	40	38	6
5	40	34	31	27	40	35	31	25	36	35	30	30	27	38	36	5
4	36	30	27	23	36	31	27		32	30	26	26	34	33	30	4
3	32	25	23		32	27	23	13	28	26	22	22	17	31	29	3
2	28	21	18		28	23	19	7	23	21	18	18	12	27		2
1	24	16	14		24	19	15	2	19	17	14	14	8			1
0	12				15	11	0		12	9			18	14		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 45-49 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	92		87		86		81				86	94	92	86		19	
18	88	93	83				77				82	90	88	82		18	
17	84	89	79		77		73				79		86		79	17	
16	80	84	74			68	69	67	74			82	80	75		16	
15	75	80	70		68		65	63				71				15	
14	71	75	66	64	63	60	60	59	65		67	73	72	67		14	
13	67	71	62		59		56	56			64		69	68	64	59	13
12	63	66	58	57	54	53	52	52	56			59	65	64	55	12	
11	58	62	54	53	50	49	48	48	51		56	55	60	60	56	52	11
10	54	57	50	50	45	45	44	44	47			51	56	56	52	48	10
9	50	53	46	47	41	41	40	41	42		48	47	52	52	49	45	9
8	45	48	42	43	36	37	36	37	38			43	48	48	45	41	8
7	41	44	38	40	31	33	32	33	33		40	40	43	44	41	38	7
6	37	39	34	36		29	27	29	29			36	39	40	38	34	6
5	33	35	30	33	22	25	23	26	24		32	32	35	36	34	31	5
4	28	30	26	29		21	19	22	20			28		31	31	27	4
3	24	26	22	26	13	17	15		15			24		27	27	24	3
2	20	21	18	22	9	13	11	14	11		20		22	23	23	20	2
1	16		14	19	4	9	7	10	6		16				19		1
0				15		5	3	7								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	98	96	100	100	89	86	86	89	89				88	88	19
18	94	91	100	99	84	82	82	85	85				84	84	18
17	90	87	96	94	80	78	78	81	80				81	81	17
16	85	83	91	89	76	74	74	77	76				77	77	16
15	81	79	86	84	72	70	70	73	71			64	74	74	15
14	77	75	80	79	67	66	66	68	67	62			70	70	14
13	73	71	75	74	63	62	61	64	63		61	58	67	67	13
12	69	67	70	69	59	58	57	60	58	54			63	63	12
11	64	63	65	64	55	54	53	56	54		53	51	60	60	11
10	60	59	60	59	50	50	49	52	50	47	49	48	56	56	10
9	56	55	55	54	46	46	45	47	45	43	45	45	53	53	9
8	52	51	50	49	42	42	41	43	41	39	41	41	49	49	8
7	48	47	45	44	38	38	37	39	36	35	37	38	46	46	7
6	44	43	40	39	33	34	33	35	32	32	33	35	42	42	6
5	39	38	35	34	29	30	28	30	28	28	29	32	39	38	5
4	35	34	29	29	25	26	24	26	23	24	25	28	35	35	4
3	31	30	24	24	21	22	20	22	19	20	21	25	32	31	3
2	27	26	19	19	16	18	16	18	14	17	17	22	28	28	2
1	23	22	14	14	12	14	12	14	10	13	13	18	25	24	1
0	18	18	9	9	8	10		9							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	93	100		94	93	88	82	88	87							19	
18	89	91	100	90	89	84	78	84	84	80						18	
17	84	87	95	86	84	80	75	80			86					17	
16	80	82	89	82	80	76	71	75	76		82					16	
15	76	78	84	78	75	73	67	71	72	70	78	71	68	70		15	
14	72	74	78	74	71	69	64	67	68	67	74		65			14	
13	67	69	73	70	67	65	60	63	64	64	71	64		62		13	
12	63	65	68	66	62	61	57	58	60		67	60	58	58		12	
11	59	61	62	62	58	57	53	54	56	57	63	57		54		11	
10	55	57	57	58	53	54	50	50	52	54	59	54	52	51		10	
9	50	52	52	54	49	50	46	46	51	55	50	49	47			9	
8	46	48	46	50	44	46	42	41	44	48	51	47	46	43		8	
7	42	44	41	46	40	42	39	37	41		48	43	43		39		7
6	38	39	36	42	35	38	35	33	37	41	44	40		35		6	
5	34	35	30	38	31	35	32	29	33	38	40	36	36	31		5	
4	29	31	25	34	27	31	28	24	29		36	33	33	27		4	
3	25	26	19	30	22	27	24	20	25	32	32	29	30	23		3	
2	21	22	14	26	18	23	21	16	21		28	26	27	19		2	
1	17	18	9	22	13	19	17	11		25	25	23	24	15		1	
0	13	3		18				7		22	21	19	21			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	96	95			96		90		94								19	
18	92	93	91	81			86		90								18	
17	88	88	86	77	88		82		86	90				82	81		17	
16	84	84	82	73	84	82	78		82	85	74		78	77	77		16	
15	80	80	77	69	80	78	74		77	80			74	73			15	
14	76	75	73	65	76	73	70		73	76	67		71	70	69		14	
13	72	71	69	61	72	69	66		69	71	63		67	66	66		13	
12	68	67	64	57	68	65	62		65	67		60	63	62	62		12	
11	64	62	60	53	64	61	58	60	61	62	56	55	60	59	58		11	
10	60	58	55	49	60	57	53		57	58	52	51	56	55	54		10	
9	56	54	51	45	56	53	49	48	52	53	48	47	46	52	51	50		9
8	52	49	46	41	52	49	45		48	49	43	43	49	48	46		8	
7	48	45	42	37	48	45	41	37	44	44	39	39	36	45	44	42		7
6	44	41	37	33	44	41	37		40	40	35	35	41	40	38		6	
5	40	36	33	29	40	36	33	25	36	35	31	31	27	37	34		5	
4	36	32	29	25	36	32	29		32	30	26	27	34	33	30		4	
3	32	27	24		32	28	25	14	28	26	22	23	17	30	29		3	
2	28	23	20		28	24	21	8	23	21	18	19	13	26			2	
1	24	19	15		24	20	17	2	19	17	14	15	8				1	
0	14				16	13	0		12	10			18	14			0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 50-54 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	93		87		87		83				88	96	94	87		19
18	89	94	83				78				84	92	90	83		18
17	85	90	79		78		74				81	87		79		17
16	81	85	75			70	70	68	75			83	82	75		16
15	76	81	71		69		66	65				72				15
14	72	76	67	64	65	62	62	61	66		68	75	74	68		14
13	68	72	63		60		58	57			65	70	70	64	59	13
12	63	67	59	57	55	54	54	53	57		61	66	65	56		12
11	59	63	55	54	51	50	50	50	52		57	57	62	61	57	11
10	55	58	51	50	46	46	45	46	48		53	58	57	53		10
9	51	54	47	47	42	42	41	42	43		49	49	53	53		9
8	46	49	43	43	37	38	37	38	39		45	49	49	46		8
7	42	45	38	40	33	34	33	34	35		41	41	45	45		7
6	38	40	34	36		30	29	31	30		37	41	41	38		6
5	34	36	30	33	23	26	25	27	26		33	33	37	34		5
4	29	31	26	29		22	21	23	21		29	32	33	31		4
3	25	27	22	26	14	18	16		17		25	28	29	27		3
2	21	22	18	22	10	14	12	16	12		21	24	25	23		2
1	16		14	19	5	10	8	12	8		17			19		1
0				15		6	4	8								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	99	97	100	100	91	88	88	91	91				88	88	19
18	95	93	100	100	87	84	83	87	87				85	84	18
17	90	89	97	96	82	80	79	83	82				81	81	17
16	86	85	92	91	78	76	75	79	78				78	77	16
15	82	81	87	86	74	72	71	74	73				66	74	15
14	78	77	82	81	70	68	67	70	69	63			70	70	14
13	74	72	77	76	65	64	63	66	65		62	59	67	67	13
12	70	68	72	71	61	60	59	62	60	55		63	63		12
11	65	64	67	66	57	56	55	58	56	54	52	60	60		11
10	61	60	62	61	53	52	50	53	52	48	50	49	56	56	10
9	57	56	57	56	48	48	46	49	47	44	46	46	53	53	9
8	53	52	52	51	44	44	42	45	43	40	42	43	49	49	8
7	49	48	47	46	40	40	38	41	38	36	38	39	46	46	7
6	45	44	41	41	36	36	34	36	34	33	34	36	42	42	6
5	40	40	36	36	31	32	30	32	30	29	30	33	39	39	5
4	36	36	31	31	27	28	26	28	25	25	26	29	35	35	4
3	32	32	26	26	23	24	22	24	21	21	22	26	32	32	3
2	28	28	21	21	19	20	17	20	16	17	18	23	28	28	2
1	24	24	16	16	14	16	13	15	12	14	14	20	25	24	1
0	19	19	11	11	10	12		11							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	91	100		96	95	89	82	90	85							19
18	87	90	100	92	91	85	79	85	81	81						18
17	83	86	98	88	86	81	75	81								17
16	78	81	92	84	82	77	72	77	74							16
15	74	77	87	80	77	73	68	73	70	71	79	71	68	72		15
14	70	73	81	76	73	70	65	68	66	68	75		65			14
13	66	68	76	72	68	66	61	64	62	64	71	65		64		13
12	61	64	71	68	64	62	57	60	58		68	61	59	60		12
11	57	60	65	64	60	58	54	56	54	58	64	58		56		11
10	53	55	60	60	55	54	50	51	50	55	60	54	53	52		10
9	49	51	55	56	51	51	47	47	51	56	51	50	48			9
8	45	47	49	52	46	47	43	43	42	48	52	47	46	44		8
7	40	42	44	48	42	43	39	38	38		48	44	43	40		7
6	36	38	39	44	37	39	36	34	34	42	45	40	40	36		6
5	32	34	33	40	33	35	32	30	31	39	41	37	37	32		5
4	28	30	28	36	28	32	29	26	27		37	34	34	28		4
3	23	25	23	32	24	28	25	21	23	32	33	30	31	24		3
2	19	21	17	28	20	24	21	17	19		29	27	28	21		2
1	15	17	12	24	15	20	18	13	26	25	23	25	17			1
0	12	6		20				9	22	22	20	22				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score	
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	96	97			98		93		93								19	
18	92	95	92	83			88		89								18	
17	88	91	88	79	90		84		84	90				81	81		17	
16	85	86	84	75	86	83	80		80	85	76		77	77	77		16	
15	81	82	79	71	82	79	76		76	80			74	74			15	
14	77	78	75	67	78	75	72		72	76	68		70	70	69		14	
13	73	73	70	63	74	71	68		68	71	65	64		66	66	65		13
12	69	69	66	59	70	66	64		64	67		60	63	63	61		12	
11	65	65	61	55	66	62	60	60	59	62	56	56		59	59	57		11
10	61	60	57	50	62	58	56		55	58	52	52		55	55	53		10
9	57	56	52	46	58	54	52	48	51	53	48	48	46	52	52	50		9
8	53	52	48	42	54	50	48		47	49	44	44		48	48	46		8
7	49	47	44	38	50	46	43	37	43	44	39	41	37	44	44	42		7
6	45	43	39	34	46	42	39		39	40	35	37		41	41	38		6
5	41	38	35	30	42	38	35	25	34	35	31	33	27	37	37	34		5
4	37	34	30	26	38	34	31		30	30	27	29		33	33	30		4
3	33	30	26		34	29	27	14	26	26	22	25	17	30	30			3
2	29	25	21		30	25	23	8	22	21	18	21	13	26				2
1	25	21	17		26	21	19	2	18	17	14	17	8					1
0	17				17	15	0		12	10				19	14			0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 55-59 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	94		87		89		84				89	97	95	87		19	
18	90	96	83				80				86	93	91	83		18	
17	86	91	79		80		76			82		89		80		17	
16	82	87	75			71	72	70	76			85	83	76		16	
15	77	82	71		70		68	66			74					15	
14	73	77	67	64	66	63	64	62	67		70	76	75	68		14	
13	69	73	63		61		60	59		66		72	71	65	59	13	
12	64	68	59	57	57	56	55	55	58		62	68	67		56	12	
11	60	64	55	54	52	52	51	51	54	58	58	64	63	57	52	11	
10	56	59	51	50	48	48	47	47	50		54	59	59	53	49	10	
9	52	55	47	47	43	44	43	44	45	50	51	55	55	50	45	9	
8	47	50	43	43	38	40	39	40	41		47	51	51	46	42	8	
7	43	46	39	40	34	36	35	36	36	43	43	47	47	42	38	7	
6	39	41	35	36		32	31	32	32		39	42	43	39	35	6	
5	35	37	31	33	25	28	27	28	27	35	35	38	39	35	31	5	
4	30	32	27	29		24	22	25	23		31		34	35	31	27	4
3	26	28	23	26	16	20	18		18		27		30	31	27	24	3
2	22	23	19	23	11	16	14	17	14		23		25	27	24	20	2
1	17		15	19	6	12	10	13	9		19			20		1	
0				16	8	6	10									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	98	100	100	93	90	89	93	93				88	88	19
18	96	94	100	100	89	86	85	89	89				85	85	18
17	92	90	99	98	85	82	81	85	84				81	81	17
16	87	86	94	93	81	78	77	81	80				78	78	16
15	83	82	89	88	76	74	73	76	76		67	74	74	74	15
14	79	78	84	83	72	70	69	72	71	64			71	70	14
13	75	74	79	78	68	66	65	68	67		62	60	67	67	13
12	71	70	74	73	64	62	60	64	63	56		64	63	63	12
11	67	66	69	68	59	58	56	60	58		55	54	60	60	11
10	62	62	64	63	55	54	52	55	54	49	51	50	57	56	10
9	58	58	59	58	51	50	48	51	49	45	47	47	53	53	9
8	54	53	54	53	47	46	44	47	45	41	43	44	49	49	8
7	50	49	48	48	42	42	40	43	41	37	39	40	46	46	7
6	46	45	43	43	38	38	36	38	36	34	35	37	42	42	6
5	41	41	38	38	34	34	32	34	32	30	31	34	39	39	5
4	37	37	33	33	30	30	27	30	27	26	27	31	35	35	4
3	33	33	28	28	25	26	23	26	23	22	23	27	32	32	3
2	29	29	23	23	21	22	19	22	19	19	19	24	28	28	2
1	25	25	18	18	17	18	15	17	14	15	15	21	25	25	1
0	21	21	13	13	13	14		13							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	91	100		98	97	89	83	91	85						19
18	87	89	100	94	93	86	80	87	81	81				85	18
17	83	85	100	90	88	82	76	83			88				17
16	78	80	96	86	84	78	72	78	74		84				16
15	74	76	90	82	79	74	69	74	70	71	80	72	69	73	15
14	70	72	85	78	75	70	65	70	66	68	76		66		14
13	66	67	79	74	71	67	62	65	62	65	72	65		65	13
12	61	63	74	70	66	63	58	61	58		69	62	59	61	12
11	57	59	69	66	62	59	54	57	54	58	65	58		58	11
10	53	54	63	62	57	55	51	53	50	55	61	55	53	54	10
9	49	50	58	58	53	51	47	48	52	57	52	50	50		9
8	45	46	53	53	48	48	44	44	42	49	53	48	47	46	8
7	40	41	47	49	44	44	40	40	38		49	45	44	42	7
6	36	37	42	45	39	40	36	36	34	42	46	41	41	38	6
5	32	33	37	41	35	36	33	31	31	39	42	38	38	34	5
4	28	28	31	37	31	32	29	27	27		38	34	35	30	4
3	23	24	26	33	26	29	26	23	23	33	34	31	31	26	3
2	19	20	20	29	22	25	22	19	19		30	27	28	22	2
1	15	15	15	25	17	21	18	14	26	26	24	25	18		1
0	11	10		21				10	23	22	21	22			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	96		99		98		95		93							19
18	92	97	94	85			91		89							18
17	88	93	90	81	90		87		84	90				81	81	17
16	85	89	85	77	86	84	83		80	85	78		77	78	77	16
15	81	84	81	73	82	80	79		76	80			73	74		15
14	77	80	76	69	78	76	75		72	76	70		70	70	69	14
13	73	76	72	64	74	72	71		68	71	66		66	67	65	13
12	69	71	67	60	70	68	67		64	67		61	62	63	61	12
11	65	67	63	56	66	64	63	60	59	62	56	58	58	59	57	11
10	61	62	59	52	62	59	58		55	58	52	54	55	56	53	10
9	57	58	54	48	58	55	54	49	51	53	48	50	46	51	52	9
8	53	54	50	44	54	51	50		47	49	44	46	47	48	45	8
7	49	49	45	40	50	47	46	37	43	44	40	42	37	44	45	7
6	45	45	41	36	46	43	42		39	40	35	38	40	41	37	6
5	41	41	36	32	42	39	38	26	34	35	31	34	27	36	37	5
4	37	36	32	28	38	35	34		30	30	27	30	33	34	30	4
3	33	32	27		34	31	30	14	26	26	23	27	17	29	30	3
2	29	28	23		30	27	26	9	22	21	18	23	13	25		2
1	25	23	19		26	22	22	3	18	17	14	19	8			1
0	19	19			18	18	0		12	10			19	14		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 60-64 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	93		88		90		86			91	99	97	88		19	
18	89	94	84				82			87	95	93	84		18	
17	85	89	80		81		78			84	91		80		17	
16	80	85	76			73	74	72	78			86	85	76	16	
15	76	80	72		72		70	68			75				15	
14	72	76	68	65	67	65	66	64	69		72	78	77	69	14	
13	68	71	63		63		62	61		68		74	73	65	59	13
12	63	66	59	58	58	58	58	57	60		64	69	69	56	12	
11	59	62	55	55	54	54	53	53	56	60	60	65	65	58	52	11
10	55	57	51	51	49	50	49	49	51		56	61	61	54	49	10
9	51	53	47	48	45	46	45	46	47	52	52	57	57	50	45	9
8	46	48	43	45	40	42	41	42	42		48	52	53	47	42	8
7	42	44	39	41	35	38	37	38	38	44	44	48	48	43	38	7
6	38	39	35	38		34	33	34	33	40		44	44	39	35	6
5	33	35	31	34	26	30	29	30	29	36	37	40	40	35	31	5
4	29	30	27	31		26	25	27	24	32		35	36	32	28	4
3	25	26	23	27	17	22	20		20	28		31	32	28	24	3
2	21	21	19	24	13	18	16	19	15	24		27	28	24	21	2
1	16		15	20	8	14	12	15	11	21				20		1
0				17		10	8	12								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	96	93	91	96	96				88	88	19
18	97	96	100	100	92	89	87	91	91				85	85	18
17	93	91	100	100	88	85	83	87	87				81	81	17
16	89	87	97	95	83	81	79	83	82				78	78	16
15	85	83	91	90	79	77	75	79	78		68	74	74	15	
14	80	79	86	85	75	73	71	74	74	65		71	71		14
13	76	75	81	80	71	69	67	70	69	63	62	62	67	67	13
12	72	71	76	75	66	65	62	66	65	58		64	64	64	12
11	68	67	71	70	62	61	58	62	61	56	55	60	60	60	11
10	64	63	66	65	58	57	54	58	56	50	52	52	57	56	10
9	60	59	61	60	54	53	50	53	52	46	48	49	53	53	9
8	55	55	56	55	49	49	46	49	47	43	44	45	50	49	8
7	51	51	51	50	45	45	42	45	43	39	40	42	46	46	7
6	47	47	46	45	41	41	38	41	39	35	36	39	43	42	6
5	43	43	40	41	36	37	34	36	34	31	32	35	39	39	5
4	39	38	35	36	32	33	30	32	30	27	28	32	36	35	4
3	34	34	30	31	28	29	25	28	25	24	24	29	32	32	3
2	30	30	25	26	24	25	21	24	21	20	20	26	29	28	2
1	26	26	20	21	19	21	17	20	17	16	16	22	25	25	1
0	22	22	15	16	15	17		15							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	89	100		99	100	90	84	93	85						19	
18	85	88	100	95	95	86	80	88	81	82				87	18	
17	81	83	100	91	91	83	77	84			89				17	
16	77	79	99	87	86	79	73	80	74		85				16	
15	73	75	94	83	82	75	69	75	70	72	81	73	69	75	15	
14	68	71	88	79	77	71	66	71	66	69	77		66		14	
13	64	66	83	75	73	67	62	67	62	65	73	66		67	13	
12	60	62	78	71	68	64	59	63	58		69	63	60	63	12	
11	56	58	72	67	64	60	55	58	54	59	66	59		60	11	
10	51	53	67	63	59	56	51	54	50	56	62	56	54	56	10	
9	47	49	62	59	55	52	48	50	52	58		52	51	52	9	
8	43	45	56	55	51	48	44	46	42	49	54	49	48	48	8	
7	39	40	51	51	46	45	41	41	38		50	45	44	44	7	
6	34	36	46	47	42	41	37	37	34	43	46	42	41	40	6	
5	30	32	40	43	37	37	33	33	31	40	43	38	38	36	5	
4	26	27	35	39	33	33	30	28	27		39	35	35	32	4	
3	22	23	29	35	28	29	26	24	23	33	35	32	32	28	3	
2	18	19	24	31	24	26	23	20	19		31	28	29	24	2	
1	13	14	19	27	19	22	19	16	27	27	25	26	20		1	
0	10	13		23				11	23	23	21	23			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100			100		99		91								19
18	96	100	96	87			94		87								18
17	92	95	91	83	92		90		83	90				80	82		17
16	88	91	87	79	88	85	86		79	85		80		76	78	77	16
15	84	87	82	75	84	81	82		75	80				73	74		15
14	80	82	78	71	80	77	78		71	76		72		69	71	69	14
13	76	78	74	67	76	73	74		66	71	65	68		65	67	65	13
12	72	73	69	63	72	69	70		62	67			61	61	63	61	12
11	68	69	65	59	68	65	66	61	58	62	57	60		58	60	57	11
10	64	65	60	55	64	61	62		54	58	52	56		54	56	53	10
9	60	60	56	50	60	57	58	49	50	53	48	52	46	50	52	49	9
8	56	56	51	46	56	52	54		46	49	44	48		47	49	45	8
7	52	52	47	42	52	48	49	38	41	44	40	44	37	43	45	41	7
6	48	47	42	38	48	44	45		37	40	36	40		39	41	37	6
5	44	43	38	34	44	40	41	26	33	35	31	36	27	36	38	33	5
4	40	39	34	30	40	36	37		29	30	27	32		32	34	29	4
3	36	34	29		36	32	33	15	25	26	23	29	17	28	30		3
2	32	30	25		32	28	29	9	21	21	19	25	13	25			2
1	28	26	20		28	24	25	3	17	17	14	21	8				1
0	21				20	21	0		12	10				19	13		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 65-69 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	94		88		92		89				93	100	99	88		19	
18	90	95	84				85				89	96	95	84		18	
17	86	90	80		83		81				86	92		81		17	
16	81	86	76			76	77	74	80			88	87	77		16	
15	77	81	72		74		72	70			77					15	
14	73	77	68	66	69	68	68	67	72		73	79	78	69		14	
13	69	72	64		65		64	63			70		75	74	66	59	13
12	64	68	60	59	60	60	60	59	63		65	71	70		56	12	
11	60	63	56	55	56	56	56	55	58		63	62	67	66	58	52	11
10	56	58	52	52	51	52	52	52	54		58	62	62	54	49		10
9	52	54	48	48	46	48	48	48	49		55	54	58	58	51	45	9
8	47	49	44	45	42	44	44	44	45		50	54	54	47	42		8
7	43	45	40	41	37	40	39	40	40		47	46	50	50	43	38	7
6	39	40	36	38		36	35	36	36		43		45	46	40	35	6
5	34	36	32	34	28	32	31	33	31		39	38	41	42	36	31	5
4	30	31	27	31		28	27	29	27		35		37	38	32	28	4
3	26	27	23	27	19	24	23		22		31		33	34	28	24	3
2	22	22	19	24	14	20	19	21	18		27		28	30	25	21	2
1	17		15	20	10	16	15	18	13		23				21		1
0				17		12	11	14								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	99	96	94	98	98				88	88	19
18	99	97	100	100	95	92	90	94	94				85	85	18
17	95	93	100	100	90	88	86	89	89				81	81	17
16	90	89	99	98	86	84	81	85	85				78	78	16
15	86	85	94	93	82	80	77	81	81				70	74	15
14	82	80	89	88	78	76	73	77	76	67			71	71	14
13	78	76	83	83	73	72	69	73	72		64	63	67	67	13
12	74	72	78	78	69	68	65	68	68	59			64	64	12
11	69	68	73	73	65	64	61	64	63		57	57	60	60	11
10	65	64	68	68	61	60	57	60	59	52	53	54	57	57	10
9	61	60	63	63	56	56	53	56	54	48	49	50	53	53	9
8	57	56	58	58	52	52	48	52	50	44	45	47	50	50	8
7	53	52	53	53	48	48	44	47	46				46	46	7
6	49	48	48	48	44	44	40	43	41		36	37	40	43	6
5	44	44	43	43	39	40	36	39	37		33	33	37	39	5
4	40	40	38	38	35	36	32	35	32				34	36	4
3	36	36	33	33	31	32	28	30	28		25	25	31	32	3
2	32	32	27	28	27	28	24	26	24		21	21	27	29	2
1	28	27	22	23	22	24	20	22	19	18	17	24	25	25	1
0	23	23	17	18	18	20		18							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	88	100		100	100	91	84	94	85							19
18	84	87	100	97	98	87	81	90	81	82						18
17	79	82	100	93	93	83	77	85			89					17
16	75	78	100	89	89	80	74	81	74		86					16
15	71	74	98	85	84	76	70	77	70	72	82	74	70	78		15
14	67	69	92	81	80	72	66	73	66	69	78		67			14
13	62	65	87	77	75	68	63	68	62	66	74	67		70		13
12	58	61	82	73	71	64	59	64	58		70	63	61	66		12
11	54	56	76	69	66	61	56	60	54	59	66	60		62		11
10	50	52	71	65	62	57	52	55	50	56	63	56	54	58		10
9	46	48	65	61	57	53	48	51	53	59	53	51	54			9
8	41	44	60	57	53	49	45	47	42	50	55	50	48	50		8
7	37	39	55	53	49	45	41	43	38		51	46	45	46		7
6	33	35	49	49	44	42	38	38	34	43	47	43	42	42		6
5	29	31	44	45	40	38	34	34	31	40	43	39	39	38		5
4	24	26	39	41	35	34	30	30	27		40	36	36	34		4
3	20	22	33	37	31	30	27	26	23	34	36	32	33	30		3
2	16	18	28	33	26	27	23	21	19		32	29	29	26		2
1	12	13	23	29	22	23	20	17		27	28	25	26	23		1
0	9	17		25				13		24	24	22	23			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100	100			100		100		90								19	
18	99	100	97	90			98		86								18	
17	95	98	93	85	94		94		82	90				79	82		17	
16	91	93	88	81	90	86	90		78	85	82		75	78	77		16	
15	87	89	84	77	86	82	86		73	80			72	75			15	
14	83	84	80	73	82	78	82		69	76	74		68	71	69		14	
13	79	80	75	69	78	74	78		65	71	65	70		64	67	65		13
12	75	76	71	65	74	70	74		61	67			61	64	61		12	
11	71	71	66	61	70	66	70	61	57	62	57	62		57	60	57		11
10	67	67	62	57	66	62	65		53	58	53	58		53	56	53		10
9	63	63	57	53	62	58	61	49	48	53	48	54	46	50	53	49		9
8	59	58	53	49	58	54	57		44	49	44	50		46	49	45		8
7	55	54	49	45	54	50	53	38	40	44	40	46	37	42	45	41		7
6	51	50	44	41	50	45	49		36	40	36	43		39	42	37		6
5	47	45	40	37	46	41	45	26	32	35	32	39	27	35	38	33		5
4	43	41	35	33	42	37	41		28	30	27	35		31	34	29		4
3	39	37	31		38	33	37	15	24	26	23	31	18	28	31			3
2	35	32	26		34	29	33	9	19	21	19	27	13	24				2
1	31	28	22		30	25	29	3	15	17	15	23	8					1
0	24				21	25	0		12	10				20	13			0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 70-74 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	95		89		94		92				94	100	100	89		19		
18	91	96	84				88				90	98	96	85		18		
17	87	91	80		85		84			89		94		81		17		
16	82	87	76			78	79	77	83			89	88	77		16		
15	78	82	72		76		75	73				79				15		
14	74	78	68	66	72	70	71	69	74		75	81	80	70		14		
13	70	73	64		67		67	66			73		77	76	66	60	13	
12	65	69	60	59	62	63	63	62	65			67	72	72	56	12		
11	61	64	56	55	58	59	59	58	61		65	63	68	68	59	52	11	
10	57	60	52	52	53	55	55	54	56			59	64	64	55	49	10	
9	52	55	48	48	49	51	51	50	52		57	55	60	60	51	45	9	
8	48	50	44	45	44	47	46	47	47			52	55	56	48	42	8	
7	44	46	40	41	39	43	42	43	43		49	48	51	52	44	38	7	
6	40	41	36	38		39	38	39	38			45	47	48	40	35	6	
5	35	37	32	34	30	35	34	35	34		41	40	43	44	36	31	5	
4	31	32	28	31		31	30	32	29			37		39	40	33	28	4
3	27	28	24	27	21	27	26		25			33		34	36	29	24	3
2	23	23	20	24	17	23	22	24	20			29		30	31	25	21	2
1	18		16	21	12	19	18	20	16			25			21		1	
0				17		15	13	16								0		

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	98	97	100	100				88	88	19
18	100	98	100	100	98	94	92	96	97				85	85	18
17	96	94	100	100	94	90	88	92	92				81	81	17
16	92	90	100	100	89	86	84	88	88				78	78	16
15	88	86	96	95	85	82	80	84	84			72	74	74	15
14	84	82	91	90	81	78	76	79	79	68			71	71	14
13	80	78	86	85	77	74	72	75	75			65	65	67	13
12	76	73	81	80	72	70	68	71	70	61			64	64	12
11	71	69	76	75	68	66	64	67	66			57	59	60	11
10	67	65	71	70	64	62	59	63	62	53	54	56	57	57	10
9	63	61	65	65	60	58	55	58	57	50	50	52	53	53	9
8	59	57	60	60	55	54	51	54	53	46	46	49	50	50	8
7	55	53	55	55	51	50	47	50	48	42	42	46	46	46	7
6	50	49	50	50	47	46	43	46	44	38	38	42	43	43	6
5	46	45	45	45	43	42	39	41	40	34	34	39	39	39	5
4	42	41	40	40	38	38	35	37	35	31	30	36	36	36	4
3	38	37	35	35	34	34	31	33	31	27	26	33	32	32	3
2	34	33	30	30	30	26	29	27	23	22	29	29	29	28	2
1	30	29	25	25	26	26	22	25	22	19	18	26	25	25	1
0	25	25	20	20	21	22	20								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	86	100		100	100	92	85	95	85						19
18	82	86	100	99	100	88	81	91	81	83				92	18
17	78	81	100	95	96	84	78	87			90				17
16	74	77	100	91	91	80	74	83	74		87				16
15	69	73	100	87	87	77	71	78	70	73	83	74	71	80	15
14	65	68	96	83	82	73	67	74	66	70	79		67		14
13	61	64	91	79	78	69	63	70	62	66	75	67		72	13
12	57	60	86	75	73	65	60	65	58		71	64	61	68	12
11	52	55	80	71	69	62	56	61	54	60	67	61		64	11
10	48	51	75	67	65	58	53	57	50	57	64	57	55	60	10
9	44	47	70	63	60	54	49	53		53	60	54	52	57	9
8	40	42	64	59	56	50	45	48	42	50	56	50	49	53	8
7	35	38	59	55	51	46	42	44	38		52	47	46	49	7
6	31	34	54	51	47	43	38	40	34	44	48	43	43	45	6
5	27	29	48	47	42	39	35	36	31	41	44	40	39	41	5
4	23	25	43	43	38	35	31	31	27		41	36	36	37	4
3	19	21	37	39	33	31	28	27	23	34	37	33	33	33	3
2	14	16	32	35	29	27	24	23	19		33	30	30	29	2
1	10	12	27	31	24	24	20	18		28	29	26	27	25	1
0		8	21	26				14		24	25	23	24		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		89							19	
18	100	100	99	92			100		85							18	
17	98	100	95	88	96		98		80	90				78	82	17	
16	94	95	90	84	92	88	94		76	85	84		75	79	77	16	
15	90	91	86	80	88	84	90		72	80			71	75		15	
14	86	87	81	76	84	79	86		68	76	76		67	71	69	14	
13	82	82	77	72	80	75	82		64	71	65	73		64	68	65	13
12	78	78	72	68	76	71	78		60	67			61	60	64	61	12
11	74	74	68	64	72	67	74	61	55	62	57	65		56	60	57	11
10	70	69	63	60	68	63	70		51	58	53	61		52	57	53	10
9	66	65	59	56	64	59	66	50	47	53	49	57	46	49	53	49	9
8	62	61	55	52	60	55	62		43	49	44	53		45	49	45	8
7	58	56	50	48	56	51	57	38	39	44	40	49	37	41	46	41	7
6	54	52	46	44	52	47	53		35	40	36	45		38	42	37	6
5	50	48	41	40	48	43	49	27	31	35	32	41	27	34	38	33	5
4	46	43	37	36	44	38	45		26	30	28	37		30	35	29	4
3	42	39	32		40	34	41	15	22	26	23	33	18	27	31		3
2	38	35	28		36	30	37	10	18	21	19	29	13	23			2
1	34	30	24		32	26	33	4	14	17	15	25	8				1
0		26			22	29	0		12	11				20	13		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 75-79 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	96		89		97		95				96	100	100	89		19
18	92	97	85				91				92	99	98	85		18
17	88	92	81		88		87				92	95		82		17
16	83	88	77			81	83	80	86			91	90	78		16
15	79	83	73		79		79	76			80					15
14	75	79	69	66	74	74	75	72	77		76	82	82	70		14
13	70	74	65		69		70	69			76	78	78	67	60	13
12	66	70	61	59	65	66	66	65	68		69	74	74		56	12
11	62	65	57	55	60	62	62	61	64		68	65	70	69	59	11
10	58	61	53	52	56	58	58	57	59		61	66	65	55	49	10
9	53	56	48	48	51	54	54	54	55		60	57	61	52	46	9
8	49	52	44	45	46	50	50	50	50		53	57	57	48	42	8
7	45	47	40	42	42	46	46	46	46		52	49	53	53	38	7
6	41	43	36	38		42	42	42	41		48	49	49	41	35	6
5	36	38	32	35	33	38	37	38	37		44	42	44	45	37	5
4	32	33	28	31		34	33	35	32		40	40	41	33	28	4
3	28	29	24	28	24	30	29		28		36	36	37	29	24	3
2	23	24	20	24	19	26	25	27	23		32	33	26	21		2
1	19		16	21	14	22	21	23	19		28			22		1
0				17		18	17	20								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	100	100	100				88	89	19
18	100	99	100	100	100	97	96	99	100				85	85	18
17	99	95	100	100	97	93	92	95	95				81	82	17
16	94	91	100	100	93	89	87	91	91				78	78	16
15	90	87	98	97	89	85	83	86	87		74	74	74	74	15
14	86	83	93	92	84	81	79	82	82	70			71	71	14
13	82	79	88	87	80	77	75	78	78		66	68	67	67	13
12	78	75	83	83	76	73	71	74	73	63			64	64	12
11	73	70	78	78	71	69	67	70	69		58	61	60	60	11
10	69	66	73	73	67	65	63	65	65	55	54	58	57	57	10
9	65	62	68	68	63	61	59	61	60	52	51	55	53	53	9
8	61	58	63	63	59	57	54	57	56	48	47	51	50	50	8
7	57	54	58	58	54	53	50	53	51	44	43	48	46	46	7
6	53	50	53	53	50	49	46	48	47	40	39	45	43	43	6
5	48	46	47	48	46	45	42	44	43	36	35	41	39	39	5
4	44	42	42	43	42	41	38	40	38	33	31	38	36	36	4
3	40	38	37	38	37	37	34	36	34	29	27	35	32	32	3
2	36	34	32	33	33	33	30	32	30	25	23	32	29	29	2
1	32	30	27	28	29	29	26	27	25	21	19	28	25	25	1
0	27	26	22	23	25	25	23								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 9-11 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	86	100		100	100	93	86	97	85							19
18	82	84	100	100	100	89	82	93	81	83						18
17	78	80	100	97	99	85	79	88			91					17
16	74	76	100	93	94	81	75	84	74		88					16
15	69	71	100	89	90	78	71	80	70	73	84	75	71	83		15
14	65	67	100	85	85	74	68	76	66	70	80		68			14
13	61	63	96	81	81	70	64	71	62	67	76	68		76		13
12	57	58	91	77	77	66	61	67	58		72	65	62	72		12
11	52	54	85	73	72	62	57	63	54	60	68	61		68		11
10	48	50	80	69	68	59	53	58	50	57	65	58	56	64		10
9	44	46	74	65	63	55	50	54		54	61	54	53	60		9
8	40	41	69	61	59	51	46	50	42	51	57	51	49	56		8
7	35	37	64	57	54	47	43	46	38		53	48	46	52		7
6	31	33	58	52	50	43	39	41	34	44	49	44	43	48		6
5	27	28	53	48	45	40	35	37	31	41	45	41	40	44		5
4	23	24	48	44	41	36	32	33	27		42	37	37	40		4
3	19	20	42	40	36	32	28	29	23	35	38	34	34	36		3
2	14	15	37	36	32	28	25	24	19		34	30	31	32		2
1	10	11	32	32	28	24	21	20		28	30	27	28	28		1
0		7	26	28				16		25	26	23	24			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100		100		100		100		89								19	
18	100	100	100	96			100		85								18	
17	98	100	96	92	96		100		80	90				77	83		17	
16	94	98	92	88	92	89	100		76	85	87		73	79	77		16	
15	90	94	88	84	88	85	96		72	80			70	75			15	
14	86	89	83	80	84	81	92		68	76	79		66	72	69		14	
13	82	85	79	76	80	77	87		64	71	66	75		62	68	65		13
12	78	81	74	72	76	73	83		60	67			61	59	64	61		12
11	74	76	70	68	72	69	79	62	55	62	57	67		55	61	57		11
10	70	72	65	64	68	64	75		51	58	53	63		51	57	53		10
9	66	68	61	60	64	60	71	50	47	53	49	60	46	48	53	49		9
8	62	63	56	55	60	56	67		43	49	45	56		44	50	45		8
7	58	59	52	51	56	52	63	39	39	44	40	52	37	40	46	41		7
6	54	55	48	47	52	48	59		35	40	36	48		37	42	37		6
5	50	50	43	43	48	44	55	27	31	35	32	44	27	33	39	33		5
4	46	46	39	39	44	40	51		26	30	28	40		29	35	29		4
3	42	42	34		40	36	47	16	22	26	24	36	18	26	31		3	
2	38	37	30		36	32	42	10	18	21	19	32	13	22			2	
1	34	33	25		32	27	38	4	14	17	15	28	8				1	
0	28				23	34	0		12	11				20	13		0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 9-11 years
Age: 80-85 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	97		89		100		99				98	100	100	90		19		
18	93	98	85				95				94	100	100	86		18		
17	89	93	81		91		91				96	97		82		17		
16	84	89	77			85	87	84	90			93	92	78		16		
15	80	84	73		82		83	80				82				15		
14	76	80	69	66	77	77	79	76	81		78	84	83	71		14		
13	72	75	65		73		75	72			80	80	79	67	60	13		
12	67	71	61	59	68	70	70	69	72		70	76	75	56		12		
11	63	66	57	56	63	66	66	65	67		72	67	71	71	60	11		
10	59	62	53	52	59	62	62	61	63			63	67	67	56	49	10	
9	54	57	49	49	54	58	58	57	58		64	59	63	63	52	46	9	
8	50	53	45	45	50	54	54	54	54			55	59	59	49	42	8	
7	46	48	41	42	45	50	50	50	49		56	51	54	55	45	39	7	
6	42	44	37	38		46	46	46	45		52	50	51	41	35		6	
5	37	39	33	35	36	42	42	42	40		48	43	46	47	37	32	5	
4	33	35	29	31		38	37	38	36			44	42	43	34	28		4
3	29	30	25	28	27	34	33		31		40	38	39	30	24		3	
2	25	26	21	24	22	30	29	31	27		36	33	35	26	21		2	
1	20		17	21	18	26	25	27	22		32			22			1	
0				17		22	21	23									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	100	100	100				88	89	19
18	100	100	100	100	100	100	100	100	100				85	85	18
17	100	96	100	100	100	97	96	98	99				81	82	17
16	97	92	100	100	97	93	91	94	94				78	78	16
15	93	88	100	100	92	89	87	90	90				77	74	15
14	89	84	96	95	88	85	83	85	86	73			71	71	14
13	85	80	91	90	84	81	79	81	81		67	71	67	68	13
12	80	76	86	85	80	77	75	77	77		65		64	64	12
11	76	72	81	80	75	73	71	73	73		59	64	60	61	11
10	72	67	76	75	71	69	67	69	68		58	61	57	57	10
9	68	63	71	70	67	65	63	64	64		54	52	58	53	9
8	64	59	65	65	63	61	59	60	59		50	48	54	50	8
7	59	55	60	60	58	57	54	56	55		47	44	51	46	7
6	55	51	55	55	54	53	50	52	51		43	40	48	43	6
5	51	47	50	50	49	46	47	46	46		39	36	44	39	5
4	47	43	45	46	46	45	42	43	42		35	32	41	36	4
3	43	39	40	41	41	41	38	39	38		31	28	38	32	3
2	39	35	35	36	37	37	34	35	33		28	24	35	29	2
1	34	31	30	31	33	33	30	31	29		24	20	31	25	1
0	30	27	25	26	29	29		26							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	90	90		83	83	81	77	79	82							19
18	86	92	85	79	78	77	73	75	78	76						18
17	82	87	79	75	74	73	70	71			79					17
16	77	83	74	71	69	70	66	67	71		75					16
15	73	79	69	67	65	66	63	62	67	66	72	65	61	65		15
14	69	74	63	63	61	62	59	58	63	63	68		58			14
13	65	70	58	59	56	58	55	54	59	59	64	58				13
12	60	66	53	55	52	54	52	50	55		60	54	52	53		12
11	56	61	47	51	47	51	48	45	51	53	56	51				11
10	52	57	42	47	43	47	45	41	47	50	52	48	46	45		10
9	48	53	36	43	38	43	41	37		47	49	44	43	41		9
8	43	48	31	39	34	39	38	32	39	43	45	41	40			8
7	39	44	26	35	29	35	34	28	35		41	37	37	33		7
6	35	40	20	31	25	32	30	24	31	37	37	34	33	29		6
5	31	35	15	27	20	28	27	20	28	34	33	30	30	25		5
4	27	31	10	23	16	24	23	15	24		29	27	27	21		4
3	22	27	4	19	12	20	20	11	20	27	26	23	24	18		3
2	18	23	0	15	7	16	16	7	16		22	20	21	14		2
1	14	18	0	11	3	13	12	3		21	18	17	18	10		1
0	14	0		7				0		17	14	13	15			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score	
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	85		84		89		83		91								19	
18	81	78	80	77			79		86								18	
17	77	74	75	73	81		75		82	85				79	76		17	
16	73	69	71	69	77	73	71		78	80	72		75	72	74		16	
15	69	65	66	65	73	69	67		74	76			72	68			15	
14	65	61	62	61	69	65	62		70	71	64		68	65	66		14	
13	61	56	58	56	65	61	58		66	67	60	60		64	61	62		13
12	57	52	53	52	61	57	54		62	62			58	61	57	58		12
11	53	48	49	48	57	53	50	56	57	57	51	52		57	54	54		11
10	49	43	44	44	53	49	46		53	53	47	48		53	50	50		10
9	45	39	40	40	49	45	42	44	49	48	43	44	44	50	46	46		9
8	41	35	35	36	45	41	38		45	44	39	41		46	43	42		8
7	37	30	31	32	41	36	34	33	41	39	35	37	34	42	39	38		7
6	33	26	26	28	37	32	30		37	35	30	33		39	35	34		6
5	29	22	22	24	33	28	26	21	32	30	26	29	24	35	32	30		5
4	25	17	18	20	29	24	22		28	26	22	25		31	28	26		4
3	21	13	13		25	20	18	10	24	21	18	21	15	28	24			3
2	17	9	9		21	16	13	4	20	17	14	17	10	24				2
1	13	4	4		17	12	9	0	16	12	9	13	5					1
0	0				8	5	0		7	5				13	10			0

(continued)

APPENDIX D (*continued*)

Sex: Female

Education: 12 years

Age: 20-34 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	86		84		83		76				79	86	83	83		19
18	82	87	80				72				75	81	79	79		18
17	78	82	76		74		68				75	77		75		17
16	74	77	72			63	64	62	69			73	71	71		16
15	69	73	68		65		60	59				63				15
14	65	68	63	63	60	55	55	55	60		59	64	63	64		14
13	61	64	59		55		51	51			59	60	59	60	58	13
12	57	59	55	56	51	47	47	47	51		52	56	55		55	12
11	52	55	51	53	46	43	43	43	47		51	48	52	51	53	11
10	48	50	47	49	42	40	39	40	42		44	47	47	49	48	10
9	44	46	43	46	37	36	35	36			43	40	43	43	45	9
8	39	41	39	42	33	32	31	32	33		36	39	39	42	41	8
7	35	37	35	39	28	28	27	28	29		35	32	35	35	38	7
6	31	32	31	35		24	22	25	24		31	31	34	34		6
5	27	28	27	32	19	20	18	21	20		27	24	26	27	30	5
4	22	23	23	29		16	14	17	15		23	22	23	27	27	4
3	18	19	19	25	10	12	10		11		19	18	19	23	23	3
2	14	14	15	22	5	8	6	9	6		15	14	15	19	19	2
1	10		11	18	0	4	2	6	2		11			16		1
0				15		0	0	2								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	91	100	100	81	79	82	83	82				86	86	19
18	90	87	100	97	76	75	78	79	77				83	83	18
17	86	82	94	92	72	71	74	74	73				79	79	17
16	82	78	89	87	68	67	70	70	69				76	75	16
15	77	74	84	82	64	63	66	66	64			61	72	72	15
14	73	70	79	77	59	59	62	62	60	59			69	68	14
13	69	66	74	72	55	55	58	58	55		56	55	65	65	13
12	65	62	69	67	51	51	54	53	51	52			62	61	12
11	61	58	64	63	47	47	49	49	47		48	48	58	58	11
10	56	54	59	58	42	43	45	45	42	44	44	45	55	54	10
9	52	50	54	53	38	39	41	41	38	40	40	42	51	51	9
8	48	46	49	48	34	35	37	36	33	36	36	38	48	47	8
7	44	42	43	43	30	31	33	32	29	33	32	35	44	44	7
6	40	38	38	38	25	27	29	28	25	29	28	32	41	40	6
5	36	34	33	33	21	23	25	24	20	25	25	28	37	37	5
4	31	29	28	28	17	19	21	20	16	21	21	25	34	33	4
3	27	25	23	23	13	15	16	15	12	17	17	22	30	30	3
2	23	21	18	18	8	11	12	11	7	14	13	19	27	26	2
1	19	17	13	13	4	7	8	7	3	10	9	15	23	23	1
0	15	13	8	8	0	3		3							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	88	94		87	85	83	78	82	82						19	
18	84	89	88	83	81	79	75	78	78	77				77	18	
17	80	85	83	79	76	75	71	74			81				17	
16	76	81	78	75	72	71	68	69	71		77				16	
15	71	77	72	71	67	67	64	65	67	67	73	66	63	66	15	
14	67	72	67	67	63	64	60	61	63	64	70		60		14	
13	63	68	61	63	58	60	57	57	59	60	66	59		58	13	
12	59	64	56	59	54	56	53	52	55		62	56	53	54	12	
11	55	59	51	55	49	52	50	48	51	54	58	52		50	11	
10	50	55	45	51	45	48	46	44	47	51	54	49	47	46	10	
9	46	51	40	47	41	45	42	40		48	50	46	44	42	9	
8	42	46	35	43	36	41	39	35	39	44	47	42	41	38	8	
7	38	42	29	39	32	37	35	31	35		43	39	38	34	7	
6	33	38	24	35	27	33	32	27	31	38	39	35	35	30	6	
5	29	33	19	31	23	30	28	22	28	35	35	32	32	26	5	
4	25	29	13	26	18	26	24	18	24		31	28	28	22	4	
3	21	25	8	22	14	22	21	14	20	28	27	25	25	19	3	
2	16	20	3	18	9	18	17	10	16		24	21	22	15	2	
1	12	16	0	14	5	14	14	5		22	20	18	19	11	1	
0	12	0		10				1		18	16	15	16		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	88		87		90		85		89								19
18	84	86	83	78			80		85								18
17	80	81	79	74	82		76		81	85				79	76		17
16	76	77	74	70	78	76	72		77	80	70		75	73	73		16
15	72	73	70	66	74	72	68		73	76			71	69			15
14	68	68	65	62	70	68	64		68	71	62		68	65	65		14
13	64	64	61	58	66	63	60		64	67	60	58		64	62	61	13
12	60	60	56	53	62	59	56		60	62		58	60	58	57		12
11	56	55	52	49	58	55	52	56	56	57	52	50		57	54	53	11
10	52	51	48	45	54	51	48		52	53	48	46		53	51	49	10
9	48	47	43	41	50	47	44	45	48	48	43	42	44	49	47	46	9
8	44	42	39	37	46	43	40		44	44	39	39		46	43	42	8
7	40	38	34	33	42	39	35	33	39	39	35	35	34	42	40	38	7
6	36	34	30	29	38	35	31		35	35	31	31		38	36	34	6
5	32	29	25	25	34	31	27	22	31	30	27	27	25	35	32	30	5
4	28	25	21	21	30	27	23		27	26	22	23		31	29	26	4
3	24	21	16		26	22	19	10	23	21	18	19	15	27	25		3
2	20	16	12		22	18	15	5	19	17	14	15	10	24			2
1	16	12	8		18	14	11	0	14	12	10	11	5				1
0	8				10	7	0		7	6				14	10		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 12 years
Age: 35-39 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	88		84		84		77				82	89	87	84		19	
18	84	89	80				73				78	84	83	80		18	
17	80	84	76		75		69				76	80		76		17	
16	76	80	72			64	65	63	70			76	74	72		16	
15	71	75	68		66		61	60				66				15	
14	67	71	64	64	61	57	57	56	61			63	68	66	65	14	
13	63	66	60		56		53	52			60		63	62	61	58	13
12	58	61	56	57	52	49	48	48	52			55	59	58	55	12	
11	54	57	52	53	47	45	44	45	48			52	51	55	54	51	11
10	50	52	48	50	43	41	40	41	43			47	51	50	50	48	10
9	46	48	44	46	38	37	36	37	39			44	43	46	46	44	9
8	41	43	40	43	33	33	32	33	34			39	42	42	43	41	8
7	37	39	36	39	29	29	28	29	30			36	35	38	39	37	7
6	33	34	32	36		25	24	26	25			32		34	35	34	6
5	29	30	28	32	20	21	19	22	21			28	28	29	30	30	5
4	24	25	24	29		17	15	18	16			24		25	26	27	4
3	20	21	20	25	11	13	11		12			20		21	22	23	3
2	16	16	16	22	6	9	7	11	7			16		17	18	20	2
1	11		12	18	1	5	3	7	3			12			16		1
0				15		1	0	3								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	91	100	100	84	82	84	85	84				86	86	19
18	91	87	99	97	79	78	79	81	80				83	83	18
17	86	83	93	92	75	74	75	77	75				79	79	17
16	82	79	88	87	71	70	71	73	71				76	76	16
15	78	75	83	82	67	66	67	68	67				62	72	15
14	74	71	78	77	62	62	63	64	62	60			69	69	14
13	70	67	73	72	58	58	59	60	58				58	56	13
12	66	63	68	67	54	54	55	56	54	52			62	62	12
11	61	59	63	62	50	50	51	51	49				50	58	11
10	57	54	58	57	45	46	46	47	45	45	46	46	55	55	10
9	53	50	53	52	41	42	42	43	40	41	42	42	51	51	9
8	49	46	48	47	37	38	38	39	36	37	38	39	48	47	8
7	45	42	42	42	33	34	34	35	32	33	34	36	44	44	7
6	40	38	37	37	28	30	30	30	27	30	30	33	41	40	6
5	36	34	32	32	24	26	26	23	26	26	26	29	37	37	5
4	32	30	27	27	20	22	22	22	19	22	22	26	34	33	4
3	28	26	22	22	16	18	18	18	14	18	19	23	30	30	3
2	24	22	17	17	11	14	14	13	10	14	15	19	27	26	2
1	20	18	12	12	7	10	9	9	5	11	11	16	23	23	1
0	15	14	7	7	3	6	5								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	88	96		88	86	84	79	84	82						19	
18	84	88	90	84	82	81	75	79	78	77				78	18	
17	80	84	85	80	77	77	72	75			82				17	
16	76	80	80	76	73	73	68	71	71		78				16	
15	71	75	74	72	69	69	65	67	67	67	74	67	63	66	15	
14	67	71	69	68	64	66	61	62	63	64	70		60		14	
13	63	67	64	64	60	62	57	58	59	61	67	60		59	13	
12	59	62	58	60	55	58	54	54	55		63	57	54	55	12	
11	55	58	53	56	51	54	50	50	51	54	59	53		51	11	
10	50	54	48	52	46	50	47	45	47	51	55	50	48	47	10	
9	46	49	42	48	42	47	43	41		48	51	46	45	43	9	
8	42	45	37	44	37	43	39	37	39	45	47	43	41	39	8	
7	38	41	32	40	33	39	36	32	35		44	39	38	35	7	
6	33	37	26	36	29	35	32	28	31	38	40	36	35	31	6	
5	29	32	21	32	24	31	29	24	28	35	36	32	32	27	5	
4	25	28	15	28	20	28	25	20	24		32	29	29	23	4	
3	21	24	10	24	15	24	21	15	20	29	28	26	26	19	3	
2	16	19	5	20	11	20	18	11	16		24	22	23	15	2	
1	12	15	0	16	6	16	14	7		22	21	19	20	11	1	
0	11	0		12				3		19	17	15	17		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	88		89		90		86		89								19
18	84	88	85	79			82		85								18
17	80	84	80	75	82		78		81	85				78	77	17	
16	76	79	76	71	78	77	73		77	80	70		75	73	73	16	
15	72	75	71	66	74	73	69		73	76			71	69		15	
14	68	71	67	62	70	69	65		68	71	62		67	66	65	14	
13	64	66	62	58	66	65	61		64	67	61	58		64	62	61	13
12	60	62	58	54	62	61	57		60	62		58	60	58	57	12	
11	56	58	54	50	58	56	53	57	56	57	52	50		56	55	53	11
10	52	53	49	46	54	52	49		52	53	48	47		53	51	49	10
9	48	49	45	42	50	48	45	45	48	48	44	43	44	49	47	45	9
8	44	45	40	38	46	44	41		44	44	39	39		45	44	41	8
7	40	40	36	34	42	40	37	34	39	39	35	35	34	42	40	37	7
6	36	36	31	30	38	36	33		35	35	31	31		38	36	33	6
5	32	32	27	26	34	32	28	22	31	30	27	27	25	34	33	29	5
4	28	27	23	22	30	28	24		27	26	23	23		31	29	26	4
3	24	23	18		26	24	20	11	23	21	18	19	15	27	25		3
2	20	19	14		22	20	16	5	19	17	14	15	10	23			2
1	16	14	9		18	15	12	0	14	12	10	11	5				1
0	10				11	8	0		7	6				14	10		0

(continued)

APPENDIX D (*continued*)

Sex: Female

Education: 12 years

Age: 40-44 years

Race: Caucasian

Verbal episodic memory

Scaled score	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	Scaled score	
19	89		85		85		78				84	90	88	84		19	
18	85	90	81				74				80	86	84	80		18	
17	81	85	77		75		70				77	82		77		17	
16	76	81	73			65	66	64	71			78	76	73		16	
15	72	76	69		66		62	61				68				15	
14	68	72	65	64	62	57	58	57	62		64	69	68	65		14	
13	64	67	61		57		53	53			61		65	64	62	59	13
12	59	63	57	57	53	49	49	49	53		56	61	60		55	12	
11	55	58	52	53	48	46	45	45	48		53	52	56	56	54	52	11
10	51	54	48	50	43	42	41	42	44		49	52	52	51	48	10	
9	47	49	44	46	39	38	37	38	39		45	45	48	47	44	9	
8	42	44	40	43	34	34	33	34	35		41	44	44	43	41	8	
7	38	40	36	39	30	30	29	30	30		37	37	39	40	39	7	
6	34	35	32	36		26	25	27	26		33	35	36	36	34	6	
5	29	31	28	32	20	22	20	23	22		29	29	31	32	32	5	
4	25	26	24	29		18	16	19	17		25		27	28	28	4	
3	21	22	20	26	11	14	12		13		21		22	23	24	3	
2	17	17	16	22	7	10	8	11	8		17		18	19	21	2	
1	12		12	19	2	6	4	8	4		13				17	1	
0				15		2	0	4								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	92	100	100	85	83	84	87	86				86	86	19
18	91	88	99	98	81	79	80	82	81				83	83	18
17	87	84	94	93	77	75	76	78	77				79	79	17
16	83	80	89	88	73	71	72	74	73				76	76	16
15	79	76	84	83	68	67	68	70	68				72	72	15
14	75	72	79	78	64	63	64	66	64	60			69	69	14
13	70	68	74	73	60	59	60	61	60				65	65	13
12	66	64	69	68	56	55	56	57	55				62	62	12
11	62	60	64	63	51	51	52	53	51				58	58	11
10	58	56	59	58	47	47	47	49	46				55	55	10
9	54	52	54	53	43	43	43	44	42				51	51	9
8	49	48	48	48	39	39	39	40	38				48	48	8
7	45	43	43	43	34	35	35	36	33				44	44	7
6	41	39	38	38	30	31	31	32	29				41	41	6
5	37	35	33	33	26	27	27	28	24				37	37	5
4	33	31	28	28	22	23	23	23	20				33	33	4
3	29	27	23	23	17	19	19	19	16				30	30	3
2	24	23	18	18	13	15	14	15	11				26	26	2
1	20	19	13	13	9	11	10	11	7				23	23	1
0	16	15	8	8	5	7		6							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	87	98		90	88	85	80	85	82						19	
18	83	87	93	86	84	82	76	81	78	78				79	18	
17	78	83	88	82	79	78	72	77			83				17	
16	74	79	82	78	75	74	69	72	71		79				16	
15	70	74	77	74	70	70	65	68	67	68	75	68	64	67	15	
14	66	70	72	70	66	66	62	64	63	65	71		61		14	
13	61	66	66	66	61	63	58	59	59	61	67	61		59	13	
12	57	61	61	62	57	59	54	55	55		64	57	54	56	12	
11	53	57	55	58	52	55	51	51	51	55	60	54		52	11	
10	49	53	50	54	48	51	47	47	47	52	56	50	48	48	10	
9	44	48	45	50	43	47	44	42		49	52	47	45	44	9	
8	40	44	39	46	39	44	40	38	39	45	48	44	42	40	8	
7	36	40	34	42	35	40	36	34	35		44	40	39	36	7	
6	32	35	29	38	30	36	33	30	31	39	41	37	36	32	6	
5	28	31	23	34	26	32	29	25	28	36	37	33	33	28	5	
4	23	27	18	30	21	28	26	21	24		33	30	30	24	4	
3	19	22	13	26	17	25	22	17	20	29	29	26	26	20	3	
2	15	18	7	22	12	21	19	12	16		25	23	23	16	2	
1	11	14	2	18	8	17	15	8		23	21	19	20	12	1	
0	9	0		14				4		19	18	16	17		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	91	91			92		87		88								19
18	87	90	86	80			83		84								18
17	83	86	82	76	84		79		80	85			78	77			17
16	79	82	77	72	80	78	75		75	80	71		74	73	73		16
15	75	77	73	68	76	74	71		71	76			71	70			15
14	71	73	69	63	72	70	67		67	71	63		67	66	65		14
13	67	69	64	59	68	66	63		63	67	61	59		63	62	61	13
12	63	64	60	55	64	62	59		59	62			58	60	59	57	12
11	59	60	55	51	60	58	55	57	55	57	52	51		56	55	53	11
10	55	56	51	47	56	54	50		51	53	48	47		52	51	49	10
9	51	51	46	43	52	49	46	46	46	48	44	43	44	49	48	45	9
8	47	47	42	39	48	45	42		42	44	40	39		45	44	41	8
7	43	43	37	35	44	41	38	34	38	39	35	35	34	41	40	37	7
6	39	38	33	31	40	37	34		34	35	31	31		38	37	33	6
5	35	34	29	27	36	33	30	23	30	30	27	28	25	34	33	29	5
4	31	30	24	23	32	29	26		26	26	23	24		30	29	25	4
3	27	25	20		28	25	22	11	21	21	19	20	15	27	26		3
2	23	21	15		24	21	18	5	17	17	14	16	10	23			2
1	19	17	11		20	17	14	0	13	12	10	12	5				1
0	12				13	10	0		7	6				15	10		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 12 years
Age: 45-49 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	90		85		85		79				85	92	90	85		19
18	86	91	81				75				81	88	86	81		18
17	82	86	77		76		71				78	83		77		17
16	77	82	73			66	67	65	72			79	78	73		16
15	73	77	69		67		63	62				70				15
14	69	73	65	64	63	59	59	58	63		66	71	70	66		14
13	65	68	61		58		55	54			62		66	62	59	13
12	60	64	57	57	53	51	51	50	54		58	62	62		55	12
11	56	59	53	53	49	47	46	47	49		54	58	57	55	52	11
10	52	55	49	50	44	43	42	43	45		50	54	53	51	48	10
9	47	50	45	47	40	39	38	39	41		46	46	49	47	45	9
8	43	46	41	43	35	35	34	35	36		42	45	45	44	41	8
7	39	41	37	40	30	31	30	31	32		38	39	41	40	38	7
6	35	36	33	36		27	26	28	27		34	37	37	36	34	6
5	30	32	29	33	21	23	22	24	23		30	31	32	33	30	5
4	26	27	25	29		19	17	20	18		26	28	29	29	27	4
3	22	23	21	26	12	15	13		14		22	24	25	25	23	3
2	18	18	16	22	8	11	9	13	9		18	20	21	21	20	2
1	13		12	19	3	7	5	9	5		14			17		1
0				15		3	1	5								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	96	94	100	100	87	85	86	88	88				86	87	19
18	92	90	100	99	83	81	82	84	83				83	83	18
17	88	86	96	94	79	77	77	80	79				79	79	17
16	84	82	91	89	75	73	73	76	75				76	76	16
15	79	77	86	84	70	69	69	71	70				64	72	15
14	75	73	80	79	66	65	65	67	66	61			69	69	14
13	71	69	75	74	62	61	61	63	61		60	57	65	65	13
12	67	65	70	69	58	57	57	59	57				62	62	12
11	63	61	65	64	53	53	53	55	53		52	51	58	58	11
10	59	57	60	60	49	49	49	50	48	46	48	47	55	55	10
9	54	53	55	55	45	45	44	46	44	42	44	44	51	51	9
8	50	49	50	50	41	41	40	42	39	38	40	41	48	48	8
7	46	45	45	45	36	37	36	38	35	35	36	37	44	44	7
6	42	41	40	40	32	33	32	33	31	31	32	34	41	41	6
5	38	37	35	35	28	29	28	29	26	27	28	31	37	37	5
4	33	33	29	30	24	25	24	25	22	23	24	28	34	34	4
3	29	29	24	25	19	21	20	21	18	20	20	24	30	30	3
2	25	24	19	20	15	17	16	17	13	16	17	21	27	27	2
1	21	20	14	15	11	13	11	12	9	12	13	18	23	23	1
0	17	16	9	10	7	9		8							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	87	100	92	90	86	80	87	82	78	78					19	
18	83	86	96	88	85	82	77	82	78	78				80	18	
17	78	82	90	84	81	79	73	78			84				17	
16	74	78	85	80	76	75	69	74	71		80				16	
15	70	73	80	76	72	71	66	69	67	68	76	68	64	68	15	
14	66	69	74	72	67	67	62	65	63	65	72		61		14	
13	61	65	69	68	63	63	59	61	59	62	68	61		61	13	
12	57	60	64	64	59	60	55	57	55		65	58	55	57	12	
11	53	56	58	60	54	56	51	52	51	55	61	55		53	11	
10	49	52	53	56	50	52	48	48	47	52	57	51	49	49	10	
9	44	47	47	52	45	48	44	44	49	53	48	46	45		9	
8	40	43	42	48	41	44	41	40	39	46	49	44	43	41	8	
7	36	39	37	44	36	41	37	35	35		45	41	39	37	7	
6	32	34	31	40	32	37	34	31	31	39	42	37	36	33	6	
5	28	30	26	36	27	33	30	27	28	36	38	34	33	29	5	
4	23	26	21	32	23	29	26	22	24		34	30	30	25	4	
3	19	21	15	28	18	25	23	18	20	30	30	27	27	21	3	
2	15	17	10	24	14	22	19	14	16		26	24	24	17	2	
1	11	13	5	20	10	18	16	10	23	22	20	21	13		1	
0	8	0		16				5	20	19	17	18			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	91	92			92		89		88								19
18	87	93	88	81			85		84								18
17	83	88	84	77	84		81		80	85				78	77		17
16	79	84	79	73	80	79	77		75	80	72			74	74	73	16
15	75	80	75	69	76	75	73		71	76				70	70		15
14	71	75	70	65	72	71	69		67	71	64			67	66	65	14
13	67	71	66	61	68	67	65		63	67	61	60		63	63	61	13
12	63	67	61	57	64	63	61		59	62		58		59	59	57	12
11	59	62	57	53	60	59	56	57	55	57	53	52		56	55	53	11
10	55	58	52	48	56	55	52		51	53	48	48		52	52	49	10
9	51	54	48	44	52	51	48	46	46	48	44	44	44	48	48	45	9
8	47	49	44	40	48	47	44		42	44	40	41		45	44	41	8
7	43	45	39	36	44	42	40	34	38	39	36	37	34	41	41	37	7
6	39	41	35	32	40	38	36		34	35	31	33		37	37	33	6
5	35	36	30	28	36	34	32	23	30	30	27	29	25	34	33	29	5
4	31	32	26	24	32	30	28		26	26	23	25		30	30	25	4
3	27	28	21		28	26	24	11	21	21	19	21	15	26	26		3
2	23	23	17		24	22	20	6	17	17	15	17	10	23			2
1	19	19	12		20	18	16	0	13	12	10	13	6				1
0	14	14			14	11	0		7	6				15	9		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 12 years
Age: 50-54 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	91		86		87		81				87	93	91	85		19
18	87	92	82				77				83	89	87	81		18
17	83	87	77		77		73			79		85		78		17
16	78	83	73			68	69	67	73			81	79	74		16
15	74	78	69		68		64	63			71					15
14	70	74	65	64	64	60	60	59	64		67	72	71	66		14
13	66	69	61		59		56	55		63		68	67	63	59	13
12	61	65	57	57	54	52	52	52	55		60	64	63	55		12
11	57	60	53	54	50	48	48	48	51	55	56	59	59	55	52	11
10	53	56	49	50	45	44	44	44	46		52	55	55	52		10
9	48	51	45	47	41	40	40	40	42	47	48	51	51	48	45	9
8	44	47	41	43	36	36	35	37	37		44	47	47	44		8
7	40	42	37	40	32	32	31	33	33	39	40	43	43	40		7
6	36	38	33	36		28	27	29	28		35	38	39	37		6
5	31	33	29	33	22	24	23	25	24	31	32	34	35	33		5
4	27	28	25	29		20	19	21	19		27	30	31	29		4
3	23	24	21	26	13	16	15		15		23	26	27	25		3
2	19	19	17	22	9	12	11	14	10		19	21	23	22		2
1	14		13	19	4	8	7	10	6		15			18		1
0				15		4	2	6								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	97	95	100	100	90	87	87	90	90				87	87	19
18	93	91	100	100	85	83	83	86	85				83	83	18
17	89	87	97	96	81	79	79	82	81				79	80	17
16	85	83	92	91	77	75	75	77	77				76	76	16
15	80	79	87	86	73	71	71	73	72				65	72	15
14	76	75	82	81	68	67	66	69	68	62			69	69	14
13	72	71	77	76	64	63	62	65	63		61	58	65	65	13
12	68	67	72	71	60	59	58	61	59	54			62	62	12
11	64	63	67	66	56	55	54	56	55		53	52	58	58	11
10	60	58	62	61	51	51	50	52	50	47	49	48	55	55	10
9	55	54	57	56	47	47	46	48	46	43	45	45	51	51	9
8	51	50	52	51	43	43	42	44	41	39	41	42	48	48	8
7	47	46	46	46	39	39	38	40	37	36	37	38	44	44	7
6	43	42	41	42	34	35	33	35	33	32	33	35	41	41	6
5	39	38	36	37	30	31	29	31	28	28	29	32	37	37	5
4	34	34	31	32	26	27	25	27	24	24	25	29	34	34	4
3	30	30	26	27	22	23	21	23	20	20	21	25	30	30	3
2	26	26	21	22	17	19	17	18	15	17	17	22	27	27	2
1	22	22	16	17	13	15	13	14	11	13	14	19	23	23	1
0	18	18	11	12	9	11		10							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	85	100	94	92	87	81	88	83							19
18	81	85	99	90	87	83	77	84	79	79				82	18
17	77	81	93	86	83	79	74	79			85				17
16	72	76	88	82	78	76	70	75	71		81				16
15	68	72	83	78	74	72	66	71	67	69	77	69	65	70	15
14	64	68	77	74	69	68	63	67	63	66	73		62		14
13	60	63	72	70	65	64	59	62	60	62	69	62		62	13
12	56	59	67	65	60	60	56	58	56		65	59	56	58	12
11	51	55	61	61	56	57	52	54	52	56	62	55		54	11
10	47	51	56	57	52	53	49	49	48	53	58	52	49	50	10
9	43	46	50	53	47	49	45	45	50	54	48	46	46		9
8	39	42	45	49	43	45	41	41	40	46	50	45	43	42	8
7	34	38	40	45	38	41	38	37	36		46	42	40	38	7
6	30	33	34	41	34	38	34	32	32	40	42	38	37	35	6
5	26	29	29	37	29	34	31	28	28	37	39	35	34	31	5
4	22	25	24	33	25	30	27	24	24		35	31	31	27	4
3	17	20	18	29	20	26	23	20	20	30	31	28	28	23	3
2	13	16	13	25	16	22	20	15	16		27	24	24	19	2
1	9	12	8	21	12	19	16	11	24	23	21	21	15		1
0	7	2		17				7	20	19	17	18			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	94	94			95		91		87							19	
18	90	92	90	83			87		82							18	
17	86	88	85	78	87		83		78	85				77	78	17	
16	82	83	81	74	83	81	79		74	80	73		73	74	73	16	
15	78	79	76	70	79	77	75		70	76			70	70		15	
14	74	75	72	66	75	72	71		66	71	66		66	67	65	14	
13	70	70	67	62	71	68	67		62	67	61	62		62	63	61	13
12	66	66	63	58	67	64	63		58	62		58	59	59	57	12	
11	62	62	59	54	63	60	59	58	53	57	53	54		55	56	53	11
10	58	57	54	50	59	56	55		49	53	49	50		51	52	49	10
9	54	53	50	46	55	52	51	46	45	48	44	46	44	48	48	45	9
8	50	48	45	42	51	48	46		41	44	40	42		44	45	41	8
7	46	44	41	38	47	44	42	35	37	39	36	38	34	40	41	37	7
6	42	40	36	34	43	40	38		33	35	32	34		37	37	33	6
5	38	35	32	30	39	36	34	23	28	30	27	30	25	33	34	29	5
4	34	31	27	26	35	31	30		24	26	23	26		29	30	25	4
3	30	27	23		31	27	26	12	20	21	19	22	15	26	26		3
2	27	22	19		27	23	22	6	16	17	15	18	10	22			2
1	23	18	14		23	19	18	0	12	12	11	14	6				1
0	14				15	14	0		7	6				15	9		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 12 years
Age: 55-59 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	92		86		88		83				88	95	93	86		19	
18	88	93	82				79				84	91	89	82		18	
17	84	88	78		79		74				81		86		78	17	
16	79	84	74			69	70	68	75			82	81	74		16	
15	75	79	70		70		66	65				73				15	
14	71	75	66	64	65	62	62	61	66		69	74	73	67		14	
13	66	70	62		60		58	57			65		69	69	63	59	13
12	62	66	58	57	56	54	54	53	57		61		65	65	55	55	12
11	58	61	54	54	51	50	50	50	52		57	57	61	61	56	52	11
10	54	57	50	50	47	46	46	46	48		53		57	57	52	48	10
9	49	52	46	47	42	42	41	42			49	50	53	53	48	45	9
8	45	48	41	43	37	38	37	38	39		46	48	49	45	41	8	
7	41	43	37	40	33	34	33	34	34		41	42	44	45	41	38	7
6	37	39	33	36		30	29	31	30		37		40	40	37	34	6
5	32	34	29	33	24	26	25	27	25		33	34	36	36	33	31	5
4	28	30	25	29		22	21	23	21		29		31	32	30	27	4
3	24	25	21	26	15	18	17		16		25		27	28	26	24	3
2	19	20	17	23	10	14	12	16	12		21		23	24	22	20	2
1	15		13	19	5	10	8	12	7		17				18		1
0				16		6	4	8								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	98	97	100	100	92	90	89	92	92				87	87	19	
18	94	92	100	100	88	86	85	88	88				83	83	18	
17	90	88	99	98	84	82	81	84	83				80	80	17	
16	86	84	94	93	79	78	76	80	79				76	76	16	
15	82	80	89	88	75	74	72	75	74			66	73	73	15	
14	77	76	84	83	71	70	68	71	70	63			69	69	14	
13	73	72	79	78	67	66	64	67	66		62	59	66	66	13	
12	69	68	74	73	62	62	60	63	61	56			62	62	12	
11	65	64	69	68	58	58	56	58	57		54	53	58	59	11	
10	61	60	64	63	54	54	52	54	52		48	50	50	55	55	10
9	56	56	59	58	50	50	48	50	48	44	44	46	51	51	9	
8	52	52	54	54	45	46	43	46	44	40	42	43	48	48	8	
7	48	48	48	49	41	42	39	42	39	37	38	40	44	44	7	
6	44	44	43	44	37	38	35	37	35	33	34	36	41	41	6	
5	40	39	38	39	33	34	31	33	31	29	30	33	37	37	5	
4	36	35	33	34	28	30	27	29	26	25	26	30	34	34	4	
3	31	31	28	29	24	26	23	25	22	21	22	26	30	30	3	
2	27	27	23	24	20	22	19	20	17	18	18	23	27	27	2	
1	23	23	18	19	16	18	15	16	13	14	15	20	23	23	1	
0	19	19	13	14	11	14		12							0	

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	85	100	95	94	87	81	89	83								19
18	81	84	100	91	89	83	78	85	79	79						18
17	77	80	97	87	85	79	74	81					86			17
16	72	75	91	83	80	75	71	77	71			82				16
15	68	71	86	79	76	72	67	72	67	69	78	70	66	72		15
14	64	67	81	75	71	68	64	68	63	66	74		62			14
13	60	62	75	71	67	64	60	64	60	63	70	63			64	13
12	56	58	70	67	63	60	56	59	56		66	59	56	60		12
11	51	54	65	63	58	56	53	55	52	56	62	56			56	11
10	47	49	59	59	54	53	49	51	48	53	59	53	50	52		10
9	43	45	54	55	49	49	46	47	50	55	49	47	48			9
8	39	41	48	51	45	45	42	42	40	47	51	46	44	44		8
7	34	36	43	47	40	41	38	38	36		47	42	41	40		7
6	30	32	38	43	36	37	35	34	32	40	43	39	38	36		6
5	26	28	32	39	31	34	31	30	28	37	39	35	34	32		5
4	22	24	27	35	27	30	28	25	24		36	32	31	28		4
3	17	19	22	31	23	26	24	21	20	31	32	28	28	24		3
2	13	15	16	27	18	22	20	17	16		28	25	25	20		2
1	9	11	11	23	14	19	17	12	24	24	22	22	17			1
0	6	6	6	19				8	21	20	18	19				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	94	96		95		94			87								19
18	90	94	91	84			90		82								18
17	86	90	87	80	87		86		78	85			77	78			17
16	82	86	82	76	83	82	82		74	80	75		73	74	73		16
15	78	81	78	72	79	78	78		70	76			69	71			15
14	74	77	74	68	75	74	74		66	71	67		66	67	65		14
13	70	72	69	64	71	70	70		62	67	63		62	63	61		13
12	66	68	65	60	67	65	66		58	62			58	58	60		12
11	62	64	60	56	63	61	61	58	53	57	53	56		55	56	53	11
10	58	59	56	52	59	57	57		49	53	49	52		51	52	49	10
9	54	55	51	48	55	53	53	47	45	48	45	48	44	47	49	45	9
8	50	51	47	44	51	49	49		41	44	40	44		44	45	41	8
7	46	46	42	40	47	45	45	35	37	39	36	40	34	40	41	37	7
6	42	42	38	36	43	41	41		33	35	32	36		36	38	33	6
5	38	38	34	32	39	37	37	24	28	30	28	32	25	33	34	29	5
4	34	33	29	28	35	33	33		24	26	23	28		29	30	25	4
3	30	29	25		31	29	29	12	20	21	19	24	15	25	27		3
2	27	25	20		27	24	25	6	16	17	15	20	10	22			2
1	23	20	16		23	20	21	1	12	12	11	16	6				1
0	16	16		16	17	0			7	7				16	9		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 12 years
Age: 60-64 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	93		86		89		85				90	96	95	86		19	
18	89	94	82				81				86	92	91	82		18	
17	84	89	78		80		77			82		88		79		17	
16	80	85	74			71	72	70	77			84	83	75		16	
15	76	80	70		71		68	67			74					15	
14	72	76	66	64	67	64	64	63	68		71	75	74	67		14	
13	67	71	62		62		60	59		67		71	70	64	59	13	
12	63	67	58	57	57	56	56	55	59		63	67	66	55		12	
11	59	62	54	54	53	52	52	51	54	59	59	63	62	56	52	11	
10	55	58	50	50	48	48	48	48	50		55	58	58	53	48	10	
9	50	53	46	47	44	44	44	44	45	51	51	54	54	49	45	9	
8	46	49	42	44	39	40	39	40	41		47	50	50	45	41	8	
7	42	44	38	40	34	36	35	36	36	43	43	46	46	41	38	7	
6	37	40	34	37		32	31	33	32		39	41	42	38	34	6	
5	33	35	30	33	25	28	27	29	27	35	36	37	38	34	31	5	
4	29	31	26	30		24	23	25	23		31		33	34	30	27	4
3	25	26	22	26	16	20	19		18		27		29	30	26	24	3
2	20	22	18	23	12	16	15	17	14		23		24	26	23	20	2
1	16		14	19	7	12	10	14	9		19			19		1	
0				16		8	6	10								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	98	100	100	95	92	91	94	94				87	87	19
18	95	94	100	100	91	88	87	90	90				83	83	18
17	91	90	100	100	86	84	83	86	86				80	80	17
16	87	86	97	96	82	80	78	82	81				76	76	16
15	83	82	91	91	78	76	74	77	77		67	73	73		15
14	79	77	86	86	74	72	70	73	72	64			69	69	14
13	75	73	81	81	69	68	66	69	68		63	61	66	66	13
12	70	69	76	76	65	64	62	65	64	57		62	62		12
11	66	65	71	71	61	60	58	61	59		55	54	59	59	11
10	62	61	66	66	57	56	54	56	55	49	51	51	55	55	10
9	58	57	61	61	52	52	50	52	50	45	47	48	52	52	9
8	54	53	56	56	48	48	46	48	46	42	43	44	48	48	8
7	49	49	51	51	44	44	41	44	42	38	39	41	45	45	7
6	45	45	46	46	40	40	37	40	37	34	35	38	41	41	6
5	41	41	40	41	35	36	33	35	33	30	31	35	38	38	5
4	37	37	35	36	31	32	29	31	29	27	27	31	34	34	4
3	33	33	30	31	27	28	25	27	24	23	23	28	30	30	3
2	29	29	25	26	23	24	21	23	20	19	19	25	27	27	2
1	24	24	20	21	18	20	17	18	15	15	15	21	23	23	1
0	20	20	15	16	14	16		14							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	84	100	97	96	88	82	91	83							19
18	79	83	100	93	92	84	79	86	79	80				85	18
17	75	79	100	89	87	80	75	82			86				17
16	71	74	95	85	83	76	71	78	71		83				16
15	67	70	90	81	78	72	68	74	67	70	79	71	66	74	15
14	62	66	84	77	74	69	64	69	63	67	75		63		14
13	58	61	79	73	69	65	61	65	60	63	71	64		66	13
12	54	57	73	69	65	61	57	61	56		67	60	57	62	12
11	50	53	68	65	60	57	53	57	52	57	63	57		58	11
10	45	48	63	61	56	53	50	52	48	54	60	53	51	54	10
9	41	44	57	57	51	50	46	48	50	56	50	47	50		9
8	37	40	52	53	47	46	43	44	40	47	52	46	44	46	8
7	33	35	47	49	43	42	39	39	36		48	43	41	42	7
6	29	31	41	45	38	38	35	35	32	41	44	40	38	38	6
5	24	27	36	41	34	35	32	31	28	38	40	36	35	34	5
4	20	22	31	37	29	31	28	27	24		37	33	32	30	4
3	16	18	25	33	25	27	25	22	20	31	33	29	29	26	3
2	12	14	20	29	20	23	21	18	16		29	26	26	22	2
1	7	9	15	25	16	19	17	14	25	25	22	23	19		1
0	5	9		21				10	21	21	19	19			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97	97	97		96		97		85							19	
18	93	97	93	87			93		81							18	
17	89	92	88	82	88		89		77	85				76	78	17	
16	85	88	84	78	85	83	85		73	80	77		72	75	73	16	
15	81	83	80	74	81	79	81		69	76			69	71		15	
14	77	79	75	70	77	75	77		65	71	69		65	67	65	14	
13	73	75	71	66	73	71	73		60	67	62	65		61	64	61	13
12	69	70	66	62	69	67	69		56	62			58	58	60	57	12
11	65	66	62	58	65	63	65	58	52	57	53	58		54	56	53	11
10	61	62	57	54	61	58	61		48	53	49	54		50	53	49	10
9	57	57	53	50	57	54	57		44	48	45	50	44	47	49	45	9
8	53	53	49	46	53	50	52		40	44	41	46		43	45	41	8
7	50	49	44	42	49	46	48	35	35	39	36	42	34	39	42	37	7
6	46	44	40	38	45	42	44		31	35	32	38		36	38	33	6
5	42	40	35	34	41	38	40	24	27	30	28	34	25	32	34	29	5
4	38	36	31	30	37	34	36		23	26	24	30		28	31	25	4
3	34	31	26		33	30	32	12	19	21	19	26	15	25	27		3
2	30	27	22		29	26	28	7	15	17	15	22	10	21			2
1	26	23	17		25	22	24	1	10	12	11	18	6				1
0	18				17	20	0		7	7				16	9		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 12 years
Age: 65-69 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	94		87		91		87				92	98	96	87		19	
18	90	95	83				83				88	94	92	83		18	
17	85	90	79		82		79			85		90		79		17	
16	81	86	75			74	75	73	79			85	84	75		16	
15	77	81	71		73		71	69			76					15	
14	73	77	67	64	68	66	67	65	70		72	77	76	68		14	
13	68	72	62		64		63	61		69		73	72	64	59	13	
12	64	68	58	58	59	58	58	58	61		64	68	68	56		12	
11	60	63	54	54	55	54	54	54	56	61	61	64	64	57	52	11	
10	56	59	50	51	50	50	50	50	52		57	60	60	53		10	
9	51	54	46	47	46	46	46	46	47	53	53	56	56	49	45	9	
8	47	50	42	44	41	42	42	42	43		49	51	52	46	41	8	
7	43	45	38	40	36	38	38	39	38	45	45	47	48	42	38	7	
6	38	41	34	37		34	34	35	34	41		43	44	38	34	6	
5	34	36	30	33	27	30	30	31	29	37	37	39	40	34	31	5	
4	30	32	26	30		26	25	27	25		33		34	36	31	27	4
3	26	27	22	26	18	22	21		20		29		30	32	27	24	3
2	21	23	18	23	13	18	17	20	16		25		26	28	23	20	2
1	17		14	19	9	14	13	16	12		21			19		1	
0				16		10	9	12								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	99	100	100	98	95	93	97	97				87	87	19
18	97	95	100	100	94	91	89	93	93				83	84	18
17	93	91	100	100	89	87	85	88	88				80	80	17
16	89	87	99	98	85	83	81	84	84				76	76	16
15	85	83	94	93	81	79	77	80	79				69	73	15
14	80	79	89	88	77	75	73	76	75	66			69	69	14
13	76	75	83	83	72	71	69	71	71				64	63	13
12	72	71	78	78	68	67	64	67	66	58			62	62	12
11	68	66	73	73	64	63	60	63	62				56	59	11
10	64	62	68	68	60	59	56	59	57	51	52	53	55	55	10
9	59	58	63	63	55	55	52	55	53	47	48	49	52	52	9
8	55	54	58	58	51	51	48	50	49	43	44	46	48	48	8
7	51	50	53	53	47	47	44	46	44	39	40	43	45	45	7
6	47	46	48	48	42	43	40	42	40	36	36	40	41	41	6
5	43	42	43	43	38	39	36	38	36	32	32	36	38	38	5
4	39	38	38	38	34	35	31	33	31	28	28	33	34	34	4
3	34	34	33	33	30	31	27	29	27	24	24	30	31	31	3
2	30	30	27	28	25	27	23	25	22	20	20	26	27	27	2
1	26	26	22	23	21	23	19	21	18	17	16	23	24	24	1
0	22	22	17	18	17	19		17							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	82	100	99	99	98	88	83	92	83	79	80					19	
18	78	82	100	95	94	85	79	88	79	80					88	18	
17	73	77	100	91	90	81	76	84			87					17	
16	69	73	99	87	85	77	72	79	71		83					16	
15	65	69	93	83	81	73	68	75	67	70	80	71	67	76		15	
14	61	65	88	79	76	69	65	71	63	67	76		64			14	
13	57	60	83	75	72	66	61	67	60	64	72	64			68	13	
12	52	56	77	71	67	62	58	62	56		68	61	57	64		12	
11	48	52	72	67	63	58	54	58	52	57	64	57		60		11	
10	44	47	67	63	58	54	50	54	48	54	60	54	51	56		10	
9	40	43	61	59	54	51	47	49		51	57	51	48	52		9	
8	35	39	56	55	49	47	43	45	40	48	53	47	45	48		8	
7	31	34	51	51	45	43	40	41	36		49	44	42	44		7	
6	27	30	45	47	41	39	36	37	32	41	45	40	39	40		6	
5	23	26	40	43	36	35	32	32	28	38	41	37	36	37		5	
4	18	21	34	38	32	32	29	28		24		37	33	32	33		4
3	14	17	29	34	27	28	25	24	20	32	34	30	29	29		3	
2	10	13	24	30	23	24	22	20	16		30	26	26	25		2	
1	6	8	18	26	18	20	18	15		25	26	23	23	21		1	
0	4	13		22				11		22	22	20	20			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100		99		98		100		84								19	
18	96	99	95	89			97		80								18	
17	92	94	90	85	90		93		76	85				75	79		17	
16	88	90	86	81	86	84	89		72	80	79		71	75	73		16	
15	84	86	81	77	82	80	85		67	76			68	71			15	
14	80	81	77	73	78	76	81		63	71	72		64	68	65		14	
13	76	77	72	69	74	72	77		59	67	68		60	64	61		13	
12	72	73	68	65	71	68	73		55	62		58	57	60	57		12	
11	69	68	63	61	67	64	68	59	51	57	53	60		53	57	53	11	
10	65	64	59	57	63	60	64		47	53	49	56	44	49	53	49	10	
9	61	60	55	53	59	56	60	47	42	48	45	52	44	46	49	45	9	
8	57	55	50	48	55	51	56		38	44	41	48		42	46	41	8	
7	53	51	46	44	51	47	52	36	34	39	37	44	35	38	42	37	7	
6	49	47	41	40	47	43	48		30	35	32	40		35	38	33	6	
5	45	42	37	36	43	39	44	24	26	30	28	36	25	31	35	29	5	
4	41	38	32	32	39	35	40		22	26	24	32		27	31	25	4	
3	37	34	28		35	31	36	13	17	21	20	28	15	24	27		3	
2	33	29	24		31	27	32	7	13	17	15	24	11	20			2	
1	29	25	19		27	23	28	1	9	12	11	20	6				1	
0	21				19	23	0		7	7				16	9		0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 12 years
Age: 70-74 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	95		87		93		90				93	100	98	87		19	
18	91	96	83				86				89	95	94	83		18	
17	86	92	79		84		82				87	91		80		17	
16	82	87	75			76	78	75	81			87	86	76		16	
15	78	83	71		75		74	72				78				15	
14	74	78	67	65	71	69	70	68	72			74	78	78	68	14	
13	69	73	63		66		65	64			71		74	74	65	59	13
12	65	69	59	58	61	61	61	60	63			66	70	70	56	12	
11	61	64	55	54	57	57	57	56	59		63	62	66	66	57	52	11
10	56	60	51	51	52	53	53	53	54			58	61	62	54	49	10
9	52	55	47	47	48	49	49	49	50		55	54	57	57	50	45	9
8	48	51	43	44	43	45	45	45	45			51	53	53	46	42	8
7	44	46	39	40	39	41	41	41	41		47	47	49	49	42	38	7
6	39	42	35	37		37	37	38	36			43	44	45	39	35	6
5	35	37	30	33	29	33	32	34	32		39	39	40	41	35	31	5
4	31	33	26	30		29	28	30	28			36	36	37	31	27	4
3	27	28	22	26	20	25	24		23			32	32	33	27	24	3
2	22	24	18	23	16	21	20	22	19			28	28	29	24	20	2
1	18		14	20	11	17	16	19	14					20		1	
0				16		13	12	15								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	98	96	99	100				87	87	19
18	99	96	100	100	97	94	92	95	95				83	84	18
17	95	92	100	100	92	90	88	91	91				80	80	17
16	91	88	100	100	88	86	84	87	87				76	77	16
15	86	84	96	95	84	82	80	82	82				71	73	15
14	82	80	91	90	80	78	75	78	78	68			69	70	14
13	78	76	86	85	75	74	71	74	73			65	65	66	13
12	74	72	81	80	71	70	67	70	69	60			62	62	12
11	70	68	76	75	67	66	63	66	65			57	58	59	11
10	65	64	71	70	63	62	59	61	60	53	53	55	55	55	10
9	61	59	65	66	58	58	55	57	56	49	49	51	52	52	9
8	57	55	60	61	54	54	51	53	52	45	45	48	48	48	8
7	53	51	55	56	50	50	47	49	47	41	41	45	45	45	7
6	49	47	50	51	46	46	42	44	43	37	37	42	41	41	6
5	45	43	45	46	41	42	38	40	38	34	33	38	38	38	5
4	40	39	40	41	37	38	34	36	34	30	29	35	34	34	4
3	36	35	35	36	33	34	30	32	30	26	25	32	31	31	3
2	32	31	30	31	29	30	26	28	25	22	21	28	27	27	2
1	28	27	25	26	24	26	22	23	21	18	17	25	24	24	1
0	24	23	20	21	20	22		19							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	80	100		100	100	89	83	94	83							19	
18	76	81	100	96	97	85	80	89	79	81					90	18	
17	72	76	100	92	92	82	76	85			88					17	
16	68	72	100	88	88	78	73	81	71		84					16	
15	63	68	98	84	83	74	69	76	67	71	81	72	67	78		15	
14	59	63	92	80	79	70	65	72	63	68	77		64			14	
13	55	59	87	76	74	67	62	68	60	64	73	65			71	13	
12	51	55	81	72	70	63	58	64	56		69	62	58	67		12	
11	46	50	76	68	65	59	55	59	52	58	65	58		63		11	
10	42	46	71	64	61	55	51	55	48	55	61	55	52	59		10	
9	38	42	65	60	57	51	47	51		51	58	51	49	55		9	
8	34	38	60	56	52	48	44	47	40	48	54	48	46	51		8	
7	29	33	55	52	48	44	40	42	36		50	44	42	47		7	
6	25	29	49	48	43	40	37	38	32	42	46	41	39	43		6	
5	21	25	44	44	39	36	33	34	28	39	42	38	36	39		5	
4	17	20	39	40	34	32	29	29		24		38	34	33	35		4
3	13	16	33	36	30	29	26	25	20	32	35	31	30	31		3	
2	8	12	28	32	25	25	22	21	16		31	27	27	27		2	
1	4	7	23	28	21	21	19	17		26	27	24	24	23		1	
0	3	17		24				12		22	23	20	21			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100	100			100		100		83								19	
18	99	100	96	92			100		78								18	
17	95	97	92	88	92		97		74	85				74	79		17	
16	91	92	87	84	88	86	93		70	80	82			71	75	73	16	
15	88	88	83	80	84	81	89		66	76				67	72		15	
14	84	84	78	76	80	77	85		62	71	74			63	68	65	14	
13	80	79	74	72	76	73	81		58	67	62	70		60	64	61	13	
12	76	75	70	68	72	69	77		54	62			59	56	61	57	12	
11	72	71	65	64	68	65	73	59	49	57	54	62		52	57	53	11	
10	68	66	61	60	64	61	69		45	53	49	58		49	53	49	10	
9	64	62	56	55	60	57	65	48	41	48	45	54	44	45	50	45	9	
8	60	58	52	51	57	53	60		37	44	41	50		41	46	41	8	
7	56	53	47	47	53	49	56	36	33	39	37	46	35	38	42	37	7	
6	52	49	43	43	49	44	52		29	35	33	42		34	39	33	6	
5	48	45	38	39	45	40	48	25	24	30	28	39	25	30	35	29	5	
4	44	40	34	35	41	36	44		20	26	24	35		27	31	25	4	
3	40	36	30		37	32	40	13	16	21	20	31	15	23	28		3	
2	36	32	25		33	28	36	7	12	17	16	27	11	19			2	
1	32	27	21		29	24	32	2	8	12	11	23	6				1	
0	23				20	28	0		7	7				17	9		0	

(continued)

APPENDIX D (*continued*)

Sex: Female

Education: 12 years

Age: 75-79 years

Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		87		96		94				95	100	100	88		19	
18	92	97	83				89				91	97	96	84		18	
17	87	93	79		87		85				90	93		80		17	
16	83	88	75			80	81	78	84			88	87	76		16	
15	79	84	71		78		77	75			79					15	
14	75	79	67	65	73	72	73	71	75		75	80	79	69		14	
13	70	75	63		68		69	67			74		76	75	65	59	13
12	66	70	59	58	64	64	65	63	66		68	71	71		56	12	
11	62	65	55	54	59	60	61	59	62		66	64	67	67	58	52	11
10	57	61	51	51	55	56	56	56	57		60	63	63	54	49		10
9	53	56	47	47	50	52	52	52	53		58	56	59	59	50	45	9
8	49	52	43	44	46	48	48	48	48		52	55	55	47	42		8
7	45	47	39	40	41	44	44	44	44		50	48	50	51	43	38	7
6	40	43	35	37		40	40	41	39		46	46	47	39	35		6
5	36	38	31	34	32	36	36	37	35		42	40	42	43	35	31	5
4	32	34	27	30		32	32	33	30		38		38	39	32	28	4
3	27	29	23	27	23	28	27		26		34		33	35	28	24	3
2	23	25	19	23	18	24	23	25	21		31		29	31	24	20	2
1	19		15	20	13	20	19	22	17		27				20		1
0				16	16	15	18									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	99	100	100				87	87	19
18	100	97	100	100	100	97	95	98	98				83	84	18
17	97	93	100	100	96	93	91	94	94				80	80	17
16	93	89	100	100	92	89	87	89	90				76	77	16
15	88	85	98	98	87	85	83	85	85				74	73	15
14	84	81	93	93	83	81	79	81	81	70			69	70	14
13	80	77	88	88	79	77	75	77	76				66	67	13
12	76	73	83	83	75	73	70	73	72	62			62	63	12
11	72	69	78	78	70	69	66	68	68				58	60	11
10	68	65	73	73	66	65	62	64	63	55	54	57	55	56	10
9	63	61	68	68	62	61	58	60	59	51	50	54	52	52	9
8	59	56	63	63	58	57	54	56	55	47	46	51	48	48	8
7	55	52	58	58	53	53	50	51	50	43	42	47	45	45	7
6	51	48	53	53	49	49	46	47	46	39	38	44	41	41	6
5	47	44	47	48	45	45	42	43	41	36	34	41	38	38	5
4	42	40	42	43	41	41	37	39	37	32	30	37	34	34	4
3	38	36	37	38	36	37	33	35	33	28	26	34	31	31	3
2	34	32	32	33	32	33	29	30	28	24	22	31	27	27	2
1	30	28	27	28	28	29	25	26	24	20	18	28	24	24	1
0	26	24	22	23	23	25		22							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 12 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	80	100		100	100	90	84	95	83							19	
18	76	80	100	98	100	86	80	91	79	81						18	
17	72	75	100	94	95	83	77	87			89					17	
16	68	71	100	90	91	79	73	82	71		85					16	
15	63	67	100	86	86	75	70	78	67	71	82	73	68	82		15	
14	59	62	97	82	82	71	66	74	63	68	78		65			14	
13	55	58	92	78	77	67	62	69	60	65	74	66		74		13	
12	51	54	86	74	73	64	59	65	56		70	62	59	70		12	
11	46	49	81	70	69	60	55	61	52	58	66	59		66		11	
10	42	45	76	66	64	56	52	57	48	55	62	56	52	62		10	
9	38	41	70	62	60	52	48	52	52	58		52	49	58		9	
8	34	36	65	58	55	48	45	48	40	49	55	49	46	54		8	
7	29	32	60	54	51	45	41	44	36		51	45	43	50		7	
6	25	28	54	50	46	41	37	40	32	42	47	42	40	46		6	
5	21	23	49	46	42	37	34	35	28	39	43	38	37	42		5	
4	17	19	43	42	37	33	30	31		24		39	35	34	38		4
3	13	15	38	38	33	29	27	27	20	33	35	31	31	35		3	
2	8	10	33	34	28	26	23	22	16		32	28	27	31		2	
1	4	6	27	30	24	22	19	18		26	28	25	24	27		1	
0	2	22		26				14		23	24	21	21			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100		100		100		100		83								19	
18	99	100	98	96			100		78								18	
17	95	99	94	92	92		100		74	85				73	79		17	
16	91	95	89	88	88	87	99		70	80		85		69	76	73	16	
15	88	91	85	83	84	83	94		66	76				66	72		15	
14	84	86	80	79	80	79	90		62	71		77		62	68	65	14	
13	80	82	76	75	76	75	86		58	67	62	73		58	65	61	13	
12	76	78	71	71	72	70	82		54	62			59	55	61	57	12	
11	72	73	67	67	68	66	78	60	49	57	54	65		51	57	53	11	
10	68	69	63	63	64	62	74		45	53	50	61		47	54	49	10	
9	64	65	58	59	60	58	70	48	41	48	45	57	44	44	50	45	9	
8	60	60	54	55	57	54	66		37	44	41	53		40	46	41	8	
7	56	56	49	51	53	50	62	37	33	39	37	49	35	36	43	37	7	
6	52	52	45	47	49	46	58		29	35	33	45		33	39	33	6	
5	48	47	40	43	45	42	54	25	24	30	29	41	25	29	35	29	5	
4	44	43	36	39	41	38	50		20	26	24	37		25	32	25	4	
3	40	38	31		37	33	45	13	16	21	20	33	15	22	28		3	
2	36	34	27		33	29	41	8	12	17	16	29	11	18			2	
1	32	30	23		29	25	37	2	8	12	12	26	6				1	
0	25				21	33	0		7	8				17	9		0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 12 years
Age: 80-85 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	97		88		99		98				97	100	100	88		19		
18	93	98	84				94				93	99	97	84		18		
17	88	94	80		90		89				94	94		81		17		
16	84	89	76			83	85	82	88			90	89	77		16		
15	80	85	72		81		81	78				81				15		
14	76	80	68	65	76	76	77	75	79		77	82	81	70		14		
13	71	76	64		72		73	71			78		77	77	66	59	13	
12	67	71	60	58	67	68	69	67	70			69	73	73	56	12		
11	63	67	56	55	62	64	65	63	65		70	66	69	69	58	52	11	
10	58	62	52	51	58	60	61	60	61			62	65	65	55	49	10	
9	54	58	47	48	53	56	56	56	57		62	58	60	61	51	45	9	
8	50	53	43	44	49	52	52	52	52			54	56	57	47	42	8	
7	46	49	39	41	44	48	48	48	48		54	50	52	53	43	38	7	
6	41	44	35	37		44	44	44	43		50		48	49	40	35	6	
5	37	39	31	34	35	40	40	41	39		46	42	44	45	36	31	5	
4	33	35	27	30		36	36	37	34			42		39	41	32	28	4
3	29	30	23	27	26	32	32		30			38		35	37	28	24	3
2	24	26	19	23	21	28	28	29	25			34		31	33	25	21	2
1	20		15	20	17	24	23	26	21			30			21		1	
0				16		20	19	22									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	100	100	100				87	87	19
18	100	98	100	100	100	100	99	100	100				83	84	18
17	100	94	100	100	100	96	95	97	98				80	80	17
16	95	90	100	100	96	92	91	93	93				76	77	16
15	91	86	100	100	91	88	87	88	89				76	73	15
14	87	82	96	96	87	84	83	84	84	72			69	70	14
13	83	78	91	91	83	80	79	80	80		67	70	66	66	13
12	79	74	86	86	79	76	75	76	76	65		65	62	63	12
11	74	70	81	81	74	72	70	72	71	59	63	59	59	59	11
10	70	66	76	76	70	68	66	67	67	57	55	60	55	56	10
9	66	62	71	71	66	64	62	63	63	53	51	57	52	52	9
8	62	58	65	66	62	60	58	59	58	49	47	53	48	49	8
7	58	54	60	61	57	56	54	55	54	46	43	50	45	45	7
6	54	49	55	56	53	52	50	50	49	42	39	47	41	42	6
5	49	45	50	51	49	48	46	46	45	38	35	44	38	38	5
4	45	41	45	46	44	44	42	42	41	34	31	40	34	34	4
3	41	37	40	41	40	40	37	38	36	31	27	37	31	31	3
2	37	33	35	36	36	33	34	32	27	23	23	34	27	27	2
1	33	29	30	31	32	32	29	29	27	23	19	30	24	24	1
0	28	25	25	26	27	28	25								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	84		87		81	80	78	75	78							19
18	80	87	81		77	76	75	72	73		75	74				18
17	76	82	76		73	71	71	68	69				77			17
16	71	78	71		69	67	67	65	65		67		73			16
15	67	74	65		65	62	63	61	61		63	64	69	63	59	15
14	63	69	60		61	58	59	57	56		59	61	66		56	14
13	59	65	55		57	53	56	54	52		55	57	62	56		13
12	54	61	49		53	49	52	50	48		51		58	53	49	12
11	50	56	44		49	44	48	47	43		47	51	54	50		11
10	46	52	39		45	40	44	43	39		43	48	50	46	43	10
9	42	48	33		41	35	40	39	35			45	46	43	40	9
8	38	44	28		37	31	37	36	31		35	41	43	39	37	8
7	33	39	23		33	27	33	32	26		32		39	36	34	32
6	29	35	17		29	22	29	29	22		28	35	35	32	31	6
5	25	31	12		25	18	25	25	18		24	32	31	29	28	5
4	21	26	6		21	13	21	22	14		20		27	25	24	4
3	16	22	1		17	9	18	18	9		16	25	23	22	21	3
2	12	18	0		13	4	14	14	5		12		20	19	18	2
1	8	13	0		9	0	10	11	1			19	16	15	15	1
0		9	0		5				0		15	12	12	12		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	81		82		85		82		85								19	
18	77	75	78	76			78			80							18	
17	73	71	73	72	77		74		76	80				75	72		17	
16	69	66	69	68	73	71	70		72	75		70		71	69	69	16	
15	65	62	64	64	69	67	65		68	71				68	65		15	
14	61	58	60	60	65	63	61		64	66		62		64	61	61	14	
13	57	53	56	56	61	59	57		60	62	58	58		60	58	57	13	
12	53	49	51	52	57	55	53		55	57			56	57	54	53	12	
11	49	45	47	48	53	51	49	54	51	53	49	50		53	50	49	11	
10	45	40	42	44	49	47	45		47	48	45	46		49	47	45	10	
9	41	36	38	40	45	42	41	43	43	44	41	42	41	46	43	41	9	
8	37	32	33	36	41	38	37		39	39	37	38		42	39	37	8	
7	33	27	29	32	38	34	33	31	35	34	33	34	32	38	36	33	7	
6	29	23	24	28	34	30	29		31	30	28	30		35	32	29	6	
5	25	19	20	24	30	26	25	20	26	25	24	26	22	31	28	25	5	
4	21	14	16	19	26	22	20		22	21	20	22		27	25	21	4	
3	17	10	11		22	18	16	8	18	16	16	18	13	24	21		3	
2	13	6	7		18	14	12	2	14	12	11	14	8	20			2	
1	9	1	2		14	10	8	0	10	7	7	10	3				1	
0		0			6	4	0		3	3				10	6		0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 20-34 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	84		82		82		74				78	83	81	81		19
18	80	84	78				70				74	79	77	78		18
17	76	79	74		73		66				73	75		74		17
16	71	75	70			61	62	61	67			70	69	70		16
15	67	70	66		64		58	57			62					15
14	63	66	62	63	59	53	54	53	58		58	62	61	63		14
13	59	61	58		55		50	49			57	58	57	59	58	13
12	54	57	54	56	50	46	45	46	49		50	53	53	54		12
11	50	52	50	53	45	42	41	42	45		49	47	49	51	51	11
10	46	48	46	49	41	38	37	38	40		43	45	45	48	47	10
9	41	43	42	46	36	34	33	34	36		41	39	41	41	44	9
8	37	39	38	42	32	30	29	31	31		35	36	37	40	40	8
7	33	34	34	39	27	26	25	27	27		33	31	32	33	36	7
6	29	30	30	35		22	21	23	22		29	28	28	33	33	6
5	24	25	26	32	18	18	17	19	18		25	23	24	29	30	5
4	20	21	22	29		14	12	15	13		21	20	20	25	26	4
3	16	16	18	25	9	10	8		9		17	15	16	22	23	3
2	12	11	14	22	4	6	4	8	4		13	11	12	18	19	2
1	7		9	18	0	2	0	4	0		9			14		1
0				15	0	0	0									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	90	100	100	80	78	82	82	80				85	85	19
18	89	86	99	98	75	74	78	77	76				81	81	18
17	85	81	94	93	71	70	74	73	72				78	78	17
16	80	77	89	88	67	66	70	69	67				74	74	16
15	76	73	84	83	63	62	65	65	63				60	71	15
14	72	69	79	78	58	58	61	61	58				67	67	14
13	68	65	74	73	54	54	57	56	54				55	54	13
12	64	61	69	68	50	50	53	52	50				60	60	12
11	60	57	64	63	45	46	49	48	45				57	56	11
10	55	53	59	58	41	42	45	44	41				53	53	10
9	51	49	54	53	37	38	41	39	37				50	49	9
8	47	45	49	48	33	34	37	35	32				46	46	8
7	43	41	43	43	28	30	32	31	28				43	42	7
6	39	37	38	38	24	26	28	27	23				39	39	6
5	34	33	33	33	20	22	24	23	19				28	36	5
4	30	28	28	28	16	18	20	18	15				32	32	4
3	26	24	23	23	11	14	16	14	10				29	28	3
2	22	20	18	18	7	10	12	10	6				25	25	2
1	18	16	13	13	3	6	8	6	1				22	21	1
0	14	12	8	8	0	2		1							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	82	90		84	82	80	77	80	78						19	
18	78	85	85	80	78	76	73	76	75	75				76	18	
17	74	80	80	76	73	72	69	72			79				17	
16	70	76	74	72	69	69	66	68	67		75				16	
15	66	72	69	68	64	65	62	63	63	65	71	65	60	64	15	
14	61	67	64	64	60	61	59	59	59	62	67		57		14	
13	57	63	58	60	56	57	55	55	55	58	64	58		56	13	
12	53	59	53	56	51	54	52	51	51	51	60	54	51	52	12	
11	49	54	48	52	47	50	48	46	47	52	56	51		48	11	
10	44	50	42	48	42	46	44	42	43	49	52	48	44	44	10	
9	40	46	37	44	38	42	41	38	46	48	44	41	40		9	
8	36	41	31	40	33	38	37	34	35	42	44	41	38	36	8	
7	32	37	26	36	29	35	34	29	32		40	37	35	32	7	
6	27	33	21	32	24	31	30	25	28	36	37	34	32	29	6	
5	23	28	15	28	20	27	26	21	24	33	33	30	29	25	5	
4	19	24	10	24	15	23	23	16	20		29	27	26	21	4	
3	15	20	5	20	11	19	19	12	16	26	25	23	22	17	3	
2	10	15	0	16	7	16	16	8	12		21	20	19	13	2	
1	6	11	0	12	2	12	12	4		20	17	17	16	9	1	
0	7	0		8				0		16	14	13	13		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	84	85			86		83		83								19
18	80	83	81	77			79		79								18
17	76	78	77	73	78		75		75	80				75	73		17
16	72	74	72	69	74	74	71		71	75	68			71	69	69	16
15	68	70	68	65	70	70	67		67	71				67	66		15
14	64	65	63	61	66	65	63		62	66	60			64	62	61	14
13	60	61	59	57	62	61	59		58	62	58	56		60	58	57	13
12	56	57	54	53	58	57	55		54	57		56		56	55	53	12
11	52	52	50	49	54	53	51	55	50	53	50	48		53	51	49	11
10	48	48	46	45	50	49	47		46	48	46	44		49	47	45	10
9	44	44	41	41	46	45	43	43	42	44	41	40	41	45	44	41	9
8	40	39	37	37	42	41	38		38	39	37	36		42	40	37	8
7	36	35	32	33	38	37	34	32	33	34	33	32	32	38	36	33	7
6	32	31	28	29	34	33	30		29	30	29	28		34	33	29	6
5	28	26	23	25	30	28	26	20	25	25	25	24	22	31	29	25	5
4	24	22	19	21	26	24	22		21	21	20	20		27	25	21	4
3	20	18	14		22	20	18	9	17	16	16	16	13	23	22		3
2	16	13	10		18	16	14	3	13	12	12	12	8	20			2
1	12	9	6		15	12	10	0	8	7	8	8	3				1
0	5				8	6	0		3	3				11	5		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 35-39 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	86		83		83		76				81	86	84	82		19
18	82	86	79				72				77	82	80	79		18
17	78	81	75		74		67				74	78		75		17
16	73	77	71			62	63	62	68			73	72	71		16
15	69	72	67		65		59	58				65				15
14	65	68	63	64	60	55	55	54	59		61	65	64	64		14
13	60	63	59		55		51	51			58		61	60	58	13
12	56	59	55	57	51	47	47	47	50		54	57	56		55	12
11	52	54	51	53	46	43	43	43	46		50	50	52	52	51	11
10	48	50	47	50	42	39	38	39	41		46	48	48	49	48	10
9	43	45	43	46	37	35	34	35	37		42	42	44	44	45	9
8	39	41	39	43	33	31	30	32	32		38	40	40	41	41	8
7	35	36	35	39	28	27	26	28	28		34	34	35	36	37	7
6	31	32	30	36		23	22	24	24		30		31	32	34	6
5	26	27	26	32	19	19	18	20	19		26	27	27	28	30	5
4	22	23	22	29		15	14	17	15		22		23	24	26	4
3	18	18	18	25	10	11	10		10		18		18	20	23	3
2	13	14	14	22	5	7	5	9	6		14		14	16	19	2
1	9		10	18	0	3	1	5	1		10				15	1
0				15		0	0	1								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	90	100	100	82	81	83	84	83				85	85	19
18	90	86	99	97	78	77	79	80	79				81	81	18
17	85	82	93	92	74	73	75	76	74				78	78	17
16	81	78	88	87	70	69	71	71	70				74	74	16
15	77	74	83	82	65	65	67	67	65				61	71	15
14	73	70	78	77	61	61	62	63	61	59			67	67	14
13	69	66	73	72	57	57	58	59	57		57	55	64	64	13
12	65	62	68	67	53	53	54	54	52	51			60	60	12
11	60	57	63	62	48	49	50	50	48		49	48	57	57	11
10	56	53	58	57	44	45	46	46	44	44	46	45	53	53	10
9	52	49	53	52	40	41	42	42	39	40	42	42	50	50	9
8	48	45	48	47	36	37	38	38	35	36	38	38	46	46	8
7	44	41	42	42	31	33	34	33	30	33	34	35	43	43	7
6	39	37	37	37	27	29	30	29	26	29	30	32	39	39	6
5	35	33	32	32	23	25	25	25	22	25	26	28	36	36	5
4	31	29	27	28	19	21	21	21	17	21	22	25	32	32	4
3	27	25	22	23	14	17	17	17	13	17	18	22	29	28	3
2	23	21	17	18	10	13	13	12	8	14	14	19	25	25	2
1	19	17	12	13	6	9	9	8	4	10	10	15	22	21	1
0	14	13	7	8	2	5		4							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	82	93		86	84	82	77	82	78						19
18	78	83	87	82	79	78	74	78	75	75				76	18
17	74	79	82	78	75	74	70	73			80				17
16	70	75	77	74	70	71	67	69	67		76				16
15	66	70	71	70	66	67	63	65	63	65	72	65	60	65	15
14	61	66	66	66	61	63	59	61	59	62	68		57		14
13	57	62	60	62	57	59	56	56	55	59	64	59		57	13
12	53	58	55	58	52	55	52	52	51		61	55	51	53	12
11	49	53	50	54	48	52	49	48	47	52	57	52		49	11
10	44	49	44	50	44	48	45	43	43	49	53	48	45	45	10
9	40	45	39	46	39	44	41	39		46	49	45	42	41	9
8	36	40	34	42	35	40	38	35	35	43	45	41	39	37	8
7	32	36	28	38	30	36	34	31	32		41	38	36	33	7
6	27	32	23	34	26	33	31	26	28	36	38	34	32	29	6
5	23	27	18	30	21	29	27	22	24	33	34	31	29	25	5
4	19	23	12	26	17	25	23	18	20		30	28	26	21	4
3	15	19	7	22	12	21	20	14	16	27	26	24	23	18	3
2	10	14	1	18	8	17	16	9	12		22	21	20	14	2
1	6	10	0	14	4	14	13	5		20	18	17	17	10	1
0	6	0		10				1		17	15	14	14		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	84		87		86		85		83								19
18	80	85	83	78			81		79								18
17	76	81	78	74	78		76		75	80				74	73	17	
16	72	76	74	70	74	75	72		71	75	68			71	70	69	16
15	68	72	69	66	70	71	68		67	71				67	66	15	
14	64	68	65	62	66	67	64		62	66	60			63	62	61	14
13	60	63	60	58	62	63	60		58	62	58	56		60	59	57	13
12	56	59	56	54	58	58	56		54	57			56	56	55	53	12
11	52	55	52	50	54	54	52	55	50	53	50	48		52	51	49	11
10	48	50	47	46	50	50	48		46	48	46	44		49	48	45	10
9	44	46	43	42	46	46	44	44	42	44	42	40	42	45	44	41	9
8	40	42	38	38	42	42	40		38	39	37	36		41	40	37	8
7	36	37	34	34	38	38	36	32	33	34	33	32	32	38	37	33	7
6	32	33	29	30	34	34	31		29	30	29	28		34	33	29	6
5	28	29	25	25	30	30	27	21	25	25	25	24	22	30	29	25	5
4	24	24	21	21	26	26	23		21	21	21	20		27	26	21	4
3	20	20	16		22	21	19	9	17	16	16	17	13	23	22		3
2	16	16	12		18	17	15	4	13	12	12	13	8	19			2
1	12	11	7		15	13	11	0	8	7	8	9	3				1
0	7				9	7	0		3	4				11	5	0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 40-44 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	87		83		84		77			82	88	86	83		19	
18	83	87	79				72			79	84	82	79		18	
17	78	83	75		74		68			75	79		75		17	
16	74	78	71			63	64	63	69		75	74	72		16	
15	70	73	67		65		60	59			67				15	
14	66	69	63	64	61	55	56	55	60		63	67	66	64	14	
13	61	64	59		56		52	51		59		62	62	60	58	13
12	57	60	55	57	52	48	48	48	51		55	58	58	55	12	
11	53	55	51	53	47	44	44	44	47	51	51	54	54	53	51	11
10	49	51	47	50	42	40	39	40	42		48	50	50	49	48	10
9	44	46	43	46	38	36	35	36	38	43	44	45	45	44	9	
8	40	42	39	43	33	32	31	33	33		40	41	41	42	41	8
7	36	37	35	39	29	28	27	29	29	35	36	37	37	38	37	7
6	31	33	31	36		24	23	25	24	31		33	33	34	34	6
5	27	28	27	32	20	20	19	21	20	27	28	28	29	31	30	5
4	23	24	23	29		16	15	17	15	23		24	25	27	27	4
3	19	19	19	26	10	12	11		11	19		20	21	23	23	3
2	14	15	15	22	6	8	6	10	6	15		16	17	19	19	2
1	10		11	19	1	4	2	6	2	11				16		1
0				15		0	0	2								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	91	100	100	84	83	84	85	85				85	85	19
18	90	87	99	98	80	79	80	81	80				81	82	18
17	86	83	94	93	76	75	76	77	76				78	78	17
16	82	79	89	88	71	71	72	73	71				74	74	16
15	78	75	84	83	67	67	68	69	67				71	71	15
14	74	71	79	78	63	63	63	64	63	60			67	67	14
13	69	67	74	73	59	59	59	60	58				64	64	13
12	65	63	69	68	54	55	55	56	54	52			60	60	12
11	61	59	64	63	50	51	51	52	50				57	57	11
10	57	55	59	58	46	47	47	48	45	44	46	46	53	53	10
9	53	51	54	53	42	43	43	43	41	41	43	42	50	50	9
8	48	47	48	48	37	39	39	39	36	37	39	39	46	46	8
7	44	42	43	43	33	35	35	35	32	33	35	36	43	43	7
6	40	38	38	38	29	31	30	31	28	29	31	32	39	39	6
5	36	34	33	34	25	27	26	26	23	26	27	29	36	36	5
4	32	30	28	29	20	23	22	22	19	22	23	26	32	32	4
3	28	26	23	24	16	19	18	18	14	18	19	23	29	29	3
2	23	22	18	19	12	15	14	14	10	14	15	19	25	25	2
1	19	18	13	14	8	11	10	10	6	10	11	16	22	22	1
0	15	14	8	9	3	7		5							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	81	95		88	85	83	78	83	78	75	76				19	
18	77	82	90	84	81	79	74	79	75	76				77	18	
17	72	78	84	80	76	75	71	75			81				17	
16	68	74	79	76	72	71	67	70	67		77				16	
15	64	69	74	72	67	68	64	66	63	66	73	66	61	66	15	
14	60	65	68	68	63	64	60	62	59	63	69		58		14	
13	55	61	63	64	58	60	56	58	55	59	65	59		58	13	
12	51	56	58	60	54	56	53	53	51		61	56	52	54	12	
11	47	52	52	56	50	52	49	49	47	53	58	52		50	11	
10	43	48	47	52	45	49	46	45	43	50	54	49	45	46	10	
9	38	43	41	48	41	45	42	41		47	50	46	42	42	9	
8	34	39	36	44	36	41	38	36	35	43	46	42	39	38	8	
7	30	35	31	40	32	37	35	32	32		42	39	36	34	7	
6	26	31	25	36	27	33	31	28	28	37	38	35	33	30	6	
5	22	26	20	32	23	30	28	24	24	34	35	32	30	26	5	
4	17	22	15	28	18	26	24	19	20		31	28	27	22	4	
3	13	18	9	24	14	22	20	15	16	27	27	25	24	18	3	
2	9	13	4	20	10	18	17	11	12		23	21	21	15	2	
1	5	9	0	16	5	14	13	6		21	19	18	17	11	1	
0	5	0		11				2		17	15	15	14		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	87		89		88		86		82								19
18	83	87	84	79			82		78								18
17	79	83	80	75	80		78		74	80				74	74	17	
16	75	79	75	71	76	76	74		69	75	68		70	70	69	16	
15	71	74	71	67	72	72	70		65	71			67	66		15	
14	67	70	67	63	68	68	66		61	66	61		63	63	61	14	
13	63	66	62	59	64	64	62		57	62	59	57		59	59	57	13
12	59	61	58	55	60	60	58		53	57			56	56	55	53	12
11	55	57	53	51	56	56	53	56	49	53	50	49		52	52	49	11
10	51	53	49	47	52	51	49		44	48	46	45		48	48	45	10
9	47	48	44	43	48	47	45	44	40	44	42	41	42	45	44	41	9
8	43	44	40	39	44	43	41		36	39	38	37		41	41	37	8
7	39	40	35	35	40	39	37	33	32	34	33	33	32	37	37	33	7
6	35	35	31	31	36	35	33		28	30	29	29		34	33	29	6
5	31	31	27	26	32	31	29	21	24	25	25	25	22	30	30	25	5
4	27	27	22	22	28	27	25		20	21	21	21		26	26	21	4
3	23	22	18		24	23	21	10	15	16	17	17	13	23	22		3
2	19	18	13		20	19	17	4	11	12	12	13	8	19			2
1	15	13	9		16	14	13	0	7	7	8	9	3				1
0	9				10	8	0		3	4				12	5		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 45-49 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	88		84		85		78			84	89	88	83		19	
18	84	88	80				74			80	85	83	80		18	
17	79	84	76		75		70			76	81		76		17	
16	75	79	72			64	65	64	70		77	75	72		16	
15	71	75	68		66		61	60			69				15	
14	67	70	64	64	62	57	57	56	61		65	68	67	65	14	
13	62	65	60		57		53	52		60		64	63	61	58	13
12	58	61	55	57	52	49	49	49	52		57	60	59		55	12
11	54	56	51	53	48	45	45	45	48		52	53	55	53	51	11
10	50	52	47	50	43	41	41	41	43		49	51	51	50	48	10
9	45	47	43	46	39	37	36	37	39		44	45	47	46	44	9
8	41	43	39	43	34	33	32	34	34		41	43	43	42	41	8
7	37	38	35	40	30	29	28	30	30		36	38	39	38	37	7
6	32	34	31	36		25	24	26	25		32	34	35	35	34	6
5	28	29	27	33	20	21	20	22	21		28	30	30	31	30	5
4	24	25	23	29		17	16	19	16		24		26	27	27	4
3	20	20	19	26	11	13	12		12		20		22	23	24	3
2	15	16	15	22	7	9	8	11	7		16		17	19	20	2
1	11		11	19	2	5	3	7	3		12			16		1
0				15		1	0	3								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	93	100	100	86	84	85	87	86				85	85	19
18	91	89	100	100	82	80	81	83	82				81	82	18
17	87	85	96	95	78	76	77	79	78				78	78	17
16	83	81	91	90	73	72	73	74	73				74	75	16
15	78	76	86	85	69	68	69	70	69				63	71	15
14	74	72	80	80	65	64	65	66	64	60			67	68	14
13	70	68	75	75	61	60	60	62	60		59	56	64	64	13
12	66	64	70	70	56	56	56	58	56				60	60	12
11	62	60	65	65	52	52	52	53	51		51	50	57	57	11
10	58	56	60	60	48	48	48	49	47	45	47	46	53	53	10
9	53	52	55	55	44	44	44	45	43	41	43	43	50	50	9
8	49	48	50	50	39	40	40	41	38	38	40	40	46	46	8
7	45	44	45	45	35	36	36	36	34	34	36	37	43	43	7
6	41	40	40	40	31	32	32	32	29	30	32	33	39	39	6
5	37	36	35	35	27	28	27	28	25	26	28	30	36	36	5
4	32	32	29	30	22	24	23	24	21	22	24	27	32	32	4
3	28	28	24	25	18	20	19	20	16	19	20	23	29	29	3
2	24	23	19	20	14	16	15	15	12	15	16	20	25	25	2
1	20	19	14	15	10	12	11	11	7	11	12	17	22	22	1
0	16	15	9	10	5	8		7							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	81	98	90	86	87	84	79	85	78	75	76				79	19
18	77	81	92	86	82	80	75	80	75	76					79	18
17	72	77	87	81	78	76	71	76			82				79	17
16	68	73	82	77	74	72	68	72	67		78				79	16
15	64	68	76	73	69	68	64	68	63	66	74	67	62	67	79	15
14	60	64	71	69	65	65	61	63	59	63	70		59		79	14
13	55	60	66	65	60	61	57	59	55	60	66	60			59	13
12	51	55	60	61	56	57	53	55	51		62	57	52	55	59	12
11	47	51	55	57	51	53	50	51	47	53	59	53			51	11
10	43	47	50	53	47	49	46	46	43	50	55	50	46	47	47	10
9	38	42	44	49	42	46	43	42		47	51	46	43	43	47	9
8	34	38	39	45	38	42	39	38	35	44	47	43	40	39	47	8
7	30	34	33	41	34	38	35	33	32		43	39	37	35	39	7
6	26	29	28	37	29	34	32	29	28	37	39	36	34	31	39	6
5	22	25	23	33	25	30	28	25	24	34	36	32	30	27	34	5
4	17	21	17	29	20	27	25	21	20		32	29	27	24	29	4
3	13	16	12	25	16	23	21	16	16	28	28	26	24	20	26	3
2	9	12	7	21	11	19	17	12	12		24	22	21	16	21	2
1	5	8	1	17	7	15	14	8		21	20	19	18	12	12	1
0	3	0		13				4		18	16	15	15		5	0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	87	90	90		88		88		82								19	
18	83	90	86	81			84		78								18	
17	79	85	82	76	80		80		74	80				74	74		17	
16	75	81	77	72	76	77	76		69	75	70		70	70	69		16	
15	71	77	73	68	72	73	72		65	71			66	67			15	
14	67	72	68	64	68	69	68		61	66	62		63	63	61		14	
13	63	68	64	60	64	65	64		57	62	59	58		59	59	57	13	
12	59	64	59	56	60	61	59		53	57			56	55	56	53	12	
11	55	59	55	52	56	57	55	56	49	53	50	50		52	52	49	11	
10	51	55	50	48	52	53	51		44	48	46	46		48	48	45	10	
9	47	51	46	44	48	49	47	45	40	44	42	42	42	44	45	41	9	
8	43	46	42	40	44	44	43		36	39	38	38		41	41	37	8	
7	39	42	37	36	40	40	39	33	32	34	34	34	32	37	37	33	7	
6	35	37	33	32	36	36	35		28	30	29	30		33	34	29	6	
5	31	33	28	28	32	32	31	22	24	25	25	26	22	30	30	25	5	
4	27	29	24	24	28	28	27		20	21	21	22		26	26	21	4	
3	23	24	19		24	24	23	10	15	16	17	18	13	22	23		3	
2	19	20	15		20	20	19	4	11	12	13	14	8	19			2	
1	15	16	10		16	16	14	0	7	7	8	10	3				1	
0	11				12	10	0		3	4				12	5		0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 50-54 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		84		86		79			86	91	89	84		19	
18	85	89	80				75			82	87	85	80		18	
17	80	85	76		76		71			77	82		76		17	
16	76	80	72			66	67	65	72		78	77	73		16	
15	72	76	68		67		63	61			70				15	
14	68	71	64	64	63	58	59	58	63		66	70	69	65	14	
13	63	67	60		58		54	54		61		65	65	61	58	13
12	59	62	56	57	54	50	50	50	54		59	61	61	55	12	
11	55	57	52	54	49	46	46	46	49	53	55	57	57	54	51	11
10	50	53	48	50	44	42	42	43	45		51	53	53	50	48	10
9	46	48	44	47	40	38	38	39	40	45	47	48	49	46	44	9
8	42	44	40	43	35	34	34	35	36		43	44	45	43	41	8
7	38	39	36	40	31	30	30	31	31	38	39	40	41	39	37	7
6	33	35	32	36		26	26	27	27		34	36	37	35	34	6
5	29	30	28	33	21	22	21	24	22	30	31	32	33	32	30	5
4	25	26	24	29		18	17	20	18		26		27	28	27	4
3	21	21	19	26	12	14	13		13		22		23	24	23	3
2	16	17	15	22	8	10	9	12	9		18		19	20	20	2
1	12		11	19	3	6	5	9	4		14			17		1
0				15		2	1	5								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	96	94	100	100	89	87	87	89	88				85	85	19	
18	92	90	100	100	84	83	82	85	84				81	82	18	
17	88	86	97	97	80	79	78	81	80				78	78	17	
16	84	82	92	92	76	75	74	76	75				74	75	16	
15	79	78	87	87	71	71	70	72	71				64	71	15	
14	75	74	82	82	67	67	66	68	66	61			67	68	14	
13	71	70	77	77	63	63	62	64	62		60	57	64	64	13	
12	67	66	72	72	59	59	58	59	58	54		60	61	61	12	
11	63	62	67	67	54	55	54	55	53		52	51	57	57	11	
10	58	57	62	62	50	51	49	51	49		46	48	47	53	54	10
9	54	53	57	57	46	47	45	47	45		42	44	44	50	50	9
8	50	49	52	52	42	43	41	43	40		38	41	41	46	47	8
7	46	45	46	47	37	39	37	38	36		35	37	38	43	43	7
6	42	41	41	42	33	35	33	34	31		31	33	34	39	39	6
5	38	37	36	37	29	31	29	30	27		27	29	31	36	36	5
4	33	33	31	32	25	27	25	26	23		23	25	28	32	32	4
3	29	29	26	27	20	23	21	18	20		21	24	29	29	29	3
2	25	25	21	22	16	19	17	17	14		16	17	21	25	25	2
1	21	21	16	17	12	15	12	13	9		12	13	18	22	22	1
0	17	17	11	12	8	11		9								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	79	100		91	89	84	79	86	79						19	
18	75	80	95	87	84	81	76	82	75	77				80	18	
17	71	76	90	83	80	77	72	78			82				17	
16	66	72	85	79	75	73	68	73	67	79					16	
15	62	67	79	75	71	69	65	69	63	67	75	68	62	68	15	
14	58	63	74	71	67	65	61	65	60	64	71	59	53	59	14	
13	54	59	69	67	62	62	58	60	56	60	67	61	60	60	13	
12	50	54	63	63	58	58	54	56	52	63	57	53	56	56	12	
11	45	50	58	59	53	54	50	52	48	54	59	54	52	52	11	
10	41	46	53	55	49	50	47	48	44	51	56	50	47	49	10	
9	37	41	47	51	44	46	43	43	48	52	47	44	45	45	9	
8	33	37	42	47	40	43	40	39	36	44	48	44	40	41	8	
7	28	33	37	43	35	39	36	35	32	44	40	37	37	37	7	
6	24	28	31	39	31	35	32	31	28	40	37	34	33	33	6	
5	20	24	26	35	27	31	29	26	24	35	36	33	31	29	5	
4	16	20	20	31	22	27	25	22	20	33	30	28	25	25	4	
3	11	15	15	27	18	24	22	18	17	28	29	26	25	21	3	
2	7	11	10	23	13	20	18	14	13	25	23	22	22	17	2	
1	3	7	4	19	9	16	15	9	22	21	19	19	13	13	1	
0	2	0		15				5	18	17	16	15			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	90	92			91		90		81								19
18	86	89	88	82			86		76								18
17	82	85	83	78	83		82		72	80				73	74	17	
16	78	80	79	74	79	78	78		68	75	71		70	71	69	16	
15	74	76	74	70	75	74	74		64	71			66	67		15	
14	70	72	70	66	71	70	70		60	66	63		62	63	61	14	
13	66	67	65	62	67	66	66		56	62	59	59		59	60	57	13
12	62	63	61	58	63	62	62		51	57			56	55	56	53	12
11	58	58	57	54	59	58	58	56	47	53	51	51		51	52	49	11
10	54	54	52	50	55	54	54		43	48	46	47		48	49	45	10
9	50	50	48	46	51	50	49	45	39	44	42	43	42	44	45	41	9
8	46	45	43	42	47	46	45		35	39	38	40		40	41	37	8
7	42	41	39	37	43	42	41	33	31	34	34	36	32	36	38	33	7
6	38	37	34	33	39	37	37		27	30	30	32		33	34	29	6
5	34	32	30	29	35	33	33	22	22	25	25	28	23	29	30	25	5
4	30	28	25	25	31	29	29		18	21	21	24		25	27	21	4
3	26	24	21		27	25	25	10	14	16	17	20	13	22	23		3
2	23	19	17		23	21	21	5	10	12	13	16	8	18			2
1	19	15	12		19	17	17	0	6	7	9	12	3				1
0	11				13	13	0		3	4				12	5	0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 55-59 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	90		85		87		81				87	92	91	84		19	
18	86	90	81				77				83	88	87	81		18	
17	81	86	76		78		73			79		84		77		17	
16	77	81	72			68	69	67	73			80	79	73		16	
15	73	77	68		69		65	63			72					15	
14	68	72	64	64	64	60	60	59	64		68	71	71	66		14	
13	64	68	60		59		56	55		63		67	66	62	59	13	
12	60	63	56	57	55	52	52	52	55		60	63	62		55	12	
11	56	59	52	54	50	48	48	48	51	55	56	59	58	54	52	11	
10	51	54	48	50	46	44	44	44	46		52	54	54	51	48	10	
9	47	50	44	47	41	40	40	40	42	47	48	50	50	47	44	9	
8	43	45	40	43	37	36	36	37	37		45	46	46	43	41	8	
7	39	40	36	40	32	32	31	33	33	39	41	42	42	39	37	7	
6	34	36	32	36		28	27	29	28		35	37	38	36	34	6	
5	30	31	28	33	23	24	23	25	24	31	33	33	34	32	30	5	
4	26	27	24	29		20	19	21	19		27		29	30	28	27	4
3	21	22	20	26	14	16	15		15		23		25	26	25	23	3
2	17	18	16	22	9	12	11	14	10		19		20	22	21	20	2
1	13		12	19	4	8	7	10	6		15			17		1	
0				16		4	3	6								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	97	96	100	100	91	89	88	91	91				85	85	19
18	93	91	100	100	87	85	84	87	86				82	82	18
17	89	87	99	99	82	81	80	83	82				78	78	17
16	85	83	94	94	78	77	76	78	77				75	75	16
15	81	79	89	89	74	73	72	74	73				65	71	15
14	76	75	84	84	70	69	68	70	69	62			67	68	14
13	72	71	79	79	65	65	64	66	64		61	59	64	64	13
12	68	67	74	74	61	61	59	61	60	55			60	61	12
11	64	63	69	69	57	57	55	57	56		53	52	57	57	11
10	60	59	64	64	53	53	51	53	51	47	49	49	53	54	10
9	55	55	59	59	48	49	47	49	47	43	45	45	50	50	9
8	51	51	54	54	44	45	43	45	42	40	41	42	46	47	8
7	47	47	48	49	40	41	39	40	38	36	38	39	43	43	7
6	43	43	43	44	36	37	35	36	34	32	34	36	39	40	6
5	39	38	38	39	31	33	31	32	29	28	30	32	36	36	5
4	35	34	33	34	27	29	26	28	25	24	26	29	32	33	4
3	30	30	28	29	23	25	22	23	20	21	22	26	29	29	3
2	26	26	23	24	19	21	18	19	16	17	18	22	25	25	2
1	22	22	18	19	14	17	14	15	12	13	14	19	22	22	1
0	18	18	13	14	10	13		11							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	79	79	100	93	91	84	80	88	79	75	77					19
18	75	79	99	89	86	80	76	83								18
17	71	75	93	85	82	77	73	79								17
16	66	70	88	81	78	73	69	75	67							16
15	62	66	83	77	73	69	65	70	63	67	76	68	63	70		15
14	58	62	77	73	69	65	62	66	60	64	72					14
13	54	57	72	69	64	61	58	62	56	61	68	61				13
12	50	53	67	65	60	58	55	58	52							12
11	45	49	61	61	55	54	51	53	48	54	60	55				11
10	41	45	56	57	51	50	47	49	44	51	56	51	47	50		10
9	37	40	51	53	46	46	44	45		48	53	48	44	46		9
8	33	36	45	49	42	42	40	41	36	45	49	44	41	42		8
7	28	32	40	45	38	39	37	36	32							7
6	24	27	34	41	33	35	33	32	28	38	41	37	35	34		6
5	20	23	29	37	29	31	30	28	24	35	37	34	32	31		5
4	16	19	24	33	24	27	26	23								4
3	11	14	18	29	20	24	22	19	17	29	30	27	25	23		3
2	7	10	13	25	15	20	19	15		13		26	24	22	19	2
1	3	6	8	21	11	16	15	11			22	22	20	19	15	1
0	1	2		17				6		19	18	17	16			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	90	94			91		93		81								19	
18	86	91	89	84			89		76								18	
17	82	87	85	80	83		85		72	80				73	75		17	
16	78	82	80	76	79	80	81		68	75	73		69	71	69		16	
15	74	78	76	72	75	76	77		64	71			65	67			15	
14	70	74	72	68	71	72	73		60	66	65		62	64	61		14	
13	66	69	67	64	67	67	69		56	62	59	61		58	60	57		13
12	62	65	63	60	63	63	64		51	57			56	54	56	53		12
11	58	61	58	56	59	59	60	57	47	53	51	53		51	53	49		11
10	54	56	54	51	55	55	56		43	48	47	49		47	49	45		10
9	50	52	49	47	51	51	52	45	39	44	42	45	42	43	45	41		9
8	46	48	45	43	47	47	48		35	39	38	41		40	42	37		8
7	42	43	40	39	43	43	44	34	31	34	34	37	32	36	38	33	7	
6	38	39	36	35	39	39	40		27	30	30	33		32	34	29		6
5	34	35	32	31	35	35	36	22	22	25	26	29	23	29	31	25		5
4	30	30	27	27	31	30	32		18	21	21	26		25	27	21		4
3	26	26	23		27	26	28	11	14	16	17	22	13	21	24			3
2	23	22	18		23	22	24	5	10	12	13	18	8	18				2
1	19	17	14		19	18	19	0	6	7	9	14	3					1
0	13				14	15	0		3	5				13	5		0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 60-64 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	91		85		89		83				89	94	92	85		19
18	87	91	81				79				85	90	88	81		18
17	82	87	77		79		75				81	85		77		17
16	78	82	73			69	71	69	75			81	80	74		16
15	74	78	69		70		67	65				73				15
14	69	73	65	64	66	62	63	61	66		70	73	72	66		14
13	65	69	61		61		58	57			65	69	68	62	59	13
12	61	64	57	57	56	54	54	54	57		62	64	64	55		12
11	57	60	53	54	52	50	50	50	53		57	58	60	60	55	11
10	52	55	49	50	47	46	46	46	48		54	56	56	51		10
9	48	51	44	47	43	42	42	42	44		49	50	52	47	45	9
8	44	46	40	43	38	38	38	39	39		46	47	48	44	41	8
7	40	42	36	40	34	34	34	35	35		41	42	43	44	40	7
6	35	37	32	37		30	29	31	30		37	39	40	36	34	6
5	31	32	28	33	24	26	25	27	26		33	35	35	36	33	5
4	27	28	24	30		22	21	23	21		29		30	32	29	4
3	22	23	20	26	15	18	17		17		25		26	28	25	3
2	18	19	16	23	11	14	13	16	12		21		22	24	21	2
1	14		12	19	6	10	9	12	8		17			18		1
0				16		6	5	8								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	99	97	100	100	94	91	90	93	93				85	86	19
18	94	93	100	100	89	87	86	89	89				82	82	18
17	90	89	100	100	85	83	82	85	84				78	79	17
16	86	85	96	96	81	79	78	81	80				75	75	16
15	82	81	91	91	77	75	74	76	76				67	71	15
14	78	76	86	86	72	71	70	72	71	64			68	68	14
13	74	72	81	81	68	67	66	68	67		62	60	64	64	13
12	69	68	76	76	64	63	62	64	62		56		61	61	12
11	65	64	71	71	60	59	57	59	58		54	53	57	57	11
10	61	60	66	66	55	55	53	55	54	48	50	50	54	54	10
9	57	56	61	61	51	51	49	51	49	45	46	47	50	50	9
8	53	52	56	56	47	47	45	47	45	41	42	44	47	47	8
7	48	48	51	51	43	43	41	43	40	37	39	40	43	43	7
6	44	44	46	46	38	39	37	38	36	33	35	37	39	40	6
5	40	40	40	41	34	35	33	34	32	29	31	34	36	36	5
4	36	36	35	36	30	31	29	30	27	26	27	30	32	33	4
3	32	32	30	31	26	27	24	26	23	22	23	27	29	29	3
2	28	28	25	26	21	23	20	21	19	18	19	24	25	26	2
1	23	23	20	21	17	19	16	17	14	14	15	21	22	22	1
0	19	19	15	16	13	15		13							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	78	100	95	93	85	80	89	79								19
18	73	78	100	91	89	81	77	85	75	78						18
17	69	74	97	87	84	77	73	80			84					17
16	65	69	92	83	80	74	70	76	67		80					16
15	61	65	86	79	75	70	66	72	63	68	77	69	63	72		15
14	56	61	81	75	71	66	62	68	60	65	73		60			14
13	52	56	76	71	67	62	59	63	56	61	69	62				13
12	48	52	70	67	62	58	55	59	52		65	59	54	60		12
11	44	48	65	63	58	55	52	55	48	55	61	55				11
10	39	43	60	59	53	51	48	51	44	52	57	52	48	52		10
9	35	39	54	54	49	47	45	46		49	54	48	45	48		9
8	31	35	49	50	44	43	41	42	36	45	50	45	42	44		8
7	27	30	43	46	40	40	37	38	32		46	42	38	40		7
6	23	26	38	42	35	36	34	33	28	39	42	38	35	36		6
5	18	22	33	38	31	32	30	29	24	36	38	35	32	33		5
4	14	17	27	34	26	28	27	25	20		34	31	29	29		4
3	10	13	22	30	22	24	23	21	17	29	31	28	26	25		3
2	6	9	17	26	18	21	19	16	13		27	24	23	21		2
1	1	5	11	22	13	17	16	12		23	23	21	20	17		1
0	0	6		18				8		19	19	17	17			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	93	95			93		96		79								19
18	89	93	91	86			92		75								18
17	85	89	86	82	85		88		71	80				72	75		17
16	81	85	82	78	81	81	84		67	75	75			68	71	68	16
15	77	80	78	74	77	77	80		63	71				65	68		15
14	73	76	73	70	73	73	76		58	66	67			61	64	60	14
13	69	72	69	66	69	69	72		54	62	60	63		57	60	57	13
12	65	67	64	62	65	65	68		50	57			56	54	57	53	12
11	61	63	60	58	61	60	64	57	46	53	51	55		50	53	49	11
10	57	59	55	54	57	56	60		42	48	47	51		46	49	45	10
9	53	54	51	50	53	52	55	46	38	44	43	47	42	43	46	41	9
8	49	50	47	46	49	48	51		34	39	38	43		39	42	37	8
7	45	46	42	41	45	44	47	34	29	34	34	39	32	35	38	33	7
6	42	41	38	37	41	40	43		25	30	30	35		32	35	29	6
5	38	37	33	33	37	36	39	23	21	25	26	31	23	28	31	25	5
4	34	33	29	29	33	32	35		17	21	22	28		24	28	21	4
3	30	28	24		29	28	31	11	13	16	17	24	13	21	24		3
2	26	24	20		25	23	27	5	9	12	13	20	8	17			2
1	22	20	15		21	19	23	0	4	7	9	16	4				1
0	15				15	19	0		3	5				13	5		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 65-69 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		85		90		86				91	96	94	85		19
18	87	92	81				82				87	91	90	81		18
17	83	88	77		81		77				83	87		78		17
16	79	83	73			72	73	71	77			83	82	74		16
15	75	79	69		72		69	67				75				15
14	70	74	65	64	67	64	65	63	68		71	74	74	67		14
13	66	70	61		63		61	60			67		70	70	59	13
12	62	65	57	58	58	56	57	56	59			63	66	66	55	12
11	58	61	53	54	54	52	53	52	55		59	59	62	62	55	11
10	53	56	49	51	49	48	48	48	50			56	57	58	52	10
9	49	52	45	47	45	44	44	45	46		51	52	53	54	48	9
8	45	47	41	44	40	40	40	41	41			48	49	49	44	8
7	40	43	37	40	35	36	36	37	37		43	44	45	45	40	7
6	36	38	33	37		32	32	33	32			39	40	41	37	6
5	32	34	29	33	26	28	28	29	28		35	36	36	37	33	5
4	28	29	25	30		24	24	26	23			31	32	33	29	4
3	23	24	21	26	17	20	20		19			27	28	29	26	3
2	19	20	17	23	13	16	15	18	14			23	23	25	22	2
1	15		13	19	8	12	11	14	10			19			18	1
0				16		8	7	11								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	98	100	100	97	94	93	96	96				85	86	19
18	96	94	100	100	92	90	89	91	91				82	82	18
17	92	90	100	100	88	86	85	87	87				78	79	17
16	88	86	99	98	84	82	80	83	83				75	75	16
15	83	82	94	93	80	78	76	79	78				68	71	15
14	79	78	89	88	75	74	72	74	74	65			68	68	14
13	75	74	83	83	71	70	68	70	69				63	62	13
12	71	70	78	78	67	66	64	66	65	57			61	61	12
11	67	65	73	73	63	62	60	62	61				55	57	11
10	63	61	68	68	58	58	56	58	56	50	51	52	54	54	10
9	58	57	63	63	54	54	52	53	52	46	47	49	50	50	9
8	54	53	58	58	50	50	47	49	47	42	43	45	47	47	8
7	50	49	53	54	46	46	43	45	43	39	39	42	43	43	7
6	46	45	48	49	41	42	39	41	39	35	36	39	40	40	6
5	42	41	43	44	37	38	35	37	34	31	32	35	36	36	5
4	37	37	38	39	33	34	31	32	30	27	28	32	33	33	4
3	33	33	32	34	29	30	27	28	26	23	24	29	29	29	3
2	29	29	27	29	24	26	23	24	21	20	20	26	26	26	2
1	25	25	22	24	20	22	19	20	17	16	16	22	22	22	1
0	21	21	17	19	16	18		15							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	76	100	96	96	96	86	81	90	79	75	78				19	
18	72	77	100	92	91	82	77	86						86	18	
17	67	73	100	88	87	78	74	82				85			17	
16	63	68	96	84	82	75	70	78	67			81			16	
15	59	64	90	80	78	71	67	73	63	68	77	70	64	74	15	
14	55	60	85	76	73	67	63	69	60	65	74		61		14	
13	51	55	79	72	69	63	60	65	56	62		70	63		66	
12	46	51	74	68	64	59	56	60	52		66	59	55	62	12	
11	42	47	69	64	60	56	52	56	48	55	62	56		58	11	
10	38	42	63	60	56	52	49	52	44	52	58	53	48	54	10	
9	34	38	58	56	51	48	45	48		49	54	49	45	50	9	
8	29	34	53	52	47	44	42	43	36	46	51	46	42	47	8	
7	25	29	47	48	42	40	38	39	32		47	42	39	43	7	
6	21	25	42	44	38	37	34	35	28	39	43	39	36	39	6	
5	17	21	37	40	33	33	31	31	24	36	39	35	33	35	5	
4	12	16	31	36	29	29	27	26	20		35	32	30	31	4	
3	8	12	26	32	24	25	24	22	17	30	31	28	27	27	3	
2	4	8	20	28	20	21	20	18	13		28	25	23	23	2	
1	0	3	15	24	16	18	16	13		23	24	22	20	19	1	
0	0	10		20				9		20	20	18	17		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	96	97			95		100		78								19
18	92	96	93	89			96		74								18
17	88	91	88	85	87		92		70	80				71	75	17	
16	84	87	84	81	83	82	88		65	75	77			68	72	68	16
15	80	83	79	76	79	78	84		61	71				64	68	15	
14	76	78	75	72	75	74	80		57	66	69			60	64	60	14
13	72	74	70	68	71	70	76		53	62	60	65		57	61	56	13
12	68	70	66	64	67	66	71		49	57			56	53	57	52	12
11	64	65	61	60	63	62	67	57	45	53	51	57		49	53	48	11
10	61	61	57	56	59	58	63		41	48	47	53		45	50	44	10
9	57	57	53	52	55	53	59	46	36	44	43	49	42	42	46	40	9
8	53	52	48	48	51	49	55		32	39	39	45		38	42	37	8
7	49	48	44	44	47	45	51	34	28	34	34	42	32	34	39	33	7
6	45	44	39	40	43	41	47		24	30	30	38		31	35	29	6
5	41	39	35	36	39	37	43	23	20	25	26	34	23	27	32	25	5
4	37	35	30	32	35	33	39		16	21	22	30		23	28	21	4
3	33	31	26		31	29	35	11	11	16	18	26	13	20	24		3
2	29	26	22		27	25	31	6	7	12	13	22	8	16			2
1	25	22	17		23	21	26	0	3	7	9	18	4				1
0	18				16	22	0		3	5				13	5	0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 70-74 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	93		86		93		89				92	97	96	86		19
18	88	93	82				84				88	93	92	82		18
17	84	89	78		83		80			86		89		78		17
16	80	84	74			75	76	74	80			84	83	75		16
15	76	80	70		74		72	70			77					15
14	71	75	65	65	70	67	68	66	71		73	76	75	67		14
13	67	71	61		65		64	62		70		72	71	63	59	13
12	63	66	57	58	60	59	60	59	62		65	67	67	55		12
11	58	62	53	54	56	55	56	55	57	62	61	63	63	56	52	11
10	54	57	49	51	51	51	51	51	53		57	59	59	52		10
9	50	53	45	47	47	47	47	47	48	54	53	55	55	48		9
8	46	48	41	44	42	43	43	43	44		49	50	51	45		8
7	41	44	37	40	38	39	39	40	39	46	46	46	47	41		7
6	37	39	33	37		35	35	36	35		42	42	43	37		6
5	33	35	29	33	28	31	31	32	30		38	38	39	34		5
4	29	30	25	30		27	27	28	26		34		34	35		4
3	24	26	21	26	19	23	23		21		30		29	31		3
2	20	21	17	23	15	19	18	21	17		26		25	27		2
1	16		13	19	10	15	14	17	12		22			19		1
0				16		11	10	13								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	99	100	100	100	97	96	98	98				85	86	19
18	98	95	100	100	96	93	91	94	94				82	82	18
17	94	91	100	100	91	89	87	90	90				78	79	17
16	89	87	100	100	87	85	83	85	85				75	75	16
15	85	83	96	96	83	81	79	81	81		70		71	72	15
14	81	79	91	91	78	77	75	77	77	67			68	68	14
13	77	75	86	86	74	73	71	73	72		64		64	65	13
12	73	71	81	81	70	69	67	69	68	59			61	61	12
11	69	67	76	76	66	65	63	64	63		56		57	58	11
10	64	63	71	71	61	61	58	60	59	52	52		54	54	10
9	60	58	65	66	57	57	54	56	55	48	48		51	51	9
8	56	54	60	61	53	53	50	52	50	44	44		47	47	8
7	52	50	55	56	49	49	46	48	46		40		44	43	7
6	48	46	50	51	44	45	42	43	41	37	36		41	40	6
5	44	42	45	46	40	41	38	39	37	33	33		37	36	5
4	39	38	40	41	36	37	34	35	33	29	29		34	33	4
3	35	34	35	36	32	33	30	31	28	25	25		31	29	3
2	31	30	30	31	27	29	26	26	24	21	21		28	26	2
1	27	26	25	26	23	25	21	22	20	18	17		24	22	1
0	23	22	20	21	19	21		18							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	74	100		98	98	87	82	92	79						19	
18	70	76	100	94	94	83	78	87	75	79				88	18	
17	66	71	100	90	89	79	75	83			86				17	
16	62	67	100	86	85	75	71	79	67		82				16	
15	57	63	94	82	80	72	67	75	63	69	78	71	65	77	15	
14	53	59	89	78	76	68	64	70	60	66	75		61		14	
13	49	54	84	74	72	64	60	66	56	62	71	64		69	13	
12	45	50	78	70	67	60	57	62	52		67	60	55	65	12	
11	40	46	73	66	63	56	53	58	48	56	63	57		61	11	
10	36	41	68	62	58	53	49	53	44	53	59	53	49	57	10	
9	32	37	62	58	54	49	46	49	49	55	50	46	53		9	
8	28	33	57	54	49	45	42	45	36	46	51	46	43	49	8	
7	24	28	51	50	45	41	39	41	32		48	43	40	45		7
6	19	24	46	46	40	37	35	36	28	40	44	40	37	41		6
5	15	20	41	42	36	34	31	32	24	37	40	36	33	37		5
4	11	15	35	38	32	30	28	28	20		36	33	30	33		4
3	7	11	30	34	27	26	24	23	17	30	32	29	27	30		3
2	2	7	25	30	23	22	21	19	13		28	26	24	26		2
1	0	2	19	26	18	18	17	15		24	25	22	21	22		1
0	0	14		22				11		20	21	19	18		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	99	99			97		100		77							19
18	95	98	94	92			100		72							18
17	91	94	90	88	89		96		68	80			70	76		17
16	87	89	85	83	85	83	92		64	75	79		67	72	68	16
15	84	85	81	79	81	79	88		60	71			63	68		15
14	80	81	76	75	77	75	84		56	66	71		59	65	60	14
13	76	76	72	71	73	71	80		52	62	68		56	61	56	13
12	72	72	68	67	69	67	76		48	57		56	52	57	52	12
11	68	68	63	63	65	63	72	58	43	53	52	60	48	54	48	11
10	64	63	59	59	61	59	68		39	48	47	56	45	50	44	10
9	60	59	54	55	57	55	63	46	35	44	43	52	42	41	46	9
8	56	55	50	51	53	51	59		31	39	39	48	37	43	36	8
7	52	50	45	47	49	46	55	35	27	34	35	44	32	34	39	7
6	48	46	41	43	45	42	51		23	30	30	40	30	36	28	6
5	44	42	36	39	41	38	47	23	18	25	26	36	23	26	32	5
4	40	37	32	35	37	34	43		14	21	22	32	23	28	21	4
3	36	33	28		33	30	39	12	10	16	18	28	13	19	25	3
2	32	29	23		29	26	35	6	6	12	14	24	8	15		2
1	28	24	19		25	22	31	0	2	7	9	20	4			1
0	20	20			18	27	0		3	5			14	5		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 75-79 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	94		86		95		92				94	99	97	86		19	
18	89	94	82				88				90	94	93	82		18	
17	85	90	78		86		84			88		90		79		17	
16	81	85	74			78	80	77	83			86	85	75		16	
15	77	81	70		77		75	73			78					15	
14	72	76	66	65	72	70	71	69	74		74	77	77	68		14	
13	68	72	62		68		67	65		73		73	73	64	59	13	
12	64	67	58	58	63	62	63	62	65		67	69	69		55	12	
11	59	63	54	54	58	58	59	58	60	65	63	65	65	56	52	11	
10	55	58	50	51	54	54	55	54	56		59	60	61	53	48	10	
9	51	54	46	47	49	50	51	50	51	57	55	56	57	49	45	9	
8	47	49	42	44	45	46	46	47	47		51	52	53	45	41	8	
7	42	45	38	40	40	42	42	43	42	49	47	48	49	41	38	7	
6	38	40	34	37		38	38	39	38	45		44	45	38	34	6	
5	34	36	29	34	31	34	34	35	33	41	39	39	41	34	31	5	
4	30	31	25	30		30	30	31	29		37		35	37	30	27	4
3	25	27	21	27	22	26	26		24		33		31	32	27	24	3
2	21	22	17	23	17	22	22	24	20		29		27	28	23	20	2
1	17		13	20	13	18	18	20	15		25			19		1	
0				16		14	13	16								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	99	100	100				85	86	19
18	100	96	100	100	99	96	95	97	97				82	82	18
17	96	92	100	100	95	92	91	92	93				78	79	17
16	92	88	100	100	90	88	86	88	88				75	75	16
15	87	84	98	98	86	84	82	84	84				73	71	15
14	83	80	93	93	82	80	78	80	80	69			68	68	14
13	79	76	88	88	78	76	74	76	75				65	66	13
12	75	72	83	83	73	72	70	71	71	61			61	61	12
11	71	68	78	78	69	68	66	67	66				57	58	11
10	67	64	73	73	65	64	62	63	62	54	53	56	54	54	10
9	62	60	68	68	61	60	58	59	58	50	49	53	50	51	9
8	58	55	63	63	56	56	53	54	53	46	45	50	47	47	8
7	54	51	58	58	52	52	49	50	49	42	41	46	43	44	7
6	50	47	53	53	48	48	45	46	45	39	37	43	40	40	6
5	46	43	47	48	44	44	41	42	40	35	34	40	36	37	5
4	41	39	42	43	39	40	37	38	36	31	30	37	33	33	4
3	37	35	37	39	35	36	33	33	31	27	26	33	29	29	3
2	33	31	32	34	31	32	29	29	27	23	22	30	26	26	2
1	29	27	27	29	27	28	25	25	23	20	18	27	22	22	1
0	25	23	22	24	22	24		21							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 13-15 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	74	100		100	100	88	82	93	79						19
18	70	75	100	96	97	84	79	89	75	79				92	18
17	66	70	100	92	92	80	75	85			87				17
16	62	66	100	88	88	76	72	81	67		83				16
15	57	62	99	84	84	72	68	76	63	69	79	71	65	80	15
14	53	57	94	80	79	69	64	72	60	66	75		62		14
13	49	53	88	76	75	65	61	68	56	63	72	64		72	13
12	45	49	83	72	70	61	57	63	52		68	61	56	68	12
11	40	44	78	68	66	57	54	59	48	56	64	58		64	11
10	36	40	72	64	61	53	50	55	44	53	60	54	50	60	10
9	32	36	67	60	57	50	46	51		50	56	51	47	56	9
8	28	31	62	56	52	46	43	46	36	47	52	47	43	52	8
7	24	27	56	52	48	42	39	42	32		49	44	40	49	7
6	19	23	51	48	44	38	36	38	28	40	45	40	37	45	6
5	15	18	46	44	39	35	32	34	24	37	41	37	34	41	5
4	11	14	40	40	35	31	29	29	20		37	33	31	37	4
3	7	10	35	36	30	27	25	25	17	31	33	30	28	33	3
2	2	5	30	32	26	23	21	21	13		29	27	25	29	2
1	0	1	24	28	21	19	18	16		24	26	23	22	25	1
0	0	0	19	24				12		21	22	20	18		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	99	100	100		97		100		77							19	
18	95	100	96	95			100		72							18	
17	91	96	92	91	89		100		68	80				69	76	17	
16	87	92	87	87	85	85	97		64	75	82			66	73	68	16
15	84	88	83	83	81	81	93		60	71				62	69		15
14	80	83	78	79	77	76	89		56	66	74			58	65	60	14
13	76	79	74	75	73	72	85		52	62	60	70		55	62	56	13
12	72	75	69	71	69	68	81		48	57			56	51	58	52	12
11	68	70	65	67	65	64	77	58	43	53	52	62		47	54	48	11
10	64	66	61	63	61	60	73		39	48	48	59		43	51	44	10
9	60	62	56	59	57	56	69	47	35	44	43	55	42	40	47	40	9
8	56	57	52	55	53	52	65		31	39	39	51		36	43	36	8
7	52	53	47	51	49	48	61	35	27	34	35	47	32	32	40	32	7
6	48	48	43	47	45	44	57		23	30	31	43		29	36	28	6
5	44	44	38	42	41	40	53	24	18	25	27	39	23	25	32	24	5
4	40	40	34	38	37	35	48		14	21	22	35		21	29	20	4
3	36	35	29		33	31	44	12	10	16	18	31	13	18	25		3
2	32	31	25		29	27	40	6	6	12	14	27	8	14			2
1	28	27	21		25	23	36	1	2	7	10	23	4				1
0	22	22			19	32	0		3	5				14	4		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 13-15 years
Age: 80-85 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	95		86		98		96				96	100	99	87		19		
18	90	96	82				92				92	96	95	83		18		
17	86	91	78		89		88				92	92		79		17		
16	82	87	74			82	84	81	86			88	87	76		16		
15	78	82	70		80		80	77				80				15		
14	73	78	66	65	75	74	75	73	77		76	79	79	68		14		
13	69	73	62		71		71	69			76		75	75	64	59	13	
12	65	69	58	58	66	66	67	65	68			68	71	71	56	12		
11	60	64	54	55	62	62	63	62	64		68	64	66	67	57	52	11	
10	56	59	50	51	57	58	59	58	59			61	62	63	53	49	10	
9	52	55	46	48	52	54	55	54	55		60	57	58	59	49	45	9	
8	48	50	42	44	48	50	51	50	50			53	54	54	46	41	8	
7	43	46	38	41	43	46	47	47	46		52	49	49	50	42	38	7	
6	39	41	34	37		42	42	43	41			48	45	46	38	34	6	
5	35	37	30	34	34	38	38	39	37		44	41	41	42	35	31	5	
4	31	32	26	30		34	34	35	32			40		37	38	31	27	4
3	26	28	22	27	25	30	30		28			36		33	34	27	24	3
2	22	23	18	23	20	26	26	28	23			33		28	30	23	20	2
1	18		14	20	16	22	22	24	19			29			20		1	
0				16		18	18	20									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	100	100	100				85	86	19
18	100	97	100	100	100	100	99	100	100				82	83	18
17	98	93	100	100	99	96	95	96	96				78	79	17
16	94	89	100	100	94	92	91	92	92				75	75	16
15	90	85	100	100	90	88	86	87	88				76	71	15
14	86	81	96	96	86	84	82	83	83	71			68	68	14
13	82	77	91	91	82	80	78	79	79				66	69	13
12	78	73	86	86	77	76	74	75	74	64			61	61	12
11	73	69	81	81	73	72	70	70	70				58	62	11
10	69	65	76	76	69	68	66	66	66	56	54	59	54	54	10
9	65	61	71	71	65	64	62	62	61	52	50	56	50	51	9
8	61	57	65	66	60	60	58	58	57	49	46	53	47	47	8
7	57	52	60	61	56	56	53	54	52	45	42	49	43	44	7
6	52	48	55	56	52	49	49	49	48	41	39	46	40	40	6
5	48	44	50	51	48	48	45	45	44	37	35	43	36	37	5
4	44	40	45	46	43	44	41	41	39	34	31	39	33	33	4
3	40	36	40	41	39	40	37	37	35	30	27	36	29	30	3
2	36	32	35	36	35	36	33	32	31	26	23	33	26	26	2
1	32	28	30	31	31	32	29	28	26	22	19	30	22	23	1
0	27	24	25	26	26	28		24							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	78	84		78	77	75	73	75	75	71	71					19
18	74	81	78	74	73	71	70	71	71	73	73					18
17	70	76	73	70	68	68	66	67			74					17
16	65	72	68	66	64	64	63	63	63			70				16
15	61	68	62	62	59	60	59	58	59	61	67	62	57	61		15
14	57	63	57	58	55	56	55	54	55	58	63	54				14
13	53	59	51	54	51	52	52	50	51	55	59	55				13
12	48	55	46	50	46	49	48	46	47	44	42	52	47	49		12
11	44	50	41	46	42	45	45	41	43	49	51	48				11
10	40	46	35	42	37	41	41	37	39	45	47	45	41	41		10
9	36	42	30	38	33	37	37	33	42	44	42	38				9
8	32	37	25	34	28	33	34	28	32	39	40	38	35			8
7	27	33	19	30	24	30	30	24	28	36	35	32	29			7
6	23	29	14	26	19	26	27	20	24	32	32	31	29	25		6
5	19	24	9	22	15	22	23	16	20	29	28	28	26	22		5
4	15	20	3	18	11	18	19	11	16		24	24	22	18		4
3	10	16	0	14	6	14	16	7	12	23	21	21	19	14		3
2	6	11	0	10	2	11	12	3	8		17	17	16	10		2
1	2	7	0	6	0	7	9	0	16	13	14	13	6			1
0	3	0		2				0	13	9	11	10				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	76	80			82		80		78								19	
18	73	71	76	76			76		74								18	
17	69	67	71	72	74		72		70	74			70	68			17	
16	65	63	67	68	70	68	68		66	69	67		66	65	64		16	
15	61	58	63	64	66	64	64		62	65			63	61			15	
14	57	54	58	60	62	60	60		58	60	60		59	57	56		14	
13	53	50	54	55	58	56	56		54	56	56	55	55	54	52		13	
12	49	45	49	51	54	52	52		49	51		53	52	50	48		12	
11	45	41	45	47	50	48	48	53	45	47	48	48	48	46	44		11	
10	41	37	40	43	46	44	44		41	42	44	44	44	43	40		10	
9	37	32	36	39	42	40	40	42	37	37	39	40	39	41	39	36	9	
8	33	28	32	35	38	36	35		33	33	35	36	37	35	32		8	
7	29	23	27	31	34	32	31	30	29	28	31	32	29	33	32	28	7	
6	25	19	23	27	30	27	27		24	24	27	28	30	28	24		6	
5	21	15	18	23	26	23	23	19	20	19	23	24	19	26	24	20	5	
4	17	10	14	19	22	19	19		16	15	18	20	22	21	16		4	
3	13	6	9		18	15	15	7	12	10	14	16	10	19	17		3	
2	9	2	5		14	11	11	1	8	6	10	12	5	15			2	
1	5	0	0		10	7	7	0	4	1	6	8	0				1	
0	0	0			3	3	0		0	1			6	0			0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 20-34 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	81		81		81		72				76	80	78	79		19
18	77	81	76				68				72	76	74	76		18
17	73	76	72		72		64				71	71		72		17
16	69	71	68				59	60	59	65			67	66	68	16
15	64	67	64		63		56	55				61				15
14	60	62	60	63	58	51	52	51	56		57	59	58	61		14
13	56	58	56		53		48	47			55	55	54	57	58	13
12	51	53	52	56	49	43	43	44	47		49	50	50		54	12
11	47	49	48	53	44	39	39	40	43		47	45	46	50	50	11
10	43	44	44	49	40	35	35	36	38		41	42	42	46	47	10
9	39	40	40	46	35	31	31	32	34		39	38	38	42	43	9
8	34	35	36	42	30	27	27	29	29		34	33	34	38	40	8
7	30	31	32	39	26	23	23	25	25		31	30	29	30	35	7
6	26	26	28	35		19	19	21	20		27	25	26	31	33	6
5	22	22	24	32	17	15	15	17	16		23	22	21	22	27	5
4	17	17	20	28		11	10	13	11			16	17	24	26	4
3	13	13	16	25	8	7	6		7			15	12	13	20	3
2	9	8	12	22	3	3	2	6	2			11	8	9	16	2
1	4		8	18	0	0	0	2	0		7			12		1
0				15		0	0	0								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	89	100	100	78	77	81	80	79				83	83	19
18	88	85	99	98	74	73	77	76	74				79	80	18
17	84	81	94	93	70	69	73	72	70				76	76	17
16	80	77	89	88	65	65	69	68	66				72	72	16
15	75	72	84	83	61	61	65	63	61			59	69	69	15
14	71	68	79	78	57	57	61	59	57	57			65	65	14
13	67	64	74	73	53	53	57	55	52			55	53	62	13
12	63	60	69	68	48	49	52	51	48	50			58	58	12
11	59	56	64	63	44	45	48	46	44	47	46		55	55	11
10	55	52	59	58	40	41	44	42	39	42	43	43	51	51	10
9	50	48	54	53	36	37	40	38	35	38	39	40	48	48	9
8	46	44	49	48	31	33	36	34	31	34	35	36	44	44	8
7	42	40	43	43	27	29	32	30	26	31	31	33	41	41	7
6	38	36	38	38	23	25	28	25	22	27	27	30	37	37	6
5	34	32	33	34	18	21	24	21	17	23	23	27	34	34	5
4	29	28	28	29	14	17	19	17	13	19	19	23	30	30	4
3	25	24	23	24	10	13	15	13	9	16	15	20	27	27	3
2	21	19	18	19	6	9	11	8	4	12	11	17	23	23	2
1	17	15	13	14	1	5	7	4	0	8	7	13	20	20	1
0	13	11	8	9	0	1	0								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	76		87	81	80	77	75	78	75	71	72				74	19
18	72	75	82	77	75	73	71	74	71						74	18
17	68	70	76	73	71	69	67	70				76				17
16	64	66	71	69	66	65	64	65	63			72				16
15	60	62	66	65	62	62	60	61	59	62	68	64	58	62		15
14	55	57	60	61	57	58	57	57	55	59	65		55			14
13	51	53	55	57	53	54	53	53	51	56	61	57		54		13
12	47	49	50	53	48	50	49	48	47		57	53	49	50		12
11	43	44	44	49	44	47	46	44	43	50	53	50		46		11
10	38	40	39	45	39	43	42	40	39	46	49	46	42	42		10
9	34	36	34	41	35	39	39	36		43	45	43	39	38		9
8	30	31	28	37	31	35	35	31	32	40	42	40	36	34		8
7	26	27	23	33	26	31	31	27	28		38	36	33	30		7
6	21	23	17	29	22	28	28	23	24	33	34	33	30	26		6
5	17	18	12	25	17	24	24	18	20	30	30	29	27	22		5
4	13	14	7	21	13	20	21	14	16		26	26	24	19		4
3	9	10	1	17	8	16	17	10	12	24	22	22	21	15		3
2	5	5	0	13	4	12	14	6	8		19	19	17	11		2
1	0	1	0	9	0	9	10	1		17	15	15	14	7		1
0		0	0	5				0		14	11	12	11			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	80		84		84		82		77								19	
18	76	76	79	77			78		73								18	
17	72	72	75	73	76		74		69	74				70	69		17	
16	68	67	70	69	72	71	70		65	69	65		66	65	64		16	
15	64	63	66	65	68	67	66		61	65			62	62			15	
14	60	59	61	61	64	63	62		56	60	58		59	58	56		14	
13	56	54	57	57	60	59	58		52	56	57	54		55	54	52		13
12	52	50	53	53	56	55	53		48	51			53	51	51	48		12
11	48	45	48	48	52	50	49	54	44	47	48	46		48	47	44		11
10	44	41	44	44	48	46	45		40	42	44	42		44	43	40		10
9	40	37	39	40	44	42	41	42	36	37	40	38	39	40	40	36		9
8	36	32	35	36	40	38	37		31	33	36	34		37	36	32		8
7	32	28	30	32	36	34	33	31	27	28	31	30	29	33	32	28		7
6	28	24	26	28	32	30	29		23	24	27	26		29	29	24		6
5	24	19	21	24	28	26	25	19	19	19	23	22	20	26	25	20		5
4	20	15	17	20	24	22	21		15	15	19	18		22	21	16		4
3	16	11	13		20	18	17	8	11	10	15	14	10	18	18			3
2	12	6	8		16	13	13	2	7	6	10	10	5	15				2
1	8	2	4		12	9	8	0	2	1	6	6	0					1
0	0	0	0		5	4	0		0	2				7	0		0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 35-39 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	83		81		82		74			80	83	81	80		19	
18	79	83	77				69			76	79	77	77		18	
17	75	78	73		73		65			72		75		73		17
16	70	74	69			60	61	60	66			70	69	69		16
15	66	69	65		63		57	56			64					15
14	62	65	61	63	59	52	53	52	57		60	62	61	62		14
13	58	60	57		54		49	49		56		58	57	58	58	13
12	53	56	53	57	50	44	45	45	48		52	53	53	54		12
11	49	51	49	53	45	40	41	41	44	48	48	49	49	51	51	11
10	45	46	45	50	41	36	36	37	39		45	45	45	47	47	10
9	41	42	41	46	36	32	32	33	35	40	41	41	41	43	44	9
8	36	37	37	43	31	28	28	30	30		37	36	37	39	40	8
7	32	33	33	39	27	24	24	26	26		32	33	32	33	36	7
6	28	28	29	36		20	20	22	21		28	28	29	32	33	6
5	23	24	25	32	18	17	16	18	17	24	25	24	25	28	30	5
4	19	19	21	29		13	12	15	12		20	20	21	25	26	4
3	15	15	17	25	8	9	8		8		16	15	17	21	22	3
2	11	10	13	22	4	5	3	7	3		12	11	13	17	19	2
1	6		8	18	0	1	0	3	0		8			13		1
0				15		0	0	0								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	89	100	100	81	80	82	83	81				83	83	19
18	89	85	99	98	77	76	78	78	77				79	80	18
17	85	81	93	93	72	72	74	74	73				76	76	17
16	80	77	88	88	68	68	70	70	68				72	73	16
15	76	73	83	83	64	64	66	66	64			60	69	69	15
14	72	69	78	78	60	60	62	61	59	58			65	66	14
13	68	65	73	73	55	56	58	57	55		57	54	62	62	13
12	64	61	68	68	51	52	54	53	51	50		58	59	59	12
11	60	57	63	63	47	48	50	49	46		49	47	55	55	11
10	55	53	58	58	43	44	45	45	42	43	45	44	51	52	10
9	51	49	53	53	38	40	41	40	38	39	41	41	48	48	9
8	47	44	48	48	34	36	37	36	33	35	37	37	44	44	8
7	43	40	42	43	30	32	33	32	29	31	33	34	41	41	7
6	39	36	37	38	26	28	29	28	24	28	29	31	37	37	6
5	34	32	32	33	21	24	25	23	20	24	25	27	34	34	5
4	30	28	27	28	17	20	21	19	16	20	21	24	30	30	4
3	26	24	22	23	13	16	17	15	11	16	17	21	27	27	3
2	22	20	17	18	9	12	12	11	7	13	13	18	23	23	2
1	18	16	12	13	4	8	8	7	2	9	9	14	20	20	1
0	14	12	7	8	0	4		2							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	76	73	89	83	81	78	75	80	75	71	73			74	19
18	72	73	84	79	76	74	72	75	71					74	18
17	68	69	79	75	72	70	68	71			77				17
16	64	65	73	71	68	66	64	67	63		73				16
15	60	61	68	67	63	63	61	63	59	63	69	64	59	63	15
14	55	56	63	63	59	59	57	58	55	60	66		55		14
13	51	52	57	59	54	55	54	54	51	56	62	57		55	13
12	47	48	52	55	50	51	50	50	47		58	54	49	51	12
11	43	43	46	51	45	47	46	45	43	50	54	51		47	11
10	38	39	41	47	41	44	43	41	39	47	50	47	43	43	10
9	34	35	36	43	36	40	39	37		44	46	44	40	39	9
8	30	30	30	39	32	36	36	33	32	40	42	40	37	35	8
7	26	26	25	35	28	32	32	28	28		39	37	34	31	7
6	21	22	20	31	23	28	29	24	24	34	35	33	30	27	6
5	17	17	14	27	19	25	25	20	20	31	31	30	27	23	5
4	13	13	9	23	14	21	21	16	16		27	26	24	19	4
3	9	9	4	19	10	17	18	11	12	24	23	23	21	15	3
2	5	4	0	15	5	13	14	7	8		19	20	18	11	2
1	0	0	0	11	1	9	11	3		18	16	16	15	8	1
0	0	0	0	7				0		14	12	13	12		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	80	78	85	78	84		83		77							19
18	76	78	81	78			79		73							18
17	72	74	76	74	76		75		69	74			69	69		17
16	68	69	72	70	72	72	71		65	69	65	65	66	66	63	16
15	64	65	68	66	68	68	67		61	65			62	62		15
14	60	61	63	61	64	64	63		56	60	57	57	58	58	55	14
13	56	56	59	57	60	60	59		52	56	57	53	55	55	52	13
12	52	52	54	53	56	56	55		48	51		53	51	51	48	12
11	48	48	50	49	52	52	51	54	44	47	48	45	47	47	44	11
10	44	43	45	45	48	48	46		40	42	44	41	44	44	40	10
9	40	39	41	41	44	43	42	43	36	37	40	37	39	40	40	9
8	36	35	36	37	40	39	38		31	33	36	33	36	36	36	8
7	32	30	32	33	36	35	34	31	27	28	32	29	29	33	33	7
6	28	26	28	29	32	31	30		23	24	27	25	29	29	24	6
5	24	22	23	25	28	27	26	20	19	19	23	21	20	25	25	5
4	20	17	19	21	24	23	22		15	15	19	17	22	22	16	4
3	16	13	14		20	19	18	8	11	10	15	13	10	18	18	3
2	12	9	10		16	15	14	3	7	6	11	9	5	14		2
1	8	4	5		12	11	10	0	2	1	6	6	0			1
0	0	0	0		6	6	0		0	2			7	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 40-44 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	84		82		82		75				80	85	83	81		19
18	80	84	78				70				76	80	79	77		18
17	76	79	74		73		66				73	76		74		17
16	71	75	70			61	62	61	67			72	71	70		16
15	67	70	65		64		58	57				65				15
14	63	66	61	64	60	53	54	53	58		61	63	63	62		14
13	59	61	57		55		50	49			57	59	59	58		13
12	54	57	53	57	50	45	46	46	49		53	55	55	54		12
11	50	52	49	53	46	41	41	42	45		49	49	51	51		11
10	46	48	45	50	41	37	37	38	40			45	46	47	47	10
9	41	43	41	46	37	33	33	34	36		41	41	42	43	44	9
8	37	38	37	43	32	29	29	31	31			37	38	39	40	8
7	33	34	33	39	28	25	25	27	27			33	34	34	36	7
6	29	29	29	36		21	21	23	22			29	30	30	32	6
5	24	25	25	32	18	17	17	19	18			25	26	25	29	5
4	20	20	21	29		13	13	15	13			21	22	25	26	4
3	16	16	17	25	9	9	8		9			17	18	21	23	3
2	12	11	13	22	5	5	4	8	4			13	14	18	19	2
1	7		9	19	0	2	0	4	0			9			14	1
0				15	0	0	0									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	91	100	100	83	82	83	84	83				83	83	19
18	89	86	99	99	78	78	79	80	79				79	80	18
17	85	82	94	94	74	74	75	76	74				76	76	17
16	81	78	89	89	70	70	71	71	70				72	73	16
15	77	74	84	84	66	66	67	67	65				61	69	15
14	73	70	79	79	61	62	63	63	61	59			65	66	14
13	69	66	74	74	57	58	59	59	57				58	54	13
12	64	62	69	69	53	54	55	54	52	51			58	59	12
11	60	58	64	64	49	50	50	50	48				50	55	11
10	56	54	59	59	44	46	46	46	44	43	46	45	51	52	10
9	52	50	54	54	40	42	42	42	39	40	42	41	48	48	9
8	48	46	48	49	36	38	38	38	35	36	38	38	44	45	8
7	43	42	43	44	32	34	34	33	30	32	34	35	41	41	7
6	39	38	38	39	27	30	30	29	26	28	30	31	37	38	6
5	35	33	33	34	23	26	26	25	22	24	26	28	34	34	5
4	31	29	28	29	19	22	22	21	17	21	22	25	30	30	4
3	27	25	23	24	15	18	17	17	13	17	18	22	27	27	3
2	23	21	18	19	10	14	13	12	8	13	14	18	23	23	2
1	18	17	13	14	6	10	9	8	4	9	10	15	20	20	1
0	14	13	8	9	2	6		4							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	75	92		85	82	79	76	81	75						19
18	71	72	86	81	78	75	72	77	71	73				75	18
17	66	68	81	77	74	71	69	73			78				17
16	62	64	76	73	69	67	65	68	63		74				16
15	58	59	70	69	65	63	61	64	59	63	70	65	59	63	15
14	54	55	65	65	60	60	58	60	55	60	66		56		14
13	49	51	60	61	56	56	54	55	51	57	63	58		56	13
12	45	46	54	57	51	52	51	51	47		59	55	50	52	12
11	41	42	49	53	47	48	47	47	43	51	55	51		48	11
10	37	38	44	49	42	44	44	43	39	47	51	48	44	44	10
9	33	34	38	45	38	41	40	38		44	47	44	40	40	9
8	28	29	33	41	34	37	36	34	32	41	43	41	37	36	8
7	24	25	28	37	29	33	33	30	28		40	38	34	32	7
6	20	21	22	33	25	29	29	26	24	34	36	34	31	28	6
5	16	16	17	29	20	25	26	21	20	31	32	31	28	24	5
4	11	12	11	25	16	22	22	17	16		28	27	25	20	4
3	7	8	6	21	11	18	18	13	12	25	24	24	22	16	3
2	3	3	1	17	7	14	15	8	8		20	20	19	12	2
1	0	0	0	13	2	10	11	4		18	17	17	15	8	1
0	0	0		9				0		15	13	13	12		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	83	87			86		85		76							19
18	79	80	83	79			81		72							18
17	75	76	78	75	78		77		68	74			69	70		17
16	71	72	74	71	74	73	73		63	69		65	65	66	63	16
15	67	67	69	67	70	69	68		59	65			62	62		15
14	63	63	65	62	66	65	64		55	60		57	58	59	55	14
13	59	59	60	58	62	61	60		51	56	57	53		54	55	51
12	55	54	56	54	58	57	56		47	51			53	51	51	47
11	51	50	51	50	54	53	52	55	43	47	49	46		47	48	43
10	47	46	47	46	50	49	48		38	42	44	42	43	44	39	10
9	43	41	43	42	46	45	44	43	34	37	40	38	39	40	40	9
8	39	37	38	38	42	41	40		30	33	36	34		36	37	32
7	35	33	34	34	38	36	36	32	26	28	32	30	29	32	33	7
6	31	28	29	30	34	32	32		22	24	28	26		29	29	24
5	27	24	25	26	30	28	28	20	18	19	23	22	20	25	26	5
4	23	20	20	22	26	24	23		13	15	19	18		21	22	16
3	19	15	16		22	20	19	9	9	10	15	14	10	18	18	3
2	15	11	11		18	16	15	3	5	6	11	10	5	14		2
1	11	7	7		14	12	11	0	1	1	7	6	1			1
0	2				8	7	0		0	2				7	0	0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 45-49 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	85		82		83		76				82	86	85	81		19	
18	81	85	78				72				78	82	81	78		18	
17	77	80	74		74		67				74	78		74		17	
16	72	76	70			62	63	62	68			73	73	70		16	
15	68	71	66		65		59	58				66				15	
14	64	67	62	64	60	54	55	54	59		62	65	64	63		14	
13	60	62	58		56		51	50			58		61	60	59	58	13
12	55	58	54	57	51	46	47	47	50		55	57	56		54	12	
11	51	53	50	53	47	42	43	43	46		50	51	52	52	51	11	
10	47	49	46	50	42	38	39	39	41		47	48	48	48	47	10	
9	42	44	42	46	38	34	34	35	37		42	43	44	44	44	9	
8	38	40	38	43	33	30	30	32	32		39	40	40	40	40	8	
7	34	35	34	40	28	26	26	28	28		34	35	35	36	37	7	
6	30	30	29	36		22	22	24	23		30	31	32	33	33	6	
5	25	26	25	33	19	18	18	20	19		26	27	28	29	30	5	
4	21	21	21	29		15	14	16	14		22		23	24	26	4	
3	17	17	17	26	10	11	10		10		18		18	20	22	3	
2	12	12	13	22	5	7	6	9	5		14		14	16	18	2	
1	8		9	19	1	3	1	5	1		10			14		1	
0				15		0	0	1								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	92	100	100	85	83	85	86	85				83	84	19
18	90	88	100	100	81	79	80	81	80				80	80	18
17	86	84	96	95	76	75	76	77	76				76	76	17
16	82	80	91	90	72	71	72	73	72				73	73	16
15	78	76	86	85	68	67	68	69	67				62	69	15
14	73	72	80	80	63	63	64	65	63	59			65	66	14
13	69	67	75	75	59	59	60	60	58				58	62	13
12	65	63	70	70	55	55	56	56	54				52	58	12
11	61	59	65	65	51	51	52	52	50				51	55	11
10	57	55	60	60	46	47	47	48	45	44	47	45	51	52	10
9	53	51	55	55	42	43	43	43	41	40	43	42	48	48	9
8	48	47	50	50	38	39	39	39	37	37	39	39	44	45	8
7	44	43	45	45	34	35	35	35	32	33	35	36	41	41	7
6	40	39	40	40	29	31	31	31	28	29	31	32	37	38	6
5	36	35	35	35	25	27	27	27	23	25	27	29	34	34	5
4	32	31	29	31	21	23	23	22	19	21	23	26	30	31	4
3	27	27	24	26	17	19	19	18	15	18	19	22	27	27	3
2	23	23	19	21	12	15	14	14	10	14	15	19	23	24	2
1	19	19	14	16	8	11	10	10	6	10	11	16	20	20	1
0	15	14	9	11	4	7		5							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	75	95		87	84	79	76	82	75							19
18	71	71	89	83	80	76	73	78	71	74						18
17	66	67	84	79	75	72	69	74			79					17
16	62	63	79	75	71	68	66	70	63		75					16
15	58	58	73	71	66	64	62	65	59	64	71	66	60	65		15
14	54	54	68	66	62	60	59	61	55	61	67		57			14
13	49	50	62	62	58	57	55	57	51	57	63	59				13
12	45	45	57	58	53	53	51	53	47		60	55	50	53		12
11	41	41	52	54	49	49	48	48	43	51	56	52				11
10	37	37	46	50	44	45	44	44	39	48	52	49	44	45		10
9	33	32	41	46	40	41	41	40		45	48	45	41	41		9
8	28	28	36	42	35	38	37	35	32	41	44	42	38	37		8
7	24	24	30	38	31	34	33	31	28		40	38	35	33		7
6	20	19	25	34	26	30	30	27	24	35	37	35	32	29		6
5	16	15	20	30	22	26	26	23	20	32	33	31	29	25		5
4	11	11	14	26	17	22	23	18	16		29	28	25	21		4
3	7	6	9	22	13	19	19	14	12	25	25	24	22	17		3
2	3	2	3	18	9	15	15	10		8	21	21	19	14		2
1	0	0	0	14	4	11	12	6		19	17	18	16	10		1
0	0	0	0	10				1		15	14	14	13			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	83		89		86		87		76									19
18	79	83	84	80			83		72									18
17	75	78	80	76	78		79		68	74				69	70			17
16	71	74	75	72	74	75	74		63	69	66		65	66	63			16
15	67	70	71	68	70	70	70		59	65			61	63				15
14	63	65	66	64	66	66	66		55	60	59		58	59	55			14
13	59	61	62	60	62	62	62		51	56	57	55		54	55	51		13
12	55	57	58	56	58	58	58		47	51			53	50	52	47		12
11	51	52	53	52	54	54	54	55	43	47	49	47		47	48	43		11
10	47	48	49	48	50	50	50		38	42	45	43		43	44	39		10
9	43	44	44	43	46	46	46	43	34	37	40	39	39	39	41	35		9
8	39	39	40	39	42	42	42		30	33	36	35		36	37	31		8
7	35	35	35	35	38	38	38	32	26	28	32	31	29	32	33	27		7
6	31	31	31	31	34	34	34		22	24	28	27		28	30	23		6
5	27	26	26	27	30	29	29	20	18	19	24	23	20	25	26	19		5
4	23	22	22	23	26	25	25		13	15	19	19		21	22	16		4
3	19	18	18		22	21	21	9	9	10	15	15	10	17	19			3
2	15	13	13		18	17	17	3	5	6	11	11	5	14				2
1	11	9	9		14	13	13	0	1	1	7	7	1					1
0	5				9	9	9	0	0	3				8	0			0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 50-54 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	86		82		84		77			83	88	86	82		19	
18	82	86	78				73			80	84	82	78		18	
17	78	81	74		75		69			75	79		75		17	
16	73	77	70			63	65	63	69			75	74	71	16	
15	69	72	66		66		61	59			68				15	
14	65	68	62	64	62	55	57	56	60		64	67	66	63	14	
13	60	63	58		57		52	52		59		62	62	60	58	13
12	56	59	54	57	52	48	48	48	51		56	58	58	55	12	
11	52	54	50	54	48	44	44	44	47	51	52	54	54	52	11	
10	48	50	46	50	43	40	40	40	42		48	50	50	48	47	10
9	43	45	42	47	39	36	36	37	38	43	45	45	46	45	44	9
8	39	41	38	43	34	32	32	33	34		41	41	42	41	40	8
7	35	36	34	40	29	28	28	29	29	35	37	37	38	37	37	7
6	31	32	30	36		24	24	25	25		31	33	34	33	33	6
5	26	27	26	33	20	20	19	22	20	27	29	28	30	30	30	5
4	22	23	22	29		16	15	18	16			23	24	26	26	4
3	18	18	18	26	11	12	11		11		19	20	22	22	23	3
2	13	13	14	22	7	8	7	10	7		15	16	17	19	19	2
1	9		10	19	2	4	3	7	2		11			15		1
0				15	0	0	3								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	93	100	100	87	86	86	87	87				83	84	19
18	91	89	100	100	83	82	82	83	82				80	80	18
17	87	85	97	97	79	78	78	79	78				76	77	17
16	83	81	92	92	74	74	74	75	74				73	73	16
15	79	77	87	87	70	70	69	71	69				63	69	15
14	74	73	82	82	66	66	65	66	65	60			66	66	14
13	70	69	77	77	61	62	61	62	61				59	56	13
12	66	65	72	72	57	58	57	58	56				53	59	12
11	62	61	67	67	53	54	53	54	52				52	55	11
10	58	57	62	62	49	50	49	50	47	45	48	46	52	52	10
9	53	53	57	57	44	46	45	45	43	41	44	43	48	48	9
8	49	48	52	52	40	42	41	41	39	37	40	40	45	45	8
7	45	44	46	47	36	38	37	37	34	34	36	37	41	41	7
6	41	40	41	42	32	34	32	33	30	30	32	33	37	38	6
5	37	36	36	37	27	30	28	28	25	26	28	30	34	34	5
4	33	32	31	32	23	26	24	24	21	22	24	27	30	31	4
3	28	28	26	27	19	22	20	20	17	19	20	23	27	27	3
2	24	24	21	22	15	18	16	16	12	15	16	20	23	24	2
1	20	20	16	17	10	14	12	12	8	11	12	17	20	20	1
0	16	16	11	13	6	10		7							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	73	98		88	86	80	77	84	77	74	74	76	67	60	58	19
18	69	74	92	84	82	76	74	80	74	74	74	76	67	60	58	18
17	65	70	87	80	77	73	70	75	66	62	64	72	67	60	66	17
16	61	65	82	76	73	69	66	71	66	62	64	72	67	60	66	16
15	56	61	76	72	68	65	63	67	62	64	64	72	67	60	66	15
14	52	57	71	68	64	61	59	63	58	61	68	68	57	57	57	14
13	48	52	65	64	59	57	56	58	54	58	64	60	60	58	58	13
12	44	48	60	60	55	54	52	54	50	50	56	56	51	54	54	12
11	39	44	55	56	51	50	48	50	46	51	57	53	53	50	50	11
10	35	39	49	52	46	46	45	45	42	48	53	49	45	46	46	10
9	31	35	44	48	42	42	41	41	45	49	49	46	42	42	42	9
8	27	31	39	44	37	38	38	37	34	42	45	42	38	39	39	8
7	22	27	33	40	33	35	34	33	31	41	39	35	35	35	35	7
6	18	22	28	36	28	31	30	28	27	35	38	36	32	31	31	6
5	14	18	23	32	24	27	27	24	23	32	34	32	29	27	27	5
4	10	14	17	28	19	23	23	20	19	30	29	26	23	23	23	4
3	6	9	12	24	15	19	20	16	15	26	26	25	23	19	19	3
2	1	5	7	20	10	16	16	11	11	22	22	22	20	15	15	2
1	0	1	1	16	6	12	12	7	19	18	18	17	11	11	11	1
0	0	0		12				3	16	14	15	14	14	14	14	0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	90	90			90		89		75								19
18	86	88	86	82			85		70								18
17	82	84	81	78	82		81		66	74				68	70	17	
16	78	80	77	73	78	80	77		62	69	68		65	67	63	16	
15	74	75	72	69	74	75	73		58	65			61	63	15		
14	70	71	68	65	70	71	69		54	60	60		57	59	55	14	
13	66	67	64	61	66	67	64		50	56	58	56		54	56	51	13
12	62	62	59	57	62	63	60		45	51			53	50	52	47	12
11	58	58	55	53	58	59	56	55	41	47	49	48		46	48	43	11
10	54	54	50	49	54	55	52		37	42	45	44		43	45	39	10
9	50	49	46	45	50	51	48	44	33	37	41	40	39	39	41	35	9
8	46	45	41	41	46	47	44		29	33	36	36		35	37	31	8
7	42	41	37	37	43	43	40	32	25	28	32	32	29	32	34	27	7
6	38	36	33	33	39	39	36		20	24	28	29		28	30	23	6
5	34	32	28	29	35	34	32	21	16	19	24	25	20	24	26	19	5
4	30	27	24	25	31	30	28		12	15	20	21		21	23	15	4
3	26	23	19		27	26	24	9	8	10	15	17	10	17	19	3	
2	22	19	15		23	22	19	4	4	6	11	13	5	13			2
1	18	14	10		19	18	15	0	0	1	7	9	1				1
0	10				14	11	0		0	3				8	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 55-59 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	87		83		86		79			85	89	88	82		19	
18	83	87	79				75			81	85	84	79		18	
17	78	82	75		77		71			77	81		75		17	
16	74	78	71			65	67	65	71			77	76	71	16	
15	70	73	67		67		62	61			69				15	
14	66	69	63	64	63	57	58	57	62		66	68	68	64	14	
13	61	64	59		58		54	53		61		64	64	60	58	13
12	57	60	54	57	54	49	50	50	53		58	60	60	55	12	
11	53	55	50	54	49	45	46	46	49	53	54	55	56	53	51	11
10	49	51	46	50	45	41	42	42	44		50	51	51	49	48	10
9	44	46	42	47	40	37	38	38	40	45	46	47	47	45	44	9
8	40	42	38	43	35	33	34	35	35		42	43	43	41	41	8
7	36	37	34	40	31	29	29	31	31	37	38	38	39	38	37	7
6	31	33	30	36		25	25	27	26		33	34	35	34	33	6
5	27	28	26	33	22	22	21	23	22	29	31	30	31	30	30	5
4	23	24	22	29		18	17	19	17		25		26	27	26	4
3	19	19	18	26	12	14	13		13		21		21	23	23	3
2	14	15	14	22	8	10	9	12	8		17		17	19	19	2
1	10		10	19	3	6	5	8	4		13			15		1
0				16		2	1	4								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	96	95	100	100	89	88	88	90	89				83	84	19
18	92	91	100	100	85	84	84	85	85				80	80	18
17	88	87	99	99	81	80	79	81	80				76	77	17
16	84	82	94	94	77	76	75	77	76				73	73	16
15	80	78	89	89	72	72	71	73	71				64	69	15
14	76	74	84	84	68	68	67	68	67	61			66	66	14
13	71	70	79	79	64	64	63	64	63		60	57	62	63	13
12	67	66	74	74	60	60	59	60	58	54			59	59	12
11	63	62	69	69	55	56	55	56	54		53	51	55	56	11
10	59	58	64	64	51	52	51	52	50	46	49	48	52	52	10
9	55	54	59	59	47	48	46	47	45	42	45	44	48	48	9
8	50	50	54	54	43	44	42	43	41	38	41	41	45	45	8
7	46	46	48	49	38	40	38	39	36	35	37	38	41	41	7
6	42	42	43	44	34	36	34	35	32	31	33	34	38	38	6
5	38	38	38	39	30	32	30	30	28	27	29	31	34	34	5
4	34	34	33	34	26	28	26	26	23	23	25	28	31	31	4
3	30	29	28	29	21	24	22	22	19	20	21	25	27	27	3
2	25	25	23	25	17	20	18	18	14	16	17	21	24	24	2
1	21	21	18	20	13	16	14	14	10	12	13	18	20	20	1
0	17	17	13	15	9	12		9							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	73	73	100	91	89	81	78	85	77	74	75				19	
18	69	73	97	87	85	77	74	81						79	18	
17	65	69	91	83	80	73	71	77			81				17	
16	61	64	86	79	76	70	67	72	66		77				16	
15	56	60	81	75	71	66	63	68	62	65	73	67	61	68	15	
14	52	56	75	71	67	62	60	64	58	62	69		58		14	
13	48	51	70	67	63	58	56	60	54	58	65	60		60	13	
12	44	47	64	63	58	54	53	55	50		61	57	52	56	12	
11	39	43	59	59	54	51	49	51	46	52	58	53		52	11	
10	35	38	54	55	49	47	45	47	42	49	54	50	45	48	10	
9	31	34	48	51	45	43	42	43		46	50	47	42	44	9	
8	27	30	43	47	40	39	38	38	34	42	46	43	39	40	8	
7	22	25	38	43	36	35	35	34	31		42	40	36	36	7	
6	18	21	32	39	31	32	31	30	27	36	38	36	33	32	6	
5	14	17	27	35	27	28	27	25	23	33	35	33	30	28	5	
4	10	12	22	31	22	24	24	21	19		31	29	27	24	4	
3	6	8	16	27	18	20	20	17	15	26	27	26	23	21	3	
2	1	4	11	23	14	17	17	13	11		23	22	20	17	2	
1	0	0	5	19	9	13	13	8		20	19	19	17	13	1	
0	0	0	0	15				4		16	15	16	14		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score	
19	90		93		90		92		75								19	
18	86	91	88	83			88		70								18	
17	82	86	84	79	82		84		66	74				68	71		17	
16	78	82	80	75	78	81	79		62	69	70		64	67	63		16	
15	74	78	75	71	74	77	75		58	65			60	63			15	
14	70	73	71	67	70	73	71		54	60	62		57	60	55		14	
13	66	69	66	63	66	68	67		50	56	58	58		53	56	51		13
12	62	65	62	59	62	64	63		45	51			53	49	52	47		12
11	58	60	57	55	58	60	59	56	41	47	49	50		46	49	43		11
10	54	56	53	51	54	56	55		37	42	45	46		42	45	39		10
9	50	52	48	47	50	52	51	44	33	37	41	42	39	38	41	35		9
8	46	47	44	43	46	48	47		29	33	37	38		35	38	31		8
7	42	43	40	39	43	44	43	33	25	28	32	34	29	31	34	27		7
6	38	38	35	35	39	40	39		20	24	28	30		27	30	23		6
5	34	34	31	31	35	36	34	21	16	19	24	26	20	24	27	19		5
4	30	30	26	27	31	32	30		12	15	20	22		20	23	15		4
3	26	25	22		27	27	26	10	8	10	16	18	10	16	19			3
2	22	21	17		23	23	22	4	4	6	11	15	5	13				2
1	18	17	13		19	19	18	0	0	1	7	11	1					1
0	12				15	14	0		0	3				9	0			0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 60-64 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	88		83		87		81				88	91	89	83		19	
18	84	88	79				77				84	87	85	79		18	
17	79	83	75		78		73				79	82		76		17	
16	75	79	71			67	69	67	73			78	77	72		16	
15	71	74	67		69		65	63				72				15	
14	67	70	63	64	64	59	60	59	64		68	70	69	64		14	
13	62	65	59		60		56	55			63		65	65	61	58	13
12	58	61	55	57	55	51	52	52	55		60	61	61		55	12	
11	54	56	51	54	51	47	48	48	50		55	57	57	57	53	51	11
10	50	52	47	50	46	43	44	44	46		53	53	53	49	48	10	
9	45	47	43	47	42	39	40	40	41		47	49	48	49	46	9	
8	41	43	39	43	37	35	36	37	37		45	44	45	42	41	8	
7	37	38	35	40	32	31	32	33	32		39	41	40	41	38	37	7
6	32	34	31	36		27	27	29	28		35	36	37	34	34	6	
5	28	29	27	33	23	23	23	25	23		31	33	32	33	31	30	5
4	24	25	23	30		20	19	21	19		27		27	29	27	26	4
3	20	20	18	26	14	16	15		15		23		23	25	23	23	3
2	15	16	14	23	9	12	11	14	10		19		19	21	20	19	2
1	11		10	19	5	8	7	10	6		15				16	1	
0				16		4	3	6								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	98	96	100	100	92	90	90	92	91				83	84	19
18	94	92	100	100	88	86	86	88	87				80	80	18
17	89	88	100	100	84	82	82	83	83				76	77	17
16	85	84	96	96	79	78	77	79	78				73	73	16
15	81	80	91	91	75	74	73	75	74				66	69	15
14	77	76	86	86	71	70	69	71	70	62			66	66	14
13	73	72	81	81	67	66	65	66	65		61	59	62	63	13
12	69	67	76	76	62	62	61	62	61		55		59	59	12
11	64	63	71	71	58	58	57	58	56		53	52	55	56	11
10	60	59	66	67	54	54	53	54	52	47	50	49	52	52	10
9	56	55	61	62	50	50	49	50	48	44	46	46	48	49	9
8	52	51	56	57	45	46	44	45	43	40	42	43	45	45	8
7	48	47	51	52	41	42	40	41	39	36	38	39	41	42	7
6	43	43	46	47	37	38	36	37	34	32	34	36	38	38	6
5	39	39	40	42	33	34	32	33	30	28	30	33	34	34	5
4	35	35	35	37	28	30	28	28	26	25	26	29	31	31	4
3	31	31	30	32	24	26	24	24	21	21	22	26	27	27	3
2	27	27	25	27	20	22	20	20	17	17	18	23	24	24	2
1	23	23	20	22	16	18	16	16	13	13	14	20	20	20	1
0	18	19	15	17	11	14		12							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	72	100		93	91	82	78	87	77						19
18	67	72	100	89	87	78	75	82	74	75				81	18
17	63	68	95	85	83	74	71	78			81				17
16	59	63	89	81	78	70	68	74	66		78				16
15	55	59	84	77	74	67	64	70	62	65	74	68	61	70	15
14	50	55	79	73	69	63	60	65	58	62	70		58		14
13	46	50	73	69	65	59	57	61	54	59	66	61		62	13
12	42	46	68	65	60	55	53	57	50		62	58	52	58	12
11	38	42	63	61	56	51	50	53	46	52	58	54		54	11
10	33	37	57	57	51	48	46	48	42	49	55	51	46	50	10
9	29	33	52	53	47	44	42	44	46	51	47	43	46		9
8	25	29	47	49	43	40	39	40	34	43	47	44	40	42	8
7	21	24	41	45	38	36	35	35	31		43	40	37	38	7
6	17	20	36	40	34	33	32	31	27	36	39	37	33	34	6
5	12	16	30	36	29	29	28	27	23	33	35	34	30	30	5
4	8	11	25	32	25	25	25	23	19		32	30	27	26	4
3	4	7	20	28	20	21	21	18	15	27	28	27	24	22	3
2	0	3	14	24	16	17	17	14	11		24	23	21	19	2
1	0	0	9	20	11	14	14	10	20	20	20	18	15		1
0	0	0	4	16				6	17	16	16	15			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93	95			92		95		73								19
18	89	93	90	86			91		69								18
17	85	89	86	82	84		87		65	74				67	71		17
16	81	84	81	77	80	82	83		61	69	72			63	67	63	16
15	77	80	77	73	76	78	79		57	65				60	64		15
14	73	76	72	69	72	74	74		52	60	64			56	60	55	14
13	69	71	68	65	68	70	70		48	56	58	60		52	56	51	13
12	65	67	63	61	64	66	66		44	51			53	49	53	47	12
11	61	62	59	57	60	61	62	56	40	47	50	52		45	49	43	11
10	57	58	55	53	56	57	58		36	42	45	48		41	45	39	10
9	53	54	50	49	52	53	54	45	32	37	41	44	39	38	42	35	9
8	49	49	46	45	48	49	50		27	33	37	40		34	38	31	8
7	45	45	41	41	44	45	46	33	23	28	33	36	30	30	34	27	7
6	41	41	37	37	40	41	42		19	24	28	32		27	31	23	6
5	37	36	32	33	36	37	38	22	15	19	24	28	20	23	27	19	5
4	33	32	28	29	32	33	34		11	15	20	24		19	23	15	4
3	29	28	23		29	29	30	10	7	10	16	20	10	16	20		3
2	25	23	19		25	25	25	4	3	6	12	17	6	12			2
1	22	19	15		21	20	21	0	0	1	7	13	1				1
0	15	15			16	17	0		0	3				9	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 65-69 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		84		89		84				89	92	91	83		19
18	85	89	79				79				85	88	87	80		18
17	80	85	75		80		75			81		84		76		17
16	76	80	71			69	71	69	75			80	79	72		16
15	72	75	67		71		67	65			74					15
14	68	71	63	64	66	61	63	61	66		70	71	71	65		14
13	63	66	59		62		59	58		65		67	67	61	58	13
12	59	62	55	57	57	54	55	54	57		62	63	63	55		12
11	55	57	51	54	53	50	51	50	53	57	58	58	59	54	51	11
10	50	53	47	51	48	46	46	46	48		54	54	55	50	48	10
9	46	48	43	47	43	42	42	43	44	49	50	50	51	46	44	9
8	42	44	39	44	39	38	38	39	39		47	46	47	42	41	8
7	38	39	35	40	34	34	34	35	35	41	43	42	43	39	37	7
6	33	35	31	37		30	30	31	30		37	37	38	35	34	6
5	29	30	27	33	25	26	26	27	26		33	35	33	34	31	5
4	25	26	23	30		22	22	24	21			29	30	28	27	4
3	21	21	19	26	16	18	18		17			25	25	26	24	3
2	16	17	15	23	11	14	13	16	12		21	20	22	20	20	2
1	12		11	19	7	10	9	12	8		17			16		1
0				16		6	5	9								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	99	97	100	100	95	93	92	94	94				83	84	19
18	95	93	100	100	91	89	88	90	90				80	81	18
17	91	89	100	100	87	85	84	86	85				76	77	17
16	87	85	99	99	82	81	80	81	81				73	73	16
15	83	81	94	94	78	77	76	77	77	67			69	70	15
14	78	77	89	89	74	73	72	73	72	64			66	66	14
13	74	73	83	84	70	69	67	69	68	62	61		62	63	13
12	70	69	78	79	65	65	63	65	63	56			59	59	12
11	66	65	73	74	61	61	59	60	59	54	54		55	56	11
10	62	61	68	69	57	57	55	56	55	49	51	51	52	52	10
9	58	56	63	64	53	53	51	52	50	45	47	48	48	49	9
8	53	52	58	59	48	49	47	48	46	41	43	44	45	45	8
7	49	48	53	54	44	45	43	43	41	38	39	41	41	42	7
6	45	44	48	49	40	41	39	39	37	34	35	38	38	38	6
5	41	40	43	44	36	37	34	35	33	30	31	34	34	35	5
4	37	36	38	39	31	33	30	31	28	26	27	31	31	31	4
3	32	32	32	34	27	29	26	27	24	22	23	28	27	28	3
2	28	28	27	29	23	25	22	22	20	19	19	25	24	24	2
1	24	24	22	24	19	21	18	18	15	15	15	21	20	21	1
0	20	20	17	19	14	17		14							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	70	100	94	94	83	79	88	77							19	
18	66	71	100	90	89	79	75	84	74	76				84	18	
17	61	66	99	86	85	75	72	80			82				17	
16	57	62	93	82	81	71	68	75	66		79				16	
15	53	58	88	78	76	67	65	71	62	66	75	69	62	72	15	
14	49	53	83	74	72	64	61	67	58	63	71		59		14	
13	45	49	77	70	67	60	57	62	54	59	67	62		64	13	
12	40	45	72	66	63	56	54	58	50		63	58	53	60	12	
11	36	41	67	62	58	52	50	54	46	53	59	55		56	11	
10	32	36	61	58	54	49	47	50	42	50	56	51	46	52	10	
9	28	32	56	54	49	45	43	45	47	52	48	43	48		9	
8	23	28	50	50	45	41	40	41	34	43	48	45	40	44	8	
7	19	23	45	46	41	37	36	37	31		44	41	37	40	7	
6	15	19	40	42	36	33	32	33	27	37	40	38	34	37	6	
5	11	15	34	38	32	30	29	28	23	34	36	34	31	33	5	
4	6	10	29	34	27	26	25	24	19		33	31	28	29	4	
3	2	6	24	30	23	22	22	20	15	27	29	27	25	25	3	
2	0	2	18	26	18	18	18	16	11		25	24	22	21	2	
1	0	0	13	22	14	14	14	11		21	21	20	18	17	1	
0	0	0	8	18				7		17	17	17	15		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	96	96	96		94		99		72								19
18	92	95	92	88			95		68								18
17	88	91	87	84	86		91		64	74				66	71		17
16	84	87	83	80	82	83	86		59	69	74			63	68	63	16
15	80	82	78	76	78	79	82		55	65				59	64		15
14	76	78	74	72	74	75	78		51	60	66			55	60	55	14
13	72	73	70	68	70	71	74		47	56	58	62		52	57	51	13
12	68	69	65	64	66	67	70		43	51			54	48	53	47	12
11	64	65	61	60	62	63	66	56	39	47	50	54		44	49	43	11
10	60	60	56	56	58	59	62		34	42	46	50		41	46	39	10
9	56	56	52	52	54	54	58	45	30	37	41	46	39	37	42	35	9
8	52	52	47	48	50	50	54		26	33	37	42		33	38	31	8
7	48	47	43	43	46	46	50	33	22	28	33	38	30	30	35	27	7
6	44	43	38	39	42	42	46		18	24	29	35		26	31	23	6
5	41	39	34	35	38	38	41	22	14	19	24	31	20	22	27	19	5
4	37	34	30	31	34	34	37		10	15	20	27		19	24	15	4
3	33	30	25		30	30	33	10	5	10	16	23	10	15	20		3
2	29	26	21		26	26	29	5	1	6	12	19	6	11			2
1	25	21	16		22	22	25	0	0	1	8	15	1				1
0	17				18	21	0		0	3				9	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 70-74 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	90		84		91		86				91	94	93	84		19	
18	86	90	80				82				87	90	89	80		18	
17	81	86	76		82		78				83	85		77		17	
16	77	81	72			72	74	72	78			81	81	73		16	
15	73	77	68		73		70	68				75				15	
14	68	72	64	65	68	64	66	64	69		71	73	72	65		14	
13	64	67	60		64		62	60			67	69	68	62	58	13	
12	60	63	56	58	59	56	58	57	60			64	64	64	55	12	
11	56	58	52	54	55	52	53	53	55		60	60	60	54	51	11	
10	51	54	48	51	50	48	49	49	51			56	56	56	50	48	10
9	47	49	43	47	46	44	45	45	46		52	52	52	47	44	9	
8	43	45	39	44	41	40	41	41	42			48	47	48	43	41	8
7	39	40	35	40	36	36	37	38	37		44	44	43	44	39	7	
6	34	36	31	37		32	33	34	33			40	39	40	35	34	6
5	30	31	27	33	27	29	29	30	28		36	36	35	36	32	5	
4	26	27	23	30		25	25	26	24			32	30	32	28	27	4
3	21	22	19	26	18	21	20		19			28	26	28	24	23	3
2	17	18	15	23	14	17	16	19	15			24	22	24	21	20	2
1	13		11	19	9	13	12	15	10						17	1	
0				16		9	8	11								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	98	100	100	98	96	95	97	97				83	84	19
18	97	94	100	100	94	92	91	92	92				80	81	18
17	93	90	100	100	90	88	87	88	88				76	77	17
16	89	86	100	100	86	84	83	84	84				73	74	16
15	85	82	96	96	81	80	78	80	79				69	69	15
14	80	78	91	91	77	76	74	76	75	66			66	67	14
13	76	74	86	86	73	72	70	71	71				63	63	13
12	72	70	81	81	68	68	66	67	66	58			59	59	12
11	68	66	76	76	64	64	62	63	62				55	56	11
10	64	62	71	71	60	60	58	59	57	51	51	53	52	52	10
9	59	58	65	66	56	56	54	54	53	47	48	50	48	49	9
8	55	54	60	61	51	52	50	50	49	43	44	46	45	45	8
7	51	49	55	56	47	48	46	46	44	39	40	43	41	42	7
6	47	45	50	51	43	44	41	42	40	35	36	40	38	38	6
5	43	41	45	46	39	40	37	38	36	32	32	36	34	35	5
4	39	37	40	41	34	36	33	33	31	28	28	33	31	31	4
3	34	33	35	37	30	32	29	29	27	24	24	30	27	28	3
2	30	29	30	32	26	28	25	25	22	20	20	27	24	24	2
1	26	25	25	27	22	24	21	21	18	17	16	23	20	21	1
0	22	21	20	22	17	20		17							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	68	100		96	97	84	80	90	77						19
18	64	70	100	92	92	80	76	85	74	76				86	18
17	60	65	100	88	88	76	72	81			83				17
16	56	61	97	84	83	72	69	77	66		79				16
15	51	57	92	80	79	68	65	72	62	66	76	69	63	75	15
14	47	52	87	76	74	65	62	68	58	63	72		59		14
13	43	48	81	72	70	61	58	64	54	60	68	63		67	13
12	39	44	76	68	65	57	55	60	50		64	59	53	63	12
11	34	39	71	64	61	53	51	55	46	53	60	56		59	11
10	30	35	65	60	56	49	47	51	42	50	56	52	47	55	10
9	26	31	60	56	52	46	44	47	47	53	49	44		51	9
8	22	26	55	52	48	42	40	43	34	44	49	45	41		8
7	18	22	49	48	43	38	37	38	31		45	42	38	43	7
6	13	18	44	44	39	34	33	34	27	37	41	38	35	39	6
5	9	13	39	40	34	30	29	30	23	34	37	35	31	35	5
4	5	9	33	36	30	27	26	25	19		33	32	28	31	4
3	1	5	28	32	25	23	22	21	15	28	30	28	25	27	3
2	0	1	22	28	21	19	19	17	11		26	25	22	23	2
1	0	0	17	24	16	15	15	13		21	22	21	19	20	1
0	0	0	12	20				8		18	18	18	16		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	99	98	98		96		100		71							19	
18	95	98	93	91			99		66							18	
17	91	93	89	87	88		95		62	74				65	72	17	
16	87	89	85	83	84	84	91		58	69	76		62	68	63	16	
15	83	84	80	79	80	80	87		54	65				58	64	15	
14	79	80	76	75	76	76	83		50	60	68			54	61	14	
13	75	76	71	71	72	72	78		46	56	58	64		51	57	51	13
12	71	71	67	67	68	68	74		41	51			54	47	53	47	12
11	67	67	62	63	64	64	70	57	37	47	50	57		43	50	43	11
10	63	63	58	59	60	60	66		33	42	46	53		40	46	39	10
9	60	58	53	55	56	56	62	45	29	37	42	49	39	36	42	35	9
8	56	54	49	50	51	52	58		25	33	37	45		32	39	31	8
7	52	50	45	46	47	47	54	34	21	28	33	41	30	29	35	27	7
6	48	45	40	42	43	43	50		17	24	29	37		25	31	23	6
5	44	41	36	38	39	39	46	22	12	19	25	33	20	21	28	19	5
4	40	37	31	34	35	35	42		8	15	20	29		18	24	15	4
3	36	32	27		31	31	38	11	4	10	16	25	10	14	21		3
2	32	28	22		27	27	33	5	0	6	12	21	6	10			2
1	28	24	18		23	23	29	0	0	1	8	17	1				1
0	19	19			19	25	0		0	4				10	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 75-79 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	91		84		94		90				92	96	94	84		19	
18	87	91	80				86				89	91	90	81		18	
17	82	87	76		85		82			86		87		77		17	
16	78	82	72			75	77	75	80			83	82	73		16	
15	74	78	68		76		73	71			77					15	
14	69	73	64	65	71	67	69	67	71		73	74	74	66		14	
13	65	69	60		66		65	63		70		70	70	62	59	13	
12	61	64	56	58	62	59	61	60	63		65	66	66	55	55	12	
11	57	59	52	54	57	55	57	56	58	62	61	62	62	55	52	11	
10	52	55	48	51	53	51	53	52	54		58	57	58	51	48	10	
9	48	50	44	47	48	47	49	48	49	55	54	53	54	47	44	9	
8	44	46	40	44	43	43	44	45	45		50	49	50	43	41	8	
7	40	41	36	40	39	40	40	41	40	47	46	45	46	40	37	7	
6	35	37	32	37		36	36	37	36		43	40	42	36	34	6	
5	31	32	28	33	30	32	32	33	31	39	38	36	38	32	30	5	
4	27	28	24	30		28	28	29	27		35		32	34	29	27	4
3	22	23	20	27	21	24	24		22		31		28	30	25	23	3
2	18	19	16	23	16	20	20	22	18		27		23	26	21	20	2
1	14		12	20	11	16	16	18	13					17		1	
0				16		12	11	14								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	99	100	100	100	99	98	99	100				83	84	19
18	99	95	100	100	97	95	94	95	96				80	81	18
17	95	91	100	100	93	91	90	91	91				76	77	17
16	91	87	100	100	89	87	86	87	87				73	74	16
15	87	83	98	99	85	83	82	83	82				72	69	15
14	82	79	93	94	80	79	78	78	78	68			66	67	14
13	78	75	88	89	76	75	73	74	74		64	65	62	63	13
12	74	71	83	84	72	71	69	70	69		60		59	60	12
11	70	67	78	79	68	67	65	66	65		56	59	55	56	11
10	66	63	73	74	63	63	61	61	60		53	52	55	52	10
9	62	59	68	69	59	59	57	57	56		49	48	52	48	9
8	57	55	63	64	55	55	53	53	52		45	45	49	45	8
7	53	51	58	59	51	51	49	49	47		41	41	45	41	7
6	49	46	53	54	46	47	45	45	43		38	37	42	38	6
5	45	42	47	49	42	43	41	40	39		34	33	39	34	5
4	41	38	42	44	38	39	36	36	34		30	29	35	31	4
3	36	34	37	39	34	35	32	32	30		26	25	32	27	3
2	32	30	32	34	29	31	28	28	25		22	21	29	24	2
1	28	26	27	29	25	27	24	23	21		19	17	26	20	1
0	24	22	22	24	21	23		19							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 16-17 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	68	100		98	100	84	80	91	77						19
18	64	68	100	94	95	81	77	87	74	77				90	18
17	60	64	100	90	91	77	73	83			84				17
16	56	60	100	86	86	73	70	78	66		80				16
15	51	56	97	82	82	69	66	74	62	67	77	70	63	78	15
14	47	51	92	78	77	65	62	70	58	64	73		60		14
13	43	47	86	74	73	62	59	65	54	60	69	63		70	13
12	39	43	81	70	68	58	55	61	50		65	60	54	66	12
11	34	38	76	66	64	54	52	57	46	54	61	56		62	11
10	30	34	70	62	60	50	48	53	42	51	57	53	48	58	10
9	26	30	65	58	55	46	44	48	48	54	50	45	54		9
8	22	25	59	54	51	43	41	44	34	44	50	46	41	50	8
7	18	21	54	50	46	39	37	40	31		46	43	38	46	7
6	13	17	49	46	42	35	34	36	27	38	42	39	35	42	6
5	9	12	43	42	37	31	30	31	23	35	38	36	32	39	5
4	5	8	38	38	33	28	26	27	19		34	32	29	35	4
3	1	4	33	34	28	24	23	23	15	28	31	29	26	31	3
2	0	0	27	30	24	20	19	18	11		27	25	23	27	2
1	0	0	22	26	20	16	16	14		22	23	22	20	23	1
0	0	0	17	22				10	18	19	19	17			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	99	100			96		100		71							19	
18	95	100	95	95			100		66							18	
17	91	96	91	91	88		100		62	74				64	72	17	
16	87	91	86	87	84	86	96		58	69	79			61	68	63	16
15	83	87	82	83	80	82	92		54	65				57	65		15
14	79	83	77	78	76	78	88		50	60	71			53	61	55	14
13	75	78	73	74	72	73	84		46	56	59	67		50	58	51	13
12	71	74	69	70	68	69	80		41	51			54	46	54	47	12
11	67	70	64	66	64	65	76	57	37	47	50	59		42	50	43	11
10	63	65	60	62	60	61	72		33	42	46	55		39	47	39	10
9	60	61	55	58	56	57	67	46	29	37	42	51	39	35	43	35	9
8	56	57	51	54	52	53	63		25	33	38	48		31	39	31	8
7	52	52	46	50	48	49	59	34	21	28	33	44	30	28	36	27	7
6	48	48	42	46	44	45	55		17	24	29	40		24	32	23	6
5	44	44	37	42	40	41	51	23	12	19	25	36	20	20	28	19	5
4	40	39	33	38	36	37	47		8	15	21	32		17	25	15	4
3	36	35	29		32	32	43	11	4	10	16	28	11	13	21		3
2	32	31	24		28	28	39	5	0	6	12	24	6	9			2
1	28	26	20		24	24	35	0	0	1	8	20	1				1
0	22	22			20	31	0		0	4				10	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 16-17 years
Age: 80-85 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		85		97		94				94	97	96	85		19
18	88	92	81				90				90	93	92	81		18
17	83	88	77		88		86			90		89		78		17
16	79	83	73			79	82	79	84			84	84	74		16
15	75	79	69		79		78	75			79					15
14	70	74	65	65	74	71	73	71	75		75	76	76	66		14
13	66	70	60		70		69	67		74		72	72	63	59	13
12	62	65	56	58	65	63	65	63	66		67	68	68	55	55	12
11	58	61	52	54	60	59	61	60	62	66	63	63	64	55	52	11
10	53	56	48	51	56	55	57	56	57		59	59	60	51	48	10
9	49	52	44	48	51	51	53	52	53	58	55	55	56	48	45	9
8	45	47	40	44	47	47	49	48	48		52	51	52	44	41	8
7	41	43	36	41	42	43	44	45	44	50	48	46	48	40	38	7
6	36	38	32	37		39	40	41	39	46	42	44	37	34	34	6
5	32	34	28	34	33	36	36	37	35	42	40	38	39	33	30	5
4	28	29	24	30		32	32	33	30	38		34	35	29	27	4
3	23	24	20	27	24	28	28		26	34		29	31	25	23	3
2	19	20	16	23	19	24	24	26	21	30		25	27	22	20	2
1	15		12	20	15	20	20	22	17	26				18		1
0				16	16	16	18									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	100	100	100				83	84	19
18	100	97	100	100	100	99	98	98	99				80	81	18
17	98	92	100	100	97	95	94	94	95				76	77	17
16	93	88	100	100	93	91	90	90	90				73	74	16
15	89	84	100	100	89	87	86	86	86				75	69	15
14	85	80	96	96	84	83	82	82	82	70			66	67	14
13	81	76	91	91	80	79	78	77	77				65	68	13
12	77	72	86	86	76	75	73	73	73	63			59	60	12
11	73	68	81	81	72	71	69	69	68				57	61	11
10	68	64	76	77	67	67	65	65	64	55	53	58	52	53	10
9	64	60	70	72	63	63	61	61	60	51	50	55	48	49	9
8	60	56	65	67	59	59	57	56	55	48	46	52	45	46	8
7	56	52	60	62	55	55	53	52	51	44	42	48	41	42	7
6	52	48	55	57	50	51	49	48	46	40	38	45	38	39	6
5	48	44	50	52	46	47	45	44	42	36	34	42	34	35	5
4	43	39	45	47	42	43	40	39	38	32	30	38	31	31	4
3	39	35	40	42	38	39	36	35	33	29	26	35	27	28	3
2	35	31	35	37	33	35	32	31	29	25	22	32	24	24	2
1	31	27	30	32	29	31	28	27	25	21	18	29	20	21	1
0	27	23	25	27	25	27	23								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 20-34 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	78		81	75	75	72	71	73	75							19
18	74	74	76	71	71	68	68	69	71	69					70	18
17	70	70	70	67	66	64	64	65			72					17
16	65	66	65	63	62	61	61	60	63		68					16
15	61	62	60	59	57	57	57	56	59	59	64	62	58	59		15
14	57	57	54	55	53	53	53	52	55	56	60		55			14
13	53	53	49	51	48	49	50	48	51	53	56	55		51		13
12	48	49	44	47	44	45	46	43	47		52	51	48	47		12
11	44	44	38	43	39	42	43	39	43	46	49	48		43		11
10	40	40	33	39	35	38	39	35	39	43	45	44	42	39		10
9	36	36	27	35	31	34	35	30		40	41	41	39	35		9
8	32	31	22	31	26	30	32	26	32	36	37	37	36	31		8
7	27	27	17	27	22	26	28	22	28		33	34	33	27		7
6	23	23	11	23	17	23	25	18	24	30	29	31	30	23		6
5	19	18	6	19	13	19	21	13	20	27	26	27	27	19		5
4	15	14	1	15	8	15	17	9	16		22	24	24	15		4
3	10	10	0	11	4	11	14	5	12	20	18	20	20	12		3
2	6	5	0	7	0	7	10	1	8		14	17	17	8		2
1	2	1	0	3	0	4	7	0		14	10	13	14	4		1
0	0	0	0	0	0	0	0		11	6	10	11				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	76		79		82		79		78									19
18	73	67	75	75			75		74									18
17	69	63	70	71	74		71		70	68				65	64			17
16	65	59	66	67	70	66	67		66	63	64		61	61	58			16
15	61	54	61	63	66	62	63		62	59			58	57				15
14	57	50	57	59	62	58	59		58	54	56		54	53	50			14
13	53	46	52	55	58	53	55		54	50	55	53		50	50	46		13
12	49	41	48	51	54	49	50		49	45			50	47	46	42		12
11	45	37	43	47	50	45	46	53	45	41	47	45		43	42	38		11
10	41	33	39	43	46	41	42		41	36	43	41		39	39	34		10
9	37	28	35	39	42	37	38	41	37	31	38	37	36	36	35	30		9
8	33	24	30	35	38	33	34		33	27	34	33		32	31	26		8
7	29	20	26	31	34	29	30	30	29	22	30	29	26	28	28	22		7
6	25	15	21	27	30	25	26		24	18	26	25		25	24	18		6
5	21	11	17	22	26	21	22	18	20	13	22	21	17	21	20	14		5
4	17	7	12	18	22	17	18		16	9	17	17		17	17	11		4
3	13	2	8		18	12	14	7	12	4	13	13	7	14	13			3
2	9	0	4		14	8	10	1	8	0	9	9	2	10				2
1	5	0	0		10	4	5	0	4	0	5	5	0					1
0	0	0	0		0	1	0		0	0				2	0			0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 20-34 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	79		79		80		70				75	77	75	78		19
18	74	77	75				66				71	73	71	74		18
17	70	73	71		71		62				69	68		70		17
16	66	68	67			56	58	57	63			64	63	67		16
15	61	64	63		61		54	53				59				15
14	57	59	59	63	57	49	50	49	54		56	56	55	59		14
13	53	55	54		52		46	45			53	51	51	55	57	13
12	49	50	50	56	48	41	41	42	45		48	47	47	54		12
11	44	46	46	53	43	37	37	38	41		45	44	43	48	50	11
10	40	41	42	49	38	33	33	34	36		40	39	39	44	47	10
9	36	36	38	46	34	29	29	30	32		37	36	34	35	40	9
8	32	32	34	42	29	25	25	26	27		32	30	31	37	39	8
7	27	27	30	39	25	21	21	23	23		29	28	26	27	33	7
6	23	23	26	35		17	17	19	18		25	22	23	29	32	6
5	19	18	22	32	16	13	12	15	14		21	21	18	19	26	5
4	14	14	18	28		9	8	11	9		17	13	15	22	25	4
3	10	9	14	25	6	5	4		5		13	9	11	18	22	3
2	6	5	10	21	2	1	0	4	0		9	5	6	14	18	2
1	2		6	18	0	0	0	0	0		5			11		1
0			15		0	0	0									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	88	100	100	77	76	81	79	77				81	81	19
18	88	84	99	99	72	72	77	74	73				77	78	18
17	83	80	94	94	68	68	72	70	68				74	74	17
16	79	76	89	89	64	64	68	66	64				70	71	16
15	75	72	84	84	60	60	64	62	60			58	67	67	15
14	71	68	79	79	55	56	60	58	55	56			63	64	14
13	67	64	74	74	51	52	56	53	51		54	52	60	60	13
12	62	60	69	69	47	48	52	49	46	49			56	57	12
11	58	56	64	64	43	44	48	45	42		46	45	53	53	11
10	54	52	59	59	38	40	44	41	38	41	42	42	49	50	10
9	50	47	54	54	34	36	39	37	33	37	38	39	46	46	9
8	46	43	48	49	30	32	35	32	29	33	34	35	42	43	8
7	42	39	43	44	26	28	31	28	25	30	30	32	39	39	7
6	37	35	38	39	21	24	27	24	20	26	26	29	35	35	6
5	33	31	33	34	17	20	23	20	16	22	22	26	32	32	5
4	29	27	28	29	13	16	19	15	11	18	18	22	28	28	4
3	25	23	23	24	8	12	15	11	7	15	14	19	25	25	3
2	21	19	18	19	4	8	11	7	3	11	10	16	21	21	2
1	16	15	13	14	0	4	6	3	0	7	7	12	18	18	1
0	12	11	8	9	0	0	0								0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 35-39 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	76		85	78	77	74	73	76	75							19
18	72	72	79	74	73	70	69	72	71	70						18
17	68	68	74	70	68	66	65	67			73					17
16	64	64	69	66	64	62	62	63	63		70					16
15	60	59	63	62	60	58	58	59	59	60	66	63	59	60		15
14	55	55	58	58	55	55	55	55	55	57	62		56			14
13	51	51	52	54	51	51	50		51	54	58	56		52		13
12	47	46	47	50	46	47	47	46	47		54	53	50	48		12
11	43	42	42	46	42	43	44	42	43	47	50	49		44		11
10	38	38	36	42	37	40	40	38	39	44	47	46	43	40		10
9	34	33	31	38	33	36	37	33		41	43	42	40	36		9
8	30	29	26	34	28	32	33	29	32	37	39	39	37	32		8
7	26	25	20	30	24	28	29	25	28		35	35	34	28		7
6	21	20	15	26	19	24	26	20	24	31	31	32	31	24		6
5	17	16	10	22	15	21	22	16	20	28	27	29	28	20		5
4	13	12	4	18	11	17	19	12	16		24	25	25	16		4
3	9	7	0	14	6	13	15	8	12	21	20	22	22	12		3
2	5	3	0	10	2	9	11	3	8		16	18	18	9		2
1	0	0	0	6	0	5	8	0		15	12	15	15	5		1
0	0	0	0	2				0		12	8	11	12			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score	
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	80		82		84		81		77								19	
18	76	72	78	76			77		73								18	
17	72	68	73	72	76		73		69	68				65	65		17	
16	68	63	69	68	72	68	68		65	63	62		61	61	58		16	
15	64	59	65	64	68	64	64		61	59			57	58			15	
14	60	55	60	60	64	60	60		56	54	54		54	54	50		14	
13	56	50	56	56	60	56	56		52	50	56	51		50	50	46		13
12	52	46	51	52	56	52	52		48	45			50	46	47	42		12
11	48	42	47	48	52	48	48	53	44	41	47	43		43	43	38		11
10	44	37	42	44	48	44	44		40	36	43	39		39	39	34		10
9	40	33	38	40	44	39	40	42	36	31	39	35	36	35	36	30		9
8	36	29	33	36	40	35	36		31	27	35	31		32	32	26		8
7	32	24	29	32	36	31	32	30	27	22	30	27	26	28	28	22		7
6	28	20	25	28	32	27	28		23	18	26	23		24	25	18		6
5	24	16	20	24	28	23	23	19	19	13	22	19	17	21	21	14		5
4	20	11	16	20	24	19	19		15	9	18	15		17	17	10		4
3	16	7	11		20	15	15	7	11	4	14	11	7	13	14			3
2	12	3	7		16	11	11	1	7	0	9	7	2	10				2
1	8	0	2		12	7	7	0	2	0	5	3	0					1
0	0	0	0		3	3	0		0	1				3	0	0		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 35-39 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	80		79		81		72			78	80	79	79		19	
18	76	79	75				67			74	76	74	75		18	
17	72	75	71		71		63			70	71		71		17	
16	68	70	67			58	59	58	64			67	66	68	16	
15	63	66	63		62		55	54			63				15	
14	59	61	59	63	58	50	51	50	55		59	59	58	60	14	
13	55	57	55		53		47	47		54		55	54	56	57	13
12	51	52	51	57	49	42	43	43	46		51	50	50		54	12
11	46	48	47	53	44	38	38	39	42	46	47	46	46	49	50	11
10	42	43	43	50	39	34	34	35	37		43	42	42	45	47	10
9	38	39	39	46	35	30	30	31	33	38	39	38	38	41	43	9
8	33	34	35	43	30	26	26	28	28		36	33	34	38	40	8
7	29	30	31	39	26	22	22	24	24	30	32	29	30	34	36	7
6	25	25	27	36		18	18	20	19		26	25	26	30	33	6
5	21	21	23	32	16	14	14	16	15	22	24	21	22	26	29	5
4	16	16	19	29		10	10	13	10		18	16	18	23	26	4
3	12	11	15	25	7	6	5		6		14	12	14	19	22	3
2	8	7	11	22	3	2	1	5	1		10	8	10	15	19	2
1	4		7	18	0	0	0	1	0	6				12		1
0				15		0	0	0							0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	89	100	100	79	79	82	81	80				81	82	19
18	88	85	99	98	75	75	78	77	75				78	78	18
17	84	81	93	93	71	71	74	73	71				74	75	17
16	80	77	88	88	67	67	70	68	67				71	71	16
15	76	72	83	83	62	63	65	64	62		59	67	68	15	
14	72	68	78	78	58	59	61	60	58	57		63	64		14
13	67	64	73	73	54	55	57	56	53		56	53	60	60	13
12	63	60	68	68	50	51	53	52	49	49		56	57		12
11	59	56	63	63	45	47	49	47	45		48	46	53	53	11
10	55	52	58	58	41	43	45	43	40	42	44	43	49	50	10
9	51	48	53	53	37	39	41	39	36	38	40	40	46	46	9
8	47	44	48	48	33	35	37	35	32	34	36	36	42	43	8
7	42	40	42	43	28	31	32	30	27	30	32	33	39	39	7
6	38	36	37	38	24	27	28	26	23	27	28	30	35	36	6
5	34	32	32	33	20	23	24	22	18	23	24	26	32	32	5
4	30	28	27	28	16	19	20	18	14	19	20	23	28	29	4
3	26	24	22	23	11	15	16	14	10	15	16	20	25	25	3
2	21	19	17	18	7	11	12	9	5	11	12	17	21	22	2
1	17	15	12	14	3	7	8	5	1	8	8	13	18	18	1
0	13	11	7	9	0	3		1							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 40-44 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	76		87	80	79	74	73	77	75							19
18	72	71	81	76	74	71	70	73	71	70						18
17	68	67	76	72	70	67	66	69			74					17
16	64	63	71	68	65	63	62	65	63		70					16
15	60	58	65	64	61	59	59	60	59	60	67	64	60	60		15
14	55	54	60	60	56	56	55	56	55	57	63		56			14
13	51	50	55	56	52	52	52	52	51	54	59	57		52		13
12	47	45	49	52	48	48	48	48	47		55	53	50	49		12
11	43	41	44	48	43	44	44	43	43	48	51	50		45		11
10	38	37	39	44	39	40	41	39	39	44	47	46	44	41		10
9	34	32	33	40	34	37	37	35		41	44	43	41	37		9
8	30	28	28	36	30	33	34	30	32	38	40	40	38	33		8
7	26	24	23	32	25	29	30	26	28		36	36	35	29		7
6	21	19	17	28	21	25	26	22	24	31	32	33	31	25		6
5	17	15	12	24	16	21	23	18	20	28	28	29	28	21		5
4	13	11	6	20	12	18	19	13	16		24	26	25	17		4
3	9	6	1	16	8	14	16	9	12	22	21	22	22	13		3
2	5	2	0	12	3	10	12	5	8		17	19	19	9		2
1	0	0	0	8	0	6	9	1	15	13	15	16	5			1
0	0	0	0	4				0	12	9	12	13				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score	
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	80		84		84		82		77								19	
18	76	74	80	77			78		73								18	
17	72	70	75	73	76		74		69	68				65	65		17	
16	68	66	71	69	72	69	70		65	63	61		61	62	58		16	
15	64	61	66	65	68	65	66		61	59			57	58			15	
14	60	57	62	61	64	61	61		56	54	54		54	54	50		14	
13	56	53	57	57	60	57	57		52	50	56	50		50	51	46		13
12	52	48	53	53	56	53	53		48	45			50	46	47	42		12
11	48	44	48	49	52	49	49	54	44	41	47	42		43	43	38		11
10	44	40	44	45	48	45	45		40	36	43	38		39	40	34		10
9	40	35	40	41	44	41	41	42	36	31	39	34	36	35	36	30		9
8	36	31	35	37	40	37	37		31	27	35	30		31	32	26		8
7	32	27	31	33	36	33	33	31	27	22	31	26	26	28	29	22		7
6	28	22	26	28	32	28	29		23	18	26	22		24	25	18		6
5	24	18	22	24	28	24	25	19	19	13	22	18	17	20	21	14		5
4	20	14	17	20	24	20	21		15	9	18	14		17	18	10		4
3	16	9	13		20	16	16	8	11	4	14	10	7	13	14			3
2	12	5	8		16	12	12	2	7	0	10	6	3	9				2
1	8	1	4		12	8	8	0	2	0	5	2	0					1
0	0	0	0		4	4	4	0	0	1				3	0	0		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 40-44 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	81		80		81		72				79	82	80	79		19	
18	77	80	76				68				75	77	76	75		18	
17	73	76	72		72		64				71	73		72		17	
16	69	71	68				58	60	59	65			69	68	68	16	
15	64	67	64		63		56	55				63				15	
14	60	62	60	64	58	51	52	51	56		59	60	60	61		14	
13	56	58	56		54		48	47			55		56	56	57	13	
12	51	53	52	57	49	43	44	44	47		52	52	52		54	12	
11	47	49	48	53	45	39	39	40	43		47	48	48	49	50	11	
10	43	44	43	50	40	35	35	36	38		44	43	44	46	47	10	
9	39	40	39	46	35	31	31	32	34		39	40	39	40	42	9	
8	34	35	35	43	31	27	27	28	29		36	35	36	38	40	8	
7	30	31	31	39	26	23	23	25	25		31	32	31	32	34	7	
6	26	26	27	36		19	19	21	20		27	26	28	31	33	6	
5	22	22	23	32	17	15	15	17	16		23	25	22	23	27	5	
4	17	17	19	29		11	11	13	11			19	18	19	23	26	4
3	13	13	15	25	8	7	6		7			15	14	15	20	22	3
2	9	8	11	22	3	3	2	6	2			11	9	11	16	19	2
1	4		7	18	0	0	0	2	0		7				12	1	
0				15		0	0	0								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	90	100	100	81	81	83	83	81				81	82	19
18	89	86	99	99	77	77	79	78	77				78	78	18
17	85	82	94	94	73	73	75	74	73				74	75	17
16	81	78	89	89	68	69	70	70	68				71	71	16
15	76	74	84	84	64	65	66	66	64			60	67	68	15
14	72	70	79	79	60	61	62	61	59	57			64	64	14
13	68	66	74	74	56	57	58	57	55		57	53	60	61	13
12	64	61	69	69	51	53	54	53	51	50			57	57	12
11	60	57	64	64	47	49	50	49	46		49	47	53	54	11
10	55	53	59	59	43	45	46	45	42	42	45	43	50	50	10
9	51	49	54	54	39	41	42	40	38	39	41	40	46	46	9
8	47	45	48	49	34	37	37	36	33	35	37	37	42	43	8
7	43	41	43	44	30	33	33	32	29	31	33	34	39	39	7
6	39	37	38	39	26	29	29	28	24	27	29	30	35	36	6
5	35	33	33	34	22	25	25	23	20	23	25	27	32	32	5
4	30	29	28	29	17	21	21	19	16	20	21	24	28	29	4
3	26	25	23	24	13	17	17	15	11	16	17	20	25	25	3
2	22	21	18	20	9	13	13	11	7	12	13	17	21	22	2
1	18	17	13	15	5	9	9	7	2	8	9	14	18	18	1
0	14	13	8	10	0	5		2							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 45-49 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	75	89		82	80	75	74	79	75						19
18	71	70	84	78	76	72	70	75	71	71				73	18
17	66	66	79	74	71	68	67	70			75				17
16	62	61	73	70	67	64	63	66	63		71				16
15	58	57	68	66	63	60	59	62	59	61	67	64	60	61	15
14	54	53	63	62	58	56	56	57	55	58	64		57		14
13	49	48	57	58	54	53	52	53	51	54	60	58		53	13
12	45	44	52	54	49	49	49	49	47		56	54	51	50	12
11	41	40	46	50	45	45	45	45	43	48	52	51		46	11
10	37	36	41	46	40	41	41	40	39	45	48	47	45	42	10
9	33	31	36	42	36	37	38	36		42	44	44	41	38	9
8	28	27	30	38	31	34	34	32	32	38	41	40	38	34	8
7	24	23	25	34	27	30	31	28	28		37	37	35	30	7
6	20	18	20	30	22	26	27	23	24	32	33	33	32	26	6
5	16	14	14	26	18	22	24	19	20	29	29	30	29	22	5
4	11	10	9	22	14	18	20	15	16		25	27	26	18	4
3	7	5	4	18	9	15	16	10	12	22	21	23	23	14	3
2	3	1	0	14	5	11	13	6	8		18	20	20	10	2
1	0	0	0	10	0	7	9	2	16	14	16	17	6		1
0	0	0		6				0	12	10	13	13			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	83	86			86		83		76							19	
18	79	77	81	78			79		72							18	
17	75	72	77	74	78		75		68	68				64	66	17	
16	71	68	72	70	74	71	71		63	63	62			61	62	58	16
15	67	64	68	66	70	67	67		59	59				57	58		15
14	63	59	63	62	66	62	63		55	54	54			53	55	50	14
13	59	55	59	58	62	58	59		51	50	56	50		50	51	46	13
12	55	51	55	54	58	54	55		47	45			50	46	47	42	12
11	51	46	50	50	54	50	51	54	43	41	48	43		42	44	38	11
10	47	42	46	46	50	46	47		38	36	43	39		39	40	34	10
9	43	38	41	42	46	42	43	42	34	31	39	35	36	35	36	30	9
8	39	33	37	38	42	38	38		30	27	35	31		31	33	26	8
7	35	29	32	34	38	34	34	31	26	22	31	27	27	28	29	22	7
6	31	25	28	29	34	30	30		22	18	27	23		24	25	18	6
5	27	20	23	25	30	26	26	19	18	13	22	19	17	20	22	14	5
4	23	16	19	21	26	21	22		13	9	18	15		16	18	10	4
3	19	12	15		22	17	18	8	9	4	14	11	7	13	14		3
2	15	7	10		18	13	14	2	5	0	10	7	3	9			2
1	11	3	6		14	9	10	0	1	0	6	3	0				1
0	0	0			5	6	0		0	1				3	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 45-49 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	82		80		82		74				80	83	82	80		19
18	78	81	76				70				77	79	78	76		18
17	74	77	72		73		65				72	75		72		17
16	70	72	68			60	61	60	66			70	70	69		16
15	65	68	64		64		57	56				65				15
14	61	63	60	64	59	52	53	52	57		61	62	62	61		14
13	57	59	56		55		49	48			56	58	57	57	58	13
12	52	54	52	57	50	44	45	45	48		53	53	53		54	12
11	48	50	48	53	46	40	41	41	44		48	49	49	50	50	11
10	44	45	44	50	41	36	36	37	39		46	45	45	46	47	10
9	40	41	40	46	36	32	32	33	35		40	42	41	41	42	9
8	35	36	36	43	32	28	28	30	30		38	36	37	39	40	8
7	31	32	32	39	27	24	24	26	26		32	34	32	33	35	7
6	27	27	28	36		20	20	22	21		28	28	29	31	33	6
5	22	23	24	33	18	16	16	18	17		24	26	24	25	27	5
4	18	18	20	29		12	12	14	12		20	19	21	24	26	4
3	14	14	16	26	9	8	8		8		16	15	17	20	22	3
2	10	9	12	22	4	4	3	7	3		12	11	13	16	19	2
1	5		7	19	0	0	0	3	0		8			13		1
0				15		0	0	0								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	91	100	100	83	82	84	84	83				81	82	19
18	90	87	100	100	79	78	80	80	79				78	78	18
17	85	83	96	96	75	74	76	76	74				74	75	17
16	81	79	91	91	71	70	72	72	70				71	71	16
15	77	75	86	86	66	66	67	67	66			61	67	68	15
14	73	71	80	81	62	62	63	63	61	58			64	64	14
13	69	67	75	76	58	58	59	59	57		58	54	60	61	13
12	65	63	70	71	54	54	55	55	53	51		50	57	57	12
11	60	59	65	66	49	50	51	50	48		50	48	53	54	11
10	56	55	60	61	45	46	47	46	44	43	46	44	50	50	10
9	52	51	55	56	41	42	43	42	39	39	42	41	46	47	9
8	48	47	50	51	36	38	39	38	35	35	38	38	43	43	8
7	44	42	45	46	32	34	34	34	31	32	34	34	39	40	7
6	40	38	40	41	28	30	30	29	26	28	30	31	36	36	6
5	35	34	35	36	24	26	26	25	22	24	26	28	32	32	5
4	31	30	29	31	19	22	22	21	17	20	22	25	29	29	4
3	27	26	24	26	15	18	18	17	13	17	18	21	25	25	3
2	23	22	19	21	11	14	14	12	9	13	14	18	22	22	2
1	19	18	14	16	7	10	10	8	4	9	10	15	18	18	1
0	14	14	9	11	2	6		4							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 50-54 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	75	92		84	82	76	74	80	75						19
18	71	69	87	80	78	72	71	76	71	71				74	18
17	66	65	81	76	73	69	67	72			76				17
16	62	60	76	72	69	65	64	67	63		72				16
15	58	56	71	68	64	61	60	63	59	61	68	65	61	62	15
14	54	52	65	64	60	57	56	59	55	58	65		58		14
13	49	47	60	60	55	53	53	55	51	55	61	58		55	13
12	45	43	55	56	51	50	49	50	47		57	55	51	51	12
11	41	39	49	51	46	46	46	46	43	49	53	51		47	11
10	37	34	44	47	42	42	42	42	39	45	49	48	45	43	10
9	33	30	38	43	38	38	39	38	42	45	44	42		39	9
8	28	26	33	39	33	34	35	33	32	39	42	41	39	35	8
7	24	21	28	35	29	31	31	29	28		38	38	36	31	7
6	20	17	22	31	24	27	28	25	24	32	34	34	33	27	6
5	16	13	17	27	20	23	24	20	20	29	30	31	30	23	5
4	11	9	12	23	15	19	21	16	16		26	27	26	19	4
3	7	4	6	19	11	15	17	12	12	23	22	24	23	15	3
2	3	0	1	15	6	12	13	8	8		19	20	20	11	2
1	0	0	0	11	2	8	10	3	16	15	17	17	7		1
0	0	0		7				0	13	11	13	14			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	83		87		86		85		76								19
18	79	79	83	79			81		72								18
17	75	75	78	75	78		77		68	68				64	66		17
16	71	70	74	71	74	72	73		63	63		63		60	62	58	16
15	67	66	70	67	70	68	69		59	59				56	59		15
14	63	62	65	63	66	64	65		55	54		55		53	55	50	14
13	59	57	61	59	62	60	61		51	50	56	52		49	51	46	13
12	55	53	56	55	58	55	57		47	45			51	45	48	42	12
11	51	49	52	51	54	51	53	54	43	41	48	44		42	44	38	11
10	47	44	47	47	50	47	49		38	36	44	40		38	40	34	10
9	43	40	43	43	46	43	44	43	34	31	39	36	36	34	37	30	9
8	39	36	38	39	42	39	40		30	27	35	32		31	33	26	8
7	35	31	34	35	38	35	36	31	26	22	31	28	27	27	29	22	7
6	31	27	30	31	34	31	32		22	18	27	24		23	26	18	6
5	27	22	25	27	30	27	28	20	18	13	23	20	17	20	22	14	5
4	23	18	21	23	26	23	24		13	9	18	16		16	18	10	4
3	19	14	16		22	19	20	8	9	4	14	12	7	12	15		3
2	15	9	12		18	14	16	3	5	0	10	8	3	9			2
1	11	5	7		14	10	12	0	1	0	6	4	0				1
0	1				6	8	0		0	2				4	0	0	0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 50-54 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	83		81		83		75				82	85	83	80		19
18	79	83	77				71				78	80	79	76		18
17	75	78	73		74		67				73	76		73		17
16	70	73	69				61	63	61	67		72	71	69		16
15	66	69	64		65		59	57			67					15
14	62	64	60	64	60	53	54	54	58		63	63	63	62		14
13	58	60	56		56		50	50			57	59	59	58	58	13
12	53	55	52	57	51	45	46	46	49		55	55	55	54	54	12
11	49	51	48	54	47	41	42	42	45		49	51	51	50	51	11
10	45	46	44	50	42	37	38	38	40		47	46	47	47	47	10
9	41	42	40	47	37	33	34	35	36		41	43	42	43	44	9
8	36	37	36	43	33	29	30	31	31		39	38	39	39	40	8
7	32	33	32	40	28	25	26	27	27		33	35	34	35	36	7
6	28	28	28	36		21	21	23	22		29	30	31	32	33	6
5	23	24	24	33	19	17	17	20	18		25	28	25	28	29	5
4	19	19	20	29		13	13	16	13		21	21	23	24	26	4
3	15	15	16	26	10	9	9		9		17	17	19	21	22	3
2	11	10	12	22	5	6	5	8	5		13	13	15	17	19	2
1	6		8	19	1	2	1	4	0		9			13		1
0				15		0	0	1								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	93	100	100	86	85	85	86	85				81	82	19
18	91	89	100	100	81	81	81	82	81				78	78	18
17	86	85	97	97	77	77	77	78	76				74	75	17
16	82	81	92	92	73	73	73	73	72				71	71	16
15	78	77	87	87	69	69	69	69	68				62	67	15
14	74	72	82	83	64	65	65	65	63	59			64	64	14
13	70	68	77	78	60	61	61	61	59		59	55	60	61	13
12	66	64	72	73	56	57	57	56	55	52			57	57	12
11	61	60	67	68	51	53	52	52	50		51	49	53	54	11
10	57	56	62	63	47	49	48	48	46	44	47	45	50	50	10
9	53	52	57	58	43	45	44	44	41	40	43	42	46	47	9
8	49	48	52	53	39	41	40	40	37	36	39	39	43	43	8
7	45	44	46	48	34	37	36	35	33	33	35	35	39	40	7
6	40	40	41	43	30	33	32	31	28	29	31	32	36	36	6
5	36	36	36	38	26	29	28	27	24	25	27	29	32	33	5
4	32	32	31	33	22	25	24	23	19	21	23	26	29	29	4
3	28	28	26	28	17	21	19	19	15	17	19	22	25	26	3
2	24	24	21	23	13	17	15	14	11	14	15	19	22	22	2
1	20	19	16	18	9	13	11	10	6	10	11	16	18	18	1
0	15	15	11	13	5	9		6							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 55-59 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	73		95	85	84	77	75	82	77						19	
18	69	68	90	81	80	73	71	77	74	72				76	18	
17	65	64	84	77	75	69	68	73			77				17	
16	61	59	79	73	71	66	64	69	66		73				16	
15	56	55	74	69	66	62	61	65	62	62	69	66	61	64	15	
14	52	51	68	65	62	58	57	60	58	59	65		58		14	
13	48	46	63	61	57	54	54	56	54	55	62	59		56	13	
12	44	42	58	57	53	50	50	52	50		58	55	52	52	12	
11	39	38	52	53	48	47	46	47	46	49	54	52		48	11	
10	35	33	47	49	44	43	43	43	42	46	50	49	46	44	10	
9	31	29	41	45	39	39	39	39	43	46	45	43	40		9	
8	27	25	36	41	35	35	36	35	34	39	42	42	39	36	8	
7	22	20	31	37	31	31	32	30	31		39	38	36	32	7	
6	18	16	25	33	26	28	28	26	27	33	35	35	33	28	6	
5	14	12	20	29	22	24	25	22	23	30	31	31	30	25	5	
4	10	7	15	25	17	20	21	18	19		27	28	27	21	4	
3	6	3	9	21	13	16	18	13	15	23	23	24	24	17	3	
2	1	0	4	17	8	12	14	9	11		19	21	21	13	2	
1	0	0	0	13	4	9	10	5		17	16	18	18	9	1	
0				9				0		13	12	14	15		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	90		89		90		88		75								19
18	86	85	84	81			84		70								18
17	82	80	80	77	82		79		66	68				63	66		17
16	78	76	76	73	78	77	75		62	63	65		60	63	58		16
15	74	71	71	69	74	73	71		58	59			56	59			15
14	70	67	67	65	70	69	67		54	54	57		52	55	50		14
13	66	63	62	61	66	65	63		50	50	53		49	52	46		13
12	62	58	58	57	62	60	59		45	45		51	45	48	42		12
11	58	54	53	53	58	56	55	55	41	41	48	45		41	44	38	11
10	54	50	49	49	54	52	51		37	36	44	41		38	41	34	10
9	50	45	45	45	50	48	47	43	33	31	40	37	36	34	37	30	9
8	46	41	40	40	46	44	43		29	27	35	33		30	33	26	8
7	42	37	36	36	43	40	39	32	25	22	31	29	27	27	30	22	7
6	38	32	31	32	39	36	34		20	18	27	25		23	26	18	6
5	34	28	27	28	35	32	30	20	16	13	23	21	17	19	22	14	5
4	30	24	22	24	31	28	26		12	9	19	18		16	19	10	4
3	26	19	18		27	24	22	9	8	4	14	14	7	12	15		3
2	22	15	13		23	19	18	3	4	0	10	10	3	8			2
1	18	11	9		19	15	14	0	0	0	6	6	0				1
0		6			11	10	0		0	2				4	0		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 55-59 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	84		81		85		77			84	86	85	81		19	
18	80	84	77				73			80	82	81	77		18	
17	76	79	73		75		69			75		78		73		17
16	71	75	69			63	65	63	69			73	73	70		16
15	67	70	65		66		60	59			68					15
14	63	65	61	64	62	55	56	55	60		64	65	65	62		14
13	59	61	57		57		52	51		59		61	61	58	58	13
12	54	56	53	57	53	47	48	48	51		57	57	57	54		12
11	50	52	49	54	48	43	44	44	46	51	53	52	53	51	51	11
10	46	47	45	50	43	39	40	40	42		49	48	49	47	47	10
9	41	43	41	47	39	35	36	36	37	43	45	44	45	43	44	9
8	37	38	37	43	34	31	31	33	33		41	40	40	40	40	8
7	33	34	33	40	30	27	27	29	28	35	37	35	36	36	37	7
6	29	29	28	36		23	23	25	24		31	31	32	32	33	6
5	24	25	24	33	20	19	19	21	20	27	29	27	28	28	30	5
4	20	20	20	29		15	15	17	15	23		23	24	25	26	4
3	16	16	16	26	11	11	11		11		19	18	20	21	22	3
2	12	11	12	22	7	7	7	10	6	15		14	16	17	19	2
1	7		8	19	2	3	3	6	2	11			14		1	
0				15	0	0	2									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	96	94	100	100	88	87	87	88	87				81	82	19
18	92	90	100	100	84	83	83	84	83				78	79	18
17	88	86	99	100	79	79	79	80	79				74	75	17
16	83	82	94	95	75	75	75	75	74				71	72	16
15	79	78	89	90	71	71	71	71	70		63	67	68		15
14	75	74	84	85	67	67	66	67	65	60		64	64		14
13	71	70	79	80	62	63	62	63	61	60	56	60	61		13
12	67	66	74	75	58	59	58	59	57	53	52	50	57		12
11	62	62	69	70	54	55	54	54	52	50	53	54			11
10	58	58	64	65	50	51	50	50	48	45	48	47	50	50	10
9	54	53	59	60	45	47	46	46	44	41	44	43	46	47	9
8	50	49	54	55	41	43	42	42	39	37	40	40	43	43	8
7	46	45	48	50	37	39	38	37	35	34	36	37	39	40	7
6	42	41	43	45	33	35	34	33	30	30	32	33	36	36	6
5	37	37	38	40	28	31	29	29	26	26	28	30	32	33	5
4	33	33	33	35	24	27	25	25	22	22	24	27	29	29	4
3	29	29	28	30	20	23	21	21	17	19	20	24	25	26	3
2	25	25	23	25	16	19	17	16	13	15	16	20	22		2
1	21	21	18	20	11	15	13	12	9	11	12	17	18	19	1
0	16	17	13	15	7	11		8							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 60-64 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	73	99		88	87	78	76	83	77						19	
18	69	67	94	84	83	74	72	79	74	72				77	18	
17	65	62	89	80	78	70	69	75			78				17	
16	61	58	83	76	74	66	65	70	66		74				16	
15	56	54	78	72	69	63	61	66	62	62	70	67	62	66	15	
14	52	50	73	68	65	59	58	62	58	59	66	59	59		14	
13	48	45	67	64	60	55	54	57	54	56	63	60		58	13	
12	44	41	62	60	56	51	51	53	50		59	56	53	54	12	
11	39	37	57	56	51	47	47	49	46	50	55	53		50	11	
10	35	32	51	52	47	44	43	45	42	46	51	49	46	46	10	
9	31	28	46	48	43	40	40	40	43	47	46	43	42		9	
8	27	24	40	44	38	36	36	36	34	40	43	42	40	38	8	
7	22	19	35	40	34	32	33	32	31		40	39	37	34	7	
6	18	15	30	36	29	28	29	28	27	33	36	36	34	30	6	
5	14	11	24	32	25	25	25	23	23	30	32	32	31	26	5	
4	10	6	19	28	20	21	22	19	19		28	29	28	22	4	
3	6	2	14	24	16	17	18	15	15	24	24	25	24	18	3	
2	1	0	8	20	11	13	15	10	11		20	22	21	14	2	
1	0	0	3	16	7	10	11	6	17	16	18	18	11		1	
0	0	0		12				2	14	13	15	15			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	90		92		90		90		75								19
18	86	87	87	83			86		70								18
17	82	82	83	79	82		82		66	68				63	67		17
16	78	78	78	75	78	78	78		62	63	67		59	63	58		16
15	74	74	74	71	74	74	74		58	59			55	59			15
14	70	69	69	67	70	70	70		54	54	59		52	56	50		14
13	66	65	65	63	66	66	66		50	50	57	55		48	52	46	13
12	62	61	60	59	62	62	62		45	45			51	44	48	42	12
11	58	56	56	54	58	58	58	55	41	41	48	47		41	45	38	11
10	54	52	52	50	54	53	54		37	36	44	43		37	41	34	10
9	50	48	47	46	50	49	49	44	33	31	40	39	36	33	37	30	9
8	46	43	43	42	46	45	45		29	27	36	35		30	34	26	8
7	42	39	38	38	43	41	41	32	25	22	31	31	27	26	30	22	7
6	38	35	34	34	39	37	37		20	18	27	27		22	26	18	6
5	34	30	29	30	35	33	33	21	16	13	23	23	17	19	23	14	5
4	30	26	25	26	31	29	29		12	9	19	19		15	19	10	4
3	26	22	20		27	25	25	9	8	4	15	15	8	11	15		3
2	22	17	16		23	21	21	3	4	0	10	11	3	8			2
1	18	13	12		19	17	17	0	0	0	6	8	0				1
0	9				12	13	0		0	2				4	0		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 60-64 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	85		81		86		79			86	88	87	81		19	
18	81	85	77				75			82	83	83	77		18	
17	77	80	73		77		71			76	79		74		17	
16	72	76	69			65	67	65	71		75	74	70		16	
15	68	71	65		68		63	61			71				15	
14	64	67	61	64	63	57	58	57	62		67	67	66	63	14	
13	60	62	57		59		54	53		61		62	62	59	58	13
12	55	58	53	57	54	49	50	50	53		59	58	58	54	12	
11	51	53	49	54	50	45	46	46	48	53	55	54	54	51	11	
10	47	48	45	50	45	41	42	42	44		51	50	50	48	47	10
9	42	44	41	47	40	37	38	38	39	45	47	45	46	44	44	9
8	38	39	37	43	36	33	34	35	35		44	41	42	40	40	8
7	34	35	33	40	31	29	29	31	30	37	40	37	38	36	37	7
6	30	30	29	36		25	25	27	26		33	33	34	33	33	6
5	25	26	25	33	22	21	21	23	21	29	32	28	30	29	30	5
4	21	21	21	30		17	17	19	17		25		24	26	25	4
3	17	17	17	26	13	13	13		12		21		20	22	23	3
2	13	12	13	23	8	9	9	12	8		17		16	18	19	2
1	8		9	19	4	5	5	8	3		13			14		1
0				16		1	1	4								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	97	96	100	100	91	89	89	90	90				81	82	19
18	93	91	100	100	86	85	85	86	85				78	79	18
17	89	87	100	100	82	81	81	82	81				74	75	17
16	85	83	96	97	78	77	77	78	77				71	72	16
15	81	79	91	92	74	73	73	73	72		65	67	68	68	15
14	76	75	86	87	69	69	69	69	68	61			64	65	14
13	72	71	81	82	65	65	64	65	64	61	58	60	61	61	13
12	68	67	76	77	61	61	60	61	59	54	53	57	58	58	12
11	64	63	71	72	57	57	56	56	55	53	51	53	54	54	11
10	60	59	66	67	52	53	52	52	50	46	49	48	50	50	10
9	55	55	61	62	48	49	48	48	46	43	45	45	46	47	9
8	51	51	56	57	44	45	44	44	42	39	41	42	43	43	8
7	47	47	51	52	40	41	40	40	37	35	37	38	39	40	7
6	43	42	45	47	35	37	36	35	33	31	33	35	36	36	6
5	39	38	40	42	31	33	31	31	28	27	29	32	32	33	5
4	35	34	35	37	27	29	27	27	24	24	25	28	29	29	4
3	30	30	30	32	23	25	23	23	20	20	21	25	25	26	3
2	26	26	25	27	18	21	19	19	15	16	17	22	22	22	2
1	22	22	20	22	14	17	15	14	11	12	13	19	18	19	1
0	18	18	15	17	10	13		10							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 65-69 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	72	100	90	89	79	76	84	77							19	
18	67	98	86	85	75	73	80	74	73					79	18	
17	63	92	82	80	71	69	76			79					17	
16	59	87	78	76	67	66	72	66		75					16	
15	55	82	74	72	63	62	67	62	63	71	67	62	67		15	
14	50	76	70	67	60	58	63	58	60	67		59			14	
13	46	71	66	63	56	55	59	54	56	63	60			60	13	
12	42	65	62	58	52	51	55	50		60	57	53	56		12	
11	38	60	58	54	48	48	50	46	50	56	53		52		11	
10	33	55	54	49	44	44	46	42	47	52	50	47	48		10	
9	29	49	50	45	41	40	42		44	48	47	44	44		9	
8	25	44	46	40	37	37	37	34	40	44	43	41	40		8	
7	21	39	42	36	33	33	33	31		40	40	38	36		7	
6	17	33	38	31	29	30	29	27	34	37	36	34	32		6	
5	12	28	34	27	26	26	25	23	31	33	33	31	28		5	
4	8	23	30	23	22	22	20	19		29	29	28	24		4	
3	4	17	25	18	18	19	16	15	24	25	26	25	20		3	
2	0	12	21	14	14	15	12	11		21	22	22	16		2	
1	0	7	17	9	10	12	8		18	17	19	19	12		1	
0	0	1	13				3		14	14	16	16			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score	
19	93	93			92		94		73								19	
18	89	89	89	85			89		69								18	
17	85	85	84	81	84		85		65	68				62	67		17	
16	81	80	80	77	80	79	81		61	63	69		58	63	58		16	
15	77	76	75	73	76	75	77		57	59			55	60			15	
14	73	72	71	69	72	71	73		52	54	61		51	56	50		14	
13	69	67	67	65	68	67	69		48	50	57	57		47	52	46		13
12	65	63	62	61	64	63	65		44	45			51	44	49	42		12
11	61	59	58	57	60	59	61	55	40	41	49	49		40	45	38		11
10	57	54	53	53	56	55	57		36	36	44	45		36	41	34		10
9	53	50	49	49	52	51	53	44	32	31	40	41	36	33	38	30		9
8	49	46	44	44	48	46	49		27	27	36	37		29	34	26		8
7	45	41	40	40	44	42	44	32	23	22	32	33	27	25	30	22		7
6	41	37	35	36	40	38	40		19	18	27	29		22	27	18		6
5	37	33	31	32	36	34	36	21	15	13	23	25	17	18	23	14		5
4	33	28	27	28	32	30	32		11	9	19	21		14	19	10		4
3	29	24	22		29	26	28	9	7	4	15	17	8	11	16			3
2	25	20	18		25	22	24	4	3	0	11	13	3	7				2
1	22	15	13		21	18	20	0	0	0	6	10	0					1
0	11				14	16	0		0	2				5	0			0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 65-69 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	86		82		88		82			88	89	88	82		19	
18	82	86	78				77			84	85	84	78		18	
17	78	81	74		79		73			79		81		74		17
16	73	77	70			67	69	67	73			77	76	71		16
15	69	72	66		70		65	63			72					15
14	65	68	62	64	65	59	61	59	64		69	68	68	63		14
13	60	63	58		61		57	56		63		64	64	59	58	13
12	56	59	53	57	56	51	53	52	55		61	60	60	54		12
11	52	54	49	54	51	47	49	48	50	55	57	55	56	52	51	11
10	48	50	45	50	47	43	44	44	46		53	51	52	48	47	10
9	43	45	41	47	42	39	40	41	42	47	49	47	48	44	44	9
8	39	40	37	44	38	35	36	37	37		45	43	44	41	40	8
7	35	36	33	40	33	31	32	33	33	39	41	38	40	37	37	7
6	31	31	29	37		27	28	29	28		35	34	36	33	33	6
5	26	27	25	33	24	23	24	25	24	31	34	30	32	29	30	5
4	22	22	21	30		19	20	22	19		27		26	28	26	4
3	18	18	17	26	15	15	15		15		23		21	23	22	3
2	13	13	13	23	10	11	11	14	10		19		17	19	18	2
1	9		9	19	6	8	7	10	6		15			15		1
0				16		4	3	7								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	99	97	100	100	94	92	92	93	92				81	82	19
18	95	93	100	100	89	88	87	88	88				78	79	18
17	91	89	100	100	85	84	83	84	84				74	75	17
16	86	85	99	99	81	80	79	80	79				71	72	16
15	82	80	94	94	77	76	75	76	75				66	67	15
14	78	76	89	89	72	72	71	72	71	63			64	65	14
13	74	72	83	84	68	68	67	67	66				62	60	13
12	70	68	78	79	64	64	63	63	62	55			57	58	12
11	65	64	73	74	60	60	59	59	57				54	53	11
10	61	60	68	69	55	56	54	55	53	48	50	50	50	51	10
9	57	56	63	64	51	52	50	50	49	44	46	47	46	47	9
8	53	52	58	59	47	48	46	46	44	40	42	43	43	44	8
7	49	48	53	54	43	44	42	42	40	36	38	40	39	40	7
6	45	44	48	49	38	40	38	38	35	33	34	37	36	36	6
5	40	40	43	44	34	36	34	34	31	29	30	33	32	33	5
4	36	36	38	40	30	32	30	29	27	25	26	30	29	29	4
3	32	31	32	35	26	28	26	25	22	21	22	27	25	26	3
2	28	27	27	30	21	24	22	21	18	18	18	24	22	22	2
1	24	23	22	25	17	20	17	17	14	14	14	20	18	19	1
0	19	19	17	20	13	16		12							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 70-74 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	70	100	91	92	79	77	86	77	74	73	80	82	19	18	17	
18	66	65	100	87	87	76	73	82	74	73						16
17	61	60	96	83	83	72	70	77			80					15
16	57	56	91	79	78	68	66	73	66		76					14
15	53	52	85	75	74	64	63	69	62	63	72	68	63	70		13
14	49	47	80	71	70	60	59	65	58	60	68	60				12
13	45	43	75	67	65	57	55	60	54	57	64	61				11
12	40	39	69	63	61	53	52	56	50		60	58	54	58		10
11	36	34	64	59	56	49	48	52	46	50	57	54				9
10	32	30	59	55	52	45	45	47	42	47	53	51	47	50		8
9	28	26	53	51	47	42	41	43	44	49	47	44	46			7
8	23	21	48	47	43	38	37	39	34	41	45	44	41	42		6
7	19	17	43	43	38	34	34	35	31		41	40	38	38		5
6	15	13	37	39	34	30	30	30	27	34	37	35	34			4
5	11	8	32	35	29	26	27	26	23	31	34	32	30			3
4	6	4	26	31	25	23	23	22	19		30	30	29	27		2
3	2	0	21	27	21	19	19	18	15	25	26	27	26	23		1
2	0	0	16	23	16	15	16	13	11		22	23	23	19		0
1	0	0	10	19	12	11	12	9		18	18	20	19	15		0
0	0	5	15					5	15	14	16	16				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	96	95	88	94		97			72								19	
18	92	91	90	88		93			68								18	
17	88	87	86	84	86	89			64	68			61	67			17	
16	84	83	82	79	82	81	85		59	63	71		58	64	57		16	
15	80	78	77	75	78	76	81		55	59			54	60			15	
14	76	74	73	71	74	72	77		51	54	63		50	56	49		14	
13	72	70	68	67	70	68	73		47	50	57	59		47	53	46	13	
12	68	65	64	63	66	64	69		43	45			51	43	49	42	12	
11	64	61	59	59	62	60	65	56	39	41	49	51		39	45	38	11	
10	60	57	55	55	58	56	61		34	36	45	47		36	42	34	10	
9	56	52	50	51	54	52	56	44	30	31	40	43	36	32	38	30	9	
8	52	48	46	47	50	48	52		26	27	36	39		28	34	26	8	
7	48	44	42	43	46	44	48	33	22	22	32	35	27	25	31	22	7	
6	44	39	37	39	42	39	44		18	18	28	31		21	27	18	6	
5	41	35	33	35	38	35	40	21	14	13	23	27	17	17	23	14	5	
4	37	31	28	31	34	31	36		10	9	19	24		14	20	10	4	
3	33	26	24		30	27	32	10	5	4	15	20	8	10	16		3	
2	29	22	19		26	23	28	4	1	0	11	16	3	6			2	
1	25	18	15		22	19	24	0	0	0	7	12	0				1	
0	13				15	20	0		0	2				5	0	0	0	

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 70-74 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	87		82		90		84				90	91	90	82		19
18	83	87	78				80				86	87	86	78		18
17	78	82	74		81		76				81	82		75		17
16	74	78	70			70	72	70	75			78	78	71		16
15	70	73	66		72		68	66				74				15
14	66	69	62	65	67	62	64	62	66		70	70	70	64		14
13	61	64	58		63		60	58			65	65	66	60	58	13
12	57	60	54	58	58	54	56	55	57		62	61	61	55		12
11	53	55	50	54	54	50	51	51	53		57	58	57	57	51	11
10	49	51	46	51	49	46	47	47	49		55	53	53	49	47	10
9	44	46	42	47	44	42	43	43	44		49	51	48	49	44	9
8	40	42	38	44	40	38	39	39	40		47	44	45	41	40	8
7	36	37	34	40	35	34	35	36	35		41	43	40	41	37	7
6	31	32	30	37		30	31	32	31		37	36	37	34	33	6
5	27	28	26	33	26	26	27	28	26		34	35	32	33	30	5
4	23	23	22	30		22	23	24	22		30	27	29	26	26	4
3	19	19	17	26	17	18	18		17		26	23	25	23	23	3
2	14	14	13	23	12	14	14	17	13		22	19	21	19	19	2
1	10		9	19	8	10	10	13	8		18			15		1
0				16		6	6	9								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	98	100	100	97	95	94	95	95				81	82	19
18	97	94	100	100	93	91	90	91	91				78	79	18
17	92	90	100	100	88	87	86	87	87				74	75	17
16	88	86	100	100	84	83	82	83	82				71	72	16
15	84	82	96	97	80	79	78	78	78				68	67	15
14	80	78	91	92	76	75	74	74	73	65			64	65	14
13	76	73	86	87	71	71	70	70	69		63	62	60	61	13
12	71	69	81	82	67	67	66	66	65	57			57	58	12
11	67	65	76	77	63	63	61	61	60		55	55	53	54	11
10	63	61	70	72	58	59	57	57	56	50	51	52	50	51	10
9	59	57	65	67	54	55	53	53	51	46	47	49	46	47	9
8	55	53	60	62	50	51	49	49	47	42	43	45	43	44	8
7	51	49	55	57	46	47	45	45	43	38	39	42	39	40	7
6	46	45	50	52	41	43	41	40	38	34	35	39	36	37	6
5	42	41	45	47	37	39	37	36	34	31	31	35	32	33	5
4	38	37	40	42	33	35	33	32	30	27	27	32	29	30	4
3	34	33	35	37	29	31	28	28	25	23	23	29	25	26	3
2	30	29	30	32	24	27	24	23	21	19	19	26	22	22	2
1	25	25	25	27	20	23	20	19	16	16	15	22	18	19	1
0	21	20	20	22	16	19		15							0

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 75-79 years

Race: Caucasian

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	68	100		93	94	80	78	87	77						19
18	64	64	100	89	90	76	74	83	74	74				84	18
17	60	59	100	85	85	73	70	79			81				17
16	56	55	95	81	81	69	67	74	66		77				16
15	51	51	90	77	77	65	63	70	62	64	73	69	64	72	15
14	47	46	84	73	72	61	60	66	58	61	69		61		14
13	43	42	79	69	68	58	56	62	54	57	65	62		65	13
12	39	38	73	65	63	54	52	57	50		61	58	54	61	12
11	34	33	68	61	59	50	49	53	46	51	58	55		57	11
10	30	29	63	57	54	46	45	49	42	48	54	51	48	53	10
9	26	25	57	53	50	42	42	45	45	50	48	45	49		9
8	22	20	52	49	45	39	38	40	34	41	46	45	42	45	8
7	18	16	47	45	41	35	34	36	31		42	41	39	41	7
6	13	12	41	41	37	31	31	32	27	35	38	36		37	6
5	9	7	36	37	32	27	27	27	23	32	35	34	32	33	5
4	5	3	31	33	28	23	24	23	19		31	31	29	29	4
3	1	0	25	29	23	20	20	19	15	25	27	27	26	25	3
2	0	0	20	25	19	16	17	15	11		23	24	23	21	2
1	0	0	15	21	14	12	13	10		19	19	20	20	17	1
0	0	9		17				6		15	15	17	17		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	99		97		96		100		71							19
18	95	94	92	91			98		66							18
17	91	89	88	86	88		93		62	68			60	68		17
16	87	85	83	82	84	82	89		58	63	73		57	64	57	16
15	83	81	79	78	80	78	85		54	59			53	60		15
14	79	76	74	74	76	74	81		50	54	65		49	57	49	14
13	75	72	70	70	72	69	77		46	50	57	61		46	53	45
12	71	68	65	66	68	65	73		41	45		51	42	49	41	12
11	67	63	61	62	64	61	69	56	37	41	49	53		38	46	37
10	63	59	57	58	60	57	65		33	36	45	50		35	42	33
9	60	55	52	54	56	53	61	45	29	31	41	46	36	31	38	29
8	56	50	48	50	52	49	57		25	27	36	42		27	35	26
7	52	46	43	46	48	45	53	33	21	22	32	38	27	24	31	22
6	48	42	39	42	44	41	48		17	18	28	34		20	27	18
5	44	37	34	38	40	37	44	22	12	13	24	30	17	16	24	14
4	40	33	30	34	36	32	40		8	9	19	26		13	20	10
3	36	29	25		32	28	36	10	4	4	15	22	8	9	16	3
2	32	24	21		28	24	32	4	0	0	11	18	3	5		2
1	28	20	17		24	20	28	0	0	0	7	14	0			1
0	15				16	24	0		0	3			6	0		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 75-79 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	88		83		93		88				91	92	91	83		19	
18	84	88	78				84				87	88	87	79		18	
17	79	83	74		84		80				84	84		75		17	
16	75	79	70			73	75	73	78			80	79	72		16	
15	71	74	66		74		71	69				76				15	
14	67	70	62	65	70	65	67	65	69		72	71	71	64		14	
13	62	65	58		65		63	61			68		67	67	60	58	13
12	58	61	54	58	61	57	59	58	60		64	63	63		55	12	
11	54	56	50	54	56	53	55	54	56		60	60	58	59	53	51	11
10	50	52	46	51	51	49	51	50	51		56	54	55	49	48		10
9	45	47	42	47	47	45	46	46	47		52	52	50	51	45	44	9
8	41	43	38	44	42	41	42	42	42		48	46	47	42	41		8
7	37	38	34	40	38	37	38	39	38		44	45	42	43	38	37	7
6	32	34	30	37		33	34	35	33		40		37	39	34	33	6
5	28	29	26	33	29	29	30	31	29		36	37	33	35	30	30	5
4	24	24	22	30		25	26	27	25		32		29	31	27	26	4
3	20	20	18	26	19	21	22		20		29		25	27	23	23	3
2	15	15	14	23	15	17	18	20	16		25		20	23	19	19	2
1	11		10	20	10	13	13	16	11		21				16		1
0				16		9	9	12								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	100	99	100	100	100	98	98	98	98				81	83	19	
18	99	95	100	100	96	94	93	94	94				78	79	18	
17	94	91	100	100	92	90	89	90	90				74	76	17	
16	90	87	100	100	87	86	85	85	85				71	72	16	
15	86	83	98	99	83	82	81	81	81				71	67	15	
14	82	79	93	94	79	78	77	77	76	67			64	65	14	
13	78	75	88	89	75	74	73	73	72		63	64	60	61	13	
12	74	70	83	84	70	70	69	68	68		59		57	58	12	
11	69	66	78	79	66	66	65	64	63		56	57	53	54	11	
10	65	62	73	74	62	62	61	60	59	52	52	54	50	51	10	
9	61	58	68	69	58	58	56	56	54	48	48	51	46	47	9	
8	57	54	63	64	53	54	52	52	50	44	44	48	43	44	8	
7	53	50	58	59	49	50	48	47	46		40	40	39	40	7	
6	48	46	53	54	45	46	44	43	41		36	36	41	36	6	
5	44	42	47	49	41	42	40	39	37		33	32	38	32	5	
4	40	38	42	44	36	38	36	35	33		29	28	34	29	30	4
3	36	34	37	39	32	34	32	30	28		25	24	31	25	26	3
2	32	30	32	34	28	30	28	26	24		21	20	28	22	23	2
1	28	26	27	29	24	26	23	22	19		18	16	25	18	19	1
0	23	22	22	25	19	22		18							0	

Note. See page 16 for a description of acronyms.

APPENDIX D (continued)

Sex: Female

Education: 18-20 years

Age: 80-85 years

Race: Caucasian

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	68	100		95	97	81	78	89	77							19
18	64	62	100	91	93	77	75	85	74	74						18
17	60	58	100	87	89	74	71	80			82					17
16	56	54	100	83	84	70	68	76	66		78					16
15	51	49	94	79	80	66	64	72	62	64	74	70	64	76		15
14	47	45	89	75	75	62	60	67	58	61	70		61			14
13	43	41	84	71	71	58	57	63	54	58	66	63		68		13
12	39	36	78	67	66	55	53	59	50		62	59	55	64		12
11	34	32	73	63	62	51	50	55	46	52	59	56		60		11
10	30	28	68	59	57	47	46	50	42	48	55	52	49	56		10
9	26	23	62	55	53	43	42	46	45	51	49	46		52		9
8	22	19	57	51	49	39	39	42	34	42	47	45	42	48		8
7	18	15	52	47	44	36	35	38	31		43	42	39	44		7
6	13	10	46	43	40	32	32	33	27	35	39	39	36	40		6
5	9	6	41	39	35	28	28	29	23	32	36	35	33	36		5
4	5	2	35	35	31	24	24	25	19		32	32	30	32		4
3	1	0	30	31	26	21	21	20	15	26	28	28	27	29		3
2	0	0	25	27	22	17	17	16	11		24	25	24	25		2
1	0	0	19	23	17	13	14	12		19	20	21	21	21		1
0	0	0	14	19				8		16	16	18	18			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	99		98		96		100		71								19	
18	95	96	94	94			100		66								18	
17	91	92	89	90	88		99		62	68				59	68		17	
16	87	88	85	86	84	83	95		58	63	76		56	64	57		16	
15	83	83	81	82	80	79	91		54	59			52	61			15	
14	79	79	76	78	76	75	87		50	54	68		48	57	49		14	
13	75	75	72	74	72	71	82		46	50	58	64		45	53	45		13
12	71	70	67	70	68	67	78		41	45			51	41	50	41		12
11	67	66	63	66	64	63	74	56	37	41	49	56		37	46	37		11
10	63	61	58	62	60	58	70		33	36	45	52		34	43	33		10
9	60	57	54	58	56	54	66	45	29	31	41	48	37	30	39	29		9
8	56	53	49	54	52	50	62		25	27	37	44		26	35	25		8
7	52	48	45	50	48	46	58	33	21	22	32	41	27	23	32	21		7
6	48	44	41	45	44	42	54		17	18	28	37		19	28	17		6
5	44	40	36	41	40	38	50	22	12	13	24	33	17	15	24	13		5
4	40	35	32	37	36	34	46		8	9	20	29		12	21	9		4
3	36	31	27		32	30	42	10	4	4	15	25	8	8	17			3
2	32	27	23		28	26	37	5	0	0	11	21	3	4				2
1	28	22	18		24	22	33	0	0	0	7	17	0					1
0	18				17	29	0		0	3				6	0	0		0

(continued)

APPENDIX D (*continued*)

Sex: Female
Education: 18-20 years
Age: 80-85 years
Race: Caucasian

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	89		83		96		92				93	94	93	83		19	
18	85	89	79				88				89	90	89	80		18	
17	80	84	75		87		84			88		86		76		17	
16	76	80	71			77	80	77	82			81	81	72		16	
15	72	75	67		77		75	73			77					15	
14	68	71	63	65	73	69	71	69	73		74	73	73	65		14	
13	63	66	59		68		67	65		72		69	69	61	58	13	
12	59	62	55	58	64	61	63	61	64		66	64	65	55		12	
11	55	57	51	54	59	57	59	58	60	64	62	60	61	53	51	11	
10	51	53	47	51	55	53	55	54	55		58	56	57	50	48	10	
9	46	48	43	47	50	49	51	50	51	56	54	52	53	46	44	9	
8	42	44	38	44	45	45	47	46	46		50	47	49	42	41	8	
7	38	39	34	41	41	41	42	43	42	48	46	43	45	38	37	7	
6	33	35	30	37		37	38	39	37	44		39	41	35	34	6	
5	29	30	26	34	32	33	34	35	33	40	39	35	37	31	30	5	
4	25	26	22	30		29	30	31	28		36		31	33	27	27	4
3	21	21	18	27	23	25	26		24		32		26	28	24	23	3
2	16	17	14	23	18	21	22	24	19		28		22	24	20	19	2
1	12		10	20	13	17	18	20	15		24			16		1	
0				16		13	14	16								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	100	100	100				81	83	19
18	100	96	100	100	100	98	98	97	97				78	79	18
17	97	92	100	100	96	94	93	93	93				74	76	17
16	93	88	100	100	91	90	89	89	89				71	72	16
15	89	84	100	100	87	86	85	84	84				74	67	69
14	85	80	96	97	83	82	81	80	80	69			64	65	14
13	80	76	91	92	79	78	77	76	76		65	67	60	62	13
12	76	72	86	87	74	74	73	72	71	62			57	58	12
11	72	67	81	82	70	70	69	67	67		57	60	53	55	11
10	68	63	76	77	66	66	65	63	62	54	53	57	50	51	10
9	64	59	70	72	62	62	60	59	58	50	49	54	46	47	9
8	60	55	65	67	57	58	56	55	54	47	45	51	43	44	8
7	55	51	60	62	53	54	52	51	49	43	41	47	39	40	7
6	51	47	55	57	49	50	48	46	45	39	37	44	36	37	6
5	47	43	50	52	45	46	44	42	40	35	33	41	32	33	5
4	43	39	45	47	40	42	40	38	36	31	29	37	29	30	4
3	39	35	40	42	36	38	36	34	32	28	25	34	25	26	3
2	34	31	35	37	32	34	32	29	27	24	21	31	22	23	2
1	30	27	30	32	28	30	27	25	23	20	17	28	18	19	1
0	26	23	25	27	23	26		21							0

Note. See page 16 for a description of acronyms.

Appendix E

AFRICAN AMERICAN-BASED NORMS: SCALED SCORE TO T-SCORE CONVERSIONS BY SEX, EDUCATION, AND AGE GROUP

APPENDIX E

Sex: Male

Education: 7-8 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	100	100	100	93	93	95	92	91	91	87	80			90	19
18	96	100	97	89	89	91	88	87	87	80				90	18
17	92	98	91	84	85	87	84	83			88				17
16	88	94	86	80	80	83	81	79	80		84				16
15	84	90	81	75	76	79	77	75	76	70	80	75	63	77	15
14	79	85	76	71	72	75	73	71	72	67	76		60		14
13	75	81	71	67	68	72	69	67	68	64	73	67		68	13
12	71	77	66	62	63	68	66	63	64		69	64	55	64	12
11	67	72	61	58	59	64	62	59	60	57	65	60		59	11
10	62	68	56	54	55	60	58	55	56	54	61	57	49	55	10
9	58	64	50	49	51	56	54	51		51	58	53	46	51	9
8	54	59	45	45	46	52	51	47	48	48	54	50	43	46	8
7	50	55	40	41	42	48	47	43	44		50	46	41	42	7
6	46	51	35	36	38	44	43	40	40	41	46	42	38	38	6
5	41	47	30	32	34	40	39	36	37	38	43	39	35	33	5
4	37	42	25	27	30	37	36	32	33		39	35	32	29	4
3	33	38	20	23	25	33	32	28	29	32	35	32	29	25	3
2	29	34	14	19	21	29	28	24	25		31	28	26	20	2
1	24	29	9	14	17	25	24	20		25	27	25	23	16	1
0	25	25	4	10				16	22	24	21	21			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97		91		93		90		100							19	
18	93	95	87	80			86		99							18	
17	89	90	82	76	85		82		94	96			97	85		17	
16	85	86	78	73	81	76	78		90	91	94		93	82	89	16	
15	81	82	74	69	77	71	74		86	87			89	78		15	
14	77	77	70	66	73	67	69		82	82	85		85	74	81	14	
13	73	73	66	62	69	63	65		78	77	83	81		81	71	77	13
12	69	69	62	59	65	59	61		74	73		65	77	67	73	12	
11	65	64	57	55	61	55	57	59	69	68	74	72		73	63	69	11
10	61	60	53	51	57	51	53		65	64	70	67		69	60	65	10
9	57	56	49	48	53	47	48	49	61	59	66	63	51	65	56	61	9
8	53	51	45	44	49	43	44		57	55	62	58		61	52	57	8
7	49	47	41	41	45	39	40	40	53	50	57	54	41	57	49	53	7
6	45	43	37	37	41	35	36		49	46	53	49		53	45	49	6
5	41	38	32	34	37	30	32	30	45	41	49	45	31	49	41	46	5
4	37	34	28	30	33	26	28		40	37	45	41		45	38	42	4
3	33	30	24		29	22	23	21	36	32	40	36	22	41	34		3
2	29	25	20		25	18	19	16	32	27	36	32	17	37			2
1	25	21	16		21	14	15	11	28	23	32	27	12				1
0	17				10	11	6		18	28			23	26		0	

(continued)

APPENDIX E (continued)

Sex: Male
Education: 7-8 years
Age: 20-34 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	99		100		98		96				91	100	98	88		19
18	95	100	97				91				87	95	94	84		18
17	90	96	94		88		87				77	91		80		17
16	86	91	90			80	82	76	82			86	85	76		16
15	82	87	87		78		77	72				73				15
14	78	83	83	70	73	72	73	68	73		69	77	76	68		14
13	74	78	79		68		68	64			61	73	72	64	61	13
12	69	74	76	63	63	63	64	61	64		60	68	67	57		12
11	65	70	72	60	58	59	59	57	60		52	55	63	63	57	11
10	61	66	69	57	53	55	55	53	55		51	59	58	53	49	10
9	57	61	65	54	48	50	50	49	51		44	46	54	54	49	9
8	53	57	62	51	43	46	45	45	46		42	50	50	45	42	8
7	48	53	58	48	38	42	41	41	42		36	37	45	45	41	7
6	44	48	55	45		38	36	38	37		32	41	41	37	35	6
5	40	44	51	42	28	34	32	34	33		28	28	36	33	31	5
4	36	40	48	39		29	27	30	28		24		32	32	29	4
3	32	36	44	36	18	25	22		24		19		27	27	25	3
2	28	31	41	33	13	21	18	22	19		15		23	23	21	2
1	23		37	30	8	17	13	19	15		11			17		1
0				26		12	9	15								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	79	79	86	84	91	95	89	92	88				85	82	19	
18	75	76	80	78	87	90	85	87	84				81	78	18	
17	72	72	75	73	83	86	81	83	79				77	74	17	
16	68	68	69	68	79	82	77	78	75				73	70	16	
15	65	65	64	62	75	77	73	73	70				64	69	15	
14	61	61	58	57	71	73	69	68	66	61			65	63	14	
13	58	58	53	52	67	69	65	64	61		60	58	61	59	13	
12	55	54	47	46	63	65	61	59	56	54		57	55		12	
11	51	50	42	41	59	60	56	54	52		53	52	54	51		11
10	48	47	36	36	55	56	52	50	47	46	50	49	50	47		10
9	44	43	30	30	50	52	48	45	43	43	46	46	46	43		9
8	41	40	25	25	46	47	44	40	38	39	43	43	42	39		8
7	37	36	19	20	42	43	40	36	34	35	40	40	38	35		7
6	34	32	14	14	38	39	36	31	29	32	36	37	34	31		6
5	30	29	8	9	34	34	32	26	25	28	33	34	30	27		5
4	27	25	3	4	30	30	28	21	20	24	29	31	26	23		4
3	24	21	0	0	26	26	24	17	16	21	26	28	23	19		3
2	20	18	0	0	22	21	20	12	11	17	23	25	19	15		2
1	17	14	0	0	18	17	16	7	6	13	19	22	15	11		1
0	13	11	0	0	13	13		3								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	99	100	100	98	97	97	92	92	91						19
18	95	100	100	93	93	93	89	88	87	81				93	18
17	90	96	97	89	89	89	85	84			90				17
16	86	92	92	85	84	86	81	80	80		86				16
15	82	88	87	80	80	82	77	76	76	71	82	75	65	80	15
14	78	83	82	76	76	78	74	72	72	68	79		62		14
13	74	79	76	71	72	74	70	68	68	65	75	68		71	13
12	69	75	71	67	68	70	66	64	64		71	65	56	67	12
11	65	70	66	63	63	66	62	60	60	58	67	61		63	11
10	61	66	61	58	59	62	59	56	56	55	64	57	51	58	10
9	57	62	56	54	55	58	55	52		52	60	54	48	54	9
8	52	57	51	50	51	55	51	48	48	49	56	50	45	50	8
7	48	53	46	45	46	51	47	44	44		52	47	42	45	7
6	44	49	41	41	42	47	44	40	40	42	48	43	39	41	6
5	40	44	35	36	38	43	40	36	37	39	45	40	36	37	5
4	35	40	30	32	34	39	36	32	33		41	36	34	32	4
3	31	36	25	28	29	35	32	29	29	33	37	33	31	28	3
2	27	31	20	23	25	31	29	25	25		33	29	28	24	2
1	23	27	15	19	21	27	25	21		26	30	25	25	19	1
0	23	23	10	15				17		23	26	22	22		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		94		95		95		100							19	
18	97	94	90	83			91		97							18	
17	93	90	86	79	87		87		93	96			98	86		17	
16	89	85	82	75	83	78	83		89	91		94		94	82	89	16
15	85	81	78	72	79	74	79		85	87			90	79		15	
14	81	77	74	68	75	70	74		81	82		85		86	75	81	14
13	77	72	69	65	71	66	70		76	77	83	80		82	71	77	13
12	73	68	65	61	67	62	66		72	73			65	78	68	73	12
11	69	64	61	58	63	57	62	60	68	68	74	71		74	64	69	11
10	65	59	57	54	59	53	58		64	64	70	67		70	60	65	10
9	61	55	53	50	55	49	53	50	60	59	66	62	51	66	57	61	9
8	57	51	49	47	51	45	49		56	55	62	58		62	53	57	8
7	53	46	44	43	47	41	45	41	52	50	57	53	41	58	49	53	7
6	49	42	40	40	43	37	41		47	46	53	49		54	46	49	6
5	45	38	36	36	39	33	37	31	43	41	49	45	32	50	42	45	5
4	41	33	32	33	35	29	33		39	37	45	40		46	38	41	4
3	37	29	28		31	25	28	22	35	32	40	36	22	42	35		3
2	33	25	24		27	21	24	17	31	27	36	31	17	38			2
1	29	20	19		23	16	20	12	27	23	32	27	12				1
0	16				12	16	7		18	28				24	25		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 35-39 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	100		100		100		98				94	100	100	91		19		
18	96	100	99				94				90	98	97	87		18		
17	92	98	95		91		89				81	94		83		17		
16	87	93	92			84	85	78	86			89	89	79		16		
15	83	89	88		81		80	74				76				15		
14	79	85	84	70	76	75	75	70	77		72	80	80	71		14		
13	75	81	81		71		71	67			64		76	75	67	61	13	
12	71	76	77	64	65	67	66	63	68			63	71	71	57	12		
11	66	72	74	61	60	62	62	59	63		56	58	67	66	59	53	11	
10	62	68	70	58	55	58	57	55	59			54	62	62	55	49	10	
9	58	64	67	55	50	54	52	51	54		48	49	57	58	51	46	9	
8	54	59	63	52	45	50	48	48	50			45	53	53	47	42	8	
7	50	55	60	49	40	46	43	44	45		39	40	48	49	43	38	7	
6	45	51	56	46		41	39	40	40			35	44	44	39	35	6	
5	41	46	53	42	30	37	34	36	36		31	31	39	40	35	31	5	
4	37	42	49	39		33	30	32	31			27		35	35	31	27	4
3	33	38	46	36	20	29	25		27			23		30	31	27	24	3
2	29	34	42	33	15	24	20	25	22			19		26	27	23	20	2
1	25		38	30	10	20	16	21	18			15			19		1	
0				27		16	11	17								0		

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	81	82	87	84	96	99	93	97	93				88	85	19
18	78	78	81	79	92	94	89	92	88				84	81	18
17	74	75	76	74	88	90	84	87	84				80	78	17
16	71	71	70	68	84	86	80	83	79				76	74	16
15	67	67	65	63	80	81	76	78	75				66	72	15
14	64	64	59	58	76	77	72	73	70	64			68	66	14
13	60	60	53	52	72	73	68	69	65				61	60	13
12	57	57	48	47	67	68	64	64	61	56			60	58	12
11	54	53	42	42	63	64	60	59	56				54	57	11
10	50	49	37	36	59	60	56	54	52	49	50	51	53	50	10
9	47	46	31	31	55	55	52	50	47	45	47	48	49	46	9
8	43	42	26	26	51	51	48	45	43	42	44	45	45	42	8
7	40	38	20	21	47	47	44	40	38				42	41	7
6	36	35	14	15	43	42	40	36	34	34	37	39	37	34	6
5	33	31	9	10	39	38	36	31	29	31	33	36	33	30	5
4	29	28	3	5	35	34	32	26	25				33	29	4
3	26	24	0	0	31	30	28	22	20	23			30	26	3
2	22	20	0	0	26	25	24	17	15	20	23	27	22	18	2
1	19	17	0	0	22	21	20	12	11	16	20	24	18	14	1
0	16	13	0	0	18	17		7							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	99	99	100	100	99	98	93	93	91	87	82			95	19
18	95	99	100	96	95	95	89	89						95	18
17	90	95	100	91	91	91	85	85			91				17
16	86	91	95	87	87	87	82	81	80		87				16
15	82	86	89	82	82	83	78	77	76	72	83	76	65	82	15
14	78	82	84	78	78	79	74	73	72	69	80		62		14
13	74	78	79	74	74	75	70	69	68	65	76	69		73	13
12	69	73	74	69	70	71	67	65	64		72	65	56	69	12
11	65	69	69	65	65	67	63	61	60	59	68	61		64	11
10	61	65	64	61	61	64	59	57	56	56	65	58	51	60	10
9	57	61	59	56	57	60	55	53		52	61	54	48	56	9
8	52	56	54	52	53	56	52	49	48	49	57	51	45	51	8
7	48	52	48	48	48	52	48	45	44		53	47	42	47	7
6	44	48	43	43	44	48	44	41	40	43	49	44	39	43	6
5	40	43	38	39	40	44	40	37	37	40	46	40	36	38	5
4	35	39	33	34	36	40	37	33		33		42	36	33	34
3	31	35	28	30	32	36	33	29	29	33	38	33	31	30	3
2	27	30	23	26	27	33	29	25	25		34	29	28	25	2
1	23	26	18	21	23	29	25	21		27	31	26	25	21	1
0	22	22	12	17				17		23	27	22	22		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		96		95		98		100							19	
18	97	96	92	84			94		97							18	
17	93	92	88	80	87		89		93	96			98	86		17	
16	89	88	84	77	83	79	85		89	91		94		94	83	89	16
15	85	83	80	73	79	75	81		85	87			90	79		15	
14	81	79	75	70	75	71	77		81	82		85		86	75	81	14
13	77	75	71	66	71	67	73		76	77	83	81		82	72	77	13
12	73	70	67	62	67	63	68		72	73			65	78	68	73	12
11	69	66	63	59	63	59	64	60	68	68	74	72		74	64	69	11
10	65	62	59	55	59	55	60		64	64	70	67		70	61	65	10
9	61	57	55	52	55	50	56	51	60	59	66	63	51	66	57	61	9
8	57	53	50	48	51	46	52		56	55	62	58		62	53	57	8
7	53	49	46	45	47	42	48	41	52	50	57	54	41	58	50	53	7
6	49	44	42	41	43	38	43		47	46	53	49		54	46	49	6
5	45	40	38	37	39	34	39	32	43	41	49	45	32	50	42	45	5
4	41	36	34	34	35	30	35		39	37	45	40		46	39	41	4
3	37	31	30		31	26	31	22	35	32	40	36	22	42	35		3
2	33	27	25		27	22	27	17	31	27	36	32	17	38			2
1	29	22	21		23	18	23	13	27	23	32	27	12				1
0	18				14	18	8		18	28				24	25		0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 7-8 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	100		100		100		100				95	100	100	92		19		
18	96	100	99				95				91	100	99	88		18		
17	92	99	96		91		91				82		95			17		
16	88	95	92				85	86	79	87			91	90	80	16		
15	84	90	89				81	81	76			77				15		
14	80	86	85	71	76	77	77	72	78		73	82	82	72		14		
13	75	82	82				71	72	68			66		77	68	63	13	
12	71	77	78	64	66	68	68	64	69			64	73	73	59	12		
11	67	73	75	61	61	64	63	60	65			58	60	68	60	55	11	
10	63	69	71	58	56	60	59	57	60			55	63	64	56	51	10	
9	59	65	68	55	51	56	54	53	56			49	51	59	59	48	9	
8	54	60	64	52	46	52	49	49	51			46	54	55	48	44	8	
7	50	56	60	49	41	47	45	45	47			41	42	50	51	44	7	
6	46	52	57	46			43	40	41	42		37		45	46	40	6	
5	42	47	53	43	30	39	36	38	38			33	33	41	42	36	5	
4	38	43	50	40			35	31	34	33			29		36	37	32	4
3	34	39	46	37	20	30	26		29			25		32	33	28	3	
2	29	35	43	34	15	26	22	26	24			20		27	28	24	2	
1	25		39	30	10	22	17	22	20			16			20		1	
0				27		18	13	19								0		

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	82	83	87	85	99	100	94	99	95				89	87	19	
18	79	80	82	79	94	97	90	94	90				85	83	18	
17	75	76	76	74	90	92	86	90	86				81	79	17	
16	72	72	71	69	86	88	82	85	81				77	75	16	
15	69	69	65	64	82	84	78	80	77				67	74	15	
14	65	65	60	58	78	79	74	76	72	65			70	67	14	
13	62	61	54	53	74	75	70	71	68			63	61	66	63	13
12	58	58	48	48	70	71	66	66	63	58			62	59	12	
11	55	54	43	42	66	66	62	62	59			56	55	58	55	11
10	51	51	37	37	62	62	58	57	54	51	53	52	54	51	10	
9	48	47	32	32	57	58	54	52	50	47	49	49	50	47	9	
8	44	43	26	26	53	53	50	47	45	44	46	46	46	44	8	
7	41	40	21	21	49	49	46	43	40	40	43	43	43	40	7	
6	37	36	15	16	45	45	42	38	36	36	39	40	39	36	6	
5	34	33	9	10	41	41	38	33	31	33	36	37	35	32	5	
4	31	29	4	5	37	36	34	29	27	29	32	34	31	28	4	
3	27	25	0	0	33	32	30	24	22	25	29	31	27	24	3	
2	24	22	0	0	29	28	26	19	18	22	26	28	23	20	2	
1	20	18	0	0	25	23	21	15	13	18	22	25	19	16	1	
0	17	14	0	0	21	19		10							0	

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	97	100		100	100	100	93	93	91						19	
18	93	98	100	98	97	96	90	89	87	82				96	18	
17	89	94	100	94	93	92	86	86			92				17	
16	85	90	97	89	89	88	82	82	80		88				16	
15	80	85	92	85	84	84	78	78	76	72	85	76	66	83	15	
14	76	81	87	80	80	80	75	74	72	69	81		63		14	
13	72	77	82	76	76	76	71	70	68	66	77	69		75	13	
12	68	72	77	72	72	73	67	66	64		73	65	57	70	12	
11	63	68	72	67	68	69	63	62	60	59	69	62		66	11	
10	59	64	67	63	63	65	60	58	56	56	66	58	51	62	10	
9	55	59	61	59	59	61	56	54		53	62	55	48	57	9	
8	51	55	56	54	55	57	52	50	48	50	58	51	46	53	8	
7	46	51	51	50	51	53	48	46	44		54	48	43	49	7	
6	42	46	46	45	46	49	45	42	40	43	51	44	40	44	6	
5	38	42	41	41	42	45	41	38	37	40	47	40	37	40	5	
4	34	38	36	37	38	41	37	34		33		43	37	34	36	4
3	30	34	31	32	34	38	33	30	29	34	39	33	31	31	3	
2	25	29	25	28	29	34	30	26	25		35	30	29	27	2	
1	21	25	20	24	25	30	26	22		27	32	26	26	23	1	
0	21	15		19				18	24	28	23	23			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		98		96		100		100							19	
18	100	99	94	85			96		96							18	
17	96	94	90	82	88		92		92	96				97	87	17	
16	92	90	86	78	85	80	88		88	91		95		93	83	89	16
15	88	86	81	74	81	76	83		83	87				89	79		15
14	84	81	77	71	77	72	79		79	82		86		85	76	81	14
13	80	77	73	67	73	68	75		75	77	83	81		81	72	77	13
12	76	73	69	64	69	64	71		71	73			65	77	68	73	12
11	72	68	65	60	65	60	67	61	67	68	74	72		73	65	69	11
10	68	64	61	57	61	56	63		63	64	70	68		69	61	65	10
9	64	60	56	53	57	52	58	51	59	59	66	63	51	65	57	61	9
8	60	55	52	49	53	48	54		54	55	61	59		61	54	57	8
7	56	51	48	46	49	43	50	42	50	50	57	54	41	57	50	53	7
6	52	47	44	42	45	39	46		46	46	53	50		53	46	49	6
5	48	42	40	39	41	35	42	32	42	41	49	46	32	49	43	45	5
4	44	38	36	35	37	31	38		38	37	45	41		45	39	41	4
3	40	33	31		33	27	33	23	34	32	40	37	22	41	35		3
2	36	29	27		29	23	29	18	29	27	36	32	17	37			2
1	32	25	23		25	19	25	13	25	23	32	28	13				1
0	20				15	21	8		18	28				24	25		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 45-49 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		100		100		100				97	100	100	93		19	
18	97	100	100				97				92	100	100	89		18	
17	93	100	97		92		92				84	97		85		17	
16	89	96	93				87	88	81	89			92	92		16	
15	84	91	89				82	83	77			79				15	
14	80	87	86	71	77	79	79	73	80		74	83	83	73		14	
13	76	83	82				72	74	70			68	79	79	69	63	13
12	72	79	79	65	67	70	69	66	71			65	74	75	59	59	12
11	68	74	75	62	62	66	65	62	66			59	61	70	70	61	11
10	63	70	72	58	57	62	60	58	62			56	65	66	57	51	10
9	59	66	68	55	52	58	56	54	57			51	52	60	61	53	9
8	55	61	65	52	47	53	51	51	53			47	56	57	49	44	8
7	51	57	61	49	42	49	47	47	48			43	43	51	52	45	7
6	47	53	58	46			45	42	43	44		39	47	48	41	37	6
5	42	49	54	43	32	41	37	39	39			35	34	42	44	37	5
4	38	44	51	40			36	33	35	35		30	38	39	33	29	4
3	34	40	47	37	22	32	28		30			26	33	35	29	26	3
2	30	36	43	34	17	28	24	28	26			22	29	30	25	22	2
1	26		40	31	12	24	19	24	21			18			21		1
0				28		20	14	20								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	84	88	85	100	100	96	100	97				91	89	19
18	80	81	82	80	97	99	92	97	93				87	85	18
17	77	77	77	75	93	95	88	92	88				83	81	17
16	73	74	71	70	89	91	84	87	84				79	77	16
15	70	70	66	64	84	86	80	83	79				69	75	15
14	66	66	60	59	80	82	76	78	75	67			71	69	14
13	63	63	55	54	76	78	72	73	70				65	64	13
12	59	59	49	48	72	73	68	69	65	60			63	61	12
11	56	56	44	43	68	69	64	64	61				58	60	11
10	52	52	38	38	64	65	60	59	56	53	55	55	56	53	10
9	49	48	32	32	60	60	56	55	52	49	51	52	52	49	9
8	46	45	27	27	56	56	52	50	47	46	48	49	48	45	8
7	42	41	21	22	52	52	48	45	43	42	45	46	44	41	7
6	39	37	16	16	48	47	44	40	38	38	41	43	40	37	6
5	35	34	10	11	43	43	39	36	34	35	38	40	36	33	5
4	32	30	5	6	39	39	35	31	29	31	34	37	32	29	4
3	28	27	0	0	35	34	31	26	25	27	31	34	28	25	3
2	25	23	0	0	31	30	27	22	20	24	28	31	25	21	2
1	21	19	0	0	27	26	23	17	15	20	24	28	21	17	1
0	18	16	0	0	23	21		12							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	97	100		100	100	100	94	94	91						19	
18	93	97	100	100	99	97	90	91	87	83				98	18	
17	89	93	100	96	95	93	87	87			93				17	
16	85	89	100	92	91	89	83	83	80		89				16	
15	80	84	95	87	87	85	79	79	76	73	86	76	66	85	15	
14	76	80	90	83	82	81	75	75	72	70	82		64		14	
13	72	76	85	78	78	78	72	71	68	66	78	69		76	13	
12	68	71	80	74	74	74	68	67	64		74	66	58	72	12	
11	63	67	74	70	70	70	64	63	60	60	71	62		68	11	
10	59	63	69	65	65	66	60	59	56	57	67	59	52	63	10	
9	55	58	64	61	61	62	57	55		53	63	55	49	59	9	
8	51	54	59	57	57	58	53	51	48	50	59	52	46	55	8	
7	46	50	54	52	53	54	49	47	44		55	48	44	50	7	
6	42	45	49	48	48	50	45	43	40	44	52	44	41	46	6	
5	38	41	44	43	44	47	42	39	37	41	48	41	38	42	5	
4	34	37	38	39	40	43	38	35		33		44	37	35	37	4
3	30	32	33	35	36	39	34	31	29	34	40	34	32	33	3	
2	25	28	28	30	31	35	30	27	25		37	30	29	29	2	
1	21	24	23	26	27	31	27	23		28	33	27	27	24	1	
0	19	18		22				19	24	29	23	24			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		96		100		100							19	
18	100	100	96	86			98		96							18	
17	96	97	92	83	88		94		92	96				96	87	17	
16	92	92	87	79	85	82	90		88	91	95		92	83	89	16	
15	88	88	83	76	81	78	86		83	87			88	80		15	
14	84	84	79	72	77	73	82		79	82	86		84	76	81	14	
13	80	79	75	69	73	69	78		75	77	83	82		80	72	77	13
12	76	75	71	65	69	65	73		71	73		65	76	69	73	12	
11	72	71	67	61	65	61	69	61	67	68	74	73		72	65	69	11
10	68	66	62	58	61	57	65		63	64	70	68		68	61	65	10
9	64	62	58	54	57	53	61	52	59	59	66	64	51	64	58	61	9
8	60	57	54	51	53	49	57		54	55	61	60		60	54	57	8
7	56	53	50	47	49	45	53	42	50	50	57	55	41	56	50	53	7
6	52	49	46	44	45	41	48		46	46	53	51		52	47	49	6
5	48	44	42	40	41	36	44	33	42	41	49	46	32	48	43	45	5
4	44	40	37	36	37	32	40		38	37	45	42		44	39	41	4
3	40	36	33		33	28	36	23	34	32	40	37	22	40	36		3
2	36	31	29		29	24	32	18	29	27	36	33	17	36			2
1	32	27	25		25	20	27	14	25	23	32	28	13				1
0	23	23			16	23	9		18	28				25	25		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 50-54 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		100		100		100				98	100	100	94		19	
18	97	100	100				99				94	100	100	90		18	
17	93	100	97		93		94			86		98		86		17	
16	89	97	94				89	90	83		91					16	
15	85	92	90		83		85	79			80					15	
14	81	88	87	71	78	80	81	75	82		76	85	85	74		14	
13	77	84	83		73		76	71		69		80	81	70	63	13	
12	72	80	80	65	68	72	71	68	73		67	76	76	59		12	
11	68	75	76	62	63	68	67	64	68	61	62	71	72	62	55	11	
10	64	71	72	59	58	63	62	60	63		58	67	68	58		10	
9	60	67	69	56	53	59	58	56	59	53	53	62	63	55	48	9	
8	56	63	65	53	48	55	53	52	54		49	57	59	51	44	8	
7	51	58	62	50	43	51	48	49	50	44	44	53	54	47	40	7	
6	47	54	58	46		47	44	45	45	40		48	50	43	37	6	
5	43	50	55	43	33	42	39	41	41	36	35	44	45	39	33	5	
4	39	45	51	40		38	35	37	36		32		39	41	35	29	4
3	35	41	48	37	23	34	30		32		28		35	37	31	26	3
2	30	37	44	34	18	30	26	30	27		24		30	32	27	22	2
1	26		41	31	13	25	21	26	23		20				23		1
0				28		21	16	22								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	86	89	86	100	100	98	100	99				92	90	19
18	81	82	83	81	99	100	94	99	95				88	86	18
17	78	78	78	76	95	98	90	95	90				84	82	17
16	74	75	72	70	91	93	86	90	86				80	78	16
15	71	71	67	65	87	89	82	85	81	72			77	74	15
14	67	68	61	60	83	85	78	80	77	70			73	70	14
13	64	64	56	54	79	80	74	76	72	67	66	69	66		13
12	61	60	50	49	74	76	70	71	68	62			65	62	12
11	57	57	44	44	70	72	66	66	63	60	60	61	58		11
10	54	53	39	38	66	67	62	62	59	55	57	57	57	55	10
9	50	50	33	33	62	63	58	57	54	51	54	54	53	51	9
8	47	46	28	28	58	59	53	52	49	48	50	51	49	47	8
7	43	42	22	23	54	54	49	48	45	44	47	48	45	43	7
6	40	39	17	17	50	50	45	43	40	40	43	45	42	39	6
5	36	35	11	12	46	46	41	38	36	37	40	42	38	35	5
4	33	31	5	7	42	41	37	33	31	33	37	39	34	31	4
3	30	28	0	1	38	37	33	29	27	29	33	36	30	27	3
2	26	24	0	0	33	33	29	24	22	26	30	33	26	23	2
1	23	21	0	0	29	28	25	19	18	22	26	30	22	19	1
0	19	17	0	0	25	24		15							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	96	100		100	100	100	95	96	89						19
18	91	96	100	100	100	98	91	92	85	83				100	18
17	87	92	100	98	97	94	87	88			94				17
16	83	87	100	94	93	90	84	84	77		90				16
15	79	83	98	89	89	87	80	80	73	73	87	77	67	87	15
14	74	79	93	85	84	83	76	76	70	70	83		64		14
13	70	75	87	81	80	79	72	72	66	67	79	70		78	13
12	66	70	82	76	76	75	69	68	62		75	66	59	74	12
11	62	66	77	72	72	71	65	64	58	60	72	63		69	11
10	58	62	72	68	67	67	61	60	54	57	68	59	53	65	10
9	53	57	67	63	63	63	57	56		54	64	55	50	61	9
8	49	53	62	59	59	59	54	52	46	51	60	52	47	56	8
7	45	49	57	55	55	56	50	48	42		56	48	44	52	7
6	41	44	52	50	51	52	46	44	38	44	53	45	42	48	6
5	36	40	46	46	46	48	42	40	34	41	49	41	39	43	5
4	32	36	41	41	42	44	39	36	30		45	38	36	39	4
3	28	31	36	37	38	40	35	32	27	35	41	34	33	35	3
2	24	27	31	33	34	36	31	28	23		38	31	30	30	2
1	19	23	26	28	29	32	27	24		28	34	27	27	26	1
0	18	21		24				20		25	30	23	24		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		98		100		99							19	
18	100	100	98	88			100		95							18	
17	96	99	93	84	90		97		90	96				95	87	17	
16	92	95	89	81	86	83	93		86	91	96		91	84	89	16	
15	88	90	85	77	82	79	88		82	87			87	80		15	
14	84	86	81	73	78	75	84		78	82	87		83	76	81	14	
13	80	82	77	70	74	71	80		74	77	83	83		79	73	77	13
12	76	77	73	66	71	66	76		70	73			65	75	69	73	12
11	72	73	68	63	67	62	72	62	65	68	74	74		71	65	69	11
10	68	68	64	59	63	58	68		61	64	70	69		67	62	65	10
9	65	64	60	56	59	54	63	52	57	59	66	65	51	63	58	61	9
8	61	60	56	52	55	50	59		53	55	61	60		59	54	57	8
7	57	55	52	48	51	46	55	43	49	50	57	56	41	55	51	53	7
6	53	51	48	45	47	42	51		45	46	53	51		51	47	49	6
5	49	47	43	41	43	38	47	33	41	41	49	47	32	47	43	45	5
4	45	42	39	38	39	34	42		36	37	45	42		43	40	41	4
3	41	38	35		35	29	38	24	32	32	40	38	22	39	36		3
2	37	34	31		31	25	34	19	28	27	36	33	17	35			2
1	33	29	27		27	21	30	14	24	23	32	29	13				1
0	25	25			17	26	9		18	28				25	25		0

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 7-8 years
Age: 55-59 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS
19	100		100		100		100				100	100	100	95	19
18	98	100	100				100				95	100	100	92	18
17	94	100	98		95		96			87		100		88	17
16	90	98	94				91	92	85		95	96	84		16
15	86	94	91		85		87	81			82				15
14	81	89	87	71	79	82	83	77	83		77	86	87	76	14
13	77	85	84		74		78	73		71		82	83	72	13
12	73	81	80	65	69	74	74	70	74		68	77	78	59	12
11	69	76	77	62	64	69	69	66	70	63	64	73	74	64	11
10	65	72	73	59	59	65	64	62	65		59	68	69	60	10
9	60	68	70	56	54	61	60	58	61	54	55	63	65	56	9
8	56	64	66	53	49	57	55	54	56		50	59	61	52	8
7	52	59	63	50	44	53	51	50	52	46	46	54	56	48	7
6	48	55	59	47		48	46	47	47	42		50	52	44	6
5	44	51	56	44	34	44	41	43	43	38	37	45	47	40	5
4	39	46	52	41		40	37	39	38		34	41	43	36	4
3	35	42	48	38	24	36	32		34		30	36	38	32	3
2	31	38	45	34	19	31	28	31	29		26	32	34	28	2
1	27		41	31	14	27	23	28	25	21				24	1
0				28	23	19	24								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	86	87	90	87	100	100	100	100	100				94	92	19
18	82	83	84	82	100	100	96	100	97				90	88	18
17	79	80	79	77	97	100	92	97	93				86	84	17
16	76	76	73	71	93	96	88	92	88				82	80	16
15	72	73	68	66	89	92	84	88	84				75	78	15
14	69	69	62	61	85	87	80	83	79	72			74	72	14
13	65	65	57	55	81	83	76	78	74		70	69	70	68	13
12	62	62	51	50	77	79	72	73	70	65		66	64		12
11	58	58	45	45	73	74	67	69	65		63	63	63	60	11
10	55	54	40	40	69	70	63	64	61	57	59	60	59	56	10
9	51	51	34	34	65	66	59	59	56	54	56	57	55	52	9
8	48	47	29	29	60	61	55	55	52	50	53	54	51	48	8
7	45	44	23	24	56	57	51	50	47	47	49	51	47	44	7
6	41	40	18	18	52	53	47	45	43	43	46	48	43	40	6
5	38	36	12	13	48	48	43	41	38	39	43	45	39	36	5
4	34	33	7	8	44	44	39	36	34	36	39	42	35	32	4
3	31	29	1	2	40	40	35	31	29	32	36	39	31	28	3
2	27	26	0	0	36	35	31	26	24	28	32	36	28	24	2
1	24	22	0	0	32	31	27	22	20	25	29	33	24	21	1
0	20	18	0	0	28	27		17							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	96	100		100	100	100	96	97	89						19
18	91	95	100	100	100	99	92	93	85	84				100	18
17	87	91	100	100	99	96	88	89			95				17
16	83	86	100	96	95	92	85	85	77		92				16
15	79	82	100	92	91	88	81	81	73	74	88	77	68	88	15
14	74	78	95	87	86	84	77	77	70	71	84		65		14
13	70	73	90	83	82	80	73	74	66	67	80	70		80	13
12	66	69	85	79	78	76	70	70	62		76	67	59	75	12
11	62	65	80	74	74	72	66	66	58	61	73	63		71	11
10	58	60	75	70	70	68	62	62	54	58	69	59	54	67	10
9	53	56	70	66	65	65	58	58		54	65	56	51	62	9
8	49	52	65	61	61	61	55	54	46	51	61	52	48	58	8
7	45	48	59	57	57	57	51	50	42		58	49	45	54	7
6	41	43	54	52	53	53	47	46	38	45	54	45	42	49	6
5	36	39	49	48	48	49	43	42	34	42	50	42	40	45	5
4	32	35	44	44	44	45	40	38	30		46	38	37	41	4
3	28	30	39	39	40	41	36	34	27	35	42	34	34	36	3
2	24	26	34	35	36	37	32	30	23		39	31	31	32	2
1	19	22	29	31	31	33	28	26		29	35	27	28	28	1
0		17	23	26				22		25	31	24	25		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		98		100		99							19	
18	100	100	99	89			100		95							18	
17	96	100	95	85	90		99		90	96				94	88	17	
16	92	97	91	82	86	84	95		86	91	97			90	84	89	16
15	88	93	87	78	82	80	91		82	87				86	80		15
14	84	88	83	75	78	76	87		78	82	88			82	77	81	14
13	80	84	79	71	74	72	83		74	77	83	83		78	73	77	13
12	76	79	74	68	71	68	78		70	73			65	74	69	73	12
11	72	75	70	64	67	64	74	62	65	68	74	74		70	66	69	11
10	68	71	66	60	63	59	70		61	64	70	70		66	62	65	10
9	65	66	62	57	59	55	66	53	57	59	66	65	51	62	58	61	9
8	61	62	58	53	55	51	62		53	55	61	61		58	55	57	8
7	57	58	54	50	51	47	58	43	49	50	57	56	41	54	51	53	7
6	53	53	49	46	47	43	53		45	46	53	52		50	47	49	6
5	49	49	45	43	43	39	49	34	41	41	49	47	32	46	44	45	5
4	45	45	41	39	39	35	45		36	37	45	43		42	40	41	4
3	41	40	37		35	31	41	24	32	32	40	39	22	38	36		3
2	37	36	33		31	27	37	19	28	27	36	34	18	34			2
1	33	32	29		27	22	32	14	24	23	32	30	13				1
0		27			18	28	10		18	28				25	25		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 60-64 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		100		100		100				100	100	100	97		19	
18	99	100	100				100				97	100	100	93		18	
17	94	100	99		97		99					89	100		89		17
16	90	99	95				92	94	87	94			97	98	85		16
15	86	95	92		87		90	83					83				15
14	82	90	88	72	82	84	85	79	85			79	88	89	77		14
13	78	86	85		77		80	75			73		83	84	73	60	13
12	74	82	81	66	72	75	76	72	76			70	79	80	56		12
11	69	78	77	62	67	71	71	68	71			64	65	74	76	65	11
10	65	73	74	59	62	67	67	64	67			61	70	71	61		10
9	61	69	70	56	57	63	62	60	62			56	56	65	67	57	9
8	57	65	67	53	51	59	57	56	58			52	60	62	53	41	8
7	53	60	63	50	46	54	53	53	53			48	47	56	58	49	7
6	48	56	60	47		50	48	49	49			44		51	53	45	6
5	44	52	56	44	36	46	44	45	44			40	38	47	49	41	5
4	40	48	53	41		42	39	41	40			35		42	45	37	4
3	36	43	49	38	26	37	35		35			31		38	40	33	3
2	32	39	46	35	21	33	30	34	31			27		33	36	29	2
1	27		42	32	16	29	25	30	26			23			25		1
0				29		25	21	26								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	87	88	91	89	100	100	100	100	100				95	93	19	
18	84	85	86	83	100	100	98	100	99				91	89	18	
17	80	81	80	78	100	100	94	99	95				87	85	17	
16	77	77	75	73	96	99	90	95	90				83	81	16	
15	73	74	69	67	91	94	85	90	86			78	80	77	15	
14	70	70	63	62	87	90	81	85	81	75			76	73	14	
13	66	67	58	57	83	86	77	81	77			72	72	72	70	13
12	63	63	52	51	79	81	73	76	72	67			68	66	66	12
11	60	59	47	46	75	77	69	71	68			66	66	64	62	11
10	56	56	41	41	71	73	65	66	63	60	62	63	60	58		10
9	53	52	36	35	67	68	61	62	58	56	59	60	56	54		9
8	49	49	30	30	63	64	57	57	54	53	55	57	52	50		8
7	46	45	24	25	59	60	53	52	49	49	52	54	48	46		7
6	42	41	19	19	55	55	49	48	45	46	49	51	45	42		6
5	39	38	13	14	50	51	45	43	40	42	45	48	41	38		5
4	35	34	8	9	46	47	41	38	36	38	42	45	37	34		4
3	32	30	2	4	42	42	37	34	31	35	38	42	33	30		3
2	28	27	0	0	38	38	33	29	27	31	35	39	29	26		2
1	25	23	0	0	34	34	29	24	22	27	32	36	25	22		1
0	22	20	0	0	30	29		19								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	94	100		100	100	100	97	99	89						19
18	90	94	100	100	100	100	93	95	85	84				100	18
17	86	90	100	100	100	97	89	91			96				17
16	81	85	100	99	97	93	86	87	77		93				16
15	77	81	100	94	93	89	82	83	73	74	89	78	69	90	15
14	73	77	98	90	89	85	78	79	70	71	85		66		14
13	69	72	93	85	84	81	74	75	66	68	81	71		81	13
12	64	68	88	81	80	77	71	71	62		78	67	60	77	12
11	60	64	83	77	76	73	67	67	58	61	74	63		73	11
10	56	59	78	72	72	70	63	63	54	58	70	60	55	68	10
9	52	55	72	68	67	66	59	59		55	66	56	52	64	9
8	47	51	67	64	63	62	56	55	46	52	62	53	49	60	8
7	43	46	62	59	59	58	52	52	42		59	49	46	55	7
6	39	42	57	55	55	54	48	48	38	45	55	46	43	51	6
5	35	38	52	50	50	50	44	44	34	42	51	42	40	47	5
4	31	33	47	46	46	46	41	40	30		47	38	37	42	4
3	26	29	42	42	42	42	37	36	27	36	44	35	35	38	3
2	22	25	36	37	38	39	33	32	23		40	31	32	34	2
1	18	20	31	33	34	35	29	28		29	36	28	29	29	1
0	16	16	26	29				24		26	32	24	26		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		100		100		97							19	
18	100	100	100	90			100		93							18	
17	99	100	97	87	92		100		89	96				91	88	17	
16	95	99	93	83	88	85	98		85	91		97		87	84	89	16
15	91	95	89	80	84	81	93		81	87				83	81		15
14	88	90	85	76	80	77	89		77	82		88		79	77	81	14
13	84	86	80	72	76	73	85		72	77	83	84		75	73	77	13
12	80	82	76	69	72	69	81		68	73			65	71	70	73	12
11	76	77	72	65	68	65	77	63	64	68	74	75		67	66	69	11
10	72	73	68	62	64	61	73		60	64	70	70		63	62	65	10
9	68	69	64	58	60	57	68	53	56	59	66	66	51	59	59	61	9
8	64	64	60	55	57	52	64		52	55	61	61		55	55	57	8
7	60	60	55	51	53	48	60	44	48	50	57	57	42	51	51	53	7
6	56	56	51	47	49	44	56		43	46	53	53		47	48	49	6
5	52	51	47	44	45	40	52	34	39	41	49	48	32	43	44	45	5
4	48	47	43	40	41	36	47		35	37	45	44		39	40	41	4
3	44	43	39		37	32	43	24	31	32	40	39	22	35	37		3
2	40	38	35		33	28	39	20	27	27	36	35	18	31			2
1	36	34	30		29	24	35	15	23	23	32	30	13				1
0	30	30			20	31	10		18	28				26	25		0

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 7-8 years

Age: 65-69 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		100		100		100				100	100	100	98		19	
18	99	100	100				100				98	100	100	94		18	
17	95	100	99		98		100				91	100		90		17	
16	91	100	96				94	97	89	96			98	100	86	16	
15	87	96	92		88		92	85				84				15	
14	83	92	89	72	83	86	88	82	87		80	89	91	78		14	
13	78	87	85		78		83	78			74		85	86	74	60	13
12	74	83	82	66	73	77	78	74	77			71	80	82	56	12	
11	70	79	78	63	68	73	74	70	73		66	66	76	77	66	52	11
10	66	74	75	60	63	69	69	66	68			62	71	73	62	48	10
9	62	70	71	57	58	65	65	63	64		58	58	67	69	58	45	9
8	57	66	68	54	53	60	60	59	59			53	62	64	54	41	8
7	53	62	64	50	48	56	55	55	55		50	49	57	60	50	37	7
6	49	57	60	47		52	51	51	50			45	53	55	46	34	6
5	45	53	57	44	38	48	46	47	46		41	40	48	51	42	30	5
4	41	49	53	41		43	42	44	41			37	44	46	38	26	4
3	36	44	50	38	28	39	37		37			33	39	42	34	23	3
2	32	40	46	35	22	35	33	36	32		29	35	38	30	19	2	
1	28		43	32	17	31	28	32	28		25			26		1	
0				29		27	23	28								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	90	93	90	100	100	100	100	100				97	95	19
18	85	86	87	85	100	100	99	100	100				93	91	18
17	81	82	82	79	100	100	95	100	97				89	87	17
16	78	79	76	74	98	100	91	97	93				85	83	16
15	75	75	71	69	94	97	87	92	88			80	81	79	15
14	71	71	65	63	90	92	83	88	83	78			77	75	14
13	68	68	59	58	86	88	79	83	79			75	74	73	13
12	64	64	54	53	82	84	75	78	74	70			69	67	12
11	61	61	48	47	77	79	71	74	70			68	68	65	11
10	57	57	43	42	73	75	67	69	65	63	65	65	62	59	10
9	54	53	37	37	69	71	63	64	61	59	62	62	58	55	9
8	50	50	32	32	65	66	59	59	56	56	58	59	54	51	8
7	47	46	26	26	61	62	55	55	52	52	55	56	50	47	7
6	43	43	20	21	57	58	51	50	47	48	51	53	46	43	6
5	40	39	15	16	53	53	47	45	43	45	48	50	42	39	5
4	37	35	9	10	49	49	43	41	38	41	45	47	38	36	4
3	33	32	4	5	45	45	39	36	33	37	41	44	34	32	3
2	30	28	0	0	40	41	35	31	29	34	38	41	31	28	2
1	26	24	0	0	36	36	31	27	24	30	35	38	27	24	1
0	23	21	0	0	32	32		22							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	92	100		100	100	100	98	100	89						19
18	88	93	100	100	100	100	95	97	85	85				100	18
17	84	89	100	100	100	98	91	93			97				17
16	80	84	100	100	99	94	87	89	77		94				16
15	75	80	100	96	95	90	83	85	73	75	90	78	70	92	15
14	71	76	100	92	91	86	80	81	70	72	86		67		14
13	67	71	96	88	86	82	76	77	66	68	82	71		83	13
12	63	67	91	83	82	79	72	73	62		79	67	61	79	12
11	59	63	85	79	78	75	68	69	58	62	75	64		74	11
10	54	58	80	75	74	71	64	65	54	59	71	60	55	70	10
9	50	54	75	70	69	67	61	62		55	67	57	53	66	9
8	46	50	70	66	65	63	57	58	46	52	63	53	50	61	8
7	42	45	65	62	61	59	53	54	42		60	50	47	57	7
6	37	41	60	57	57	55	49	50	38	46	56	46	44	53	6
5	33	37	55	53	53	51	46	46	34	43	52	42	41	48	5
4	29	32	50	48	48	48	42	42	30		48	39	38	44	4
3	25	28	44	44	44	44	38	38	27	36	45	35	35	40	3
2	20	24	39	40	40	40	34	34	23		41	32	33	35	2
1	16	19	34	35	36	36	31	30		30	37	28	30	31	1
0	15	19	29	31				26		26	33	25	27		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		96							19	
18	100	100	100	91			100		92							18	
17	100	100	99	88	94		100		88	96			89	88		17	
16	99	100	95	84	90	87	100		84	91		98		85	85	88	16
15	95	97	91	81	86	82	96		79	87			81	81		15	
14	91	93	86	77	82	78	92		75	82		89		77	77	81	14
13	87	88	82	74	78	74	88		71	77	82	84		73	74	77	13
12	83	84	78	70	74	70	83		67	73			66	69	70	73	12
11	79	80	74	67	70	66	79	63	63	68	74	75		65	66	69	11
10	75	75	70	63	66	62	75		59	64	70	71		61	63	65	10
9	71	71	66	59	62	58	71	54	55	59	66	66	51	57	59	61	9
8	67	67	61	56	58	54	67		50	55	61	62		53	55	57	8
7	63	62	57	52	54	50	62	44	46	50	57	58	42	49	52	53	7
6	59	58	53	49	50	45	58		42	46	53	53		45	48	49	6
5	55	54	49	45	46	41	54	34	38	41	49	49	32	41	44	45	5
4	51	49	45	42	43	37	50		34	37	44	44		37	41	41	4
3	47	45	41		39	33	46	25	30	32	40	40	22	33	37		3
2	43	41	36		35	29	42	20	25	27	36	35	18	29			2
1	39	36	32		31	25	37	15	21	23	32	31	13				1
0	32				21	33	11		18	28				26	25		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 70-74 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS
19	100		100		100		100				100	100	100	99	19
18	100	100	100				100				99	100	100	95	18
17	96	100	100		99		100				92	100		91	17
16	91	100	97			96	99	92	97			100	100	87	16
15	87	97	93		89		95	88				86			15
14	83	93	90	72	84	87	90	84	88		81	91	93	79	14
13	79	88	86		79		86	80			76		86	88	75
12	75	84	82	66	74	79	81	76	79			72	82	84	56
11	71	80	79	63	69	75	76	73	75		68	68	77	79	52
10	66	75	75	60	64	71	72	69	70			63	73	75	48
9	62	71	72	57	59	66	67	65	66		59	59	68	70	45
8	58	67	68	54	54	62	63	61	61			54	63	66	55
7	54	63	65	51	49	58	58	57	57		51	50	59	62	37
6	50	58	61	48		54	54	54	52		47		54	57	34
5	45	54	58	45	39	49	49	50	48		43	41	50	53	30
4	41	50	54	42		45	44	46	43			39	45	48	26
3	37	46	51	38	29	41	40		39			35	41	44	35
2	33	41	47	35	24	37	35	38	34		31		36	39	19
1	29		44	32	19	33	31	35	30		26			27	1
0				29		28	26	31							0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	91	95	92	100	100	100	100	100				98	96	19
18	86	87	89	86	100	100	100	100	100				94	92	18
17	83	84	83	81	100	100	97	100	99				90	88	17
16	79	80	78	76	100	100	93	99	95				86	84	16
15	76	76	72	70	96	99	89	95	90			83	83	81	15
14	72	73	67	65	92	94	85	90	86	81			79	77	14
13	69	69	61	60	88	90	81	85	81			78	77	75	13
12	65	66	56	54	84	86	77	81	77	73			71	69	12
11	62	62	50	49	80	82	73	76	72			71	71	67	11
10	58	58	44	44	76	77	69	71	68	66	68	68	63	61	10
9	55	55	39	38	72	73	65	67	63	62	65	65	59	57	9
8	52	51	33	33	67	69	61	62	58	59	61	62	55	53	8
7	48	47	28	28	63	64	57	57	54	55	58	59	51	49	7
6	45	44	22	23	59	60	53	52	49	52	54	56	48	45	6
5	41	40	17	17	55	56	49	48	45	48	51	53	44	41	5
4	38	37	11	12	51	51	45	43	40	44	48	50	40	37	4
3	34	33	5	7	47	47	41	38	36	41	44	47	36	33	3
2	31	29	0	1	43	43	36	34	31	37	41	44	32	29	2
1	27	26	0	0	39	38	32	29	27	33	38	41	28	25	1
0	24	22	0	0	35	34		24							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	91	100		100	100	100	100	100	89						19
18	87	92	100	100	100	100	96	100	85	85				100	18
17	82	87	100	100	100	99	92	96			99				17
16	78	83	100	100	100	95	89	92	77		95				16
15	74	79	100	99	97	91	85	88	73	75	91	78	70	93	15
14	70	74	100	94	93	88	81	84	70	72	87		68		14
13	65	70	98	90	88	84	77	80	66	69	83	71		85	13
12	61	66	93	86	84	80	74	76	62		80	68	62	80	12
11	57	62	88	81	80	76	70	72	58	62	76	64		76	11
10	53	57	83	77	76	72	66	68	54	59	72	61	56	72	10
9	48	53	78	73	72	68	62	64		56	68	57	53	67	9
8	44	49	73	68	67	64	58	60	46	53	65	53	50	63	8
7	40	44	68	64	63	60	55	56	42		61	50	48	59	7
6	36	40	63	59	59	57	51	52	38	46	57	46	45	54	6
5	32	36	57	55	55	53	47	48	34	43	53	43	42	50	5
4	27	31	52	51	50	49	43	44	30		49	39	39	46	4
3	23	27	47	46	46	45	40	40	27	37	46	36	36	41	3
2	19	23	42	42	42	41	36	36	23		42	32	33	37	2
1	15	18	37	38	38	37	32	32		30	38	29	31	33	1
0	14	14	32	33				28		27	34	25	28		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	100		100		100		100		95							19
18	100	100	100	93			100		91							18
17	100	100	100	89	96		100		86	96				86	89	17
16	100	100	97	86	92	88	100		82	91	98		82	85	88	16
15	98	99	92	82	88	84	98		78	87				78	81	15
14	94	95	88	78	84	80	94		74	82	89			74	78	80
13	90	91	84	75	80	75	90		70	77	82	85		70	74	76
12	86	86	80	71	76	71	86		66	73			66	66	70	72
11	82	82	76	68	72	67	82	64	62	68	74	76		62	67	68
10	78	78	72	64	68	63	77		57	64	70	71		58	63	64
9	74	73	67	61	64	59	73	54	53	59	66	67	51	54	59	61
8	70	69	63	57	60	55	69		49	55	61	63		50	56	57
7	66	65	59	54	56	51	65	44	45	50	57	58	42	46	52	53
6	62	60	55	50	52	47	61		41	46	53	54		42	48	49
5	58	56	51	46	48	43	57	35	37	41	49	49	32	38	45	45
4	54	52	47	43	44	38	52		32	37	44	45		34	41	41
3	50	47	42		40	34	48	25	28	32	40	40	22	30	37	3
2	46	43	38		36	30	44	21	24	27	36	36	18	26		2
1	42	39	34		32	26	40	16	20	23	32	31	13			1
0	34				22	36	11		18	28				26	25	0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 7-8 years
Age: 75-79 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		100		100		100				100	100	100	100	100	19	
18	100	100	100				100				100	100	100	96		18	
17	96	100	100			100		100				94	100		92		17
16	92	100	97				98	100	94	99			100	100	88		16
15	88	98	94			90		98	91				87				15
14	84	94	90	73	85	89	93	87	90			83	92	94	80		14
13	79	89	87			80		89	83			78		88	90	76	13
12	75	85	83	67	75	81	84	79	81			74	83	86		56	12
11	71	81	80	63	70	76	79	75	76			69	69	79	81	68	11
10	67	77	76	60	65	72	75	71	72			65	74	77	64	48	10
9	63	72	73	57	60	68	70	68	67			61	60	70	72	60	9
8	59	68	69	54	55	64	66	64	63			56	65	68	56	41	8
7	54	64	65	51	50	60	61	60	58			53	51	60	63	53	7
6	50	59	62	48		55	56	56	54			49		56	59	49	6
5	46	55	58	45	40	51	52	52	49			45	42	51	55	45	5
4	42	51	55	42		47	47	49	45			41		47	50	41	4
3	38	47	51	39	30	43	43		40			36		42	46	37	3
2	33	42	48	36	25	38	38	41	36			32		38	41	33	2
1	29		44	33	20	34	34	37	31			28			29		1
0				30		30	29	33								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	91	92	96	94	100	100	100	100	100				100	98	19	
18	87	89	91	88	100	100	100	100	100				96	94	18	
17	84	85	85	83	100	100	99	100	100				92	90	17	
16	80	81	80	78	100	100	95	100	97				88	86	16	
15	77	78	74	72	99	100	91	97	92				86	84	15	
14	73	74	69	67	94	96	87	92	88	84			80	78	14	
13	70	70	63	62	90	92	83	88	83			81	80	76	74	13
12	67	67	58	56	86	88	79	83	79	77			72	70	12	
11	63	63	52	51	82	83	75	78	74	74	74		68	66	11	
10	60	60	46	46	78	79	71	74	70	69	71	71	65	62	10	
9	56	56	41	40	74	75	67	69	65	66	68	68	61	58	9	
8	53	52	35	35	70	70	63	64	61	62	64	65	57	54	8	
7	49	49	30	30	66	66	59	60	56	59	61	62	53	50	7	
6	46	45	24	24	62	62	55	55	52	55	58	59	49	47	6	
5	42	42	19	19	57	57	50	50	47	51	54	56	45	43	5	
4	39	38	13	14	53	53	46	45	42	48	51	53	41	39	4	
3	36	34	7	9	49	49	42	41	38	44	47	50	37	35	3	
2	32	31	2	3	45	44	38	36	33	40	44	47	34	31	2	
1	29	27	0	0	41	40	34	31	29	37	41	44	30	27	1	
0	25	23	0	0	37	36		27							0	

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 7-8 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	91	100		100	100	100	100	100	89						19
18	87	91	100	100	100	100	98	100	85	86				100	18
17	82	86	100	100	100	100	94	99			100				17
16	78	82	100	100	100	97	90	95	77		96				16
15	74	78	100	100	99	93	87	91	73	76	92	79	71	95	15
14	70	73	100	97	95	89	83	87	70	73	88		68		14
13	65	69	100	93	91	85	79	83	66	69	85	72		87	13
12	61	65	96	88	87	81	75	79	62		81	68	63	82	12
11	57	60	91	84	82	77	72	75	58	63	77	65		78	11
10	53	56	86	80	78	73	68	71	54	60	73	61	57	74	10
9	48	52	81	75	74	69	64	67		56	69	57	54	69	9
8	44	47	76	71	70	66	60	63	46	53	66	54	51	65	8
7	40	43	71	66	65	62	57	59	42		62	50	49	61	7
6	36	39	66	62	61	58	53	55	38	47	58	47	46	56	6
5	32	34	60	58	57	54	49	51	34	44	54	43	43	52	5
4	27	30	55	53	53	50	45	47	30		51	40	40	48	4
3	23	26	50	49	48	46	42	43	27	37	47	36	37	43	3
2	19	21	45	45	44	42	38	39	23		43	33	34	39	2
1	15	17	40	40	40	38	34	35		31	39	29	31	35	1
0	13	35		36				31		27	36	25	29		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		95							19	
18	100	100	100	94			100		91							18	
17	100	100	100	91	96		100		86	96			82	89		17	
16	100	100	99	87	92	89	100		82	91		99	78	85	88	16	
15	98	100	95	83	88	85	100		78	87			74	82		15	
14	94	98	90	80	84	81	97		74	82		90	70	78	80	14	
13	90	93	86	76	80	77	93		70	77	82	85		66	74	76	13
12	86	89	82	73	76	73	89		66	73			66	62	71	72	12
11	82	85	78	69	72	69	84	64	62	68	74	76		58	67	68	11
10	78	80	74	66	68	64	80		57	64	70	72		54	63	64	10
9	74	76	69	62	64	60	76	55	53	59	66	68	51	50	60	60	9
8	70	72	65	58	60	56	72		49	55	61	63		46	56	56	8
7	66	67	61	55	56	52	68	45	45	50	57	59	42	42	52	52	7
6	62	63	57	51	52	48	64		41	46	53	54		38	49	48	6
5	58	58	53	48	48	44	59	35	37	41	49	50	32	34	45	44	5
4	54	54	49	44	44	40	55		32	37	44	45		30	41	41	4
3	50	50	44		40	36	51	26	28	32	40	41	23	26	38		3
2	46	45	40		36	32	47	21	24	27	36	36	18	22			2
1	42	41	36		32	27	43	16	20	23	32	32	13				1
0	37				23	38	12		18	28				27	25		0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 7-8 years
Age: 80-85 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		100		100		100				100	100	100	100	100	19
18	100	100	100				100				100	100	100	98		18
17	97	100	100			100		100			96	100		94		17
16	93	100	98				100	100	97	100			100	100	90	16
15	89	99	95			92		100	94			89				15
14	84	95	91	73	87	91	97	90	92		84	94	96	82		14
13	80	91	87			82		92	86		80	89	92	78	60	13
12	76	86	84	67	77	83	87	82	83		75	85	88	56		12
11	72	82	80	64	72	78	83	78	78		71	71	80	83	70	11
10	68	78	77	61	67	74	78	75	74		66	76	79	66	48	10
9	63	74	73	58	62	70	74	71	69		63	62	71	74	62	9
8	59	69	70	55	57	66	69	67	65		57	67	70	58	41	8
7	55	65	66	51	51	62	64	63	60		55	53	62	65	54	7
6	51	61	63	48		57	60	59	56		51	58	61	50	34	6
5	47	56	59	45	41	53	55	56	51		47	44	53	57	46	5
4	42	52	56	42		49	51	52	47		42	49	52	42	26	4
3	38	48	52	39	31	45	46		42		38	44	48	38	23	3
2	34	44	49	36	26	40	42	44	38		34	39	43	34	19	2
1	30		45	33	21	36	37	40	33		30			30		1
0				30		32	32	37								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	94	99	96	100	100	100	100	100				100	100	19
18	89	90	93	91	100	100	100	100	100				97	96	18
17	85	86	88	85	100	100	100	100	100				93	92	17
16	82	83	82	80	100	100	97	100	99				90	88	16
15	78	79	77	75	100	100	93	100	95				89	86	15
14	75	75	71	69	97	97	89	95	90	88			82	80	14
13	71	72	66	64	93	93	85	90	86		85	83	78	76	13
12	68	68	60	59	89	89	81	86	81	81			74	72	12
11	64	65	54	53	85	85	77	81	77		78	77	70	68	11
10	61	61	49	48	81	80	73	76	72	73	75	74	66	64	10
9	58	57	43	43	76	76	69	72	68	70	71	71	62	60	9
8	54	54	38	37	72	72	65	67	63	66	68	68	58	56	8
7	51	50	32	32	68	67	61	62	59	62	64	65	55	52	7
6	47	47	27	27	64	63	57	57	54	59	61	62	51	48	6
5	44	43	21	22	60	59	52	53	49	55	58	59	47	44	5
4	40	39	16	16	56	54	48	48	45	51	54	56	43	40	4
3	37	36	10	11	52	50	44	43	40	48	51	53	39	36	3
2	33	32	4	6	48	46	40	39	36	44	47	50	35	32	2
1	30	28	0	0	44	41	36	34	31	40	44	47	31	29	1
0	26	25	0	0	40	37		29							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	95	98		91	90	91	89	89	87							19
18	90	97	93	87	86	87	85	85	83	78						18
17	86	92	88	82	81	83	81	81			85					17
16	82	88	83	78	77	79	77	77	76		81					16
15	78	84	78	73	73	75	74	73	72	68	77	73	62	75		15
14	73	79	73	69	69	71	70	69	68	65	73		59			14
13	69	75	68	65	65	68	66	65	64	61	70	66		66		13
12	65	71	62	60	60	64	62	61	60		66	62	53	61		12
11	61	66	57	56	56	60	59	57	56	55	62	59		57		11
10	56	62	52	52	52	56	55	53	52	52	58	55	47	53		10
9	52	58	47	47	48	52	51	49		49	55	52	45	48		9
8	48	53	42	43	43	48	47	45	44	45	51	48	42	44		8
7	44	49	37	38	39	44	43	41	40		47	45	39	40		7
6	40	45	32	34	35	40	40	37	37	39	43	41	36	35		6
5	35	40	27	30	31	36	36	33	33	36	39	38	33	31		5
4	31	36	21	25	26	33	32	29	29		36	34	30	27		4
3	27	32	16	21	22	29	28	25	25	29	32	30	27	22		3
2	23	27	11	17	18	25	25	21	21		28	27	25	18		2
1	18	23	6	12	14	21	21	17		23	24	23	22	14		1
0	19	1		8				13		19	21	20	19			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score	
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	93		89		89		88		97								19	
18	89	91	84	79			84		93								18	
17	85	87	80	75	81		80		88	90			93	81			17	
16	81	82	76	72	77	73	76		84	85	90		89	78	84		16	
15	77	78	72	68	73	69	72		80	80			85	74			15	
14	73	74	68	64	69	65	67		76	76	81		81	70	76		14	
13	69	69	63	61	65	61	63		72	71	80	76		77	67	72		13
12	65	65	59	57	61	56	59		68	67		62	73	63	68		12	
11	61	61	55	54	57	52	55	57	63	62	71	67		69	59	64		11
10	57	56	51	50	53	48	51		59	58	67	63		65	56	60		10
9	53	52	47	47	49	44	47	48	55	53	63	59	48	61	52	56		9
8	49	48	43	43	45	40	42		51	49	58	54		57	48	52		8
7	45	44	38	39	41	36	38	38	47	44	54	50	38	53	45	48		7
6	41	39	34	36	37	32	34		43	40	50	45		49	41	44		6
5	37	35	30	32	33	28	30	29	38	35	46	41	29	45	37	40		5
4	33	31	26	29	29	24	26		34	30	41	36		41	34	36		4
3	29	26	22		25	19	22	19	30	26	37	32	19	37	30			3
2	25	22	18		21	15	17	14	26	21	33	27	14	33				2
1	21	18	13		17	11	13	10	22	17	29	23	10					1
0	13				7	9	5		12	25			19	20			0	

(continued)

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 20-34 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		91		97		93				91	97	96	87		19	
18	91	96	87				88				86	92	91	83		18	
17	87	92	84		87		84				76	88		79		17	
16	83	87	80			77	79	73	79			83	83	75		16	
15	79	83	77		77		75	69				73				15	
14	75	79	73	68	71	68	70	65	70			68	74	74	67	14	
13	70	74	69		66		66	62			60		70	69	63	61	13
12	66	70	66	62	61	60	61	58	61			59	65	65	57	12	
11	62	66	62	59	56	56	56	54	56			52	55	61	60	11	
10	58	62	59	56	51	51	52	50	52			50	56	56	51	10	
9	54	57	55	53	46	47	47	46	47			43	46	52	47	9	
8	50	53	52	50	41	43	43	43	43			41	47	47	43	8	
7	45	49	48	47	36	39	38	39	38			35	37	42	39	7	
6	41	44	45	44		34	33	35	34			31	38	38	35	6	
5	37	40	41	41	26	30	29	31	29			27	28	33	34	5	
4	33	36	38	38		26	24	27	25			23	29	29	27	4	
3	29	32	34	35	16	22	20		20			19	24	25	23	3	
2	24	27	31	31	11	18	15	20	16			15	20	21	19	2	
1	20		27	28	6	13	11	16	11			10			15	1	
0				25		9	6	12								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	77	78	86	84	89	92	87	91	87				81	81	19
18	74	74	81	78	85	88	83	86	83				77	77	18
17	70	71	75	73	81	84	79	81	78				73	73	17
16	67	67	70	68	77	79	75	77	73				69	70	16
15	63	63	64	62	73	75	71	72	69				63	66	15
14	60	60	59	57	69	71	67	67	64	60			62	62	14
13	56	56	53	52	64	66	63	62	60				59	57	13
12	53	53	47	46	60	62	59	58	55	52			54	54	12
11	50	49	42	41	56	58	54	53	51				50	50	11
10	46	45	36	36	52	53	50	48	46	45	48	48	46	46	10
9	43	42	31	30	48	49	46	44	42	41	45	45	42	42	9
8	39	38	25	25	44	45	42	39	37	38	42	42	38	38	8
7	36	34	20	20	40	41	38	34	33	34	38	39	35	34	7
6	32	31	14	14	36	36	34	30	28	30	35	36	31	30	6
5	29	27	9	9	32	32	30	25	23	27	32	33	27	26	5
4	25	24	3	4	27	28	26	20	19	23	28	30	23	22	4
3	22	20	0	0	23	23	22	16	14	19	25	27	19	18	3
2	19	16	0	0	19	19	18	11	10	16	21	24	15	14	2
1	15	13	0	0	15	15	14	6	5	12	18	21	11	10	1
0	12	9	0	0	11	10		1							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	93	90	100	96	94	93	89	89	87	84	79				19
18	89	94	99	91	90	89	85	85	84	87				91	18
17	84	90	94	87	86	85	82	81							17
16	80	86	89	83	81	82	78	78	76			83			16
15	76	81	83	78	77	78	74	74	72	69	79	74	63	78	15
14	72	77	78	74	73	74	70	70	68	66	76		60		14
13	68	73	73	69	69	70	67	66	64	62	72	67		69	13
12	63	68	68	65	65	66	63	62	60		68	63	55	65	12
11	59	64	63	61	60	62	59	58	56	56	64	60		60	11
10	55	60	58	56	56	58	55	54	52	53	60	56	49	56	10
9	51	55	53	52	52	54	52	50	50	57	53	46	52		9
8	46	51	47	48	48	51	48	46	44	46	53	49	43	47	8
7	42	47	42	43	43	47	44	42	41		49	45	40	43	7
6	38	43	37	39	39	43	40	38	37	40	45	42	38	39	6
5	34	38	32	34	35	39	37	34	33	37	42	38	35	34	5
4	29	34	27	30	31	35	33	30	29		38	35	32	30	4
3	25	30	22	26	26	31	29	26	25	30	34	31	29	26	3
2	21	25	17	21	22	27	25	22	21		30	28	26	21	2
1	17	21	11	17	18	23	22	18	24	27	24	23	17		1
0	17	21	6	13				14	20	23	20	21			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	96	90	92		91		93		95							19	
18	93	90	88	81			89		91							18	
17	89	86	84	78	83		85		87	90			93	82		17	
16	85	82	80	74	79	75	81		83	85	89		89	78	84	16	
15	81	77	76	71	75	71	77		79	80			85	75		15	
14	77	73	71	67	71	67	72		75	76	80		81	71	76	14	
13	73	69	67	63	67	63	68		70	71	79	76		77	67	72	13
12	69	64	63	60	63	59	64		66	67		62	73	64	68	12	
11	65	60	59	56	59	55	60	58	62	62	71	67		69	60	64	11
10	61	55	55	53	55	51	56		58	58	67	62		65	56	60	10
9	57	51	50	49	51	47	52	49	54	53	63	58	48	61	53	56	9
8	53	47	46	46	47	42	47		50	49	58	54		57	49	52	8
7	49	42	42	42	43	38	43	39	45	44	54	49	38	53	45	48	7
6	45	38	38	38	39	34	39		41	40	50	45		49	42	44	6
5	41	34	34	35	35	30	35	30	37	35	46	40	29	45	38	40	5
4	37	29	30	31	31	26	31		33	30	41	36		41	34	36	4
3	33	25	25		27	22	27	20	29	26	37	31	19	37	31		3
2	29	21	21		23	18	22	15	25	21	33	27	14	33			2
1	25	16	17		19	14	18	11	21	17	29	22	10				1
0	12	12			10	14	6		12	25			20	20			0

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 9-11 years
Age: 35-39 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	97		92		99		96				93	100	99	89		19
18	93	98	89				91				89	95	95	85		18
17	88	94	85		89		86			80		91		81		17
16	84	89	82			80	82	75	82			86	86	77		16
15	80	85	78		79		77	72			75					15
14	76	81	74	69	74	72	73	68	73		71	77	77	70		14
13	72	77	71		69		68	64			63		73	73	66	13
12	67	72	67	63	64	63	63	60	64		62		68	68	57	12
11	63	68	64	60	59	59	59	56	60		55	57	64	64	58	11
10	59	64	60	57	54	55	54	53	55		53		59	60	54	10
9	55	60	57	54	49	51	50	49	51		47	48	55	55	50	9
8	51	55	53	51	44	46	45	45	46		44		50	51	46	8
7	47	51	50	48	39	42	41	41	42		39		39	45	42	7
6	42	47	46	44		38	36	37	37		34		41	42	38	6
5	38	42	43	41	29	34	31	34	33		30	30	36	37	34	5
4	34	38	39	38		30	27	30	28		26		32	33	30	4
3	30	34	36	35	18	25	22		24		22		27	29	26	3
2	26	30	32	32	13	21	18	22	19		18		23	24	22	2
1	21		28	29	8	17	13	18	15		14			18		1
0				26		13	8	14								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	80	80	87	84	94	96	91	95	92				84	85	19
18	76	77	82	79	90	92	87	91	87				80	81	18
17	73	73	76	74	86	88	82	86	82				76	77	17
16	69	70	70	68	81	83	78	81	78				72	73	16
15	66	66	65	63	77	79	74	77	73				65	69	15
14	62	62	59	58	73	75	70	72	69	63			65	65	14
13	59	59	54	52	69	70	66	67	64		59	59	61	61	13
12	55	55	48	47	65	66	62	63	60	55			57	57	12
11	52	51	43	42	61	62	58	58	55		52	53	53	53	11
10	48	48	37	36	57	57	54	53	51	48	49	50	49	49	10
9	45	44	31	31	53	53	50	48	46	44	46	47	45	45	9
8	42	41	26	26	49	49	46	44	42	41	42	44	41	41	8
7	38	37	20	21	44	44	42	39	37	37	39	41	37	37	7
6	35	33	15	15	40	40	38	34	32	33	35	38	34	33	6
5	31	30	9	10	36	36	34	30	28	30	32	35	30	29	5
4	28	26	4	5	32	31	30	25	23	26	29	32	26	25	4
3	24	23	0	0	28	27	26	20	19	22	25	29	22	21	3
2	21	19	0	0	24	23	22	16	14	19	22	26	18	17	2
1	17	15	0	0	20	19	18	11	10	15	19	23	14	13	1
0	14	12	0	0	16	14		6							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	93	100		98	96	94	90	90	87						19
18	89	93	100	94	92	91	86	86	84	79				93	18
17	84	89	96	89	88	87	82	82			88				17
16	80	85	91	85	84	83	78	78	76		84				16
15	76	80	86	80	79	79	75	74	72	69	80	74	63	80	15
14	72	76	81	76	75	75	71	70	68	66	77		60		14
13	68	72	76	72	71	71	67	66	64	63	73	67		71	13
12	63	67	71	67	67	67	63	62	60		69	64	55	66	12
11	59	63	66	63	62	63	59	58	56	56	65	60		62	11
10	55	59	60	59	58	60	56	54	52	53	62	57	49	58	10
9	51	54	55	54	54	56	52	50	50		58	53	46	53	9
8	46	50	50	50	50	52	48	46	44	47	54	49	43	49	8
7	42	46	45	45	45	48	44	43	41		50	46	40	45	7
6	38	41	40	41	41	44	41	39	37	40	46	42	37	40	6
5	34	37	35	37	37	40	37	35	33	37	43	39	35	36	5
4	29	33	30	32	33	36	33	31	29		39	35	32	32	4
3	25	28	25	28	28	32	29	27	25	31	35	32	29	27	3
2	21	24	19	24	24	29	26	23	21		31	28	26	23	2
1	17	20	14	19	20	25	22	19	24	28	24	23	19		1
0	16	9		15				15	21	24	21	20			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	96	94			91		96		95							19	
18	93	90	83				92		91							18	
17	89	88	86	79	83		87		87	90			93	82		17	
16	85	84	82	75	79	77	83		83	85	90		89	79	84	16	
15	81	80	77	72	75	72	79		79	80			85	75		15	
14	77	75	73	68	71	68	75		75	76	81		81	71	76	14	
13	73	71	69	65	67	64	71		70	71	79	76		77	68	72	13
12	69	66	65	61	63	60	67		66	67		62	73	64	68	12	
11	65	62	61	58	59	56	62	59	62	62	71	67		69	60	64	11
10	61	58	56	54	55	52	58		58	58	63		65	57	60		10
9	57	53	52	50	51	48	54	49	54	53	63	58	48	61	53	56	9
8	53	49	48	47	47	44	50		50	49	58	54		57	49	52	8
7	49	45	44	43	43	40	46	40	45	44	54	50	38	53	46	48	7
6	45	40	40	40	39	35	42		41	40	50	45		49	42	44	6
5	41	36	36	36	35	31	37	30	37	35	46	41	29	45	38	40	5
4	37	32	31	33	31	27	33		33	30	41	36		41	35	36	4
3	33	27	27		27	23	29	21	29	26	37	32	19	37	31		3
2	29	23	23		23	19	25	16	25	21	33	27	15	33			2
1	25	19	19		19	15	21	11	21	17	29	23	10				1
0	14				11	16	6		12	25			20	20		0	

(continued)

APPENDIX E (continued)

Sex: Male
Education: 9-11 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	97		93		99		97				95	100	100	91		19
18	93	99	89				93				90	97	97	87		18
17	89	95	86		89		88				82	92		83		17
16	85	91	82			82	83	77	84			88	88	79		16
15	81	86	79		79		79	73				77				15
14	76	82	75	69	74	74	74	69	75		72	79	79	71		14
13	72	78	72		69		70	65			65	74	75	67	63	13
12	68	73	68	63	64	65	65	62	66		63	70	70		59	12
11	64	69	65	60	59	61	60	58	61		57	59	65	66	59	11
10	60	65	61	57	54	57	56	54	57		54	61	61	55	52	10
9	55	61	57	54	49	52	51	50	52		49	50	56	57	51	9
8	51	56	54	51	44	48	47	46	48		45	52	53	47	44	8
7	47	52	50	48	39	44	42	43	43		40	41	47	48	43	7
6	43	48	47	45		40	38	39	39		36	42	44	39	37	6
5	39	43	43	42	29	36	33	35	34		32	32	38	39	35	5
4	35	39	40	39		31	28	31	30		28		33	35	31	4
3	30	35	36	35	19	27	24		25		24		29	30	27	3
2	26	31	33	32	14	23	19	24	21		20		24	26	23	2
1	22		29	29	9	19	15	20	16		16			19		1
0				26		14	10	16								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	81	82	88	85	96	99	92	98	94				86	86	19
18	77	78	82	79	92	94	88	93	89				82	82	18
17	74	74	77	74	88	90	84	88	85				78	78	17
16	70	71	71	69	84	86	80	84	80				74	74	16
15	67	67	65	64	80	81	76	79	76				66	70	15
14	63	64	60	58	76	77	72	74	71	64			66	66	14
13	60	60	54	53	71	73	68	70	67		62	60	62	62	13
12	57	56	49	48	67	68	64	65	62	57			58	58	12
11	53	53	43	42	63	64	60	60	57		55	54	55	54	11
10	50	49	38	37	59	60	56	56	53	50	51	51	51	51	10
9	46	46	32	32	55	55	52	51	48	46	48	48	47	47	9
8	43	42	26	26	51	51	48	46	44	42	45	45	43	43	8
7	39	38	21	21	47	47	44	41	39	39	41	42	39	39	7
6	36	35	15	16	43	42	40	37	35	35	38	39	35	35	6
5	32	31	10	10	39	38	36	32	30	31	35	36	31	31	5
4	29	27	4	5	35	34	32	27	26	28	31	33	27	27	4
3	26	24	0	0	30	30	28	23	21	24	28	30	23	23	3
2	22	20	0	0	26	25	24	18	17	20	24	27	20	19	2
1	19	17	0	0	22	21	19	13	12	17	21	24	16	15	1
0	15	13	0	0	18	17		9							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	91	100		100	98	96	90	91	87						19
18	87	92	100	96	94	92	86	87	84	80				94	18
17	83	88	99	92	90	88	83	83			89				17
16	79	84	94	87	86	84	79	79	76		85				16
15	74	79	89	83	81	80	75	75	72	70	82	75	64	81	15
14	70	75	84	78	77	76	71	71	68	67	78		61		14
13	66	71	79	74	73	72	68	67	64	63	74	68		73	13
12	62	66	73	70	69	69	64	63	60		70	64	55	68	12
11	57	62	68	65	64	65	60	59	56	57	66	60		64	11
10	53	58	63	61	60	61	56	55	52	54	63	57	50	59	10
9	49	53	58	57	56	57	53	51		50	59	53	47	55	9
8	45	49	53	52	52	53	49	47	44	47	55	50	44	51	8
7	41	45	48	48	48	49	45	43	41		51	46	41	46	7
6	36	40	43	43	43	45	41	39	37	41	48	43	38	42	6
5	32	36	38	39	39	41	38	35	33	38	44	39	35	38	5
4	28	32	32	35	35	37	34	31	29		40	36	33	33	4
3	24	27	27	30	31	34	30	28	25	31	36	32	30	29	3
2	19	23	22	26	26	30	26	24	21		32	28	27	25	2
1	15	19	17	22	22	26	22	20		25	29	25	24	20	1
0	14	12		17				16		21	25	21	21		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		96		93		98		94							19	
18	96	95	92	84			94		90							18	
17	92	91	88	80	85		90		86	90				93	83	17	
16	88	86	83	77	81	78	86		82	85	90		89	79	83	16	
15	84	82	79	73	77	74	82		77	80				85	75	15	
14	80	77	75	70	73	70	77		73	76	81			81	72	14	
13	76	73	71	66	69	65	73		69	71	79	77		77	68	72	13
12	72	69	67	62	65	61	69		65	67		62		73	64	68	12
11	68	64	63	59	61	57	65	59	61	62	71	68		69	61	64	11
10	64	60	58	55	57	53	61		57	58	67	64		65	57	60	10
9	60	56	54	52	53	49	57	50	52	53	63	59	48	61	53	56	9
8	56	51	50	48	49	45	52		48	49	58	55		57	50	52	8
7	52	47	46	45	45	41	48	40	44	44	54	50	39	53	46	48	7
6	48	43	42	41	41	37	44		40	40	50	46		49	42	44	6
5	44	38	37	37	37	33	40	31	36	35	46	41	29	45	39	40	5
4	40	34	33	34	33	28	36		32	30	41	37		41	35	36	4
3	36	30	29		29	24	31	21	28	26	37	32	19	37	31		3
2	32	25	25		25	20	27	16	23	21	33	28	15	33			2
1	28	21	21		21	16	23	12	19	17	29	23	10				1
0	17				12	19	7		12	25				20	20		0

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 9-11 years
Age: 45-49 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	98		94		100		99				96	100	100	92		19	
18	94	100	90				94				92	98	99	88		18	
17	90	96	86		90		90			83		94		84		17	
16	85	92	83			84	85	78	86			89	90	80		16	
15	81	87	79		80		80	75			78					15	
14	77	83	76	70	75	75	76	71	77		74	80	81	72		14	
13	73	79	72		70		71	67		67		76	77	68	63	13	
12	69	75	69	64	65	67	67	63	68		65	71	72	59		12	
11	64	70	65	60	60	63	62	59	63	58	60	67	68	60	55	11	
10	60	66	62	57	55	58	58	56	59		56	62	63	56	52	10	
9	56	62	58	54	50	54	53	52	54	50	51	58	59	52	48	9	
8	52	57	55	51	45	50	48	48	50		47	53	54	48	44	8	
7	48	53	51	48	40	46	44	44	45	42	42	49	50	44	40	7	
6	43	49	48	45		42	39	40	41	38		44	46	40	37	6	
5	39	45	44	42	30	37	35	37	36	34	33	39	41	36	33	5	
4	35	40	41	39		33	30	33	32		30		35	37	32	29	4
3	31	36	37	36	20	29	25		27		25		30	32	28	26	3
2	27	32	33	33	15	25	21	25	23		21		26	28	24	22	2
1	23		30	30	10	20	16	21	18		17			20		1	
0				27		16	12	17								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	82	83	88	85	98	100	94	100	96				87	88	19
18	78	79	83	80	94	97	90	96	92				83	84	18
17	75	76	77	75	90	93	86	91	87				79	80	17
16	72	72	72	70	86	88	82	86	82				75	76	16
15	68	69	66	64	82	84	78	81	78				68	72	15
14	65	65	61	59	78	80	74	77	73	66			68	68	14
13	61	61	55	54	74	75	70	72	69		64	62	64	64	13
12	58	58	49	48	70	71	66	67	64	59		60	60	60	12
11	54	54	44	43	66	67	62	63	60		57	56	56	56	11
10	51	50	38	38	62	62	58	58	55	52	53	53	52	52	10
9	47	47	33	32	57	58	54	53	51	48	50	50	48	48	9
8	44	43	27	27	53	54	50	49	46	44	47	44	44	44	8
7	41	40	22	22	49	49	46	44	41	41	43	44	40	40	7
6	37	36	16	16	45	45	42	39	37	37	40	41	37	36	6
5	34	32	11	11	41	41	37	34	32	33	36	38	33	32	5
4	30	29	5	6	37	36	33	30	28	30	33	35	29	28	4
3	27	25	0	0	33	32	29	25	23	26	30	33	25	24	3
2	23	21	0	0	29	28	25	20	19	22	26	30	21	20	2
1	20	18	0	0	25	23	21	16	14	19	23	27	17	17	1
0	16	14	0	0	20	19		11							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	91	100		100	100	97	91	92	87						19
18	87	91	100	98	96	93	87	88	84	80				96	18
17	83	87	100	94	92	89	83	84			90				17
16	79	82	97	90	88	85	79	80	76		86				16
15	74	78	92	85	83	81	76	76	72	70	83	75	65	83	15
14	70	74	87	81	79	77	72	72	68	67	79		62		14
13	66	69	81	76	75	74	68	68	64	64	75	68		74	13
12	62	65	76	72	71	70	64	64	60		71	64	56	70	12
11	57	61	71	68	67	66	61	60	56	57	67	61		66	11
10	53	57	66	63	62	62	57	56	52	54	64	57	50	61	10
9	49	52	61	59	58	58	53	52		51	60	54	48	57	9
8	45	48	56	55	54	54	49	48	44	48	56	50	45	52	8
7	41	44	51	50	50	46	44		41		52	47	42	48	7
6	36	39	45	46	45	46	42	40	37	41	49	43	39	44	6
5	32	35	40	41	41	43	38	36	33	38	45	39	36	39	5
4	28	31	35	37	37	39	34	33	29		41	36	33	35	4
3	24	26	30	33	33	35	31	29	25	32	37	32	31	31	3
2	19	22	25	28	28	31	27	25	21		33	29	28	26	2
1	15	18	20	24	24	27	23	21		25	30	25	25	22	1
0	13	15		20				17		22	26	22	22		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		98		93		100		94							19	
18	96	97	94	85			97		90							18	
17	92	93	89	81	85		92		86	90				92	83	17	
16	88	88	85	78	81	79	88		82	85	91		88	79	83	16	
15	84	84	81	74	77	75	84		77	80				84	76	15	
14	80	80	77	71	73	71	80		73	76	82			80	72	14	
13	76	75	73	67	69	67	76		69	71	79	78		76	68	71	13
12	72	71	69	64	65	63	72		65	67		63	72	65	67	12	
11	68	67	64	60	61	58	67	60	61	62	71	69		68	61	63	11
10	64	62	60	57	57	54	63		57	58	67	64		64	57	59	10
9	60	58	56	53	53	50	59	50	52	53	62	60	48	60	54	56	9
8	56	54	52	49	49	46	55		48	49	58	55		56	50	52	8
7	52	49	48	46	45	42	51	41	44	44	54	51	39	52	46	48	7
6	48	45	43	42	41	38	46		40	40	50	46		48	43	44	6
5	44	41	39	39	37	34	42	31	36	35	46	42	29	44	39	40	5
4	40	36	35	35	33	30	38		32	30	41	37		40	35	36	4
3	36	32	31		29	26	34	22	28	26	37	33	19	36	32		3
2	32	28	27		25	21	30	17	23	21	33	28	15	32			2
1	28	23	23		21	17	26	12	19	17	29	24	10				1
0	19				13	21	7		12	24				21	20		0

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 9-11 years
Age: 50-54 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	99		94		100		100				97	100	100	93		19
18	94	100	91				96				93	100	100	89		18
17	90	97	87		92		92			85		95		85		17
16	86	93	84			85	87	80	87			91	92	81		16
15	82	88	80		82		82	76			79					15
14	78	84	77	70	77	77	78	73	78		75	82	83	73		14
13	73	80	73		72		73	69		68		77	78	69	63	13
12	69	76	70	64	67	69	69	65	69		66	73	74	59		12
11	65	71	66	61	61	64	64	61	65	60	62	68	70	61	55	11
10	61	67	62	58	56	60	60	57	60		57	64	65	57		10
9	57	63	59	55	51	56	55	54	56	52	53	59	61	53	48	9
8	52	59	55	52	46	52	50	50	51		48	55	56	49	44	8
7	48	54	52	48	41	47	46	46	47	44	44	50	52	45	40	7
6	44	50	48	45		43	41	42	42	40		45	47	41	37	6
5	40	46	45	42	31	39	37	38	38	35	35	41	43	37	33	5
4	36	41	41	39		35	32	34	33	31		36	39	33	29	4
3	32	37	38	36	21	31	27		29	27		32	34	29	26	3
2	27	33	34	33	16	26	23	27	24	23		27	30	25	22	2
1	23		31	30	11	22	18	23	20	19				21		1
0				27		18	14	19								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	84	89	86	100	100	96	100	98				89	89	19
18	80	81	84	81	97	99	92	98	94				85	85	18
17	76	77	78	76	93	95	88	93	89				81	81	17
16	73	73	73	70	88	91	84	89	85				77	77	16
15	69	70	67	65	84	87	80	84	80				71	73	15
14	66	66	61	60	80	82	76	79	76	69			69	69	14
13	62	63	56	54	76	78	72	74	71		66	65	65	65	13
12	59	59	50	49	72	74	68	70	66	61		61	62	62	12
11	56	55	45	44	68	69	64	65	62		59	59	57	58	11
10	52	52	39	39	64	65	60	60	57	54	56	56	54	54	10
9	49	48	34	33	60	61	56	56	53	50	52	53	50	50	9
8	45	44	28	28	56	56	51	51	48	47	49	50	46	46	8
7	42	41	23	23	52	52	47	46	44	43	45	47	42	42	7
6	38	37	17	17	47	48	43	42	39	39	42	44	38	38	6
5	35	34	11	12	43	43	39	37	35	36	39	41	34	34	5
4	31	30	6	7	39	39	35	32	30	32	35	38	30	30	4
3	28	26	0	1	35	35	31	27	26	28	32	35	26	26	3
2	25	23	0	0	31	30	27	23	21	25	29	32	23	22	2
1	21	19	0	0	27	26	23	18	16	21	25	29	19	18	1
0	18	16	0	0	23	22		13							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	90	100		100	100	98	92	93	85						19	
18	85	90	100	100	98	94	88	89	81	81				98	18	
17	81	86	100	96	94	90	84	85			91				17	
16	77	81	100	92	90	86	80	81	74		87				16	
15	73	77	94	87	86	83	77	77	70	71	84	76	65	85	15	
14	69	73	89	83	81	79	73	73	66	68	80		63		14	
13	64	68	84	79	77	75	69	69	62	64	76	68		76	13	
12	60	64	79	74	73	71	65	65	58		72	65	57	72	12	
11	56	60	74	70	69	67	62	62	54	58	69	61		67	11	
10	52	55	69	66	64	63	58	58	50	55	65	58	51	63	10	
9	47	51	64	61	60	59	54	54		51	61	54	48	58	9	
8	43	47	58	57	56	55	50	50	42	48	57	51	46	54	8	
7	39	42	53	52	52	46	46		38		53	47	43	50	7	
6	35	38	48	48	47	48	43	42	34	42	50	43	40	45	6	
5	30	34	43	44	43	44	39	38	31	39	46	40	37	41	5	
4	26	30	38	39	39	40	35	34	27		42	36	34	37	4	
3	22	25	33	35	35	36	31	30	23	32	38	33	31	32	3	
2	18	21	28	31	31	32	28	26	19		35	29	28	28	2	
1	14	17	23	26	26	28	24	22		26	31	26	26	24	1	
0	12	17		22				18	22	27	22	22		23	0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	100		100		95		100		93								19
18	96	99	95	86			99		89								18
17	92	95	91	83	87		95		84	90				91	83		17
16	88	91	87	79	83	80	91		80	85		92		87	80	83	16
15	84	86	83	76	79	76	87		76	80				83	76		15
14	80	82	79	72	75	72	82		72	76		83		79	72	75	14
13	76	78	75	68	71	68	78		68	71	79	78		75	69	71	13
12	72	73	70	65	67	64	74		64	67			63	71	65	67	12
11	68	69	66	61	63	60	70	60	59	62	71	69		67	61	63	11
10	64	65	62	58	59	56	66		55	58	67	65		63	58	59	10
9	61	60	58	54	55	51	61	51	51	53	62	60	48	59	54	55	9
8	57	56	54	51	51	47	57		47	49	58	56		55	50	51	8
7	53	52	50	47	47	43	53	41	43	44	54	51	39	51	47	47	7
6	49	47	45	44	43	39	49		39	40	50	47		47	43	43	6
5	45	43	41	40	39	35	45	32	34	35	46	42	29	43	39	40	5
4	41	39	37	36	35	31	41		30	30	41	38		39	36	36	4
3	37	34	33		31	27	36	22	26	26	37	34	19	35	32		3
2	33	30	29		27	23	32	17	22	21	33	29	15	31			2
1	29	26	24		23	19	28	12	18	17	29	25	10				1
0	21				14	24	8		12	24				21	20		0

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 9-11 years

Age: 55-59 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	99		95		100		100				99	100	100	94		19	
18	95	100	91				98				94	100	100	90		18	
17	91	98	88		93		94			87		97		86		17	
16	87	94	84			87	89	82	89			92	93	82		16	
15	82	90	81		83		85	78			81					15	
14	78	85	77	70	78	79	80	74	80		76	83	85	74		14	
13	74	81	74		73		75	71		70		79	80	70	63	13	
12	70	77	70	64	68	70	71	67	71		67	74	76	59		12	
11	66	72	67	61	63	66	66	63	66	62	63	70	71	62	55	11	
10	61	68	63	58	58	62	62	59	62		58	65	67	58		10	
9	57	64	60	55	53	58	57	55	57	54	54	61	62	54	48	9	
8	53	60	56	52	48	53	52	52	53		49	56	58	50	44	8	
7	49	55	53	49	43	49	48	48	48	45	45	52	54	46	40	7	
6	45	51	49	46		45	43	44	44	41		47	49	42	37	6	
5	40	47	45	43	32	41	39	40	39	37	36	42	45	38	33	5	
4	36	42	42	40		37	34	36	35		33		38	40	35	29	4
3	32	38	38	36	22	32	30		30		29		33	36	31	26	3
2	28	34	35	33	17	28	25	29	26		25		29	32	27	22	2
1	24		31	30	12	24	20	25	21		21			23		1	
0				27		20	16	21								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	86	90	87	100	100	98	100	100				90	91	19
18	81	82	85	82	99	100	94	100	96				86	87	18
17	77	78	79	77	95	98	90	96	91				82	83	17
16	74	75	74	71	91	94	86	91	87				78	79	16
15	71	71	68	66	87	89	82	86	82		74		75	75	15
14	67	67	63	61	83	85	78	82	78	71			71	71	14
13	64	64	57	55	79	81	74	77	73		68		68	67	13
12	60	60	51	50	74	76	70	72	69	64			63	63	12
11	57	57	46	45	70	72	65	67	64		62		59	59	11
10	53	53	40	40	66	68	61	63	60	56	58		55	55	10
9	50	49	35	34	62	63	57	58	55	53	55		56	51	9
8	46	46	29	29	58	59	53	53	51	49	51		53	47	8
7	43	42	24	24	54	55	49	49	46	45	48		50	43	7
6	39	39	18	18	50	50	45	44	41	42	45		47	40	6
5	36	35	12	13	46	46	41	39	37	38	41		44	36	5
4	33	31	7	8	42	42	37	35	32	34	38		41	32	4
3	29	28	1	2	37	37	33	30	28	31	34		38	28	3
2	26	24	0	0	33	33	29	25	23	27	31		35	24	2
1	22	20	0	0	29	29	25	20	19	23	28		32	20	1
0	19	17	0	0	25	24		16							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	90	100		100	100	99	93	95	85						19
18	85	89	100	100	100	95	89	91	81	81				99	18
17	81	85	100	99	96	92	85	87			92				17
16	77	80	100	94	92	88	81	83	74		88				16
15	73	76	97	90	88	84	77	79	70	71	85	76	66	86	15
14	69	72	92	85	83	80	74	75	66	68	81		63		14
13	64	67	87	81	79	76	70	71	62	65	77	69		78	13
12	60	63	82	77	75	72	66	67	58		73	65	58	73	12
11	56	59	77	72	71	68	62	63	54	58	70	62		69	11
10	52	54	71	68	66	64	59	59	50	55	66	58	52	65	10
9	47	50	66	64	62	61	55	55		52	62	55	49	60	9
8	43	46	61	59	58	57	51	51	42	49	58	51	46	56	8
7	39	41	56	55	54	53	47	47	38		55	47	44	51	7
6	35	37	51	50	50	49	44	43	34	42	51	44	41	47	6
5	30	33	46	46	45	45	40	39	31	39	47	40	38	43	5
4	26	28	41	42	41	41	36	35	27		43	37	35	38	4
3	22	24	36	37	37	37	32	31	23	33	39	33	32	34	3
2	18	20	30	33	33	33	29	27	19		36	30	29	30	2
1	14	15	25	29	28	29	25	23		26	32	26	26	25	1
0	11	20		24				19		23	28	22	24		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100			95		100		93							19	
18	96	100	97	88			100		89							18	
17	92	97	93	84	87		97		84	90				89	84	17	
16	88	93	89	80	83	81	93		80	85	92			85	80	83	16
15	84	89	85	77	79	77	89		76	80				81	76		15
14	80	84	81	73	75	73	85		72	76	83			77	73	75	14
13	76	80	76	70	71	69	81		68	71	79	79		73	69	71	13
12	72	76	72	66	67	65	76		64	67		63		69	65	67	12
11	68	71	68	63	63	61	72	61	59	62	71	70		65	62	63	11
10	64	67	64	59	59	57	68		55	58	67	65		61	58	59	10
9	61	63	60	55	55	53	64	51	51	53	62	61	48	57	54	55	9
8	57	58	56	52	51	49	60		47	49	58	57		53	51	51	8
7	53	54	51	48	47	44	56	42	43	44	54	52	39	49	47	47	7
6	49	50	47	45	43	40	51		39	40	50	48		45	43	43	6
5	45	45	43	41	39	36	47	32	34	35	46	43	29	41	40	39	5
4	41	41	39	38	35	32	43		30	30	41	39		37	36	35	4
3	37	37	35		31	28	39	22	26	26	37	34	20	33	32		3
2	33	32	30		27	24	35	18	22	21	33	30	15	29			2
1	29	28	26		23	20	31	13	18	17	29	25	10				1
0	24				16	26	8		12	24				21	20		0

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 9-11 years
Age: 60-64 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		96		100		100				100	100	100	95		19	
18	96	100	92				100				96	100	100	91		18	
17	91	99	89		95		96			88		98		87		17	
16	87	95	85			89	91	84	91			94	95	83		16	
15	83	91	82		85		87	80			82					15	
14	79	86	78	71	80	81	82	77	82		78	85	86	75		14	
13	75	82	74		75		78	73		72		80	82	72	60	13	
12	70	78	71	64	70	72	73	69	73		69	76	78		56	12	
11	66	74	67	61	65	68	69	65	68	64	64	71	73	64	52	11	
10	62	69	64	58	60	64	64	61	64		60	67	69	60	49	10	
9	58	65	60	55	55	59	59	58	59	55	55	62	64	56	45	9	
8	54	61	57	52	50	55	55	54	55		51	58	60	52	41	8	
7	49	56	53	49	45	51	50	50	50	47	46	53	55	48	37	7	
6	45	52	50	46		47	46	46	46	43		49	51	44	34	6	
5	41	48	46	43	35	43	41	42	41	39	37	44	47	40	30	5	
4	37	44	43	40		38	36	39	37		35		39	42	36	26	4
3	33	39	39	37	25	34	32		32		31		35	38	32	23	3
2	28	35	36	34	20	30	27	31	28		26		30	33	28	19	2
1	24		32	31	15	26	23	27	23	22				24		1	
0				27		21	18	23								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	86	87	92	89	100	100	100	100	100				92	92	19
18	82	83	86	83	100	100	96	100	98				88	88	18
17	79	80	81	78	97	100	92	98	94				84	84	17
16	75	76	75	73	93	96	88	93	89				80	80	16
15	72	72	69	67	89	92	83	89	85				76	76	15
14	68	69	64	62	85	87	79	84	80	74			72	73	14
13	65	65	58	57	81	83	75	79	75		71	70	68	69	13
12	61	62	53	51	77	79	71	75	71	66			64	65	12
11	58	58	47	46	73	75	67	70	66		64	64	60	61	11
10	54	54	42	41	69	70	63	65	62	59	61	62	57	57	10
9	51	51	36	35	64	66	59	60	57	55	58	59	53	53	9
8	48	47	30	30	60	62	55	56	53	52	54	56	49	49	8
7	44	43	25	25	56	57	51	51	48		48	51	53	45	7
6	41	40	19	19	52	53	47	46	44		44	47	50	41	6
5	37	36	14	14	48	49	43	42	39	41	44	47	37	37	5
4	34	33	8	9	44	44	39	37	35		37	41	44	33	4
3	30	29	3	4	40	40	35	32	30	33	37	41	29	29	3
2	27	25	0	0	36	36	31	28	25	30	34	38	26	25	2
1	23	22	0	0	32	31	27	23	21	26	30	35	22	21	1
0	20	18	0	0	27	27		18							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	88	100		100	100	100	94	97	85						19
18	84	88	100	100	100	97	90	93	81	82				100	18
17	80	83	100	100	98	93	86	89			93				17
16	75	79	100	97	94	89	82	85	74		90				16
15	71	75	100	92	90	85	79	81	70	72	86	76	67	88	15
14	67	71	95	88	85	81	75	77	66	69	82		64		14
13	63	66	90	83	81	77	71	73	62	65	78	69		79	13
12	58	62	84	79	77	73	67	69	58		74	66	59	75	12
11	54	58	79	75	73	69	64	65	54	59	71	62		71	11
10	50	53	74	70	69	66	60	61	50	56	67	58	53	66	10
9	46	49	69	66	64	62	56	57		52	63	55	50	62	9
8	42	45	64	62	60	58	52	53	42	49	59	51	47	57	8
7	37	40	59	57	56	54	49	49	38		56	48	44	53	7
6	33	36	54	53	52	50	45	45	34	43	52	44	41	49	6
5	29	32	49	48	47	46	41	41	31	40	48	41	39	44	5
4	25	27	43	44	43	42	37	37	27		44	37	36	40	4
3	20	23	38	40	39	38	34	33	23	33	40	34	33	36	3
2	16	19	33	35	35	35	30	29	19		37	30	30	31	2
1	12	14	28	31	30	31	26	25		27	33	26	27	27	1
0	10	23		27				21		23	29	23	24		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		97		100		91							19	
18	99	100	99	89			100		87							18	
17	95	100	95	85	89		100		83	90			87	84		17	
16	91	95	91	82	85	83	96		79	85	93		83	80	83	16	
15	87	91	87	78	81	78	92		75	80			79	77		15	
14	83	87	82	75	77	74	87		71	76	84		75	73	75	14	
13	80	82	78	71	73	70	83		66	71	79	79		71	69	71	13
12	76	78	74	67	69	66	79		62	67		63	67	66	67	12	
11	72	74	70	64	65	62	75	61	58	62	71	70		63	62	63	11
10	68	69	66	60	61	58	71		54	58	67	66		59	58	59	10
9	64	65	62	57	57	54	66	52	50	53	62	62	48	55	55	55	9
8	60	61	57	53	53	50	62		46	49	58	57		51	51	51	8
7	56	56	53	50	49	46	58	42	41	44	54	53	39	47	47	47	7
6	52	52	49	46	45	42	54		37	40	50	48		43	44	43	6
5	48	48	45	42	41	37	50	33	33	35	46	44	29	39	40	39	5
4	44	43	41	39	37	33	46		29	30	41	39		35	36	35	4
3	40	39	37		33	29	41	23	25	26	37	35	20	31	33		3
2	36	35	32		29	25	37	18	21	21	33	30	15	27			2
1	32	30	28		25	21	33	13	17	17	29	26	10				1
0	26				17	29	9		12	24			22	19		0	

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 9-11 years
Age: 65-69 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		96		100		100				100	100	100	97	19	
18	96	100	93				100				97	100	100	93	18	
17	92	100	89		96		99				90	100		89	17	
16	88	96	86				91	94	87	92		95	97	85	16	
15	84	92	82		86		89	83			84				15	
14	79	88	79	71	81	82	85	79	83		79	86	88	77	14	
13	75	83	75		76		80	75			74		82	84	73	13
12	71	79	72	65	71	74	76	71	74		70	77	79	56	12	
11	67	75	68	62	66	70	71	67	70		65	66	73	75	65	11
10	63	70	65	59	61	65	66	64	65		61	68	71	61	10	
9	58	66	61	56	56	61	62	60	61		57	57	64	66	57	9
8	54	62	58	52	51	57	57	56	56		52	59	62	53	41	8
7	50	58	54	49	46	53	53	52	52		49	48	55	57	49	7
6	46	53	50	46		49	48	48	47		45		50	53	45	6
5	42	49	47	43	36	44	44	45	43		41	39	45	48	41	5
4	37	45	43	40		40	39	41	38		36		41	44	37	4
3	33	40	40	37	26	36	34		34		32		36	40	33	3
2	29	36	36	34	21	32	30	33	29		28		32	35	29	2
1	25		33	31	16	27	25	29	25		24			25		1
0				28		23	21	26							0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	87	88	93	90	100	100	100	100	100				93	94	19
18	83	85	88	85	100	100	97	100	100				89	90	18
17	80	81	82	79	100	100	93	100	96				85	86	17
16	76	77	76	74	96	99	89	96	91				81	82	16
15	73	74	71	69	91	94	85	91	87		79		77	78	15
14	69	70	65	63	87	90	81	86	82	77			74	74	14
13	66	66	60	58	83	86	77	82	78		74		73	70	13
12	63	63	54	53	79	81	73	77	73	69			66	66	12
11	59	59	49	47	75	77	69	72	69		67		67	62	11
10	56	56	43	42	71	73	65	68	64	62	64		64	58	10
9	52	52	37	37	67	68	61	63	60	58	60		61	54	9
8	49	48	32	32	63	64	57	58	55	55	57		58	50	8
7	45	45	26	26	59	60	53	53	50	51	54		55	46	7
6	42	41	21	21	54	55	49	49	46	47	50		52	43	6
5	38	37	15	16	50	51	45	44	41	44	47		49	39	5
4	35	34	10	10	46	47	41	39	37	40	43		46	35	4
3	32	30	4	5	42	42	37	35	32	36	40		43	31	3
2	28	27	0	0	38	38	33	30	28	33	37		40	27	2
1	25	23	0	0	34	34	29	25	23	29	33		37	23	1
0	21	19	0	0	30	29		21							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	86	100		100	100	100	95	99	85						19
18	82	87	100	100	100	98	91	95	81	82				100	18
17	78	82	100	100	100	94	87	91			94				17
16	74	78	100	99	96	90	84	87	74		91				16
15	69	74	100	94	92	86	80	83	70	72	87	77	68	90	15
14	65	69	98	90	88	82	76	79	66	69	83		65		14
13	61	65	92	86	83	78	72	75	62	66	79	70		81	13
12	57	61	87	81	79	75	69	71	58		76	66	59	77	12
11	53	56	82	77	75	71	65	67	54	59	72	62		72	11
10	48	52	77	73	71	67	61	63	50	56	68	59	54	68	10
9	44	48	72	68	66	63	57	59		53	64	55	51	64	9
8	40	44	67	64	62	59	54	55	42	50	60	52	48	59	8
7	36	39	62	60	58	55	50	51	38		57	48	45	55	7
6	31	35	56	55	54	51	46	47	34	43	53	45	42	50	6
5	27	31	51	51	49	47	42	43	31	40	49	41	39	46	5
4	23	26	46	46	45	44	39	39	27		45	37	37	42	4
3	19	22	41	42	41	40	35	35	23	34	42	34	34	37	3
2	14	18	36	38	37	36	31	31	19		38	30	31	33	2
1	10	13	31	33	33	32	27	27		27	34	27	28	29	1
0	9	26		29				23		24	30	23	25		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		99		100		90							19	
18	100	100	100	90			100			86						18	
17	99	100	97	87	91		100		82	90				84	84	17	
16	95	98	93	83	87	84	98		78	85		93		80	81	83	16
15	91	93	88	79	83	80	94		73	80				76	77	15	
14	87	89	84	76	79	76	90		69	76		84		72	73	75	14
13	83	85	80	72	75	71	86		65	71	79	80		68	70	71	13
12	79	80	76	69	71	67	81		61	67			63	64	66	67	12
11	75	76	72	65	67	63	77	62	57	62	71	71		60	62	63	11
10	71	72	68	62	63	59	73		53	58	67	67		56	59	59	10
9	67	67	63	58	59	55	69	52	48	53	62	62	48	52	55	55	9
8	63	63	59	54	55	51	65		44	49	58	58		48	51	51	8
7	59	59	55	51	51	47	61	43	40	44	54	53	39	44	48	47	7
6	55	54	51	47	47	43	56		36	40	50	49		40	44	43	6
5	51	50	47	44	43	39	52	33	32	35	46	44	29	36	40	39	5
4	47	46	43	40	39	35	48		28	30	41	40		32	37	35	4
3	43	41	38		35	30	44	23	24	26	37	35	20	28	33		3
2	39	37	34		31	26	40	19	19	21	33	31	15	24			2
1	35	32	30		27	22	36	14	15	17	29	26	10				1
0	28				18	31	9		12	24				22	19		0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 9-11 years
Age: 70-74 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		97		100		100				100	100	100	98		19	
18	97	100	94				100				99	100	100	94		18	
17	92	100	90		98		100				92	100		90		17	
16	88	97	87			93	97	89	94			97	99	86		16	
15	84	93	83		88		92	85			85					15	
14	80	89	79	71	83	84	88	81	85		81	88	90	78		14	
13	76	84	76		77		83	78		75		83	86	74	60	13	
12	72	80	72	65	72	76	78	74	76		72	79	81		56	12	
11	67	76	69	62	67	71	74	70	71	67	67	74	77	66	52	11	
10	63	71	65	59	62	67	69	66	67		63	70	72	62	49	10	
9	59	67	62	56	57	63	65	62	62	59	58	65	68	58	45	9	
8	55	63	58	53	52	59	60	59	58		54	61	64	54	41	8	
7	51	59	55	50	47	55	55	55	53	50	49	56	59	50	37	7	
6	46	54	51	47		50	51	51	49	46		52	55	46	34	6	
5	42	50	48	44	37	46	46	47	44	42	40	47	50	42	30	5	
4	38	46	44	40		42	42	43	40		38		42	46	38	26	4
3	34	42	41	37	27	38	37		35		34		38	41	34	23	3
2	30	37	37	34	22	33	33	36	31		30		33	37	30	19	2
1	25		33	31	17	29	28	32	26					26		1	
0				28		25	23	28								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	89	95	92	100	100	100	100	100				95	95	19
18	84	86	89	86	100	100	99	100	100				91	91	18
17	81	82	84	81	100	100	95	100	98				87	88	17
16	78	79	78	76	98	100	91	98	94				83	84	16
15	74	75	73	70	94	96	87	93	89				82	79	15
14	71	71	67	65	90	92	83	89	85	80			75	76	14
13	67	68	61	60	86	88	79	84	80		77	76	71	72	13
12	64	64	56	54	81	83	75	79	75	72			67	68	12
11	60	60	50	49	77	79	71	75	71		70	70	63	64	11
10	57	57	45	44	73	75	67	70	66	65	67	67	60	60	10
9	53	53	39	39	69	70	63	65	62	61	63	64	56	56	9
8	50	50	34	33	65	66	59	61	57	58	60	61	52	52	8
7	47	46	28	28	61	62	55	56	53	54	57	58	48	48	7
6	43	42	23	23	57	58	51	51	48	50	53	55	44	44	6
5	40	39	17	17	53	53	47	46	44	47	50	52	40	40	5
4	36	35	11	12	49	49	43	42	39	43	46	49	36	36	4
3	33	32	6	7	44	45	39	37	35	39	43	46	32	32	3
2	29	28	0	1	40	40	34	32	30	36	40	43	29	28	2
1	26	24	0	0	36	36	30	28	25	32	36	40	25	24	1
0	22	21	0	0	32	32		23							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	85	100		100	100	100	96	100	85						19
18	81	86	100	100	100	99	93	97	81	83				100	18
17	76	81	100	100	100	95	89	93			95				17
16	72	77	100	100	98	91	85	89	74		92				16
15	68	73	100	97	94	87	81	85	70	73	88	77	69	91	15
14	64	68	100	92	90	84	78	81	66	70	84		66		14
13	59	64	95	88	85	80	74	77	62	66	80	70		83	13
12	55	60	90	84	81	76	70	73	58		77	66	60	78	12
11	51	55	85	79	77	72	66	69	54	60	73	63		74	11
10	47	51	80	75	73	68	63	65	50	57	69	59	54	70	10
9	42	47	75	71	68	64	59	61		53	65	56	52	65	9
8	38	42	69	66	64	60	55	57	42	50	61	52	49	61	8
7	34	38	64	62	60	56	51	53	38		58	49	46	56	7
6	30	34	59	57	56	53	48	49	34	44	54	45	43	52	6
5	26	29	54	53	52	49	44	46	31	41	50	41	40	48	5
4	21	25	49	49	47	45	40	42	27		46	38	37	43	4
3	17	21	44	44	43	41	36	38	23	34	43	34	35	39	3
2	13	16	39	40	39	37	33	34	19		39	31	32	35	2
1	9	12	34	36	35	33	29	30		28	35	27	29	30	1
0	8	8	28	31				26		24	31	24	26		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		89							19	
18	100	100	100	91			100		85							18	
17	100	100	99	88	93		100		80	90				81	85	17	
16	98	100	94	84	89	85	100		76	85	94			77	81	83	16
15	94	96	90	81	85	81	96		72	80				73	77		15
14	90	91	86	77	81	77	92		68	76	85			69	74	75	14
13	86	87	82	74	77	73	88		64	71	81			65	70	71	13
12	82	83	78	70	73	69	84		60	67			63	61	66	67	12
11	78	78	74	66	69	64	80	62	55	62	71	72		57	63	63	11
10	74	74	69	63	65	60	76		51	58	67	67		53	59	59	10
9	70	70	65	59	61	56	71	53	47	53	62	63	48	49	55	55	9
8	66	65	61	56	57	52	67		43	49	58	58		45	52	51	8
7	62	61	57	52	53	48	63	43	39	44	54	54	39	41	48	47	7
6	58	57	53	49	49	44	59		35	40	50	49		37	44	43	6
5	54	52	49	45	45	40	55	33	31	35	45	45	29	33	41	39	5
4	50	48	44	41	41	36	51		26	30	41	40		29	37	35	4
3	46	43	40		37	32	46	24	22	26	37	36	20	25	33		3
2	42	39	36		33	28	42	19	18	21	33	31	15	21			2
1	38	35	32		29	23	38	14	14	17	29	27	10				1
0	30				19	34	10		12	24				22	19		0

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 9-11 years
Age: 75-79 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		98		100		100				100	100	100	99		19
18	97	100	94				100				100	100	100	95		18
17	93	100	91		99		100			93		100		91		17
16	89	98	87			94	100	92	96			98	100	87		16
15	85	94	84		89		95	88			86					15
14	81	90	80	72	84	86	90	84	87		82	89	92	79		14
13	76	85	77		79		86	80		77		85	88	75	60	13
12	72	81	73	65	74	77	81	76	78		73	80	83		56	12
11	68	77	70	62	69	73	77	73	73	69	68	76	79	67	52	11
10	64	73	66	59	64	69	72	69	69		64	71	74	63	49	10
9	60	68	63	56	59	65	68	65	64	60	60	67	70	59	45	9
8	55	64	59	53	54	60	63	61	60		55	62	65	55	41	8
7	51	60	55	50	48	56	58	57	55	52	51	58	61	51	37	7
6	47	55	52	47		52	54	54	51	48		53	57	47	34	6
5	43	51	48	44	38	48	49	50	46	44	42	48	52	43	30	5
4	39	47	45	41		44	45	46	42	40		44	48	39	26	4
3	34	43	41	38	28	39	40		37	36		39	43	35	23	3
2	30	38	38	35	23	35	35	38	33	32		35	39	31	19	2
1	26		34	32	18	31	31	35	28	27				27		1
0				28	27	26	31									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	91	97	94	100	100	100	100	100				96	97	19
18	86	87	91	88	100	100	100	100	100				92	93	18
17	82	83	86	83	100	100	97	100	100				88	89	17
16	79	80	80	78	100	100	93	100	96				84	85	16
15	75	76	75	72	96	98	89	96	91	85			80	81	15
14	72	73	69	67	92	94	85	91	87	83			77	77	14
13	68	69	63	62	88	89	81	86	82	80	79	73	73	73	13
12	65	65	58	56	84	85	77	82	78	76		69	69	69	12
11	62	62	52	51	80	81	73	77	73	73	73	73	65	65	11
10	58	58	47	46	76	77	69	72	69	68	70	70	61	61	10
9	55	55	41	40	71	72	65	68	64	65	66	67	57	57	9
8	51	51	36	35	67	68	61	63	59	61	63	64	53	54	8
7	48	47	30	30	63	64	57	58	55	57	60	61	49	50	7
6	44	44	25	24	59	59	53	54	50	54	56	58	46	46	6
5	41	40	19	19	55	55	48	49	46	50	53	55	42	42	5
4	37	36	13	14	51	51	44	44	41	46	49	52	38	38	4
3	34	33	8	9	47	46	40	39	37	43	46	49	34	34	3
2	30	29	2	3	43	42	36	35	32	39	43	46	30	30	2
1	27	26	0	0	39	38	32	30	28	35	39	43	26	26	1
0	24	22	0	0	35	33		25							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	85	100		100	100	100	98	100	85						19
18	81	84	100	100	100	100	95	100	81	83				100	18
17	76	80	100	100	100	97	91	96			97				17
16	72	76	100	100	100	93	87	92	74		93				16
15	68	71	100	99	96	89	83	88	70	73	89	78	70	93	15
14	64	67	100	95	92	85	80	84	66	70	85		67		14
13	59	63	98	91	88	81	76	80	62	67	82	70		84	13
12	55	58	93	86	83	77	72	76	58		78	67	61	80	12
11	51	54	88	82	79	73	68	72	54	60	74	63		76	11
10	47	50	83	78	75	69	65	68	50	57	70	60	55	71	10
9	42	46	78	73	71	66	61	64		54	66	56	53	67	9
8	38	41	72	69	67	62	57	60	42	51	63	53	50	63	8
7	34	37	67	64	62	58	53	56	38		59	49	47	58	7
6	30	33	62	60	58	54	50	52	34	44	55	45	44	54	6
5	26	28	57	56	54	50	46	48	31	41	51	42	41	50	5
4	21	24	52	51	50	46	42	45	27		48	38	38	45	4
3	17	20	47	47	45	42	38	41	23	35	44	35	35	41	3
2	13	15	42	43	41	38	34	37	19		40	31	33	37	2
1	9	11	37	38	37	34	31	33		28	36	28	30	32	1
0	7	7	31	34				29		25	32	24	27		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		89							19	
18	100	100	100	93			100		85							18	
17	100	100	100	89	93		100		80	90				77	85	17	
16	98	100	96	86	89	86	100		76	85	94			73	81	83	16
15	94	98	92	82	85	82	99		72	80				69	78		15
14	90	94	88	79	81	78	95		68	76	86			65	74	75	14
13	86	89	84	75	77	74	91		64	71	81			61	70	71	13
12	82	85	80	71	73	70	87		60	67				63	57	67	12
11	78	81	76	68	69	66	82	63	55	62	71	72		53	63	63	11
10	74	76	71	64	65	62	78		51	58	68			49	59	59	10
9	70	72	67	61	61	58	74	53	47	53	62	63	49	45	56	55	9
8	66	68	63	57	57	54	70		43	49	58	59		41	52	51	8
7	62	63	59	54	53	49	66	43	39	44	54	54	39	37	48	47	7
6	58	59	55	50	49	45	62		35	40	50	50		33	45	43	6
5	54	55	51	46	45	41	57	34	31	35	45	45	29	29	41	39	5
4	50	50	46	43	41	37	53		26	30	41	41		25	37	35	4
3	46	46	42		37	33	49	24	22	26	37	36	20	21	34		3
2	42	42	38		33	29	45	20	18	21	33	32	15	17			2
1	38	37	34		29	25	41	15	14	17	29	28	10				1
0	33				21	37	10		12	24				23	19		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 9-11 years

Age: 80-85 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		99		100		100				100	100	100	100	100	19	
18	98	100	95				100				100	100	100	96		18	
17	94	100	92			100		100			95		100		92	17	
16	90	99	88				96	100	95	97			100	100	88	16	
15	85	95	85			90		98	91			88				15	
14	81	91	81	72	85	88	94	87	88		84	91	94	80		14	
13	77	87	77		80		89	83		79		86	90	76	60	13	
12	73	82	74	66	75	79	85	80	79		75	82	85		56	12	
11	69	78	70	63	70	75	80	76	75	71	70	77	81	68	52	11	
10	64	74	67	60	65	71	76	72	70		66	73	76	64	49	10	
9	60	70	63	56	60	67	71	68	66	62	61	68	72	60	45	9	
8	56	65	60	53	55	62	66	64	61		57	64	67	57	41	8	
7	52	61	56	50	50	58	62	61	57	54	52	59	63	53	37	7	
6	48	57	53	47		54	57	57	52	50		55	59	49	34	6	
5	43	52	49	44	40	50	53	53	48	46	43	50	54	45	30	5	
4	39	48	46	41		46	48	49	43		42		46	50	41	26	4
3	35	44	42	38	30	41	43		39		38		41	45	37	23	3
2	31	40	39	35	25	37	39	42	34		33		37	41	33	19	2
1	27		35	32	20	33	34	38	30	29				29		1	
0				29		29	30	34								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	90	92	99	96	100	100	100	100	100				98	99	19
18	87	89	94	91	100	100	100	100	100				94	95	18
17	84	85	88	85	100	100	99	100	100				90	91	17
16	80	81	83	80	100	100	95	100	98				86	87	16
15	77	78	77	75	99	99	91	98	94		88		82	83	15
14	73	74	72	69	95	95	87	94	89	87			78	79	14
13	70	70	66	64	90	91	83	89	85		83		82	75	13
12	66	67	60	59	86	86	79	84	80	80			70	71	12
11	63	63	55	53	82	82	75	80	76		77		76	67	11
10	59	60	49	48	78	78	71	75	71	72	73		73	63	10
9	56	56	44	43	74	73	67	70	66	69	70		70	59	9
8	53	52	38	37	70	69	63	66	62	65	66		67	55	8
7	49	49	33	32	66	65	59	61	57	61	63		64	51	7
6	46	45	27	27	62	61	55	56	53	58	60		61	47	6
5	42	41	21	22	58	56	50	51	48	54	56		58	43	5
4	39	38	16	16	54	52	46	47	44	50	53		55	39	4
3	35	34	10	11	49	48	42	42	39	47	50		52	36	3
2	32	31	5	6	45	43	38	37	35	43	46		49	32	2
1	28	27	0	0	41	39	34	33	30	39	43		46	28	1
0	25	23	0	0	37	35		28							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	89	96		89	88	88	86	86	82						19	
18	84	92	91	85	83	84	82	83	78	76				86	18	
17	80	87	85	81	79	80	78	79			82				17	
16	76	83	80	76	75	76	75	75	71		79				16	
15	72	79	75	72	71	72	71	71	67	66	75	72	59	73	15	
14	67	74	70	67	66	68	67	67	63	63	71		56		14	
13	63	70	65	63	62	64	63	63	59	59	67	65		64	13	
12	59	66	60	59	58	60	60	59	55		63	61	51	60	12	
11	55	61	55	54	54	57	56	55	51	53	60	58		55	11	
10	51	57	50	50	49	53	52	51	47	50	56	54	45	51	10	
9	46	53	44	46	45	49	48	47	47	52	51	42	47		9	
8	42	48	39	41	41	45	45	43	39	43	48	47	39	42	8	
7	38	44	34	37	37	41	41	39	35		45	44	36	38	7	
6	34	40	29	33	32	37	37	35	31	37	41	40	34	34	6	
5	29	35	24	28	28	33	33	31	28	34	37	36	31	29	5	
4	25	31	19	24	24	29	30	27	24		33	33	28	25	4	
3	21	27	14	19	20	26	26	23	20	27	29	29	25	21	3	
2	17	23	8	15	16	22	22	19	16		26	26	22	16	2	
1	12	18	3	11	11	18	18	15		21	22	22	19	12	1	
0	14	0		6				11		17	18	19	17		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	88		87		86		87		91								19
18	84	83	83	78			83		86								18
17	80	78	78	74	78		79		82	85				89	78		17
16	76	74	74	71	74	71	74		78	80	86		85	74	79		16
15	72	70	70	67	70	67	70		74	76			81	71			15
14	68	65	66	63	66	62	66		70	71	77		77	67	72		14
13	64	61	62	60	62	58	62		66	67	77	73		73	63	68	13
12	61	57	58	56	58	54	58		62	62		60	69	60	64		12
11	57	52	53	53	54	50	53	56	57	57	69	64		65	56	60	11
10	53	48	49	49	50	46	49		53	53	64	60		61	52	56	10
9	49	44	45	46	46	42	45	47	49	48	60	55	46	57	49	52	9
8	45	39	41	42	42	38	41		45	44	56	51		53	45	48	8
7	41	35	37	38	38	34	37	37	41	39	52	46	36	49	41	44	7
6	37	30	32	35	34	30	33		37	35	47	42		45	38	40	6
5	33	26	28	31	30	26	28	28	32	30	43	37	27	41	34	36	5
4	29	22	24	28	26	21	24		28	26	39	33		37	30	32	4
3	25	17	20		22	17	20	18	24	21	35	28	17	33	27		3
2	21	13	16		18	13	16	13	20	17	30	24	12	29			2
1	17	9	12		14	9	12	8	16	12	26	19	7				1
0	4				5	8	4		7	22				16	16		0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 12 years
Age: 20-34 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	93		86		95		91				90	95	94	86		19
18	89	93	82				86				85	90	89	82		18
17	85	88	79		85		82			76		85		78		17
16	80	84	75			74	77	71	76			81	81	74		16
15	76	80	72		75		73	67			72					15
14	72	76	68	68	70	66	68	63	67		67	72	72	66		14
13	68	71	65		65		63	60		59		67	67	62	60	13
12	64	67	61	61	60	57	59	56	58		58	63	63	56	56	12
11	60	63	57	58	55	53	54	52	54	51	54	58	58	54	52	11
10	55	58	54	55	50	49	50	48	49		49	54	54	50	49	10
9	51	54	50	52	45	44	45	44	45	43	45	49	50	46	45	9
8	47	50	47	49	40	40	40	41	40		40	45	45	42	41	8
7	43	46	43	46	35	36	36	37	36	35	36	40	41	38	37	7
6	39	41	40	43		32	31	33	31		30	36	36	34	34	6
5	34	37	36	40	25	28	27	29	27	26	27	31	32	30	30	5
4	30	33	33	37		23	22	25	22		22	27	27	26	26	4
3	26	28	29	34	15	19	18		18		18	22	23	22	23	3
2	22	24	26	31	10	15	13	18	13		14	17	19	18	19	2
1	18		22	28	5	11	8	14	9	10				14		1
0				24		6	4	10								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	76	77	87	84	87	90	85	90	86				80	81	19
18	72	73	81	78	83	86	81	85	82				76	77	18
17	69	69	76	73	79	82	77	80	77				72	73	17
16	66	66	70	68	75	77	73	76	73				68	69	16
15	62	62	64	62	71	73	69	71	68				61	64	15
14	59	59	59	57	67	69	65	66	63	59			60	61	14
13	55	55	53	52	62	65	61	61	59				59	55	13
12	52	51	48	46	58	60	57	57	54	51			53	53	12
11	48	48	42	41	54	56	53	52	50				52	49	11
10	45	44	37	36	50	52	49	47	45	44	48	46	45	45	10
9	41	41	31	30	46	47	45	43	41	40	45	43	41	41	9
8	38	37	25	25	42	43	41	38	36	37	42	40	37	37	8
7	34	33	20	20	38	39	37	33	32	33	38	37	33	33	7
6	31	30	14	15	34	34	33	29	27	29	35	34	29	29	6
5	28	26	9	9	30	30	29	24	22	26	31	31	25	25	5
4	24	22	3	4	26	26	25	19	18	22	28	28	21	21	4
3	21	19	0	0	21	21	20	14	13	18	25	25	18	17	3
2	17	15	0	0	17	17	16	10	9	15	21	22	14	13	2
1	14	12	0	0	13	13	12	5	4	11	18	19	10	10	1
0	10	8	0	0	9	8		0							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	87	100	94	92	90	86	87	82							19	
18	83	89	96	90	87	86	83	83	78	77				89	18	
17	78	85	91	85	83	82	79	79			84				17	
16	74	81	86	81	79	78	75	75	71		81				16	
15	70	77	81	77	75	75	71	72	67	67	77	73	61	76	15	
14	66	72	76	72	71	71	68	68	63	64	73		58		14	
13	62	68	70	68	66	67	64	64	59	60	69	66		67	13	
12	57	64	65	63	62	63	60	60	55		66	62	52	63	12	
11	53	59	60	59	58	59	56	56	51	54	62	59		59	11	
10	49	55	55	55	54	55	53	52	47	51	58	55	47	54	10	
9	45	51	50	50	49	51	49	48	48	54	51	44	50		9	
8	40	46	45	46	45	47	45	44	39	44	51	48	41	46	8	
7	36	42	40	42	41	43	41	40	35		47	44	38	41	7	
6	32	38	34	37	37	40	38	36	31	38	43	41	35	37	6	
5	28	33	29	33	32	36	34	32	28	35	39	37	32	33	5	
4	23	29	24	28	28	32	30	28	24		35	34	30	28	4	
3	19	25	19	24	24	28	26	24	20	28	32	30	27	24	3	
2	15	20	14	20	20	24	23	20	16		28	27	24	20	2	
1	11	16	9	15	15	20	19	16	22	24	23	21	15		1	
0	12	4		11				12	18	20	19	18			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	91	90	80		87		92		89								19
18	87	90	86	80			88		85								18
17	83	86	82	77	79		83		81	85			90	79			17
16	80	82	78	73	75	73	79		77	80	86		86	75	79		16
15	76	77	74	69	71	69	75		73	76			82	71			15
14	72	73	70	66	67	65	71		68	71	77		78	68	71		14
13	68	69	65	62	63	61	67		64	67	72		74	64	67		13
12	64	64	61	59	59	57	63		60	62		60	70	60	63		12
11	60	60	57	55	55	53	58	57	56	57	68	63	66	57	59		11
10	56	56	53	52	51	48	54		52	53	64	59	62	53	55		10
9	52	51	49	48	47	44	50	48	48	48	60	55	46	58	49		9
8	48	47	45	45	43	40	46		44	44	56	50	54	46	47		8
7	44	42	40	41	39	36	42	38	39	39	52	46	36	50	42		7
6	40	38	36	37	35	32	38		35	35	47	41	46	38	39		6
5	36	34	32	34	31	28	33	28	31	30	43	37	27	42	35		5
4	32	29	28	30	27	24	29		27	26	39	32	38	31	32		4
3	28	25	24		23	20	25	19	23	21	35	28	17	34	27		3
2	24	21	19		19	16	21	14	19	17	30	23	12	30			2
1	20	16	15		15	12	17	9	14	12	26	19	7				1
0	12				7	12	5		7	22			16	16			0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 35-39 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	94		87		98		93				93	98	97	88		19
18	90	95	84				89				88	93	93	84		18
17	86	91	80		88		84			79		88		80		17
16	82	86	77			78	80	73	80			84	84	76		16
15	77	82	73		78		75	69			75					15
14	73	78	69	68	73	69	70	66	71		70	75	75	68		14
13	69	73	66		68		66	62		63		70	71	65	60	13
12	65	69	62	62	63	61	61	58	62		61	66	66	56		12
11	61	65	59	59	57	56	57	54	57	54	57	61	62	57	52	11
10	57	61	55	56	52	52	52	50	53		52	57	58	53	49	10
9	52	56	52	53	47	48	48	47	48	46	48	52	53	49	45	9
8	48	52	48	50	42	44	43	43	44		43	48	49	45	41	8
7	44	48	45	47	37	40	38	39	39	38	39	43	44	41	37	7
6	40	43	41	44		35	34	35	35		34	39	40	37	34	6
5	36	39	38	40	27	31	29	31	30	30	30	34	36	33	30	5
4	31	35	34	37		27	25	28	26		26	30	31	29	26	4
3	27	31	31	34	17	23	20		21		21	25	27	25	23	3
2	23	26	27	31	12	18	15	20	17		17	21	22	21	19	2
1	19		24	28	7	14	11	16	12		13			17		1
0				25		10	6	12								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	78	79	87	84	92	94	89	94	91				83	84	19	
18	75	76	82	79	88	90	85	90	86				79	80	18	
17	71	72	76	74	84	86	81	85	82				75	76	17	
16	68	68	71	68	79	81	77	80	77				71	72	16	
15	64	65	65	63	75	77	73	76	72		63	67	68		15	
14	61	61	60	58	71	73	69	71	68	62		63	64		14	
13	58	58	54	52	67	68	65	66	63		59	57	59	60		13
12	54	54	48	47	63	64	61	62	59	54		56	56		12	
11	51	50	43	42	59	60	57	57	54		52	51	52	52		11
10	47	47	37	36	55	55	52	52	50	47	49	48	48	48		10
9	44	43	32	31	51	51	48	47	45	43	46	45	44	44		9
8	40	39	26	26	47	47	44	43	41	40	42	42	40	40		8
7	37	36	21	21	43	43	40	38	36	36	39	39	36	36		7
6	33	32	15	15	38	38	36	33	32	32	35	36	32	32		6
5	30	29	10	10	34	34	32	29	27	29	32	33	28	28		5
4	27	25	4	5	30	30	28	24	22	25	29	30	24	25		4
3	23	21	0	0	26	25	24	19	18	21	25	27	21	21		3
2	20	18	0	0	22	21	20	15	13	18	22	24	17	17		2
1	16	14	0	0	18	17	16	10	9	14	19	21	13	13		1
0	13	11	0	0	14	12		5								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	87	100	96	94	91	87	88	82							19
18	83	88	99	92	90	87	83	84	78	77				91	18
17	78	84	94	88	85	83	79	80			86				17
16	74	80	89	83	81	80	76	76	71		82				16
15	70	75	83	79	77	76	72	72	67	67	78	73	61	78	15
14	66	71	78	74	73	72	68	68	63	64	74		58		14
13	62	67	73	70	68	68	64	64	59	61	70	66		69	13
12	57	62	68	66	64	64	61	60	55		67	63	52	65	12
11	53	58	63	61	60	60	57	56	51	54	63	59		60	11
10	49	54	58	57	56	56	53	52	47	51	59	55	46	56	10
9	45	49	53	53	51	52	49	48	48	48	55	52	44	52	9
8	40	45	48	48	47	49	46	44	39	45	52	48	41	47	8
7	36	41	42	44	43	45	42	40	35		48	45	38	43	7
6	32	37	37	40	39	41	38	37	31	38	44	41	35	39	6
5	28	32	32	35	35	37	34	33	28	35	40	38	32	34	5
4	23	28	27	31	30	33	31	29	24		36	34	29	30	4
3	19	24	22	26	26	29	27	25	20	29	33	30	27	26	3
2	15	19	17	22	22	25	23	21	16		29	27	24	21	2
1	11	15	12	18	18	21	19	17	22	25	23	21	17		1
0	11	6	13					13	19	21	20	18			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	91	92			87		94		89							19	
18	87	93	88	80			90		85							18	
17	83	88	84	77	79		86		81	85			89	79		17	
16	80	84	80	73	75	74	82		77	80	86		85	75	79	16	
15	76	80	76	70	71	70	78		73	76			81	72		15	
14	72	75	71	66	67	66	73		68	71	77		77	68	71	14	
13	68	71	67	63	63	62	69		64	67	77	73		73	64	67	13
12	64	67	63	59	59	58	65		60	62		60	69	61	63	12	
11	60	62	59	55	55	54	61	58	56	57	68	64		65	57	59	11
10	56	58	55	52	51	50	57		52	53	64	59		61	53	55	10
9	52	53	51	48	47	46	53	48	48	48	60	55	46	57	50	51	9
8	48	49	46	45	43	42	48		44	44	56	51		53	46	47	8
7	44	45	42	41	39	37	44	38	39	39	52	46	36	49	42	43	7
6	40	40	38	38	35	33	40		35	35	47	42		45	39	39	6
5	36	36	34	34	31	29	36	29	31	30	43	37	27	41	35	35	5
4	32	32	30	31	27	25	32		27	26	39	33		37	31	31	4
3	28	27	26		23	21	27	19	23	21	35	28	17	33	28		3
2	24	23	21		19	17	23	15	19	17	30	24	12	29			2
1	20	19	17		15	13	19	10	14	12	26	19	8				1
0	14	14			9	15	5		7	22				17	16		0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 12 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	95		88		97		95				94	99	99	90		19
18	91	96	84				90				90	95	95	86		18
17	86	92	81		87		86			81		90		82		17
16	82	87	77			79	81	75	81			85	86	78		16
15	78	83	74		77		77	71			76					15
14	74	79	70	69	72	71	72	67	72		72	76	77	70		14
13	70	75	67		67		67	63		64		72	73	66	60	13
12	66	70	63	62	62	62	63	59	63		63	67	68		56	12
11	61	66	60	59	57	58	58	56	59	56	58	63	64	58	52	11
10	57	62	56	56	52	54	54	52	54		54	58	59	54	49	10
9	53	57	53	53	47	50	49	48	50	48	49	54	55	50	45	9
8	49	53	49	50	42	46	45	44	45		45	49	51	46	41	8
7	45	49	45	47	37	41	40	40	41	40	40	45	46	42	37	7
6	40	45	42	44		37	35	37	36		36	40	42	38	34	6
5	36	40	38	41	26	33	31	33	32		31	36	37	34	30	5
4	32	36	35	38		29	26	29	27		27	31	33	30	26	4
3	28	32	31	35	16	24	22		23		23	27	28	26	23	3
2	24	27	28	32	11	20	17	21	18		19	22	24	22	19	2
1	19		24	28	6	16	12	18	14		15			18		1
0				25		12	8	14								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	79	81	88	85	94	97	91	97	93				84	85	19	
18	76	77	82	79	90	92	87	92	88				80	81	18	
17	73	73	77	74	86	88	83	87	84				76	77	17	
16	69	70	71	69	82	84	79	83	79				73	73	16	
15	66	66	66	64	78	79	75	78	75				65	69	15	
14	62	62	60	58	74	75	71	73	70	63			65	66	14	
13	59	59	55	53	70	71	66	69	66		61	59	61	62	13	
12	55	55	49	48	65	66	62	64	61	56		57	58		12	
11	52	52	43	42	61	62	58	59	56		54	53	53	54		11
10	48	48	38	37	57	58	54	55	52	49	50	50	49	50		10
9	45	44	32	32	53	53	50	50	47	45	47	47	45	46		9
8	42	41	27	26	49	49	46	45	43	41	44	44	41	42		8
7	38	37	21	21	45	45	42	40	38		40	41	38	38		7
6	35	34	16	16	41	41	38	36	34	34	37	38	34	34		6
5	31	30	10	10	37	36	34	31	29	30	34	35	30	30		5
4	28	26	5	5	33	32	30	26	25		27	30	32	26		4
3	24	23	0	0	28	28	26	22	20	23	27	29	22		22	3
2	21	19	0	0	24	23	22	17	16	19	23	26	18	18		2
1	17	15	0	0	20	19	18	12	11	16	20	23	14	14		1
0	14	12	0	0	16	15		8								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	85	100	99	96	92	87	89	82							19	
18	81	100	94	92	89	84	85	78	78					92	18	
17	77	83	96	90	87	85	80	81			87				17	
16	73	79	91	86	83	81	76	77	71	83					16	
15	68	74	86	81	79	77	72	73	67	68	79	74	61	79	15	
14	64	70	81	77	75	73	69	69	63	65	75		59		14	
13	60	66	76	72	70	69	65	65	59	61	72	67		71	13	
12	56	61	71	68	66	65	61	61	55	68	63	53	66		12	
11	51	57	66	64	62	61	57	57	51	55	64	59		62	11	
10	47	53	61	59	58	58	54	53	47	52	60	56	47	58	10	
9	43	48	55	55	54	54	50	49	49	56	52	44	53		9	
8	39	44	50	51	49	50	46	45	39	45	53	49	42	49	8	
7	35	40	45	46	45	46	42	41	35	49	45	39	45		7	
6	30	35	40	42	41	42	39	37	31	45	42	36	40		6	
5	26	31	35	37	37	38	35	33	28	36	41	38	33	36	5	
4	22	27	30	33	32	34	31	29	24	38	34	30	32		4	
3	18	22	25	29	28	30	27	25	20	29	34	31	27	27	3	
2	13	18	19	24	24	27	24	22	16	30	27	24	23		2	
1	9	14	14	20	20	23	20	18	23	26	24	22	19		1	
0	9	9	9	16				14	19	22	20	19			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	95	94			89		97		88								19
18	91	95	90	82			93		84								18
17	87	91	86	78	81		88		80	85				89	79		17
16	83	86	82	75	77	76	84		75	80	87		85	76	79		16
15	79	82	77	71	73	71	80		71	76			81	72			15
14	75	78	73	67	69	67	76		67	71	78		77	68	71		14
13	71	73	69	64	65	63	72		63	67	77	73		73	65	67	13
12	67	69	65	60	61	59	68		59	62		60	69	61	63		12
11	63	64	61	57	57	55	63	58	55	57	68	65		65	57	59	11
10	59	60	57	53	53	51	59		51	53	64	60		61	54	55	10
9	55	56	52	50	49	47	55	49	46	48	60	56	46	57	50	51	9
8	51	51	48	46	45	43	51		42	44	56	51		53	46	47	8
7	47	47	44	42	41	39	47	39	38	39	52	47	36	49	43	43	7
6	43	43	40	39	37	35	42		34	35	47	42		45	39	39	6
5	39	38	36	35	33	30	38	29	30	30	43	38	27	41	35	35	5
4	35	34	32	32	29	26	34		26	26	39	33		37	32	31	4
3	31	30	27		25	22	30	20	21	21	35	29	17	33	28		3
2	27	25	23		21	18	26	15	17	17	30	24	12	29			2
1	23	21	19		17	14	22	10	13	12	26	20	8				1
0	17				10	17	6		7	22				17	15		0

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 12 years
Age: 45-49 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	95		89		98		97				95	100	100	91		19
18	91	97	85				92				91	96	97	87		18
17	87	93	82		88		87			83		92		83		17
16	83	88	78			81	83	76	83			87	88	79		16
15	79	84	74		78		78	72			77					15
14	74	80	71	69	73	73	74	69	74		73	78	79	71		14
13	70	76	67		68		69	65		66		73	75	67	60	13
12	66	71	64	63	63	64	65	61	65		64	69	70		56	12
11	62	67	60	60	58	60	60	57	61	58	60	64	66	59	52	11
10	58	63	57	56	53	56	55	53	56		55	60	61	55	49	10
9	54	59	53	53	48	52	51	50	52	50	51	55	57	51	45	9
8	49	54	50	50	43	47	46	46	47		46	51	52	47	41	8
7	45	50	46	47	38	43	42	42	43	41	42	46	48	43	37	7
6	41	46	43	44		39	37	38	38	37	42	44	39	34		6
5	37	41	39	41	28	35	32	34	33	33	33	37	39	35	30	5
4	33	37	36	38		30	28	31	29	29		33	35	31	26	4
3	28	33	32	35	18	26	23		24	25		28	30	27	23	3
2	24	29	28	32	13	22	19	23	20	21		24	26	23	19	2
1	20		25	29	8	18	14	19	15	17				19		1
0				26		14	10	15								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	81	82	89	85	97	99	93	99	95				86	87	19
18	77	78	83	80	92	95	89	95	91				82	83	18
17	74	75	78	75	88	91	85	90	86				78	79	17
16	70	71	72	70	84	86	80	85	81				74	75	16
15	67	67	66	64	80	82	76	80	77				68	70	15
14	63	64	61	59	76	78	72	76	72	65			66	67	14
13	60	60	55	54	72	73	68	71	68				63	62	13
12	57	57	50	48	68	69	64	66	63	58			58	59	12
11	53	53	44	43	64	65	60	62	59				56	55	11
10	50	49	39	38	60	60	56	57	54	51	52	53	51	51	10
9	46	46	33	32	55	56	52	52	50	47	49	50	47	47	9
8	43	42	27	27	51	52	48	48	45	43	46	47	43	43	8
7	39	38	22	22	47	47	44	43	41	40	42	44	39	39	7
6	36	35	16	16	43	43	40	38	36	36	39	41	35	36	6
5	32	31	11	11	39	39	36	33	31	32	35	38	31	32	5
4	29	28	5	6	35	34	32	29	27	29	32	35	27	28	4
3	25	24	0	0	31	30	28	24	22	25	29	32	24	24	3
2	22	20	0	0	27	26	24	19	18	21	25	29	20	20	2
1	19	17	0	0	23	21	20	15	13	18	22	26	16	16	1
0	15	13	0	0	19	17		10							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	85	100		100	98	94	88	90	82							19	
18	81	86	100	97	94	90	84	86	78	78						18	
17	77	82	99	92	89	86	81	82			88					17	
16	73	78	94	88	85	82	77	78	71		84					16	
15	68	73	89	84	81	78	73	74	67	68	80	74	62	81		15	
14	64	69	84	79	77	74	69	70	63	65	76		59			14	
13	60	65	79	75	73	70	66	66	59	62	73	67			72	13	
12	56	60	74	70	68	67	62	62	55		69	63	54	68		12	
11	51	56	68	66	64	63	58	58	51	55	65	60			64	11	
10	47	52	63	62	60	59	54	54	47	52	61	56	48	59		10	
9	43	47	58	57	56	55	51	50		49	57	53	45	55		9	
8	39	43	53	53	51	51	47	46	39	46	54	49	42	51		8	
7	35	39	48	49	47	47	43	42	35		50	46	40	46		7	
6	30	34	43	44	43	43	39	38	31	39	46	42	37	42		6	
5	26	30	38	40	39	39	35	34	28	36	42	38	34	38		5	
4	22	26	32	35	34	36	32	30		24		39	35	31	33		4
3	18	21	27	31	30	32	28	27	20	30	35	31	28	29		3	
2	13	17	22	27	26	28	24	23	16		31	28	25	25		2	
1	9	13	17	22	22	24	20	19		23	27	24	22	20		1	
0		8	12	18				15		20	24	21	20			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	95		96		89		99		88								19	
18	91	97	92	83			95		84								18	
17	87	93	88	79	81		91		80	85				88	80		17	
16	83	88	83	76	77	77	87		75	80	87		84	76	79		16	
15	79	84	79	72	73	73	83		71	76			80	72			15	
14	75	80	75	69	69	69	78		67	71	79		76	69	71		14	
13	71	75	71	65	65	64	74		63	67	77	74		72	65	67	13	
12	67	71	67	62	61	60	70		59	62			60	68	61	63	12	
11	63	67	63	58	57	56	66	59	55	57	68	65		64	58	59	11	
10	59	62	58	54	53	52	62		51	53	64	61		60	54	55	10	
9	55	58	54	51	49	48	58	49	46	48	60	56	46	56	50	51	9	
8	51	54	50	47	45	44	53		42	44	56	52		52	47	47	8	
7	47	49	46	44	41	40	49	39	38	39	51	47	36	48	43	43	7	
6	43	45	42	40	37	36	45		34	35	47	43		44	39	39	6	
5	39	41	38	37	33	32	41	30	30	30	43	38	27	40	36	35	5	
4	35	36	33	33	29	28	37		26	26	39	34		36	32	31	4	
3	31	32	29		25	23	32	20	21	21	35	29	17	32	28		3	
2	27	28	25		21	19	28	16	17	17	30	25	12	28			2	
1	23	23	21		17	15	24	11	13	12	26	21	8				1	
0		19			11	20	6		7	22				17	15		0	

(continued)

APPENDIX E (continued)

Sex: Male
Education: 12 years
Age: 50-54 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		89		99		99				97	100	100	92		19	
18	92	98	86				94				92	98	99	88		18	
17	88	94	82		89		89			84		93		84		17	
16	83	90	79			83	85	78	85			88	90	80		16	
15	79	85	75		79		80	74			79					15	
14	75	81	72	69	74	74	76	70	76		74	79	81	72		14	
13	71	77	68		69		71	67		68		75	76	68	60	13	
12	67	72	65	63	64	66	67	63	67		65	70	72		56	12	
11	62	68	61	60	59	62	62	59	62	60	61	66	68	60	52	11	
10	58	64	57	57	54	57	57	55	58		56	61	63	56	49	10	
9	54	60	54	54	49	53	53	51	53	51	52	57	59	52	45	9	
8	50	55	50	51	44	49	48	48	49		47	52	54	48	41	8	
7	46	51	47	48	39	45	44	44	44	43	43	48	50	44	37	7	
6	42	47	43	44		41	39	40	40		39	43	45	40	34	6	
5	37	42	40	41	29	36	34	36	35	35	34	39	41	36	30	5	
4	33	38	36	38		32	30	32	31		31		34	37	32	26	4
3	29	34	33	35	19	28	25		26		27		30	32	28	23	3
2	25	30	29	32	14	24	21	25	22		22		25	28	24	19	2
1	21		26	29	9	19	16	21	17		18			20		1	
0			26		15	12	17									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	82	83	90	86	99	100	94	100	97				87	88	19
18	78	80	84	81	95	98	90	97	93				83	85	18
17	75	76	78	76	91	93	86	92	88				79	81	17
16	72	72	73	70	87	89	82	88	84				76	77	16
15	68	69	67	65	82	85	78	83	79				70	72	15
14	65	65	62	60	78	80	74	78	75	68			68	69	14
13	61	61	56	54	74	76	70	73	70		65	64	64	65	13
12	58	58	51	49	70	72	66	69	66	60			60	61	12
11	54	54	45	44	66	67	62	64	61		58	58	56	57	11
10	51	51	40	39	62	63	58	59	56	53	55	55	52	53	10
9	47	47	34	33	58	59	54	55	52	49	51	52	48	49	9
8	44	43	28	28	54	54	50	50	47	46	48	49	44	45	8
7	40	40	23	23	50	50	46	45	43	42	44	46	41	41	7
6	37	36	17	17	45	46	42	41	38	38	41	43	37	37	6
5	34	32	12	12	41	41	38	36	34	35	38	40	33	33	5
4	30	29	6	7	37	37	34	31	29	31	34	37	29	29	4
3	27	25	1	1	33	33	30	26	25	27	31	34	25	25	3
2	23	22	0	0	29	28	26	22	20	24	28	31	21	21	2
1	20	18	0	0	25	24	22	17	16	20	24	28	17	17	1
0	16	14	0	0	21	20		12							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	84	100		100	100	95	89	91	83						19	
18	79	85	100	99	96	91	85	87	79	79				96	18	
17	75	81	100	95	92	87	81	83			89				17	
16	71	76	97	90	87	83	78	79	71		85				16	
15	67	72	92	86	83	79	74	75	67	69	81	74	63	83	15	
14	63	68	87	81	79	76	70	71	63	66	77		60		14	
13	58	63	81	77	75	72	66	67	60	62	74	67		74	13	
12	54	59	76	73	70	68	63	63	56		70	64	55	70	12	
11	50	55	71	68	66	64	59	60	52	56	66	60		65	11	
10	46	51	66	64	62	60	55	56	48	53	62	57	49	61	10	
9	41	46	61	60	58	56	51	52		50	59	53	46	57	9	
8	37	42	56	55	53	52	48	48	40	46	55	49	43	52	8	
7	33	38	51	51	49	48	44	44	36		51	46	40	48	7	
6	29	33	46	47	45	44	40	40	32	40	47	42	37	44	6	
5	24	29	40	42	41	41	36	36	28	37	43	39	35	39	5	
4	20	25	35	38	37	37	33	32		24		40	35	32	35	4
3	16	20	30	33	32	33	29	28	20	30	36	32	29	31	3	
2	12	16	25	29	28	29	25	24	16		32	28	26	26	2	
1	8	12	20	25	24	25	21	20		24	28	25	23	22	1	
0	7	15		20				16		20	25	21	20		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	98	98			92		100		87							19	
18	94	96	94	84			98		82							18	
17	90	92	89	81	84		93		78	85			87	80		17	
16	86	88	85	77	80	78	89		74	80	88		83	76	79	16	
15	82	83	81	74	76	74	85		70	76			79	73		15	
14	78	79	77	70	72	70	81		66	71	79		75	69	71	14	
13	74	75	73	66	68	66	77		62	67	77	75		71	65	67	13
12	70	70	69	63	64	62	73		58	62		60	67	62	63	12	
11	66	66	64	59	60	57	68	59	53	57	68	66		63	58	59	11
10	62	62	60	56	56	53	64		49	53	64	61		59	54	55	10
9	58	57	56	52	52	49	60	49	45	48	60	57	46	55	51	51	9
8	54	53	52	49	48	45	56		41	44	56	52		51	47	47	8
7	50	49	48	45	44	41	52	40	37	39	51	48	36	47	43	43	7
6	46	44	44	41	40	37	47		33	35	47	43		43	40	39	6
5	42	40	39	38	36	33	43	30	28	30	43	39	27	39	36	35	5
4	38	36	35	34	32	29	39		24	26	39	35		35	32	31	4
3	34	31	31		28	25	35	21	20	21	35	30	17	31	29		3
2	30	27	27		24	21	31	16	16	17	30	26	13	27			2
1	26	23	23		20	16	27	11	12	12	26	21	8				1
0	18	18			12	22	6		7	22				18	15		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 55-59 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	97		90		100		100				98	100	100	93		19	
18	92	99	87				96				94	99	100	89		18	
17	88	95	83		91		92			86		95		85		17	
16	84	91	79			85	87	80	86			90	92	81		16	
15	80	86	76		81		82	76			80					15	
14	76	82	72	69	76	76	78	72	77		76	81	83	73		14	
13	71	78	69		70		73	69		70		76	78	69	60	13	
12	67	74	65	63	65	68	69	65	68		67	72	74		56	12	
11	63	69	62	60	60	63	64	61	64	61	62	67	69	61	52	11	
10	59	65	58	57	55	59	59	57	59		58	63	65	57	49	10	
9	55	61	55	54	50	55	55	53	55	53	53	58	61	53	45	9	
8	51	56	51	51	45	51	50	50	50		49	54	56	49	41	8	
7	46	52	48	48	40	47	46	46	46	45	44	49	52	45	37	7	
6	42	48	44	45		42	41	42	41	41	45	47	41	34		6	
5	38	44	41	42	30	38	37	38	37	37	35	40	43	37	30	5	
4	34	39	37	39		34	32	34	32		32		36	38	33	26	4
3	30	35	33	36	20	30	27		28		28		31	34	29	23	3
2	25	31	30	32	15	25	23	27	23	24		27	30	26	19	2	
1	21		26	29	10	21	18	23	19	20				22		1	
0				26		17	14	19								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	84	91	87	100	100	96	100	100				89	90	19
18	80	81	85	82	97	100	92	99	95				85	86	18
17	76	77	80	77	93	96	88	95	90				81	82	17
16	73	74	74	71	89	92	84	90	86				77	78	16
15	69	70	68	66	85	87	80	85	81				73	73	15
14	66	66	63	61	81	83	76	81	77	70			69	70	14
13	62	63	57	55	77	79	72	76	72		67	67	65	66	13
12	59	59	52	50	72	74	68	71	68		63		61	62	12
11	55	55	46	45	68	70	64	66	63		61	61	58	58	11
10	52	52	41	40	64	66	60	62	59		55	57	58	54	10
9	49	48	35	34	60	61	56	57	54		52	54	55	50	9
8	45	45	29	29	56	57	52	52	50		48	50	52	46	8
7	42	41	24	24	52	53	48	48	45		44	47	49	42	7
6	38	37	18	18	48	48	44	43	40		41	44	46	38	6
5	35	34	13	13	44	44	40	38	36		37	40	43	34	5
4	31	30	7	8	40	40	35	34	31		33	37	40	30	4
3	28	27	2	2	36	35	31	29	27		30	33	37	27	3
2	24	23	0	0	31	31	27	24	22		26	30	34	23	2
1	21	19	0	0	27	27	23	19	18		22	27	31	19	1
0	18	16	0	0	23	23		15							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	84	100		100	100	96	90	93	83						19	
18	79	84	100	100	98	92	86	89	79	79				97	18	
17	75	80	100	97	94	88	82	85			90				17	
16	71	75	100	93	89	84	79	81	71		86				16	
15	67	71	94	88	85	81	75	77	67	69	82	75	64	84	15	
14	63	67	89	84	81	77	71	73	63	66	79		61		14	
13	58	62	84	79	77	73	67	69	60	63	75	68		76	13	
12	54	58	79	75	72	69	64	65	56		71	64	55	71	12	
11	50	54	74	71	68	65	60	61	52	56	67	61		67	11	
10	46	49	69	66	64	61	56	57	48	53	63	57	50	63	10	
9	41	45	64	62	60	57	52	53		50	60	53	47	58	9	
8	37	41	59	58	56	53	49	49	40	47	56	50	44	54	8	
7	33	36	53	53	51	50	45	45	36		52	46	41	50	7	
6	29	32	48	49	47	46	41	41	32	40	48	43	38	45	6	
5	24	28	43	44	43	42	37	37	28	37	45	39	35	41	5	
4	20	24	38	40	39	38	33	33		24		41	36	33	37	4
3	16	19	33	36	34	34	30	29	20	31	37	32	30	32	3	
2	12	15	28	31	30	30	26	25	16		33	28	27	28	2	
1	8	11	23	27	26	26	22	21		24	29	25	24	24	1	
0	6	17		23				17		21	26	21	21		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	98	100			92		100		87								19
18	94	99	95	86			100		82								18
17	90	94	91	82	84		96		78	85				85	80		17
16	86	90	87	78	80	79	92		74	80	89			81	77	79	16
15	82	86	83	75	76	75	88		70	76				77	73		15
14	78	81	79	71	72	71	83		66	71	80			73	69	71	14
13	74	77	75	68	68	67	79		62	67	77	75		69	66	67	13
12	70	73	70	64	64	63	75		58	62		60		65	62	63	12
11	66	68	66	61	60	59	71	59	53	57	68	66		61	58	59	11
10	62	64	62	57	56	55	67		49	53	64	62		57	55	55	10
9	58	60	58	53	52	50	62	50	45	48	60	57	46	53	51	51	9
8	54	55	54	50	48	46	58		41	44	56	53		49	47	47	8
7	50	51	50	46	44	42	54	40	37	39	51	49	37	45	44	43	7
6	46	47	45	43	40	38	50		33	35	47	44		41	40	39	6
5	42	42	41	39	36	34	46	31	28	30	43	40	27	37	36	35	5
4	38	38	37	36	32	30	42		24	26	39	35		33	33	31	4
3	34	34	33		28	26	37	21	20	21	35	31	17	29	29		3
2	30	29	29		24	22	33	17	16	17	30	26	13	25			2
1	26	25	25		20	18	29	12	12	12	26	22	8				1
0	20	25			14	25	7		7	22				18	15		0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 12 years
Age: 60-64 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	97		91		100		100				100	100	100	94		19
18	93	100	87				98				95	100	100	90		18
17	89	96	84		94		94				88	96		86		17
16	85	92	80				86	89	82	88		92	93	82		16
15	80	87	77		84		85	78			82					15
14	76	83	73	70	79	78	80	74	79		77	82	84	74		14
13	72	79	70		74		76	71			71	78	80	70	60	13
12	68	75	66	64	69	69	71	67	70		68	73	76	56		12
11	64	70	62	61	64	65	66	63	66		63	64	69	71	63	11
10	59	66	59	57	59	61	62	59	61		59	64	67	59		10
9	55	62	55	54	54	57	57	55	57		55	55	60	62	55	9
8	51	58	52	51	49	53	53	52	52		50	55	58	51	41	8
7	47	53	48	48	43	48	48	48	47		46	46	51	54	47	7
6	43	49	45	45		44	43	44	43		42	46	49	43	34	6
5	39	45	41	42	33	40	39	40	38		38	37	42	45	39	5
4	34	40	38	39		36	34	36	34		34	37	40	35	26	4
3	30	36	34	36	23	31	30		29		30	33	36	31	23	3
2	26	32	31	33	18	27	25	29	25		26	28	31	27	19	2
1	22		27	30	13	23	21	25	20		22			23		1
0				27		19	16	21								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	86	92	89	100	100	98	100	100				90	92	19
18	81	82	86	83	99	100	94	100	97				86	88	18
17	77	78	81	78	95	99	90	97	93				82	84	17
16	74	75	75	73	91	94	86	92	88				78	80	16
15	70	71	70	67	87	90	82	88	84				76	75	15
14	67	68	64	62	83	86	78	83	79	73			71	72	14
13	64	64	59	57	79	81	74	78	75		70	70	67	68	13
12	60	60	53	51	75	77	70	74	70	65			63	64	12
11	57	57	47	46	71	73	66	69	65		63	64	59	60	11
10	53	53	42	41	67	68	62	64	61	58	60	61	55	56	10
9	50	50	36	35	62	64	58	59	56	54	56	58	51	52	9
8	46	46	31	30	58	60	54	55	52	51	53	55	47	48	8
7	43	42	25	25	54	55	49	50	47	47	50	52	44	44	7
6	39	39	20	20	50	51	45	45	43	43	46	49	40	40	6
5	36	35	14	14	46	47	41	41	38	40	43	46	36	36	5
4	33	31	8	9	42	42	37	36	34	36	40	43	32	32	4
3	29	28	3	4	38	38	33	31	29	32	36	40	28	28	3
2	26	24	0	0	34	34	29	27	25	29	33	37	24	24	2
1	22	21	0	0	30	29	25	22	20	25	29	34	20	20	1
0	19	17	0	0	26	25		17							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	82	100		100	100	97	91	94	83						19	
18	78	83	100	100	100	93	87	91	79	80				99	18	
17	74	79	100	99	96	90	83	87			91				17	
16	69	74	100	95	92	86	80	83	71		87				16	
15	65	70	97	91	87	82	76	79	67	70	83	75	65	86	15	
14	61	66	92	86	83	78	72	75	63	67	80		62		14	
13	57	61	87	82	79	74	68	71	60	63	76	68		77	13	
12	52	57	82	77	75	70	65	67	56		72	65	56	73	12	
11	48	53	77	73	70	66	61	63	52	57	68	61		69	11	
10	44	48	72	69	66	62	57	59	48	54	64	57	50	64	10	
9	40	44	66	64	62	59	53	55		50	61	54	48	60	9	
8	36	40	61	60	58	55	50	51	40	47	57	50	45	56	8	
7	31	35	56	56	53	51	46	47	36		53	47	42	51	7	
6	27	31	51	51	49	47	42	43	32	41	49	43	39	47	6	
5	23	27	46	47	45	43	38	39	28	38	46	40	36	43	5	
4	19	22	41	42	41	39	35	35		24		42	36	33	38	4
3	14	18	36	38	36	35	31	31	20	31	38	32	31	34	3	
2	10	14	30	34	32	31	27	27	16		34	29	28	30	2	
1	6	9	25	29	28	28	23	23		25	30	25	25	25	1	
0	5	5	20	25				19	21	27	22	22			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	100	100			94		100		85								19
18	97	100	97	87			100		81								18
17	93	97	93	83	86		98		77	85				83	81		17
16	89	92	89	80	82	80	94		73	80	89		79	77	79		16
15	85	88	85	76	78	76	90		69	76			75	73			15
14	81	84	81	73	74	72	86		65	71	80		71	70	71		14
13	77	79	76	69	70	68	82		60	67	77	76		67	66	67	13
12	73	75	72	65	66	64	77		56	62			61	63	62	63	12
11	69	71	68	62	62	60	73	60	52	57	68	67		59	59	59	11
10	65	66	64	58	58	56	69		48	53	64	63		55	55	55	10
9	61	62	60	55	54	52	65	50	44	48	60	58	46	51	51	51	9
8	57	58	56	51	50	48	61		40	44	56	54		47	48	47	8
7	53	53	51	48	46	43	57	41	35	39	51	49	37	43	44	43	7
6	49	49	47	44	42	39	52		31	35	47	45		39	40	39	6
5	45	45	43	40	38	35	48	31	27	30	43	40	27	35	37	35	5
4	41	40	39	37	34	31	44		23	26	39	36		31	33	31	4
3	37	36	35		30	27	40	22	19	21	35	31	17	27	29		3
2	33	31	31		26	23	36	17	15	17	30	27	13	23			2
1	29	27	26		22	19	32	12	10	12	26	22	8				1
0	23	23			15	27	7		7	22				19	15		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 65-69 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	98		91		100		100				100	100	100	96		19	
18	94	100	88				100				97	100	100	92		18	
17	89	97	84		95		96			89		98		88		17	
16	85	93	81			88	92	84	90			93	95	84		16	
15	81	89	77		85		87	81			83					15	
14	77	84	74	70	80	80	83	77	81		79	84	86	76		14	
13	73	80	70		75		78	73		73		79	82	72	60	13	
12	68	76	67	64	70	71	73	69	72		70	75	77	56		12	
11	64	71	63	61	65	67	69	65	67	65	65	70	73	64	52	11	
10	60	67	60	58	60	63	64	62	63		61	66	69	60	49	10	
9	56	63	56	55	55	59	60	58	58	56	56	61	64	56	45	9	
8	52	59	53	52	50	54	55	54	54		52	57	60	52	41	8	
7	47	54	49	48	45	50	51	50	49	48	47	52	55	48	37	7	
6	43	50	46	45		46	46	46	45	44		48	51	44	34	6	
5	39	46	42	42	35	42	41	43	40	40	38	43	46	40	30	5	
4	35	41	38	39		37	37	39	36			39	42	36	26	4	
3	31	37	35	36	25	33	32		31			32	34	38	32	23	3
2	27	33	31	33	20	29	28	31	27		28	30	33	28	19	2	
1	22		28	30	14	25	23	27	22					24		1	
0				27		21	18	24								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	87	93	90	100	100	100	100	100				92	93	19
18	82	83	88	85	100	100	96	100	100				88	89	18
17	79	80	82	79	98	100	92	99	95				84	85	17
16	75	76	77	74	94	97	88	95	90				80	81	16
15	72	73	71	69	89	92	84	90	86				78	77	15
14	68	69	66	63	85	88	80	85	81	76			72	73	14
13	65	65	60	58	81	84	76	81	77				73	72	13
12	61	62	54	53	77	79	72	76	72	68			64	66	12
11	58	58	49	47	73	75	68	71	68				66	61	11
10	54	54	43	42	69	71	63	67	63	61	63	63	57	58	10
9	51	51	38	37	65	66	59	62	59	57	59	60	53	54	9
8	48	47	32	32	61	62	55	57	54	54	56	57	49	50	8
7	44	44	27	26	57	58	51	52	49	50	53	54	45	46	7
6	41	40	21	21	53	53	47	48	45	46	49	51	41	42	6
5	37	36	16	16	48	49	43	43	40	43	46	48	37	38	5
4	34	33	10	10	44	45	39	38	36	39	42	45	33	34	4
3	30	29	4	5	40	41	35	34	31	35	39	42	30	30	3
2	27	25	0	0	36	36	31	29	27	32	36	39	26	26	2
1	23	22	0	0	32	32	27	24	22	28	32	36	22	22	1
0	20	18	0	0	28	28		20							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	80	100		100	100	99	92	97	83							19	
18	76	82	100	100	100	95	88	93	79	80						18	
17	72	77	100	100	98	91	85	89			92					17	
16	68	73	100	97	94	87	81	85	71		88					16	
15	64	69	100	93	89	83	77	81	67	70	84	76	66	88		15	
14	59	65	95	88	85	79	73	77	63	67	81		63			14	
13	55	60	90	84	81	75	70	73	60	64	77	68		79		13	
12	51	56	85	80	77	71	66	69	56		73	65	57	75		12	
11	47	52	79	75	72	68	62	65	52	57	69	61		70		11	
10	42	47	74	71	68	64	58	61	48	54	66	58	51	66		10	
9	38	43	69	67	64	60	55	57		51	62	54	48	62		9	
8	34	39	64	62	60	56	51	53	40	48	58	51	46	57		8	
7	30	34	59	58	55	52	47	49	36		54	47	43	53		7	
6	25	30	54	54	51	48	43	45	32	41	50	44	40	49		6	
5	21	26	49	49	47	44	40	41	28	38	47	40	37	44		5	
4	17	21	44	45	43	40	36	37		24		43	36	34	40		4
3	13	17	38	40	39	36	32	33	20	32	39	33	31	36		3	
2	9	13	33	36	34	33	28	29	16		35	29	29	31		2	
1	4	8	28	32	30	29	25	25		25	32	26	26	27		1	
0		4	23	27				21		22	28	22	23			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100		100		96		100		84								19	
18	100	100	99	88			100		80								18	
17	96	99	95	85	88		100		76	85				80	81		17	
16	92	95	91	81	84	82	97		72	80	90		76	77	79		16	
15	88	90	87	77	80	78	92		67	76			72	74			15	
14	84	86	82	74	76	73	88		63	71	81		68	70	71		14	
13	80	82	78	70	72	69	84		59	67	77	77		64	66	67		13
12	76	77	74	67	68	65	80		55	62		61	60	63	63		12	
11	72	73	70	63	64	61	76	60	51	57	68	68		56	59	59		11
10	68	69	66	60	60	57	72		47	53	64	63		52	55	55		10
9	64	64	62	56	56	53	67	51	42	48	60	59	46	48	52	51		9
8	60	60	57	52	52	49	63		38	44	56	54		44	48	47		8
7	56	56	53	49	48	45	59	41	34	39	51	50	37	40	44	43		7
6	52	51	49	45	44	41	55		30	35	47	45		36	41	39		6
5	48	47	45	42	40	36	51	32	26	30	43	41	27	32	37	35		5
4	45	42	41	38	36	32	47		22	26	39	36		28	33	31		4
3	41	38	37		32	28	42	22	17	21	35	32	17	24	30			3
2	37	34	32		28	24	38	17	13	17	30	27	13	20				2
1	33	29	28		24	20	34	13	9	12	26	23	8					1
0	25				16	30	8		7	22				19	15		0	

(continued)

APPENDIX E (continued)

Sex: Male
Education: 12 years
Age: 70-74 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	98		92		100		100				100	100	100	97		19	
18	94	100	89				100				98	100	100	93		18	
17	90	98	85		96		99				91	99		89		17	
16	86	94	82			90	95	87	91			95	97	85		16	
15	82	90	78		86		90	83				84				15	
14	77	85	75	70	81	81	85	79	82		80	85	88	77		14	
13	73	81	71		76		81	75			75	81	84	73	60	13	
12	69	77	67	64	71	73	76	72	73			71	76	79	56	12	
11	65	73	64	61	66	69	72	68	69		66	66	72	75	65	11	
10	61	68	60	58	61	65	67	64	64			62	67	70	61	49	10
9	56	64	57	55	56	60	62	60	60		58	58	63	66	57	45	9
8	52	60	53	52	51	56	58	56	55			53	58	62	53	41	8
7	48	55	50	49	46	52	53	53	51		50	49	54	57	49	37	7
6	44	51	46	46		48	49	49	46			46	49	53	45	34	6
5	40	47	43	43	36	43	44	45	42		42	40	45	48	41	30	5
4	36	43	39	40		39	40	41	37			37	40	44	37	26	4
3	31	38	36	36	26	35	35		33			33	36	39	33	23	3
2	27	34	32	33	21	31	30	34	28			29	31	35	29	19	2
1	23		29	30	16	27	26	30	24			25			25		1
0				27	22	21	26									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	87	88	95	92	100	100	100	100	100				93	95	19	
18	83	85	90	86	100	100	98	100	100				89	91	18	
17	80	81	84	81	100	100	94	100	97				85	87	17	
16	76	77	78	76	96	99	90	97	93				81	83	16	
15	73	74	73	70	92	94	86	92	88			81	78	79	15	
14	69	70	67	65	88	90	81	88	84	79			74	75	14	
13	66	67	62	60	84	86	77	83	79			76	75	70	71	13
12	63	63	56	54	80	82	73	78	74	71			69	66	67	12
11	59	59	51	49	75	77	69	74	70			69	69	62	63	11
10	56	56	45	44	71	73	65	69	65	64	66	66	58	59		10
9	52	52	40	39	67	69	61	64	61	60	62	63	54	55		9
8	49	48	34	33	63	64	57	60	56	57	59	60	50	51		8
7	45	45	28	28	59	60	53	55	52	53	56	57	47	47		7
6	42	41	23	23	55	56	49	50	47	49	52	54	43	43		6
5	38	38	17	17	51	51	45	45	43	46	49	51	39	39		5
4	35	34	12	12	47	47	41	41	38	42	45	48	35	35		4
3	31	30	6	7	43	43	37	36	34	38	42	45	31	32		3
2	28	27	1	1	38	38	33	31	29	35	39	42	27	28		2
1	25	23	0	0	34	34	29	27	24	31	35	39	23	24		1
0	21	20	0	0	30	30	22									0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	79	100		100	100	100	94	99	83						19	
18	75	81	100	100	100	96	90	95	79	81				100	18	
17	70	76	100	100	100	92	86	91			93				17	
16	66	72	100	100	96	88	82	87	71		89				16	
15	62	68	100	95	91	84	79	83	67	71	85	76	66	89	15	
14	58	63	98	91	87	80	75	79	63	68	82		63		14	
13	53	59	92	86	83	76	71	75	60	64	78	69		81	13	
12	49	55	87	82	79	73	67	71	56		74	65	58	76	12	
11	45	50	82	78	75	69	64	67	52	58	70	62		72	11	
10	41	46	77	73	70	65	60	63	48	55	67	58	52	68	10	
9	37	42	72	69	66	61	56	59		51	63	55	49	63	9	
8	32	38	67	65	62	57	52	55	40	48	59	51	46	59	8	
7	28	33	62	60	58	53	49	51	36		55	47	44	55	7	
6	24	29	57	56	53	49	45	47	32	42	52	44	41	50	6	
5	20	25	51	51	49	45	41	43	28	39	48	40	38	46	5	
4	15	20	46	47	45	42	37	40		24		44	37	35	42	4
3	11	16	41	43	41	38	34	36	20	32	40	33	32	37	3	
2	7	12	36	38	36	34	30	32	16		36	30	29	33	2	
1	3	7	31	34	32	30	26	28		26	33	26	26	29	1	
0	3	3	26	30				24	22	29	23	24			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		98		100		83							19	
18	100	100	100	89			100		78							18	
17	99	100	97	86	90		100		74	85				77	81	17	
16	95	97	93	82	86	83	99		70	80	90			73	78	79	16
15	91	93	88	79	82	79	95		66	76				69	74		15
14	87	88	84	75	78	75	91		62	71	82			65	70	71	14
13	83	84	80	72	74	71	87		58	67	77	77		61	67	67	13
12	79	80	76	68	70	66	82		54	62		61	57	63	63		12
11	75	75	72	64	66	62	78	61	49	57	68	68		53	59	59	11
10	71	71	68	61	62	58	74		45	53	64	64		49	56	55	10
9	67	67	63	57	58	54	70	51	41	48	60	59	46	45	52	51	9
8	64	62	59	54	54	50	66		37	44	56	55		41	48	47	8
7	60	58	55	50	50	46	62	42	33	39	51	50	37	37	45	43	7
6	56	53	51	47	46	42	57		29	35	47	46		33	41	39	6
5	52	49	47	43	42	38	53	32	24	30	43	41	27	29	37	35	5
4	48	45	43	39	38	34	49		20	26	39	37		25	34	31	4
3	44	40	38		34	29	45	23	16	21	34	32	18	21	30		3
2	40	36	34		30	25	41	18	12	17	30	28	13	17			2
1	36	32	30		26	21	36	13	8	12	26	23	8				1
0	27				17	32	8		7	22				19	15		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 75-79 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	99		93		100		100				100	100	100	98		19		
18	95	100	89				100				99	100	100	94		18		
17	91	99	86		98		100				93	100		90		17		
16	86	95	82			92	97	90	93			96	99	86		16		
15	82	91	79		87		93	86				86				15		
14	78	87	75	71	82	83	88	82	84		81	87	90	78		14		
13	74	82	72		77		84	78			76		82	86	74	60	13	
12	70	78	68	65	72	75	79	74	75			72	78	81	56	12		
11	65	74	65	61	67	70	75	71	70		68	68	73	77	66	52	11	
10	61	69	61	58	62	66	70	67	66			63	69	72	62	49	10	
9	57	65	58	55	57	62	65	63	61		60	59	64	68	58	45	9	
8	53	61	54	52	52	58	61	59	57			54	60	63	54	41	8	
7	49	57	50	49	47	54	56	55	52		52	50	55	59	50	37	7	
6	44	52	47	46		49	52	52	48			47	51	55	46	34	6	
5	40	48	43	43	37	45	47	48	43		43	41	46	50	42	30	5	
4	36	44	40	40		41	42	44	39			39		42	46	38	26	4
3	32	39	36	37	27	37	38		34			35		37	41	34	23	3
2	28	35	33	34	22	32	33	36	30			31		33	37	30	19	2
1	24		29	31	17	28	29	32	25			27			26		1	
0				28		24	24	29								0		

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	90	97	94	100	100	100	100	100				95	96	19
18	84	86	92	88	100	100	100	100	100				91	92	18
17	81	82	86	83	100	100	95	100	99				87	88	17
16	78	79	80	78	98	100	91	100	95				83	84	16
15	74	75	75	72	94	96	87	95	90				79	80	15
14	71	71	69	67	90	92	83	90	86	82			75	77	14
13	67	68	64	62	86	88	79	85	81				79	78	13
12	64	64	58	56	82	83	75	81	77	75			67	69	12
11	60	61	53	51	78	79	71	76	72				72	64	11
10	57	57	47	46	74	75	67	71	68	67			69	69	10
9	53	53	42	40	70	70	63	67	63	64			65	66	9
8	50	50	36	35	65	66	59	62	59	60			62	63	8
7	46	46	30	30	61	62	55	57	54	56			59	60	7
6	43	43	25	24	57	57	51	53	49	53			55	57	6
5	40	39	19	19	53	53	47	48	45	49			52	54	5
4	36	35	14	14	49	49	43	43	40	45			48	51	4
3	33	32	8	9	45	44	39	38	36	42			45	48	3
2	29	28	3	3	41	40	35	34	31	38			42	45	2
1	26	24	0	0	37	36	31	29	27	34			42	25	1
0	22	21	0	0	33	31									0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	79	100		100	100	100	96	100	83						19	
18	75	80	100	100	100	97	92	98	79	81				100	18	
17	70	75	100	100	100	93	88	94			94				17	
16	66	71	100	100	98	89	84	90	71		90				16	
15	62	67	100	98	94	86	81	86	67	71	87	76	67	91	15	
14	58	62	100	93	90	82	77	82	63	68	83		64		14	
13	53	58	95	89	85	78	73	78	60	65	79	69		83	13	
12	49	54	90	85	81	74	69	74	56		75	66	59	78	12	
11	45	49	85	80	77	70	66	70	52	58	72	62		74	11	
10	41	45	80	76	73	66	62	66	48	55	68	59	53	70	10	
9	37	41	75	72	68	62	58	62		52	64	55	50	65	9	
8	32	36	70	67	64	58	54	58	40	49	60	51	47	61	8	
7	28	32	65	63	60	55	51	54	36		56	48	44	57	7	
6	24	28	60	58	56	51	47	50	32	42	53	44	42	52	6	
5	20	23	54	54	51	47	43	46	28	39	49	41	39	48	5	
4	15	19	49	50	47	43	39	43		24		45	37	36	44	4
3	11	15	44	45	43	39	36	39	20	33	41	34	33	39	3	
2	7	10	39	41	39	35	32	35	16		38	30	30	35	2	
1	3	6	34	37	34	31	28	31		26	34	27	27	30	1	
0	2	2	29	32				27		23	30	23	25		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100	100		98		100		83							19	
18	100	100	100	91			100		78							18	
17	99	100	99	87	90		100		74	85				73	82	17	
16	95	99	95	84	86	84	100		70	80	91			69	78	78	16
15	91	95	90	80	82	80	98		66	76				65	75		15
14	87	91	86	76	78	76	94		62	71	82			61	71	70	14
13	83	86	82	73	74	72	89		58	67	77	78		57	67	67	13
12	79	82	78	69	70	68	85		54	62			61	53	64	63	12
11	75	78	74	66	66	64	81	61	49	57	68	69		49	60	59	11
10	71	73	70	62	62	60	77		45	53	64	64		45	56	55	10
9	67	69	65	59	58	55	73	52	41	48	60	60	46	41	53	51	9
8	64	65	61	55	54	51	68		37	44	56	55		37	49	47	8
7	60	60	57	52	50	47	64	42	33	39	51	51	37	33	45	43	7
6	56	56	53	48	46	43	60		29	35	47	46		29	42	39	6
5	52	52	49	44	42	39	56	33	24	30	43	42	27	25	38	35	5
4	48	47	45	41	38	35	52		20	26	39	37		21	34	31	4
3	44	43	40		34	31	48	23	16	21	34	33	18	17	31		3
2	40	39	36		30	27	43	18	12	17	30	29	13	13			2
1	36	34	32		26	23	39	14	8	12	26	24	8				1
0	30	30			19	35	9		7	22				20	15		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 12 years

Age: 80-85 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		94		100		100				100	100	100	99		19
18	95	100	90				100				100	100	100	95		18
17	91	100	87		99		100				95	100	100	91		17
16	87	96	83			94	100	93	95			98	100	87		16
15	83	92	80		89		96	89				87				15
14	79	88	76	71	84	85	92	85	86		83	89	92	79		14
13	74	83	72		79		87	81		78		84	88	75	60	13
12	70	79	69	65	74	77	83	77	77		74	80	83	56		12
11	66	75	65	62	69	72	78	74	72	70	69	75	79	67	52	11
10	62	71	62	59	64	68	73	70	68		65	71	74	63		10
9	58	66	58	56	59	64	69	66	63	62	60	66	70	59	45	9
8	54	62	55	53	54	60	64	62	59		56	61	65	55	41	8
7	49	58	51	49	49	56	60	58	54	53	51	57	61	51	37	7
6	45	53	48	46		51	55	55	50	49		52	57	48	34	6
5	41	49	44	43	38	47	50	51	45	45	42	48	52	44	30	5
4	37	45	41	40		43	46	47	41	41		43	48	40	26	4
3	33	41	37	37	28	39	41		36	37		39	43	36	23	3
2	28	36	34	34	23	34	37	39	32	33		34	39	32	19	2
1	24		30	31	18	30	32	36	27	29				28		1
0				28	26	28	32									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	91	100	96	100	100	100	100	100				96	98	19
18	86	87	94	91	100	100	100	100	100				92	94	18
17	82	84	89	85	100	100	97	100	100				88	90	17
16	79	80	83	80	100	100	93	100	97				85	86	16
15	75	76	77	75	97	97	89	97	93				87	81	15
14	72	73	72	69	93	93	85	93	88	86			77	78	14
13	68	69	66	64	89	89	81	88	84				82	81	13
12	65	66	61	59	84	85	77	83	79	79			69	70	12
11	62	62	55	53	80	80	73	79	75				76	75	11
10	58	58	50	48	76	76	69	74	70	71	72	72	61	62	10
9	55	55	44	43	72	72	65	69	66	68	69	69	57	58	9
8	51	51	38	38	68	67	61	65	61	64	65	66	54	55	8
7	48	48	33	32	64	63	57	60	56	60	62	63	50	51	7
6	44	44	27	27	60	59	53	55	52	57	59	60	46	47	6
5	41	40	22	22	56	54	49	50	47	53	55	57	42	43	5
4	37	37	16	16	52	50	45	46	43	49	52	54	38	39	4
3	34	33	11	11	47	46	41	41	38	46	48	51	34	35	3
2	31	29	5	6	43	41	37	36	34	42	45	48	30	31	2
1	27	26	0	0	39	37	33	32	29	38	42	45	26	27	1
0	24	22	0	0	35	33		27							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	83	93		88	85	84	83	84	78						19
18	78	87	88	83	81	81	79	80	75	74				84	18
17	74	82	83	79	77	77	76	77			80				17
16	70	78	78	75	72	73	72	73	67		76				16
15	66	74	73	70	68	69	68	69	63	64	72	71	58	71	15
14	61	69	67	66	64	65	64	65	59	61	69		55		14
13	57	65	62	61	60	61	61	61	55	57	65	64		62	13
12	53	61	57	57	55	57	57	57	51		61	60	49	58	12
11	49	56	52	53	51	53	53	53	47	51	57	57		54	11
10	45	52	47	48	47	49	49	49	43	48	53	53	44	49	10
9	40	48	42	44	43	46	46	45		45	50	50	41	45	9
8	36	44	37	40	39	42	42	41	35	41	46	46	38	41	8
7	32	39	31	35	34	38	38	37	32		42	42	35	36	7
6	28	35	26	31	30	34	34	33	28	35	38	39	32	32	6
5	23	31	21	27	26	30	31	29	24	32	35	35	29	27	5
4	19	26	16	22	22	26	27	25	20		31	32	27	23	4
3	15	22	11	18	17	22	23	21	16	25	27	28	24	19	3
2	11	18	6	13	13	18	19	17	12		23	25	21	14	2
1	6	13	1	9	9	15	16	13		19	19	21	18	10	1
0	9	0		5				9		15	16	18	15		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	84		85		83		85		85							19	
18	80	80	81	77			81		80							18	
17	76	75	77	73	75		77		76	80				85	75	17	
16	72	71	72	69	71	69	73		72	75	83		81	71	75	16	
15	68	67	68	66	67	64	69		68	71			77	68		15	
14	64	62	64	62	63	60	64		64	66	74		73	64	67	14	
13	60	58	60	59	59	56	60		60	62	74	69		69	60	63	13
12	57	54	56	55	55	52	56		55	57		58	65	57	59	12	
11	53	49	52	52	51	48	52	55	51	53	66	61		61	53	55	11
10	49	45	47	48	47	44	48		47	48	62	56		57	49	51	10
9	45	40	43	44	43	40	44	45	43	44	58	52	43	53	46	47	9
8	41	36	39	41	39	36	39		39	39	53	47		49	42	43	8
7	37	32	35	37	35	32	35	36	35	34	49	43	34	45	38	39	7
6	33	27	31	34	31	27	31		31	30	45	38		41	35	35	6
5	29	23	27	30	27	23	27	26	26	25	41	34	24	37	31	31	5
4	25	19	22	27	23	19	23		22	21	36	29		33	27	27	4
3	21	14	18		19	15	19	17	18	16	32	25	15	29	24		3
2	17	10	14		15	11	14	12	14	12	28	20	10	25			2
1	13	6	10		11	7	10	7	10	7	24	16	5				1
0	1				3	6	2		3	19				13	11		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 20-34 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	91		83		94		89				89	92	92	85		19
18	86	89	80				84				85	88	87	81		18
17	82	85	76		84		80			75		83		77		17
16	78	81	73			71	75	69	74			79	79	73		16
15	74	77	69		74		70	65			71					15
14	70	72	66	67	69	63	66	61	65		67	70	70	65		14
13	65	68	62		64		61	57		59		65	65	61	60	13
12	61	64	59	61	59	54	57	54	56		58	61	61	56		12
11	57	59	55	57	54	50	52	50	51	50	53	56	56	53	52	11
10	53	55	52	54	49	46	47	46	47		49	51	52	49		10
9	49	51	48	51	44	42	43	42	42	42		44	47	48	45	9
8	44	47	44	48	39	38	38	38	38		40	42	43	41		8
7	40	42	41	45	34	33	34	35	33	34	35	38	39	37	38	7
6	36	38	37	42		29	29	31	29		30	33	34	33	34	6
5	32	34	34	39	23	25	25	27	24	26	26	29	30	29	30	5
4	28	30	30	36		21	20	23	20		22		24	25	26	4
3	24	25	27	33	13	16	15		15		17	20	21	21	23	3
2	19	21	23	30	8	12	11	16	11		13	15	17	17	19	2
1	15		20	27	3	8	6	12	6		9			13		1
0				24		4	2	8								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	75	76	87	84	85	89	84	89	85				79	80	19
18	71	72	81	78	81	84	80	84	81				75	76	18
17	68	68	76	73	77	80	76	79	76				71	72	17
16	64	65	70	68	73	76	72	75	72				67	68	16
15	61	61	65	62	69	71	67	70	67			60	63	64	15
14	57	57	59	57	65	67	63	65	62	58			59	60	14
13	54	54	54	52	61	63	59	60	58		58	54	56	56	13
12	50	50	48	46	56	58	55	56	53	50		51	52	52	12
11	47	47	42	41	52	54	51	51	49		51	48	48	48	11
10	44	43	37	36	48	50	47	46	44	43	47	45	44	44	10
9	40	39	31	30	44	45	43	42	40	40	44	42	40	40	9
8	37	36	26	25	40	41	39	37	35	36	41	39	36	36	8
7	33	32	20	20	36	37	35	32	31	32	37	36	32	33	7
6	30	29	15	15	32	32	31	28	26	29	34	33	28	29	6
5	26	25	9	9	28	28	27	23	22	25	30	30	25	25	5
4	23	21	4	4	24	24	23	18	17	21	27	27	21	21	4
3	19	18	0	0	19	19	19	13	12	18	24	24	17	17	3
2	16	14	0	0	15	15	15	9	8	14	20	21	13	13	2
1	13	10	0	0	11	11	11	4	3	10	17	18	9	9	1
0	9	7	0	0	7	6		0							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	81	99		92	89	87	84	85	78						19
18	77	85	93	88	85	83	80	81	75	75				87	18
17	73	80	88	84	81	79	76	77			82				17
16	68	76	83	79	77	75	72	73	67		78				16
15	64	72	78	75	72	71	69	69	63	65	75	72	59	74	15
14	60	67	73	71	68	67	65	66	59	62	71		57		14
13	56	63	68	66	64	64	61	62	55	58	67	65		66	13
12	51	59	63	62	60	60	57	58	51		63	61	51	61	12
11	47	54	57	57	55	56	54	54	47	52	59	58		57	11
10	43	50	52	53	51	52	50	50	43	49	56	54	45	53	10
9	39	46	47	49	47	48	46	46	46	52	50	42	48		9
8	34	41	42	44	43	44	42	42	35	42	48	47	40		8
7	30	37	37	40	38	40	39	38	32		44	43	37	40	7
6	26	33	32	36	34	36	35	34	28	36	41	40	34	35	6
5	22	28	27	31	30	33	31	30	24	33	37	36	31	31	5
4	18	24	22	27	26	29	27	26	20		33	33	28	26	4
3	13	20	16	22	22	25	24	22	16	26	29	29	25	22	3
2	9	15	11	18	17	21	20	18	12		25	25	23	18	2
1	5	11	6	14	13	17	16	14		20	22	22	20	13	1
0	7	1		9				10		16	18	18	17		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	87		89		83		90		83							19	
18	83	87	84	79			86		79							18	
17	79	83	80	76	75		82		75	80				86	76	17	
16	76	79	76	72	71	71	78		71	75	82			82	72	75	16
15	72	74	72	68	67	67	74		67	71				78	68		15
14	68	70	68	65	64	63	69		62	66	73			74	65	67	14
13	64	66	64	61	60	59	65		58	62	74	69		70	61	63	13
12	60	61	59	58	56	55	61		54	57			58	66	57	59	12
11	56	57	55	54	52	50	57	56	50	53	66	60		62	54	55	11
10	52	52	51	51	48	46	53		46	48	62	56		58	50	51	10
9	48	48	47	47	44	42	49	46	42	44	57	51	44	54	46	47	9
8	44	44	43	43	40	38	44		38	39	53	47		50	43	43	8
7	40	39	39	40	36	34	40	37	33	34	49	42	34	46	39	39	7
6	36	35	34	36	32	30	36		29	30	45	38		42	35	35	6
5	32	31	30	33	28	26	32	27	25	25	41	33	24	38	32	31	5
4	28	26	26	29	24	22	28		21	21	36	29		34	28	27	4
3	24	22	22		20	18	23	18	17	16	32	24	15	30	24		3
2	20	18	18		16	13	19	13	13	12	28	20	10	26			2
1	16	13	14		12	9	15	8	8	7	24	15	5				1
0	9				5	11	3		3	19				13	11		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 35-39 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		85		96		91				92	95	96	87		19
18	88	92	81				87				88	91	91	83		18
17	83	87	78		86		82			79		86		79		17
16	79	83	74			75	77	71	77			82	82	75		16
15	75	79	71		76		73	67			74					15
14	71	75	67	67	71	66	68	64	68		70	73	73	67		14
13	67	70	64		66		64	60		62		68	69	63	60	13
12	62	66	60	61	61	58	59	56	59		61	64	65	56	56	12
11	58	62	56	58	56	54	55	52	55	54	56	59	60	56	52	11
10	54	57	53	55	51	50	50	48	50		52	54	56	52	49	10
9	50	53	49	52	46	45	45	44	46	46	47	50	51	48	45	9
8	46	49	46	49	41	41	41	41	41		43	45	47	44	41	8
7	41	45	42	46	36	37	36	37	37	37	38	41	42	40	38	7
6	37	40	39	43		33	32	33	32		33	36	38	36	34	6
5	33	36	35	40	26	28	27	29	28	29	29	32	34	32	30	5
4	29	32	32	37		24	22	25	23		25	27	29	28	26	4
3	25	27	28	33	16	20	18		19		21	23	25	24	23	3
2	21	23	25	30	11	16	13	18	14	17	18	20	20	19	2	
1	16		21	27	6	12	9	14	10		13			16		1
0				24		7	4	10								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	77	78	88	84	90	92	87	93	90				82	83	19
18	74	74	82	79	86	88	83	89	85				78	79	18
17	70	71	77	74	82	84	79	84	81				74	75	17
16	67	67	71	68	78	79	75	79	76				70	71	16
15	63	64	65	63	73	75	71	75	71				62	66	15
14	60	60	60	58	69	71	67	70	67	61			62	63	14
13	56	56	54	52	65	66	63	65	62				58	56	13
12	53	53	49	47	61	62	59	61	58	53			55	55	12
11	49	49	43	42	57	58	55	56	53				51	51	11
10	46	46	38	36	53	54	51	51	49	46	48	47	47	48	10
9	43	42	32	31	49	49	47	46	44	42	45	44	43	44	9
8	39	38	27	26	45	45	43	42	40	39	41	41	39	40	8
7	36	35	21	21	41	41	39	37	35				35	36	7
6	32	31	15	15	37	36	35	32	31	31	34	35	31	32	6
5	29	27	10	10	32	32	31	28	26	28	31	32	28	28	5
4	25	24	4	5	28	28	27	23	21	24	28	29	24	24	4
3	22	20	0	0	24	23	23	18	17	20	24	26	20	20	3
2	18	17	0	0	20	19	18	14	12	17	21	23	16	16	2
1	15	13	0	0	16	15	14	9	8	13	17	20	12	12	1
0	12	9	0	0	12	10		4							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	81	100		95	91	88	84	86	78						19	
18	77	83	96	90	87	84	80	82	75	75				89	18	
17	73	79	91	86	83	80	77	78			83				17	
16	68	75	86	82	79	76	73	74	67		79				16	
15	64	70	81	77	74	73	69	70	63	65	76	72	59	76	15	
14	60	66	76	73	70	69	65	66	59	62	72		56		14	
13	56	62	71	68	66	65	62	62	55	59	68	65		67	13	
12	51	58	65	64	62	61	58	58	51		64	61	51	63	12	
11	47	53	60	60	57	57	54	54	47	52	60	58		59	11	
10	43	49	55	55	53	53	50	50	43	49	57	54	45	54	10	
9	39	45	50	51	49	49	47	46	46	53	51	42	50		9	
8	34	40	45	47	45	45	43	42	35	43	49	47	39	46	8	
7	30	36	40	42	41	42	39	38	32		45	44	37	41	7	
6	26	32	35	38	36	38	35	34	28	36	42	40	34	37	6	
5	22	27	29	34	32	34	32	31	24	33	38	37	31	32	5	
4	18	23	24	29	28	30	28	27	20		34	33	28	28	4	
3	13	19	19	25	24	26	24	23	16	27	30	29	25	24	3	
2	9	14	14	20	19	22	20	19	12		26	26	22	19	2	
1	5	10	9	16	15	18	17	15	20	23	22	19	15		1	
0	6	4		12				11	17	19	19	17			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	87	90			83		93		83								19
18	83	90	86	79			89		79								18
17	79	85	82	76	75		84		75	80				86	76		17
16	76	81	78	72	71	72	80		71	75	83		82	72	75		16
15	72	77	74	69	67	68	76		67	71			78	69			15
14	68	72	70	65	64	64	72		62	66	74		74	65	67		14
13	64	68	65	62	60	60	68		58	62	74	69	70	61	63		13
12	60	63	61	58	56	56	64		54	57		58	66	58	59		12
11	56	59	57	54	52	52	59	56	50	53	66	60	62	54	55		11
10	52	55	53	51	48	48	55		46	48	62	56	58	50	51		10
9	48	50	49	47	44	43	51	47	42	44	57	52	44	54	47		9
8	44	46	45	44	40	39	47		38	39	53	47	50	43	43		8
7	40	42	40	40	36	35	43	37	33	34	49	43	34	46	39		7
6	36	37	36	37	32	31	39		29	30	45	38	42	36	35		6
5	32	33	32	33	28	27	34	28	25	25	41	34	25	38	32		5
4	28	29	28	29	24	23	30		21	21	36	29	34	28	27		4
3	24	24	24		20	19	26	18	17	16	32	25	15	30	25		3
2	20	20	20		16	15	22	13	13	12	28	20	10	26			2
1	16	16	15		12	11	18	9	8	7	24	16	5				1
0	11				7	13	4		3	19			14	11			0

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 13-15 years

Age: 40-44 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		86		96		93				93	97	97	89		19
18	88	93	82				88				89	92	93	85		18
17	84	88	78		86		84			80		88		81		17
16	80	84	75			77	79	73	79			83	84	77		16
15	76	80	71		76		74	69			75					15
14	71	76	68	68	71	68	70	65	70		71	74	75	69		14
13	67	71	64		65		65	61		64		70	71	65	60	13
12	63	67	61	61	60	60	61	57	61		62	65	66	56		12
11	59	63	57	58	55	56	56	54	56	56	58	60	62	57	52	11
10	55	58	54	55	50	51	52	50	52		53	56	58	53		10
9	50	54	50	52	45	47	47	46	47	47	49	51	53	49		9
8	46	50	47	49	40	43	42	42	43		44	47	49	45		8
7	42	46	43	46	35	39	38	38	38	39	40	42	44	41		7
6	38	41	40	43		34	33	34	34		35	38	40	37		6
5	34	37	36	40	25	30	29	31	29	31	31	33	35	33		5
4	29	33	32	37		26	24	27	25		27	29	31	29		4
3	25	29	29	34	15	22	19		20		23	24	27	25		3
2	21	24	25	31	10	18	15	19	16		18	20	22	21		2
1	17		22	28	5	13	10	15	11		14			17		1
0				24		9	6	12								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	78	79	88	85	92	95	89	96	92				83	85	19	
18	75	76	83	80	88	90	85	91	87				79	81	18	
17	71	72	77	74	84	86	81	86	83				76	77	17	
16	68	69	72	69	80	82	77	82	78				72	73	16	
15	64	65	66	64	76	77	73	77	74		64		68	69	15	
14	61	61	60	58	72	73	69	72	69	62			64	65	14	
13	58	58	55	53	68	69	65	68	65		60	58	60	61		13
12	54	54	49	48	63	65	61	63	60	55			56	57		12
11	51	50	44	42	59	60	57	58	56		53	52	52	53		11
10	47	47	38	37	55	56	53	54	51	48	49	49	48	49		10
9	44	43	33	32	51	52	49	49	46	44	46	46	45	45		9
8	40	40	27	26	47	47	45	44	42	40	43	43	41	41		8
7	37	36	22	21	43	43	41	39	37	37	39	40	37	37		7
6	33	32	16	16	39	39	37	35	33	33	36	37	33	33		6
5	30	29	10	10	35	34	32	30	28	30	32	34	29	29		5
4	26	25	5	5	31	30	28	25	24	26	29	31	25	25		4
3	23	22	0	0	27	26	24	21	19	22	26	28	21	21		3
2	20	18	0	0	22	21	20	16	15	19	22	25	17	17		2
1	16	14	0	0	18	17	16	11	10	15	19	22	13	14		1
0	13	11	0	0	14	13		7								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	79	82	100	97	93	89	85	87	78	75	76				19
18	75	82	99	93	89	85	81	83						91	18
17	71	78	94	88	85	82	77	79				84			17
16	67	74	89	84	81	78	73	75	67			80			16
15	62	69	84	80	76	74	70	71	63	66	77	73	60	78	15
14	58	65	78	75	72	70	66	67	59	63	73		57		14
13	54	61	73	71	68	66	62	63	55	59	69	65		69	13
12	50	56	68	66	64	62	58	59	51		65	62	52	65	12
11	46	52	63	62	60	58	55	55	47	53	62	58		60	11
10	41	48	58	58	55	54	51	51	43	50	58	55	46	56	10
9	37	43	53	53	51	50	47	47		47	54	51	43	52	9
8	33	39	48	49	47	47	43	43	35	43	50	48	40	47	8
7	29	35	42	45	43	43	40	39	32		46	44	37	43	7
6	24	31	37	40	38	39	36	35	28	37	43	40	35	39	6
5	20	26	32	36	34	35	32	31	24	34	39	37	32	34	5
4	16	22	27	31	30	31	28	27	20		35	33	29	30	4
3	12	18	22	27	26	27	25	23	16	27	31	30	26	25	3
2	7	13	17	23	21	23	21	19	12		28	26	23	21	2
1	3	9	12	18	17	19	17	16		21	24	23	20	17	1
0	5	7	14					12		17	20	19	17		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	91	92	92		85		95		82							19	
18	87	92	88	81			91		78							18	
17	83	87	84	77	77		87		74	80				85	76	17	
16	79	83	80	74	73	73	83		69	75	83			81	73	75	16
15	75	79	76	70	69	69	79		65	71				77	69	15	
14	71	74	71	66	65	65	74		61	66	74			73	65	67	14
13	67	70	67	63	61	61	70		57	62	74	70		69	62	63	13
12	63	66	63	59	57	57	66		53	57			58	65	58	59	12
11	59	61	59	56	53	53	62	57	49	53	66	61		61	54	55	11
10	55	57	55	52	50	49	58		44	48	62	57		57	51	51	10
9	51	53	51	49	46	45	54	47	40	44	57	52	44	53	47	47	9
8	47	48	46	45	42	41	49		36	39	53	48		49	43	43	8
7	43	44	42	41	38	36	45	38	32	34	49	43	34	45	40	39	7
6	39	40	38	38	34	32	41		28	30	45	39		41	36	35	6
5	35	35	34	34	30	28	37	28	24	25	41	34	25	37	32	31	5
4	31	31	30	31	26	24	33		20	21	36	30		33	29	27	4
3	27	27	26		22	20	28	19	15	16	32	25	15	29	25		3
2	23	22	21		18	16	24	14	11	12	28	21	10	25			2
1	19	18	17		14	12	20	9	7	7	24	16	5				1
0	14	14			8	16	4		3	19				14	11		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 45-49 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	93		86		97		94				95	98	99	90		19
18	89	94	83				90				90	94	95	86		18
17	85	90	79		87		85			82		89		82		17
16	80	85	76			78	81	74	81			85	86	78		16
15	76	81	72		77		76	70			77					15
14	72	77	69	68	72	70	72	67	71		72	76	77	70		14
13	68	72	65		67		67	63		66		71	73	66	60	13
12	64	68	61	62	62	62	62	59	62		63	67	68	56		12
11	59	64	58	59	57	57	58	55	58	57	59	62	64	58	52	11
10	55	60	54	56	52	53	53	51	53		54	57	59	54	49	10
9	51	55	51	53	47	49	49	47	49	49	50	53	55	50	45	9
8	47	51	47	49	42	45	44	44	44		45	48	50	46	41	8
7	43	47	44	46	36	40	39	40	40	41	41	44	46	42	38	7
6	38	42	40	43		36	35	36	35		37	39	42	38	34	6
5	34	38	37	40	26	32	30	32	31	33	32	35	37	34	30	5
4	30	34	33	37		28	26	28	26		28	30	33	30	26	4
3	26	30	30	34	16	24	21		22		24	26	28	26	23	3
2	22	25	26	31	11	19	17	21	17		20	21	24	22	19	2
1	17		23	28	6	15	12	17	13		16			18		1
0				25		11	7	13								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	79	81	89	85	95	97	91	98	94				85	86	19
18	76	77	83	80	90	93	87	94	90				81	82	18
17	73	73	78	75	86	89	83	89	85				77	78	17
16	69	70	72	70	82	84	79	84	81				73	74	16
15	66	66	67	64	78	80	75	79	76				67	69	15
14	62	63	61	59	74	76	71	75	71	64			65	66	14
13	59	59	56	54	70	71	67	70	67		61	61	62	62	13
12	55	55	50	48	66	67	63	65	62	57			58	59	12
11	52	52	44	43	62	63	59	61	58		55	55	54	55	11
10	48	48	39	38	58	58	55	56	53	50	51	52	50	51	10
9	45	44	33	32	54	54	50	51	49	46	48	49	46	47	9
8	41	41	28	27	49	50	46	47	44	42	45	46	42	43	8
7	38	37	22	22	45	45	42	42	40	39	41	43	38	39	7
6	35	34	17	16	41	41	38	37	35	35	38	40	34	35	6
5	31	30	11	11	37	37	34	32	31	32	34	37	30	31	5
4	28	26	6	6	33	33	30	28	26	28	31	34	27	27	4
3	24	23	0	1	29	28	26	23	21	24	28	31	23	23	3
2	21	19	0	0	25	24	22	18	17	21	24	28	19	19	2
1	17	16	0	0	21	20	18	14	12	17	21	25	15	15	1
0	14	12	0	0	17	15		9							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	79	100		99	95	90	85	88	78						19	
18	75	81	100	95	91	87	82	84	75	76				92	18	
17	71	77	97	91	87	83	78	80			85				17	
16	67	73	91	86	83	79	74	76	67		81				16	
15	62	68	86	82	79	75	70	72	63	66	78	73	61	79	15	
14	58	64	81	78	74	71	67	68	59	63	74		58		14	
13	54	60	76	73	70	67	63	64	55	60	70	66		71	13	
12	50	55	71	69	66	63	59	60	51		66	62	52	66	12	
11	46	51	66	64	62	59	55	56	47	53	63	59		62	11	
10	41	47	61	60	57	56	52	52	43	50	59	55	47	58	10	
9	37	42	55	56	53	52	48	48		47	55	52	44	53	9	
8	33	38	50	51	49	48	44	44	35	44	51	48	41	49	8	
7	29	34	45	47	45	44	40	40	32		48	44	38	45	7	
6	24	29	40	43	40	40	37	36	28	37	44	41	35	40	6	
5	20	25	35	38	36	36	33	32	24	34	40	37	32	36	5	
4	16	21	30	34	32	32	29	28	20		36	34	30	32	4	
3	12	16	25	29	28	28	25	25	16	28	32	30	27	27	3	
2	7	12	20	25	24	25	22	21	12		29	27	24	23	2	
1	3	8	14	21	19	21	18	17		21	25	23	21	18	1	
0		3	9	16				13		18	21	19	18		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	91	94	94		85		98		82								19
18	87	94	90	82			94		78								18
17	83	90	86	78	77		89		74	80				84	77		17
16	79	85	82	75	73	75	85		69	75	84		80	73	75		16
15	75	81	77	71	69	71	81		65	71			76	69			15
14	71	77	73	68	65	66	77		61	66	75		72	66	67		14
13	67	72	69	64	61	62	73		57	62	74	71		68	62	63	13
12	63	68	65	61	57	58	69		53	57			58	64	58	59	12
11	59	64	61	57	53	54	64	57	49	53	66	62		60	55	55	11
10	55	59	57	53	50	50	60		44	48	62	57		56	51	51	10
9	51	55	52	50	46	46	56	48	40	44	57	53	44	52	47	47	9
8	47	51	48	46	42	42	52		36	39	53	48		48	44	43	8
7	43	46	44	43	38	38	48	38	32	34	49	44	34	44	40	39	7
6	39	42	40	39	34	34	43		28	30	45	39		40	36	35	6
5	35	38	36	36	30	29	39	29	24	25	40	35	25	36	33	31	5
4	31	33	32	32	26	25	35		20	21	36	30		32	29	27	4
3	27	29	27		22	21	31	19	15	16	32	26	15	28	25		3
2	23	25	23		18	17	27	14	11	12	28	22	10	24			2
1	19	20	19		14	13	23	10	7	7	24	17	5				1
0		16			9	18	5		3	19				14	11		0

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 13-15 years

Age: 50-54 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	93		87		98		96				96	100	100	91		19
18	89	95	83				92				92	95	97	87		18
17	85	91	80		88		87			84		91		83		17
16	81	86	76			80	83	76	82			86	88	79		16
15	77	82	73		78		78	72			78					15
14	73	78	69	68	73	72	74	68	73		74	77	79	71		14
13	68	74	66		68		69	64		67		73	74	67	60	13
12	64	69	62	62	63	63	64	61	64		65	68	70		56	12
11	60	65	59	59	58	59	60	57	60	59	60	64	66	59	52	11
10	56	61	55	56	53	55	55	53	55		56	59	61	55	49	10
9	52	56	52	53	48	51	51	49	51	51	51	54	57	51	45	9
8	47	52	48	50	43	46	46	45	46		47	50	52	47	41	8
7	43	48	45	47	38	42	41	42	42	42	42	45	48	43	38	7
6	39	44	41	44		38	37	38	37		38	41	43	39	34	6
5	35	39	37	41	28	34	32	34	33	34	33	36	39	35	30	5
4	31	35	34	37		29	28	30	28		30	32	35	31	26	4
3	26	31	30	34	18	25	23		24		26	27	30	27	23	3
2	22	26	27	31	13	21	19	23	19		22	23	26	23	19	2
1	18		23	28	7	17	14	19	15		18			19		1
0				25		13	9	15								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	81	82	90	86	97	100	93	100	96				86	88	19
18	77	78	84	81	93	96	89	96	92				82	84	18
17	74	75	79	76	89	91	85	91	87				79	80	17
16	70	71	73	70	85	87	81	86	83				75	76	16
15	67	67	68	65	80	83	77	82	78				69	71	15
14	63	64	62	60	76	78	73	77	74	67			67	68	14
13	60	60	56	54	72	74	69	72	69				64	63	13
12	56	57	51	49	68	70	64	68	65	59			59	60	12
11	53	53	45	44	64	65	60	63	60				57	55	11
10	50	49	40	39	60	61	56	58	55	52	54	54	51	52	10
9	46	46	34	33	56	57	52	54	51	48	50	51	48	48	9
8	43	42	29	28	52	52	48	49	46	45	47	48	44	44	8
7	39	39	23	23	48	48	44	44	42	41	43	45	40	40	7
6	36	35	18	17	44	44	40	40	37	37	40	42	36	36	6
5	32	31	12	12	39	40	36	35	33	34	37	39	32	32	5
4	29	28	6	7	35	35	32	30	28	30	33	36	28	28	4
3	25	24	1	1	31	31	28	25	24	26	30	33	24	25	3
2	22	20	0	0	27	27	24	21	19	23	26	30	20	21	2
1	19	17	0	0	23	22	20	16	15	19	23	27	16	17	1
0	15	13	0	0	19	18		11							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	78	100		100	98	92	86	89	79						19
18	74	80	100	97	93	88	82	85	75	77				94	18
17	69	76	99	93	89	84	79	81			86				17
16	65	72	94	89	85	80	75	77	67		83				16
15	61	67	89	84	81	76	71	73	63	67	79	73	62	81	15
14	57	63	84	80	76	72	67	69	60	64	75		59		14
13	52	59	79	75	72	68	64	65	56	60	71	66		72	13
12	48	54	74	71	68	65	60	61	52		67	63	53	68	12
11	44	50	69	67	64	61	56	57	48	54	64	59		64	11
10	40	46	63	62	59	57	52	54	44	51	60	56	48	59	10
9	35	41	58	58	55	53	49	50		48	56	52	45	55	9
8	31	37	53	54	51	49	45	46	36	44	52	48	42	51	8
7	27	33	48	49	47	45	41	42	32		49	45	39	46	7
6	23	28	43	45	43	41	37	38	28	38	45	41	36	42	6
5	18	24	38	41	38	37	34	34	24	35	41	38	33	38	5
4	14	20	33	36	34	34	30	30	20		37	34	30	33	4
3	10	15	27	32	30	30	26	26	17	28	33	31	28	29	3
2	6	11	22	27	26	26	22	22	13		30	27	25	24	2
1	2	7	17	23	21	22	19	18		22	26	23	22	20	1
0		2	12	19				14		18	22	20	19		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	94	96			88		100		81							19	
18	90	93	92	83			96		76							18	
17	86	89	88	80	80		92		72	80				83	77	17	
16	82	85	83	76	76	76	88		68	75	85		79	73	75	16	
15	78	80	79	73	72	72	84		64	71			75	70		15	
14	74	76	75	69	68	68	79		60	66	76		71	66	67	14	
13	70	72	71	65	64	64	75		56	62	74	71		67	62	63	13
12	66	67	67	62	60	59	71		51	57			58	63	59	59	12
11	62	63	63	58	56	55	67	58	47	53	66	62		59	55	55	11
10	58	59	58	55	52	51	63		43	48	62	58		55	51	51	10
9	54	54	54	51	48	47	58	48	39	44	57	53	44	51	48	47	9
8	50	50	50	48	45	43	54		35	39	53	49		47	44	43	8
7	46	46	46	44	41	39	50	39	31	34	49	44	34	43	40	39	7
6	42	41	42	40	37	35	46		27	30	45	40		39	37	35	6
5	38	37	38	37	33	31	42	29	22	25	40	36	25	35	33	31	5
4	34	33	33	33	29	27	38		18	21	36	31		31	29	27	4
3	30	28	29		25	22	33	20	14	16	32	27	15	27	26		3
2	26	24	25		21	18	29	15	10	12	28	22	10	23			2
1	22	20	21		17	14	25	10	6	7	24	18	6				1
0		15			10	21	5		3	19				15	11		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 55-59 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	94		88		99		99				98	100	100	92		19	
18	90	96	84				94				93	97	98	88		18	
17	86	92	81		89		89			85		92		84		17	
16	81	87	77			82	85	78	84			88	90	80		16	
15	77	83	74		79		80	74			80					15	
14	73	79	70	69	74	73	76	70	75		75	79	81	72		14	
13	69	75	66		69		71	66			69		74	76	68	60	13
12	65	70	63	62	64	65	66	63	66		66	70	72		56	12	
11	61	66	59	59	59	61	62	59	61		61	62	65	67	60	52	11
10	56	62	56	56	54	57	57	55	57		57	60	63	56	49		10
9	52	58	52	53	49	52	53	51	52		52	53	56	59	52	45	9
8	48	53	49	50	44	48	48	47	48		48	51	54	48	41		8
7	44	49	45	47	39	44	44	44	43		44	44	47	50	44	38	7
6	40	45	42	44		40	39	40	39		40		42	45	40	34	6
5	35	40	38	41	29	35	34	36	34		36	35	38	41	36	30	5
4	31	36	35	38		31	30	32	30		32		33	36	32	26	4
3	27	32	31	35	19	27	25		25		28		29	32	28	23	3
2	23	28	28	32	14	23	21	25	21		24		24	28	24	19	2
1	19		24	28	9	19	16	21	16		19			20		1	
0				25		14	11	17								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	82	83	91	87	99	100	95	100	99				88	89	19
18	78	80	85	82	95	98	91	98	94				84	85	18
17	75	76	80	77	91	94	87	94	90				80	81	17
16	71	72	74	71	87	90	83	89	85				76	77	16
15	68	69	69	66	83	85	78	84	80				72	72	15
14	65	65	63	61	79	81	74	79	76	69			68	70	14
13	61	62	58	55	75	77	70	75	71				66	66	13
12	58	58	52	50	71	72	66	70	67	62			61	62	12
11	54	54	46	45	66	68	62	65	62				59	57	11
10	51	51	41	40	62	64	58	61	58	54	56	57	53	54	10
9	47	47	35	34	58	59	54	56	53	51	53	54	49	50	9
8	44	43	30	29	54	55	50	51	49	47	49	51	45	46	8
7	40	40	24	24	50	51	46	47	44				46	48	7
6	37	36	19	18	46	47	42	42	40				40	43	6
5	34	33	13	13	42	42	38	37	35				36	39	5
4	30	29	7	8	38	38	34	33	30				36	39	4
3	27	25	2	2	34	34	30	28	26				32	36	3
2	23	22	0	0	29	29	26	23	21				29	33	2
1	20	18	0	0	25	25	22	18	17				30	18	1
0	16	14	0	0	21	21		14							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	78	100		100	100	93	87	91	79						19	
18	74	79	100	100	95	89	83	87	75	77				96	18	
17	69	75	100	95	91	85	80	83			87				17	
16	65	70	97	91	87	81	76	79	67		84				16	
15	61	66	92	87	83	77	72	75	63	67	80	74	63	83	15	
14	57	62	87	82	79	74	68	71	60	64	76		60		14	
13	52	57	82	78	74	70	65	67	56	61	72	67		74	13	
12	48	53	76	73	70	66	61	63	52		69	63	54	70	12	
11	44	49	71	69	66	62	57	59	48	54	65	59		65	11	
10	40	45	66	65	62	58	53	55	44	51	61	56	48	61	10	
9	35	40	61	60	57	54	50	51		48	57	52	45	57	9	
8	31	36	56	56	53	50	46	47	36	45	53	49	43	52	8	
7	27	32	51	52	49	46	42	43	32		50	45	40	48	7	
6	23	27	46	47	45	42	38	39	28	38	46	42	37	44	6	
5	18	23	40	43	40	39	35	35	24	35	42	38	34	39	5	
4	14	19	35	38	36	35	31	31		20		38	35	31	35	4
3	10	14	30	34	32	31	27	27	17	29	35	31	28	31	3	
2	6	10	25	30	28	27	23	23	13		31	27	26	26	2	
1	2	6	20	25	23	23	20	19		22	27	24	23	22	1	
0	1	15		21				15		19	23	20	20		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	94		98		88		100		81							19
18	90	96	94	84			99		76							18
17	86	91	89	81	80		94		72	80				81	77	17
16	82	87	85	77	76	77	90		68	75		85		77	74	74
15	78	83	81	74	72	73	86		64	71				73	70	15
14	74	78	77	70	68	69	82		60	66		76		69	66	67
13	70	74	73	67	64	65	78		56	62	74	72		65	63	63
12	66	70	69	63	60	61	73		51	57			58	61	59	12
11	62	65	64	60	56	57	69	58	47	53	66	63		57	55	11
10	58	61	60	56	52	52	65		43	48	62	58		53	52	51
9	54	57	56	52	48	48	61	49	39	44	57	54	44	49	48	9
8	50	52	52	49	45	44	57		35	39	53	50		45	44	43
7	46	48	48	45	41	40	53	39	31	34	49	45	34	41	41	7
6	42	44	44	42	37	36	48		27	30	45	41		37	37	6
5	38	39	39	38	33	32	44	30	22	25	40	36	25	33	33	5
4	34	35	35	35	29	28	40		18	21	36	32		29	30	27
3	30	30	31		25	24	36	20	14	16	32	27	15	25	26	3
2	26	26	27		21	20	32	15	10	12	28	23	10	21		2
1	22	22	23		17	15	28	11	6	7	24	18	6			1
0	17				11	23	6		3	19				15	11	0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 60-64 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	95		88		100		100				99	100	100	93		19	
18	90	97	85				96				95	98	100	89		18	
17	86	93	81		93		92			87		94		85		17	
16	82	89	78			84	87	80	85			89	91	81		16	
15	78	84	74		82		83	76			81					15	
14	74	80	71	69	77	75	78	72	76		77	80	83	73		14	
13	70	76	67		72		73	69		71		76	78	69	60	13	
12	65	71	64	63	67	67	69	65	67		68	71	74		56	12	
11	61	67	60	60	62	63	64	61	63	62	63	67	69	61	52	11	
10	57	63	57	57	57	58	60	57	58		59	62	65	57	49	10	
9	53	59	53	53	52	54	55	53	54	54	54	57	60	54	45	9	
8	49	54	49	50	47	50	50	50	49		50	53	56	50	41	8	
7	44	50	46	47	42	46	46	46	45	46	45	48	52	46	38	7	
6	40	46	42	44		41	41	42	40	42		44	47	42	34	6	
5	36	41	39	41	32	37	37	38	36	38	36	39	43	38	30	5	
4	32	37	35	38		33	32	34	31		33		35	38	34	26	4
3	28	33	32	35	22	29	28		27		29		30	34	30	23	3
2	23	29	28	32	17	25	23	27	22		25		26	29	26	19	2
1	19		25	29	12	20	18	23	18	21				22		1	
0				26		16	14	19								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	85	92	89	100	100	96	100	100				89	91	19
18	80	81	87	83	97	100	92	100	96				85	87	18
17	76	77	81	78	93	97	88	96	92				82	83	17
16	73	74	76	73	89	92	84	91	87				78	79	16
15	69	70	70	67	85	88	80	87	83		75		74	75	15
14	66	66	64	62	81	84	76	82	78	72			70	71	14
13	62	63	59	57	77	79	72	77	74		69	69	66	67	13
12	59	59	53	51	73	75	68	72	69	64			62	63	12
11	55	56	48	46	69	71	64	68	64	62	63	58	59		11
10	52	52	42	41	65	66	60	63	60	57	59	60	54	55	10
9	49	48	37	35	61	62	56	58	55	53	55	57	50	51	9
8	45	45	31	30	56	58	52	54	51	50	52	54	47	47	8
7	42	41	25	25	52	53	48	49	46	46	49	51	43	43	7
6	38	37	20	20	48	49	44	44	42	42	45	48	39	40	6
5	35	34	14	14	44	45	40	40	37	39	42	45	35	36	5
4	31	30	9	9	40	40	36	35	33	35	38	42	31	32	4
3	28	27	3	4	36	36	32	30	28	31	35	39	27	28	3
2	24	23	0	0	32	32	28	26	24	28	32	36	23	24	2
1	21	19	0	0	28	28	24	21	19	24	28	33	19	20	1
0	17	16	0	0	24	23		16							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	76	100		100	100	94	88	92	79						19	
18	72	78	100	100	98	90	84	89	75	78				97	18	
17	68	74	100	98	93	86	81	85			88				17	
16	63	69	100	93	89	82	77	81	67		85				16	
15	59	65	95	89	85	79	73	77	63	68	81	74	63	84	15	
14	55	61	89	85	81	75	69	73	60	65	77		60		14	
13	51	56	84	80	76	71	66	69	56	61	73	67		76	13	
12	46	52	79	76	72	67	62	65	52		70	63	55	71	12	
11	42	48	74	71	68	63	58	61	48	55	66	60		67	11	
10	38	43	69	67	64	59	54	57	44	52	62	56	49	63	10	
9	34	39	64	63	59	55	51	53		49	58	53	46	58	9	
8	30	35	59	58	55	51	47	49	36	45	54	49	43	54	8	
7	25	30	53	54	51	48	43	45	32		51	46	41	50	7	
6	21	26	48	50	47	44	39	41	28	39	47	42	38	45	6	
5	17	22	43	45	43	40	36	37	24	36	43	38	35	41	5	
4	13	17	38	41	38	36	32	33		20		39	35	32	37	4
3	8	13	33	36	34	32	28	29	17	29	36	31	29	32	3	
2	4	9	28	32	30	28	24	25	13		32	28	26	28	2	
1	0	5	23	28	26	24	21	21		23	28	24	24	23	1	
0	0	18		23				17		19	24	21	21		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97	100			90		100		79							19	
18	93	98	95	86			100		75							18	
17	89	94	91	82	82		97		71	80			79	78		17	
16	85	89	87	79	78	78	93		67	75	86		75	74	74	16	
15	81	85	83	75	74	74	88		63	71			71	70		15	
14	77	81	79	71	70	70	84		58	66	77		67	67	66	14	
13	73	76	75	68	66	66	80		54	62	74	72		63	63	62	13
12	69	72	70	64	62	62	76		50	57			58	59	59	12	
11	65	68	66	61	58	58	72	59	46	53	66	64		55	56	54	11
10	61	63	62	57	54	54	68		42	48	62	59		51	52	50	10
9	57	59	58	54	50	50	63	49	38	44	57	55	44	47	48	47	9
8	53	55	54	50	46	45	59		34	39	53	50		43	45	43	8
7	49	50	50	47	42	41	55	40	29	34	49	46	34	39	41	39	7
6	45	46	45	43	38	37	51		25	30	45	41		35	37	35	6
5	41	41	41	39	34	33	47	30	21	25	40	37	25	31	34	31	5
4	37	37	37	36	31	29	43		17	21	36	32		27	30	27	4
3	33	33	33		27	25	38	21	13	16	32	28	15	23	26		3
2	29	28	29		23	21	34	16	9	12	28	23	10	19			2
1	25	24	25		19	17	30	11	4	7	24	19	6				1
0	20	20			13	26	6		3	19				15	11		0

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 13-15 years
Age: 65-69 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	95		89		100		100				100	100	100	95		19
18	91	98	86				99				96	100	100	91		18
17	87	94	82		94		94				89	95		87		17
16	83	90	78			85	90	82	87			91	93	83		16
15	78	85	75		84		85	78			82					15
14	74	81	71	69	79	77	80	75	78		78	82	84	75		14
13	70	77	68		74		76	71			72	77	80	71	60	13
12	66	73	64	63	69	69	71	67	69		69	73	76	56		12
11	62	68	61	60	64	64	67	63	65		64	68	71	63	52	11
10	58	64	57	57	59	60	62	59	60		60	64	67	59		10
9	53	60	54	54	53	56	58	56	56		56	55	59	62	55	9
8	49	55	50	51	48	52	53	52	51		51	54	58	51	41	8
7	45	51	47	48	43	47	48	48	47		48	47	50	53	47	7
6	41	47	43	45		43	44	44	42		43	45	49	43	34	6
5	37	43	40	41	33	39	39	40	38		39	38	41	45	39	5
4	32	38	36	38		35	35	37	33		35	36	40	35	26	4
3	28	34	33	35	23	31	30		29		31	32	36	31	23	3
2	24	30	29	32	18	26	25	29	24		27	27	31	27	19	2
1	20		25	29	13	22	21	25	20		23			23		1
0				26		18	16	21								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	86	94	90	100	100	98	100	100				91	92	19
18	81	82	88	85	100	100	94	100	99				87	88	18
17	77	79	83	79	96	99	90	98	94				83	85	17
16	74	75	77	74	92	95	86	94	89				79	81	16
15	70	71	71	69	88	90	82	89	85		77		75	77	15
14	67	68	66	63	83	86	78	84	80	75			71	73	14
13	64	64	60	58	79	82	74	80	76		72	71	68	69	13
12	60	60	55	53	75	77	70	75	71	67			64	65	12
11	57	57	49	47	71	73	66	70	67		65	65	60	61	11
10	53	53	44	42	67	69	62	65	62	60	62	63	56	57	10
9	50	50	38	37	63	65	58	61	58	56	58	60	52	53	9
8	46	46	33	32	59	60	54	56	53	53	55	57	48	49	8
7	43	42	27	26	55	56	50	51	49	49	52	54	44	45	7
6	39	39	21	21	51	52	46	47	44	45	48	51	40	41	6
5	36	35	16	16	46	47	42	42	39	42	45	48	36	37	5
4	32	32	10	10	42	43	38	37	35	38	41	45	33	33	4
3	29	28	5	5	38	39	33	33	30	34	38	42	29	29	3
2	26	24	0	0	34	34	29	28	26	31	35	39	25	25	2
1	22	21	0	0	30	30	25	23	21	27	31	36	21	21	1
0	19	17	0	0	26	26		19							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	74	100		100	100	95	90	95	79						19
18	70	77	100	100	100	91	86	91	75	78				99	18
17	66	73	100	100	95	88	82	87			90				17
16	62	68	100	96	91	84	78	83	67		86				16
15	58	64	97	91	87	80	75	79	63	68	82	75	64	86	15
14	53	60	92	87	83	76	71	75	60	65	78		61		14
13	49	55	87	82	78	72	67	71	56	62	74	67		77	13
12	45	51	82	78	74	68	63	67	52		71	64	56	73	12
11	41	47	77	74	70	64	60	63	48	55	67	60		69	11
10	36	42	72	69	66	60	56	59	44	52	63	57	50	64	10
9	32	38	66	65	62	57	52	55		49	59	53	47	60	9
8	28	34	61	61	57	53	48	51	36	46	56	50	44	56	8
7	24	29	56	56	53	49	44	47	32		52	46	41	51	7
6	19	25	51	52	49	45	41	43	28	39	48	42	39	47	6
5	15	21	46	48	45	41	37	39	24	36	44	39	36	43	5
4	11	16	41	43	40	37	33	35	20		40	35	33	38	4
3	7	12	36	39	36	33	29	31	17	30	37	32	30	34	3
2	3	8	31	34	32	29	26	27	13		33	28	27	30	2
1	0	3	25	30	28	26	22	23		23	29	25	24	25	1
0	0	0	20	26				19		20	25	21	21		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100			92		100		78							19	
18	96	100	97	87			100		74							18	
17	92	96	93	83	84		99		70	80				77	78	17	
16	88	92	89	80	80	79	95		65	75	86		73	74	74	16	
15	84	87	85	76	76	75	91		61	71			69	71		15	
14	80	83	81	73	72	71	87		57	66	78		65	67	66	14	
13	76	79	76	69	68	67	83		53	62	74	73		61	63	62	13
12	72	74	72	66	64	63	78		49	57			58	57	60	58	12
11	68	70	68	62	60	59	74	59	45	53	66	64		53	56	54	11
10	64	66	64	58	56	55	70		41	48	62	60		49	52	50	10
9	60	61	60	55	52	51	66	50	36	44	57	55	44	45	49	46	9
8	56	57	56	51	48	47	62		32	39	53	51		41	45	42	8
7	52	52	51	48	44	43	58	40	28	34	49	46	34	37	41	38	7
6	48	48	47	44	40	38	53		24	30	45	42		33	38	34	6
5	44	44	43	41	36	34	49	31	20	25	40	37	25	29	34	31	5
4	41	39	39	37	32	30	45		16	21	36	33		25	30	27	4
3	37	35	35		28	26	41	21	11	16	32	28	15	21	27		3
2	33	31	31		24	22	37	16	7	12	28	24	10	17			2
1	29	26	26		20	18	33	11	3	7	24	19	6				1
0	22	22			14	28	7		3	19				16	11		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 70-74 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		90		100		100				100	100	100	96		19	
18	92	99	86				100				97	100	100	92		18	
17	87	95	83		95		97				90	97		88		17	
16	83	91	79			87	92	85	89			92	95	84		16	
15	79	86	76		85		88	81			84					15	
14	75	82	72	69	80	79	83	77	80		79	83	86	76		14	
13	71	78	69		75		79	73			74		79	82	72	60	13
12	66	74	65	63	70	70	74	70	71		70	74	77		56	12	
11	62	69	62	60	65	66	69	66	66		66	66	70	73	64	52	11
10	58	65	58	57	60	62	65	62	62		61	65	68	60	49		10
9	54	61	54	54	55	58	60	58	57		57	57	60	64	56	45	9
8	50	57	51	51	50	53	56	54	53		52	56	60	52	41		8
7	46	52	47	48	45	49	51	51	48		49	48	51	55	48	38	7
6	41	48	44	45		45	47	47	44		45		47	51	44	34	6
5	37	44	40	42	35	41	42	43	39		41	39	42	46	40	30	5
4	33	39	37	39		37	37	39	35		37		38	42	36	26	4
3	29	35	33	36	24	32	33		30		33		33	37	32	23	3
2	25	31	30	33	19	28	28	31	26		29		29	33	28	19	2
1	20		26	29	14	24	24	28	21		24			24			1
0			26		20	19	24									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	85	87	95	92	100	100	100	100	100				92	94	19	
18	82	83	90	86	100	100	96	100	100				88	90	18	
17	79	80	84	81	98	100	92	100	96				85	86	17	
16	75	76	79	76	94	97	88	96	92				81	82	16	
15	72	73	73	70	90	93	84	91	87		80		77	78	15	
14	68	69	68	65	86	88	80	87	83	78			73	74	14	
13	65	65	62	60	82	84	76	82	78		75		74	69	70	13
12	61	62	56	54	78	80	72	77	74	70			65	66	12	
11	58	58	51	49	73	75	68	73	69		68		61	62	11	
10	54	55	45	44	69	71	64	68	64	63	65		57	58	10	
9	51	51	40	39	65	67	60	63	60	59	61		53	54	9	
8	47	47	34	33	61	62	56	58	55	56	58	59	50	51	8	
7	44	44	29	28	57	58	52	54	51	52	54	56	46	47	7	
6	41	40	23	23	53	54	47	49	46	48	51	53	42	43	6	
5	37	36	18	17	49	49	43	44	42	45	48	50	38	39	5	
4	34	33	12	12	45	45	39	40	37	41	44	47	34	35	4	
3	30	29	6	7	41	41	35	35	33	37	41	44	30	31	3	
2	27	26	1	1	37	36	31	30	28	34	38	41	26	27	2	
1	23	22	0	0	32	32	27	26	24	30	34	38	22	23	1	
0	20	18	0	0	28	28		21							0	

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	73	100		100	100	97	91	97	79						19
18	69	76	100	100	100	93	87	93	75	79				100	18
17	64	71	100	100	97	89	84	89			91				17
16	60	67	100	98	93	85	80	85	67		87				16
15	56	63	100	94	89	81	76	81	63	69	83	75	65	88	15
14	52	59	95	89	85	77	72	77	60	66	79		62		14
13	47	54	90	85	81	73	69	73	56	62	76	68		79	13
12	43	50	85	80	76	69	65	69	52		72	64	56	75	12
11	39	46	80	76	72	66	61	65	48	56	68	61		70	11
10	35	41	74	72	68	62	57	61	44	53	64	57	51	66	10
9	31	37	69	67	64	58	54	57		49	60	54	48	62	9
8	26	33	64	63	59	54	50	53	36	46	57	50	45	57	8
7	22	28	59	59	55	50	46	49	32		53	46	42	53	7
6	18	24	54	54	51	46	42	45	28	40	49	43	39	49	6
5	14	20	49	50	47	42	38	41	24	37	45	39	37	44	5
4	9	15	44	45	42	38	35	37	20		42	36	34	40	4
3	5	11	38	41	38	35	31	34	17	30	38	32	31	36	3
2	1	7	33	37	34	31	27	30	13		34	29	28	31	2
1	0	2	28	32	30	27	23	26		24	30	25	25	27	1
0	0	0	23	28				22	20	26	21	22			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	100	100			94		100		77							19
18	99	100	99	88			100		72							18
17	95	98	95	85	86		100		68	80				74	78	17
16	91	94	91	81	82	81	98		64	75	87		70	75	74	16
15	87	90	87	78	78	77	93		60	71			66	71		15
14	83	85	82	74	74	72	89		56	66	78		62	67	66	14
13	79	81	78	70	70	68	85		52	62	74	74		58	64	62
12	75	77	74	67	66	64	81		48	57		58	54	60	58	12
11	71	72	70	63	62	60	77	60	43	53	66	65		50	56	54
10	67	68	66	60	58	56	73		39	48	61	60		46	53	50
9	63	63	62	56	54	52	68	50	35	44	57	56	44	42	49	9
8	60	59	57	53	50	48	64		31	39	53	51		38	45	42
7	56	55	53	49	46	44	60	41	27	34	49	47	35	34	42	7
6	52	50	49	45	42	40	56		23	30	45	42		30	38	34
5	48	46	45	42	38	36	52	31	18	25	40	38	25	26	34	30
4	44	42	41	38	34	31	48		14	21	36	33		22	31	26
3	40	37	37		30	27	43	21	10	16	32	29	15	18	27	3
2	36	33	32		26	23	39	17	6	12	28	24	11	14		2
1	32	29	28		22	19	35	12	2	7	23	20	6			1
0	24	24			15	31	7		3	19				16	11	0

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 13-15 years

Age: 75-79 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	96		91		100		100				100	100	100	97		19
18	92	100	87				100				99	100	100	93		18
17	88	96	83		96		100				92	98		89		17
16	84	92	80			89	95	87	90			94	97	85		16
15	80	88	76		86		91	84				85				15
14	75	83	73	70	81	80	86	80	81		81	85	88	77		14
13	71	79	69		76		82	76		76		80	84	73	60	13
12	67	75	66	64	71	72	77	72	72		72	76	79		56	12
11	63	70	62	61	66	68	72	68	68	67	67	71	75	65	52	11
10	59	66	59	57	61	64	68	65	63		63	67	70	61	49	10
9	55	62	55	54	56	59	63	61	59	59	58	62	66	57	45	9
8	50	58	52	51	51	55	59	57	54		54	57	61	53	41	8
7	46	53	48	48	46	51	54	53	50	51	49	53	57	49	38	7
6	42	49	45	45		47	49	49	45		47	48	53	45	34	6
5	38	45	41	42	36	42	45	46	41	43	40	44	48	41	30	5
4	34	40	37	39		38	40	42	36		39	39	44	37	26	4
3	29	36	34	36	26	34	36		32		34	35	39	33	23	3
2	25	32	30	33	21	30	31	34	27		30	30	35	29	19	2
1	21		27	30	16	26	27	30	23		26			25		1
0				27		21	22	27								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	87	88	97	94	100	100	100	100	100				94	96	19
18	83	85	92	88	100	100	98	100	100				90	92	18
17	80	81	86	83	100	100	94	100	98				86	88	17
16	76	78	81	78	96	99	90	98	94				82	84	16
15	73	74	75	72	92	94	86	94	89				83	78	15
14	69	70	70	67	88	90	82	89	85	81			74	76	14
13	66	67	64	62	84	86	78	84	80		78	77	70	72	13
12	62	63	58	56	80	81	74	80	76	74			67	68	12
11	59	59	53	51	76	77	70	75	71		71	71	63	64	11
10	56	56	47	46	72	73	66	70	67	66	68	68	59	60	10
9	52	52	42	40	68	68	61	66	62	63	64	65	55	56	9
8	49	49	36	35	63	64	57	61	58	59	61	62	51	52	8
7	45	45	31	30	59	60	53	56	53	55	58	59	47	48	7
6	42	41	25	24	55	55	49	51	48	52	54	56	43	44	6
5	38	38	20	19	51	51	45	47	44	48	51	53	39	40	5
4	35	34	14	14	47	47	41	42	39	44	47	50	36	36	4
3	31	30	8	9	43	42	37	37	35	41	44	47	32	32	3
2	28	27	3	3	39	38	33	33	30	37	41	44	28	28	2
1	25	23	0	0	35	34	29	28	26	34	37	41	24	24	1
0	21	20	0	0	31	30		23							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	73	100		100	100	98	93	100	79						19
18	69	75	100	100	100	94	89	96	75	79				100	18
17	64	70	100	100	100	90	85	92			92				17
16	60	66	100	100	96	86	82	88	67		88				16
15	56	62	100	96	91	82	78	84	63	69	84	75	66	89	15
14	52	57	98	92	87	79	74	80	60	66	80		63		14
13	47	53	93	87	83	75	70	76	56	63	77	68		81	13
12	43	49	88	83	79	71	67	72	52		73	65	57	76	12
11	39	44	83	79	74	67	63	68	48	56	69	61		72	11
10	35	40	77	74	70	63	59	64	44	53	65	58	52	68	10
9	31	36	72	70	66	59	55	60		50	62	54	49	63	9
8	26	31	67	66	62	55	52	56	36	47	58	50	46	59	8
7	22	27	62	61	57	51	48	52	32		54	47	43	55	7
6	18	23	57	57	53	47	44	48	28	40	50	43	40	50	6
5	14	18	52	52	49	44	40	44	24	37	46	40	37	46	5
4	9	14	47	48	45	40	37	40	20		43	36	35	42	4
3	5	10	41	44	41	36	33	37	17	31	39	33	32	37	3
2	1	5	36	39	36	32	29	33	13		35	29	29	33	2
1	0	1	31	35	32	28	25	29		24	31	25	26	29	1
0	0	0	26	31				25		21	28	22	23		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	100		100		94		100		77							19
18	99	100	100	90			100		72							18
17	95	100	97	86	86		100		68	80			70	79		17
16	91	96	93	83	82	82	100		64	75	88		66	75	74	16
15	87	92	89	79	78	78	96		60	71			62	71		15
14	83	88	85	75	74	74	92		56	66	79		58	68	66	14
13	79	83	80	72	70	70	88		52	62	74	74		54	64	62
12	75	79	76	68	66	66	84		48	57		59	50	60	58	12
11	71	75	72	65	62	62	79	60	43	53	66	65		46	57	54
10	67	70	68	61	58	57	75		39	48	61	61		42	53	50
9	63	66	64	58	54	53	71	51	35	44	57	56	44	38	49	46
8	60	62	59	54	50	49	67		31	39	53	52		34	46	42
7	56	57	55	50	46	45	63	41	27	34	49	47	35	30	42	38
6	52	53	51	47	42	41	59		23	30	45	43		26	38	34
5	48	49	47	43	38	37	54	32	18	25	40	38	25	22	35	30
4	44	44	43	40	34	33	50		14	21	36	34		18	31	26
3	40	40	39		30	29	46	22	10	16	32	30	15	14	27	3
2	36	36	34		26	25	42	17	6	12	28	25	11	10		2
1	32	31	30		22	20	38	12	2	7	23	21	6			1
0	27				16	34	8		3	19			16	10		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 13-15 years

Age: 80-85 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	97		91		100		100				100	100	100	98		19	
18	93	100	88				100				100	100	100	94		18	
17	89	97	84		98		100				94	100	100	90		17	
16	84	93	81			91	99	91	92			95	99	86		16	
15	80	89	77		88		94	87			87					15	
14	76	85	74	70	82	82	90	83	83		82	86	90	78		14	
13	72	80	70		77		85	79		78		82	86	74	60	13	
12	68	76	67	64	72	74	80	75	74		73	77	81	56		12	
11	64	72	63	61	67	70	76	72	70	69	69	73	77	66	52	11	
10	59	67	60	58	62	66	71	68	65		64	68	72	62		10	
9	55	63	56	55	57	61	67	64	61	61	60	64	68	58	45	9	
8	51	59	52	52	52	57	62	60	56		55	59	63	54	41	8	
7	47	55	49	49	47	53	57	56	52	53	51	55	59	50	38	7	
6	43	50	45	45		49	53	53	47	49		50	55	46	34	6	
5	38	46	42	42	37	44	48	49	43	45	42	46	50	42	30	5	
4	34	42	38	39		40	44	45	38		40		41	46	39	26	4
3	30	37	35	36	27	36	39		34		36		36	41	35	23	3
2	26	33	31	33	22	32	35	37	29		32		32	37	31	19	2
1	22		28	30	17	28	30	33	25	28				27		1	
0				27		23	25	30								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	90	100	96	100	100	100	100	100				95	97	19
18	84	86	94	91	100	100	100	100	100				92	93	18
17	81	83	89	85	100	100	96	100	100				88	89	17
16	78	79	83	80	99	100	92	100	96				84	85	16
15	74	75	78	75	95	96	88	96	92				86	80	15
14	71	72	72	69	91	91	84	92	87	85			76	78	14
13	67	68	67	64	87	87	80	87	83		81	80	72	74	13
12	64	64	61	59	82	83	76	82	78	78			68	70	12
11	60	61	55	53	78	78	72	78	74		75	74	64	66	11
10	57	57	50	48	74	74	68	73	69	70	71	71	60	62	10
9	53	54	44	43	70	70	63	68	65	67	68	68	57	58	9
8	50	50	39	38	66	65	59	64	60	63	64	65	53	54	8
7	47	46	33	32	62	61	55	59	55	59	61	62	49	50	7
6	43	43	28	27	58	57	51	54	51	56	58	59	45	46	6
5	40	39	22	22	54	52	47	49	46	52	54	56	41	42	5
4	36	36	16	16	50	48	43	45	42	48	51	53	37	38	4
3	33	32	11	11	46	44	39	40	37	45	47	50	33	34	3
2	29	28	5	6	41	39	35	35	33	41	44	47	29	30	2
1	26	25	0	0	37	35	31	31	28	37	41	44	26	26	1
0	22	21	0	0	33	31			26						0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	77	90	86	82	80	80	82	75							19
18	72	81	85	81	78	77	76	71	71					82	18
17	68	76	79	77	74	73	72	74			77				17
16	64	72	74	73	69	69	69	70	63		73				16
15	60	68	69	68	65	65	65	66	59	61	69	70	57	69	15
14	55	63	64	64	61	61	61	62	55	58	66		54		14
13	51	59	59	59	57	57	57	58	51	55	62	63		60	13
12	47	55	54	55	52	53	54	54	47		58	59	49	56	12
11	43	50	49	51	48	49	50	50	43	49	54	55		51	11
10	39	46	43	46	44	46	46	46	39	45	50	52	43	47	10
9	34	42	38	42	40	42	42	42	42	47	47	48	40	43	9
8	30	37	33	38	35	38	39	38	32	39	43	45	37	38	8
7	26	33	28	33	31	34	35	34	28		39	41	34	34	7
6	22	29	23	29	27	30	31	30	24	32	35	38	32	30	6
5	17	24	18	24	23	26	27	26	20	29	32	34	29	25	5
4	13	20	13	20	19	22	23	22	16		28	30	26	21	4
3	9	16	8	16	14	18	20	19	12	23	24	27	23	17	3
2	5	11	2	11	10	14	16	15	8		20	23	20	12	2
1	0	7	0	7	6	11	12	11	16	16	20	17	8		1
0		3	0	3				7	13	13	16	14			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	80	83	79		83				78							19	
18	76	76	78	75		79			74							18	
17	72	71	74	72	71	75			70	74			81	71		17	
16	68	67	70	68	67	66	71		66	69	79		77	67	70	16	
15	64	63	66	65	63	62	67		62	65			73	64		15	
14	60	58	62	61	59	58	63		58	60	70		69	60	62	14	
13	56	54	58	57	55	54	58		54	56	71	65		65	56	58	13
12	52	50	53	54	51	49	54		49	51			55	61	53	54	12
11	49	45	49	50	47	45	50	53	45	47	63	56		57	49	50	11
10	45	41	45	47	43	41	46		41	42	59	52		53	45	46	10
9	41	37	41	43	39	37	42	44	37	37	54	47	41	49	42	42	9
8	37	32	37	40	35	33	38		33	33	50	43		45	38	38	8
7	33	28	33	36	31	29	33	34	29	28	46	38	31	41	34	34	7
6	29	24	28	32	27	25	29		24	24	42	34		37	31	30	6
5	25	19	24	29	23	21	25	25	20	19	37	29	22	33	27	26	5
4	21	15	20	25	19	17	21		16	15	33	25		29	23	22	4
3	17	11	16		15	12	17	15	12	10	29	21	12	25	20		3
2	13	6	12		11	8	12	11	8	6	25	16	7	21			2
1	9	2	8		7	4	8	6	4	1	21	12	2				1
0	0	0			0	4	1		0	16			9	6		0	

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 16-17 years
Age: 20-34 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	87		82		92		86				88	89	89	84		19
18	83	85	78				81				84	85	85	80		18
17	79	81	74		82		77			74		80		76		17
16	75	77	71			68	72	66	71			76	76	72		16
15	71	73	67		72		68	62			71					15
14	66	68	64	66	67	60	63	59	62		66	67	67	64		14
13	62	64	60		62		59	55			58		62	63	60	13
12	58	60	57	59	57	51	54	51	53		57	58	58	56		12
11	54	55	53	56	52	47	49	47	48	50	53	53	54	52		11
10	50	51	50	53	47	43	45	43	44		48	49	50	48		10
9	45	47	46	50	42	38	40	40	39	41	44	44	45	44		9
8	41	43	43	47	37	34	36	36	35		39	39	41	40		8
7	37	38	39	44	32	30	31	32	30		33	35	35	36		7
6	33	34	36	41		26	26	28	26		29		30	32		6
5	29	30	32	38	22	22	22	24	21		25	26	26	28		5
4	25	26	28	35		17	17	21	17		21		23	24		4
3	20	21	25	32	12	13	13		12		17	17	19	20		3
2	16	17	21	29	7	9	8	13	8		13		12	14		2
1	12		18	26	2	5	4	9	3		8			12		1
0				22		0	0	5								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	73	74	87	84	83	86	82	87	84				78	79	19	
18	70	70	82	78	79	82	78	83	79				74	75	18	
17	66	67	76	73	75	77	74	78	75				70	71	17	
16	63	63	71	68	70	73	70	73	70				67	67	16	
15	59	60	65	62	66	69	65	69	66		59		63	63	15	
14	56	56	60	57	62	65	61	64	61	57			59	59	14	
13	52	52	54	52	58	60	57	59	57		56	53	55	55		13
12	49	49	48	46	54	56	53	54	52	49		49	51	51		12
11	45	45	43	41	50	52	49	50	48		49	47	47	47		11
10	42	42	37	36	46	47	45	45	43	42	46	44	43	43		10
9	39	38	32	30	42	43	41	40	39	38	43	41	39	40		9
8	35	34	26	25	38	39	37	36	34	35	39	38	36	36		8
7	32	31	21	20	33	34	33	31	29	31	36	35	32	32		7
6	28	27	15	15	29	30	29	26	25	27	33	32	28	28		6
5	25	23	9	9	25	26	25	22	20	24	29	29	24	24		5
4	21	20	4	4	21	21	17	16	20	26	26	20	20	20		4
3	18	16	0	0	17	17	17	12	11	16	22	23	16	16		3
2	14	13	0	0	13	13	13	7	7	13	19	20	12	12		2
1	11	9	0	0	9	8	9	3	2	9	16	17	8	8		1
0	8	5	0	0	5	4		0								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	75	95		90	86	83	80	83	75						19	
18	71	75	90	86	82	79	77	79	71	72				85	18	
17	67	70	85	82	78	75	73	75			79				17	
16	62	66	80	77	73	71	69	71	63		75				16	
15	58	62	75	73	69	67	65	67	59	62	71	70	59	72	15	
14	54	57	70	68	65	63	62	63	55	59	68		56		14	
13	50	53	64	64	61	60	58	59	51	56	64	63		63	13	
12	45	49	59	60	57	56	54	55	47		60	60	50	59	12	
11	41	44	54	55	52	52	50	51	43	50	56	56		55	11	
10	37	40	49	51	48	48	47	47	39	46	53	53	45	50	10	
9	33	36	44	47	44	44	43	43	43	49	49	49	42	46	9	
8	28	31	39	42	40	40	39	39	32	40	45	45	39	42	8	
7	24	27	34	38	35	36	35	35	28		41	42	36	37	7	
6	20	23	28	34	31	32	32	31	24	33	37	38	33	33	6	
5	16	18	23	29	27	29	28	27	20	30	34	35	30	29	5	
4	12	14	18	25	23	25	24	23	16		30	31	27	24	4	
3	7	10	13	20	18	21	20	19	12	24	26	28	25	20	3	
2	3	5	8	16	14	17	17	15	8		22	24	22	16	2	
1	0	1	3	12	10	13	13	11	17	19	20	19	11	11	1	
0	0	0		7				8	14	15	17	16			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	83		86		81		88		77								19
18	79	80	82	78			84		73								18
17	75	76	78	74	73		80		69	74				81	72	17	
16	71	72	74	71	69	68	76		65	69	78		77	68	69	16	
15	68	67	70	67	65	64	72		61	65				73	64	15	
14	64	63	65	64	61	60	68		56	60	69		69	61	62	14	
13	60	59	61	60	57	56	63		52	56	71	65		65	57	58	13
12	56	54	57	56	53	52	59		48	51			55	61	53	54	12
11	52	50	53	53	49	48	55	54	44	47	63	56		57	50	50	11
10	48	46	49	49	45	44	51		40	42	58	51		53	46	46	10
9	44	41	45	46	41	40	47	45	36	37	54	47	41	49	42	42	9
8	40	37	40	42	37	35	42		31	33	50	42		45	39	38	8
7	36	33	36	39	33	31	38	35	27	28	46	38	31	41	35	34	7
6	32	28	32	35	29	27	34		23	24	42	33		37	31	30	6
5	28	24	28	31	25	23	30	26	19	19	37	29	22	33	28	26	5
4	24	20	24	28	21	19	26		15	15	33	24		29	24	22	4
3	20	15	20		17	15	22	16	11	10	29	20	12	25	20		3
2	16	11	15		13	11	17	11	7	6	25	16	7	21			2
1	12	7	11		9	7	13	7	2	1	20	11	3				1
0	2				3	9	2		0	16				9	6		0

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 16-17 years

Age: 35-39 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		83		95		89				91	92	93	86		19
18	84	88	79				84				87	88	89	82		18
17	80	83	76		85		79			78		83		78		17
16	76	79	72			72	75	68	74			79	80	74		16
15	72	75	69		75		70	65			73					15
14	68	71	65	66	70	63	66	61	65		69	70	71	66		14
13	63	66	62		65		61	57		61		65	67	62	60	13
12	59	62	58	60	60	55	56	53	56		60	61	62	56		12
11	55	58	55	57	55	50	52	49	51	53	55	56	58	54	52	11
10	51	53	51	54	49	46	47	46	47		51	52	53	50	49	10
9	47	49	48	51	44	42	43	42	42	45	46	47	49	46	45	9
8	42	45	44	48	39	38	38	38	38		42	43	44	42	41	8
7	38	41	41	45	34	34	34	34	33	37	37	38	40	38	38	7
6	34	36	37	42		29	29	30	29		32	33	36	34	34	6
5	30	32	33	38	24	25	24	27	24	28	28	29	31	30	30	5
4	26	28	30	35		21	20	23	20		24		27	26	27	4
3	22	23	26	32	14	17	15		15		20		20	22	23	3
2	17	19	23	29	9	12	11	15	11		16		15	18	19	2
1	13		19	26	4	8	6	11	6	12				14		1
0				23		4	1	8								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	75	77	88	84	87	90	85	92	88				81	82	19
18	72	73	83	79	83	86	81	87	84				77	78	18
17	69	69	77	74	79	81	77	83	79				73	74	17
16	65	66	71	68	75	77	73	78	75				70	70	16
15	62	62	66	63	71	73	69	73	70				61	66	15
14	58	59	60	58	67	68	65	69	66	60			62	62	14
13	55	55	55	52	63	64	61	64	61		57	55	58	58	13
12	51	51	49	47	59	60	57	59	57		52		54	55	12
11	48	48	44	42	55	55	53	55	52		50	49	50	51	11
10	44	44	38	36	50	51	49	50	48	45	47	46	46	47	10
9	41	40	32	31	46	47	45	45	43	41	43	43	42	43	9
8	38	37	27	26	42	43	41	40	38	38	40	40	39	39	8
7	34	33	21	21	38	38	37	36	34	34	37	37	35	35	7
6	31	30	16	15	34	34	33	31	29	30	33	34	31	31	6
5	27	26	10	10	30	30	29	26	25	27	30	31	27	27	5
4	24	22	5	5	26	25	25	22	20	23	26	28	23	23	4
3	20	19	0	0	22	21	21	17	16	19	23	25	19	19	3
2	17	15	0	0	18	17	16	12	11	16	20	22	15	15	2
1	13	12	0	0	14	12	12	8	7	12	16	19	11	11	1
0	10	8	0	0	9	8		3							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	75	98		93	88	84	81	83	75						19
18	71	73	93	88	84	80	77	80	71	73				87	18
17	67	69	88	84	80	76	73	76			80				17
16	62	65	83	80	76	72	70	72	63		76				16
15	58	61	77	75	71	69	66	68	59	63	73	71	58	74	15
14	54	56	72	71	67	65	62	64	55	60	69		55		14
13	50	52	67	66	63	61	58	60	51	56	65	64		65	13
12	45	48	62	62	59	57	55	56	47		61	60	49	61	12
11	41	43	57	58	54	53	51	52	43	50	57	57		56	11
10	37	39	52	53	50	49	47	48	39	47	54	53	43	52	10
9	33	35	47	49	46	45	43	44	44	50	49	41	48		9
8	28	30	41	45	42	41	40	40	32	40	46	46	38	43	8
7	24	26	36	40	37	38	36	36	28		42	42	35	39	7
6	20	22	31	36	33	34	32	32	24	34	39	39	32	35	6
5	16	17	26	31	29	30	28	28	20	31	35	35	29	30	5
4	12	13	21	27	25	26	24	24	16		31	32	26	26	4
3	7	9	16	23	21	22	21	20	12	24	27	28	23	22	3
2	3	4	11	18	16	18	17	16	8		23	24	21	17	2
1	0	0	6	14	12	14	13	12	18	20	21	18	13		1
0	0	0		10				8	14	16	17	15			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	83		88		81		91		77							19
18	79	83	84	78			87		73							18
17	75	78	80	75	73		83		69	74			81	72		17
16	71	74	76	71	69	69	78		65	69	78		77	68	69	16
15	68	70	72	67	65	65	74		61	65			73	65		15
14	64	65	67	64	61	61	70		56	60	70		69	61	61	14
13	60	61	63	60	57	57	66		52	56	71	65		65	57	13
12	56	57	59	57	53	53	62		48	51			55	61	54	12
11	52	52	55	53	49	49	57	55	44	47	63	56		57	50	11
10	48	48	51	50	45	45	53		40	42	58	52		53	46	45
9	44	44	46	46	41	41	49	45	36	37	54	47	41	49	43	9
8	40	39	42	42	37	37	45		31	33	50	43		45	39	8
7	36	35	38	39	33	33	41	36	27	28	46	38	31	41	35	7
6	32	31	34	35	29	28	37		23	24	42	34		37	32	6
5	28	26	30	32	25	24	32	26	19	19	37	29	22	33	28	5
4	24	22	26	28	21	20	28		15	15	33	25		29	24	4
3	20	17	21		17	16	24	17	11	10	29	20	12	25	21	3
2	16	13	17		13	12	20	12	7	6	25	16	7	21		2
1	12	9	13		9	8	16	7	2	1	20	11	3			1
0	4				4	12	2		0	16			10	6		0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 16-17 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	89		84		96		90				93	94	95	87		19
18	85	89	80				85				88	89	90	83		18
17	81	84	77		86		81			80		85		79		17
16	77	80	73			73	76	70	76			80	82	75		16
15	72	76	70		76		72	66			75					15
14	68	72	66	67	71	65	67	62	67		70	71	73	67		14
13	64	67	62		66		63	58		63		67	68	63	60	13
12	60	63	59	60	61	56	58	55	58		61	62	64	56		12
11	56	59	55	57	56	52	53	51	53	55	57	58	59	55	52	11
10	51	54	52	54	51	48	49	47	49		52	53	55	51	49	10
9	47	50	48	51	46	44	44	43	44	47	48	49	51	47	45	9
8	43	46	45	48	41	40	40	39	40		43	44	46	43	41	8
7	39	42	41	45	36	35	35	36	35		38	39	39	38		7
6	35	37	38	42		31	30	32	31		34		35	37	36	6
5	31	33	34	39	26	27	26	28	26		30	30	33	32	30	5
4	26	29	31	36		23	21	24	22		26		28	28	26	4
3	22	25	27	33	15	18	17		17		22		21	24	23	3
2	18	20	24	30	10	14	12	17	13		18		17	20	19	2
1	14		20	26	5	10	8	13	8		14			16		1
0				23		6	3	9								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	77	78	89	85	90	92	87	95	91				83	84	19
18	73	74	83	80	86	88	83	90	86				79	80	18
17	70	71	78	74	82	84	79	85	82				75	76	17
16	66	67	72	69	77	79	75	80	77				71	72	16
15	63	63	66	64	73	75	71	76	73				64	67	15
14	59	60	61	58	69	71	67	71	68	61			63	64	14
13	56	56	55	53	65	66	63	66	63		58	58	59	60	13
12	53	53	50	48	61	62	59	62	59	54			56	56	12
11	49	49	44	42	57	58	55	57	54		52	52	52	52	11
10	46	45	39	37	53	54	51	52	50	47	48	49	48	48	10
9	42	42	33	32	49	49	47	48	45	43	45	46	44	44	9
8	39	38	27	26	45	45	43	43	41	39	41	43	40	40	8
7	35	35	22	21	41	41	39	38	36	36	38	40	36	36	7
6	32	31	16	16	36	36	35	33	32	32	35	37	32	32	6
5	28	27	11	10	32	32	30	29	27	28	31	34	28	28	5
4	25	24	5	5	28	28	26	24	23	25	28	31	24	24	4
3	21	20	0	0	24	23	22	19	18	21	24	28	21	21	3
2	18	16	0	0	20	19	18	15	13	17	21	25	17	17	2
1	15	13	0	0	16	15	14	10	9	14	18	22	13	13	1
0	11	9	0	0	12	10		5							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	73	100	95	90	85	81	84	75								19
18	69	72	96	91	86	81	78	71	73							18
17	65	68	90	86	82	78	74	76			81					17
16	61	64	85	82	78	74	70	72	63		77					16
15	56	59	80	78	73	70	66	68	59	63	74	71	58	75		15
14	52	55	75	73	69	66	63	65	55	60	70		56			14
13	48	51	70	69	65	62	59	61	51	57	66	64				13
12	44	46	65	64	61	58	55	57	47		62	61	50	62		12
11	40	42	60	60	56	54	51	53	43	51	58	57		58		11
10	35	38	55	56	52	50	48	49	39	47	55	53	44	54		10
9	31	34	49	51	48	46	44	45		44	51	50	41	49		9
8	27	29	44	47	44	43	40	41	32	41	47	46	38	45		8
7	23	25	39	43	40	39	36	37	28		43	43	36	41		7
6	18	21	34	38	35	35	33	33	24	34	40	39	33	36		6
5	14	16	29	34	31	31	29	29	20	31	36	36	30	32		5
4	10	12	24	29	27	27	25	25	16		32	32	27	28		4
3	6	8	19	25	23	23	21	21	12	25	28	28	24	23		3
2	1	3	13	21	18	19	18	17	8		25	25	21	19		2
1	0	0	8	16	14	15	14	13		18	21	21	19	15		1
0	0	0	3	12				9	15	17	18	16				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	87	90		83		93			76								19
18	83	85	86	79			89		72								18
17	79	81	82	76	75		85		68	74				81	72		17
16	75	76	78	72	71	71	81		63	69	79		77	69	69		16
15	71	72	73	69	67	67	77		59	65			73	65			15
14	67	68	69	65	63	62	73		55	60	70		69	61	61		14
13	63	63	65	62	59	58	68		51	56	71	66		65	58	57	13
12	59	59	61	58	55	54	64		47	51			55	61	54	53	12
11	55	55	57	54	51	50	60	55	43	47	63	57		57	50	49	11
10	51	50	52	51	47	46	56		38	42	58	52		53	47	45	10
9	47	46	48	47	43	42	52	46	34	37	54	48	41	49	43	41	9
8	43	42	44	44	39	38	47		30	33	50	43		45	39	37	8
7	39	37	40	40	35	34	43	36	26	28	46	39	31	41	36	33	7
6	35	33	36	37	31	30	39		22	24	42	34		37	32	29	6
5	31	28	32	33	27	26	35	27	18	19	37	30	22	33	28	26	5
4	27	24	27	29	23	21	31		13	15	33	25		29	25	22	4
3	23	20	23		19	17	27	17	9	10	29	21	12	25	21		3
2	19	15	19		15	13	22	12	5	6	25	17	7	21			2
1	15	11	15		11	9	18	8	1	1	20	12	3				1
0	7				5	14	3		0	16				10	6		0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 16-17 years
Age: 45-49 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	90		84		97		92				94	95	97	88		19		
18	86	90	81				87				90	91	92	84		18		
17	81	86	77		87		83				81	86		80		17		
16	77	81	74			75	78	71	77			82	83	76		16		
15	73	77	70		77		73	68				76				15		
14	69	73	67	67	72	67	69	64	68		72	73	75	69		14		
13	65	68	63		67		64	60			65		68	70	65	60	13	
12	60	64	60	61	62	58	60	56	59			63	64	66	56	12		
11	56	60	56	58	57	54	55	52	55		56	58	59	61	57	52	11	
10	52	56	53	55	52	50	51	49	50			54	55	57	53	49	10	
9	48	51	49	51	47	46	46	45	46		48	49	50	52	49	45	9	
8	44	47	45	48	42	41	41	41	41			45	46	48	45	41	8	
7	39	43	42	45	37	37	37	37	37		40	40	41	44	41	38	7	
6	35	38	38	42		33	32	33	32			36	39	37	34		6	
5	31	34	35	39	27	29	28	30	28		32	31	32	35	33	30	5	
4	27	30	31	36		24	23	26	23			28		27	30	29	26	4
3	23	26	28	33	17	20	18		19			23		23	26	25	23	3
2	19	21	24	30	12	16	14	18	14		19		18	21	21	19	2	
1	14		21	27	7	12	9	14	10		15				17		1	
0				24		8	5	11									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	78	79	89	86	92	95	89	97	93				84	85	19
18	74	76	84	80	88	91	85	92	88				80	81	18
17	71	72	78	75	84	86	81	88	84				76	77	17
16	68	68	73	70	80	82	77	83	79				73	73	16
15	64	65	67	64	76	78	73	78	75				67	69	15
14	61	61	62	59	72	73	69	73	70	63			65	66	14
13	57	58	56	54	68	69	65	69	66			60	61	62	13
12	54	54	50	48	63	65	61	64	61	56			57	58	12
11	50	50	45	43	59	60	57	59	57			53	55	53	11
10	47	47	39	38	55	56	53	55	52	49	50	52	49	50	10
9	43	43	34	32	51	52	48	50	47	45	47	49	45	46	9
8	40	39	28	27	47	47	44	45	43	41	43	46	41	42	8
7	36	36	23	22	43	43	40	41	38				38	38	7
6	33	32	17	16	39	39	36	36	34				34	34	6
5	30	29	11	11	35	34	32	31	29				30	33	5
4	26	25	6	6	31	30	28	26	25				34	26	4
3	23	21	0	1	26	26	24	22	20				31	22	3
2	19	18	0	0	22	22	20	17	16				28	18	2
1	16	14	0	0	18	17	16	12	11				14	14	1
0	12	10	0	0	14	13		8							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	73	100		97	92	86	82	85	75						19	
18	69	71	98	93	88	83	78	81	71	74				90	18	
17	65	67	93	89	84	79	74	77			82				17	
16	61	63	88	84	80	75	71	73	63		78				16	
15	56	58	83	80	76	71	67	70	59	64	75	72	59	77	15	
14	52	54	78	75	71	67	63	66	55	61	71		56		14	
13	48	50	73	71	67	63	59	62	51	57	67	64		68	13	
12	44	45	68	67	63	59	56	58	47		63	61	51	64	12	
11	40	41	62	62	59	55	52	54	43	51	60	57		60	11	
10	35	37	57	58	54	52	48	50	39	48	56	54	45	55	10	
9	31	32	52	54	50	48	44	46		45	52	50	42	51	9	
8	27	28	47	49	46	44	41	42	32	41	48	47	39	47	8	
7	23	24	42	45	42	40	37	38	28		44	43	36	42	7	
6	18	19	37	41	37	36	33	34	24	35	41	40	34	38	6	
5	14	15	32	36	33	32	29	30	20	32	37	36	31	34	5	
4	10	11	26	32	29	28	26	26	16		33	32	28	29	4	
3	6	6	21	27	25	24	22	22	12	25	29	29	25	25	3	
2	1	2	16	23	20	21	18	18		8	26	25	22	21	2	
1	0	0	11	19	16	17	14	14		19	22	22	19	16	1	
0	0	0	6	14				10		15	18	18	17		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	87	92			83		96		76								19
18	83	87	88	81			92		72								18
17	79	83	84	77	75		88		68	74			80	73			17
16	75	79	79	73	71	72	83		63	69	80		76	69	69		16
15	71	74	75	70	67	68	79		59	65			72	65			15
14	67	70	71	66	63	64	75		55	60	71		68	62	61		14
13	63	66	67	63	59	60	71		51	56	71	66		64	58	57	13
12	59	61	63	59	55	55	67		47	51			55	60	54	53	12
11	55	57	59	56	51	51	62	56	43	47	63	57		56	51	49	11
10	51	53	54	52	47	47	58		38	42	58	53		52	47	45	10
9	47	48	50	49	43	43	54	46	34	37	54	48	41	48	43	41	9
8	43	44	46	45	39	39	50		30	33	50	44		44	40	37	8
7	39	39	42	41	35	35	46	37	26	28	46	40	31	40	36	33	7
6	35	35	38	38	31	31	42		22	24	42	35		36	32	29	6
5	31	31	33	34	27	27	37	27	18	19	37	31	22	32	29	25	5
4	27	26	29	31	23	23	33		13	15	33	26		28	25	21	4
3	23	22	25		19	19	29	18	9	10	29	22	12	24	21		3
2	19	18	21		15	14	25	13	5	6	25	17	8	20			2
1	15	13	17		11	10	21	8	1	1	20	13	3				1
0	9				6	17	3		0	16				10	6		0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 16-17 years
Age: 50-54 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	90		85		99		94				95	97	99	90		19		
18	86	91	82				89				91	92	94	86		18		
17	82	87	78		88		85			83		88		82		17		
16	78	82	74			77	80	73	79			83	85	78		16		
15	74	78	71		78		75	69			77					15		
14	69	74	67	67	73	68	71	66	70		73	74	76	70		14		
13	65	70	64		68		66	62			66		70	72	66	60	13	
12	61	65	60	61	63	60	62	58	61		64	65	68		56	12		
11	57	61	57	58	58	56	57	54	56		58	60	61	63	58	52	11	
10	53	57	53	55	53	51	52	50	52		55	56	59	54	49		10	
9	48	52	50	52	48	47	48	47	47	50	51	52	54	50	45		9	
8	44	48	46	49	43	43	43	43	43		46	47	50	46	41		8	
7	40	44	43	46	38	39	39	39	38		42	42	42	45	42	38		7
6	36	40	39	42		35	34	35	34		38	38	41	38	34		6	
5	32	35	36	39	28	30	30	31	29		33	33	33	34	30		5	
4	27	31	32	36		26	25	28	25		29		29	32	30	26		4
3	23	27	29	33	18	22	20		20		25		24	28	26	23		3
2	19	22	25	30	13	18	16	20	16		21		20	23	22	19		2
1	15		21	27	8	13	11	16	11		17				18		1	
0				24		9	7	12									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	79	81	90	86	94	98	91	99	95				86	87	19	
18	76	77	85	81	90	93	87	95	91				82	83	18	
17	72	73	79	76	86	89	83	90	86				78	79	17	
16	69	70	74	70	82	85	79	85	82				74	75	16	
15	65	66	68	65	78	80	75	81	77				69	70	15	
14	62	62	62	60	74	76	71	76	72	65			66	67	14	
13	58	59	57	54	70	72	67	71	68		62	63	62	63		13
12	55	55	51	49	66	67	62	66	63	58			59	59		12
11	51	52	46	44	62	63	58	62	59		56	57	55	55		11
10	48	48	40	39	58	59	54	57	54	51	52	54	51	51		10
9	45	44	35	33	53	54	50	52	50	47	49	51	47	47		9
8	41	41	29	28	49	50	46	48	45	44	46	48	43	43		8
7	38	37	23	23	45	46	42	43	41	40	42	45	39	39		7
6	34	33	18	17	41	41	38	38	36	36	39	42	35	35		6
5	31	30	12	12	37	37	34	34	32	33	35	39	31	32		5
4	27	26	7	7	33	33	30	29	27	29	32	36	27	28		4
3	24	23	1	1	29	28	26	24	22	25	29	33	24	24		3
2	20	19	0	0	25	24	22	19	18	22	25	30	20	20		2
1	17	15	0	0	21	20	18	15	13	18	22	27	16	16		1
0	14	12	0	0	16	16		10								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	72	100		100	95	88	83	87	77						19
18	68	74	100	95	90	84	79	83	74	74				92	18
17	63	70	96	91	86	80	75	79			83				17
16	59	65	91	87	82	76	72	75	66		80				16
15	55	61	86	82	78	72	68	71	62	64	76	72	60	79	15
14	51	57	81	78	73	68	64	67	58	61	72		57		14
13	46	52	75	73	69	64	60	63	54	58	68	65		70	13
12	42	48	70	69	65	61	57	59	50		64	61	51	66	12
11	38	44	65	65	61	57	53	55	46	51	61	58		61	11
10	34	39	60	60	56	53	49	51	42	48	57	54	46	57	10
9	29	35	55	56	52	49	45	47	45	53	51	43	53		9
8	25	31	50	52	48	45	42	43	34	42	49	47	40	48	8
7	21	27	45	47	44	41	38	39	31		46	43	37	44	7
6	17	22	39	43	40	37	34	35	27	35	42	40	34	40	6
5	13	18	34	38	35	33	30	31	23	32	38	36	32	35	5
4	8	14	29	34	31	30	26	27	19		34	33	29	31	4
3	4	9	24	30	27	26	23	23	15	26	30	29	26	27	3
2	0	5	19	25	23	22	19	19	11		27	26	23	22	2
1	0	1	14	21	18	18	15	15	19	23	22	20	18		1
0	0	9		17				11	16	19	19	17			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	93	94			88		98		75							19
18	90	93	90	82			94		70							18
17	86	88	85	78	80		90		66	74			79	73		17
16	82	84	81	75	76	77	86		62	69	80		75	69	69	16
15	78	80	77	71	72	73	82		58	65			71	66		15
14	74	75	73	68	68	69	77		54	60	71		67	62	61	14
13	70	71	69	64	64	65	73		50	56	71	67	63	58	57	13
12	66	67	65	60	60	60	69		45	51		55	59	55	53	12
11	62	62	60	57	56	56	65	56	41	47	63	58	55	51	49	11
10	58	58	56	53	52	52	61		37	42	58	54	51	47	45	10
9	54	54	52	50	48	48	57	47	33	37	54	49	41	47	44	9
8	50	49	48	46	44	44	52		29	33	50	45	43	40	37	8
7	46	45	44	43	40	40	48	37	25	28	46	40	32	38	36	7
6	42	41	39	39	36	36	44		20	24	42	36	34	33	29	6
5	38	36	35	36	32	32	40	28	16	19	37	31	22	30	29	5
4	34	32	31	32	28	28	36		12	15	33	27	26	25	21	4
3	30	28	27		24	24	32	18	8	10	29	22	12	22	22	3
2	26	23	23		20	19	27	13	4	6	25	18	8	18		2
1	22	19	19		16	15	23	9	0	1	20	13	3			1
0	15				11	19	4		0	16			11	5		0

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 16-17 years
Age: 55-59 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	91		86		100		96				97	98	100	91		19	
18	87	92	82				91				92	94	96	87		18	
17	83	88	79		90		87			85		89		83		17	
16	78	83	75			79	82	75	81			85	87	79		16	
15	74	79	72		80		78	71			79					15	
14	70	75	68	67	75	70	73	68	72		74	76	78	71		14	
13	66	71	65		70		68	64			68		71	74	67	60	13
12	62	66	61	61	64	62	64	60	63		65	67	69		56	12	
11	57	62	58	58	59	57	59	56	58		60	61	62	65	59	52	11
10	53	58	54	55	54	53	55	52	54		56	58	61	55	49		10
9	49	53	50	52	49	49	50	49		52	52	53	56	51	45		9
8	45	49	47	49	44	45	45	45			47	49	52	47	41		8
7	41	45	43	46	39	41	41	41	40		43	43	44	47	43	38	7
6	36	41	40	43		36	36	37	36		39	39	43	39	34		6
5	32	36	36	40	29	32	32	33	31		35	34	35	38	35	30	5
4	28	32	33	37		28	27	30	27		31		30	34	31	26	4
3	24	28	29	34	19	24	23		22		27		26	30	27	23	3
2	20	24	26	30	14	19	18	22	17		23		21	25	23	19	2
1	16		22	27	9	15	13	18	13		19				19		1
0				24		11	9	14								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	80	82	91	87	97	100	93	100	97				87	88	19	
18	77	78	86	82	93	96	89	97	93				83	84	18	
17	73	75	80	77	89	92	85	92	88				79	81	17	
16	70	71	75	71	85	87	81	88	84				76	77	16	
15	66	67	69	66	80	83	76	83	79				72	72	15	
14	63	64	63	61	76	79	72	78	75	68			68	69	14	
13	60	60	58	55	72	74	68	74	70		65	66	64	65		13
12	56	56	52	50	68	70	64	69	66	61			60	61		12
11	53	53	47	45	64	66	60	64	61		58	60	56	57		11
10	49	49	41	40	60	61	56	59	57	53	55	57	52	53		10
9	46	46	36	34	56	57	52	55	52	50	51	54	48	49		9
8	42	42	30	29	52	53	48	50	47	46	48	51	44	45		8
7	39	38	25	24	48	48	44	45	43	42	45	48	41	41		7
6	35	35	19	18	43	44	40	41	38	39	41	45	37	37		6
5	32	31	13	13	39	40	36	36	34	35	38	42	33	33		5
4	29	28	8	8	35	35	32	31	29	31	34	39	29	29		4
3	25	24	2	2	31	31	28	27	25	28	31	36	25	25		3
2	22	20	0	0	27	27	24	22	20	24	28	33	21	21		2
1	18	17	0	0	23	23	20	17	16	20	24	30	17	17		1
0	15	13	0	0	19	18		12								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	72	100		100	97	89	84	88	75						19
18	68	73	100	98	92	85	80	84	71	75				93	18
17	63	69	99	93	88	81	76	80			84				17
16	59	64	94	89	84	77	73	76	63		81				16
15	55	60	88	85	80	73	69	72	59	65	77	72	61	80	15
14	51	56	83	80	75	70	65	68	55	62	73		58		14
13	46	51	78	76	71	66	61	64	51	58	69	65		72	13
12	42	47	73	71	67	62	57	60	47		65	62	52	67	12
11	38	43	68	67	63	58	54	56	43	52	62	58		63	11
10	34	38	63	63	59	54	50	52	39	49	58	55	47	59	10
9	29	34	58	58	54	50	46	49		46	54	51	44	54	9
8	25	30	53	54	50	46	42	45	32	42	50	47	41	50	8
7	21	25	47	50	46	42	39	41	28		47	44	38	46	7
6	17	21	42	45	42	39	35	37	24	36	43	40	35	41	6
5	13	17	37	41	37	35	31	33	20	33	39	37	32	37	5
4	8	12	32	36	33	31	27	29	16		35	33	30	33	4
3	4	8	27	32	29	27	24	25	12	26	32	30	27	28	3
2	0	4	22	28	25	23	20	21	8		28	26	24	24	2
1	0	0	17	23	20	19	16	17	20	24	22	21	20	20	1
0	0	0	11	19				13	16	20	19	18			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93	96			88		100		75							19	
18	90	95	91	83			97		70							18	
17	86	91	87	80	80		92		66	74				77	73	17	
16	82	86	83	76	76	78	88		62	69	81		73	70	69	16	
15	78	82	79	72	72	74	84		58	65			69	66		15	
14	74	78	75	69	68	70	80		54	60	72		65	62	61	14	
13	70	73	71	65	64	66	76		50	56	71	68		61	59	13	
12	66	69	66	62	60	62	72		45	51			56	57	55	12	
11	62	65	62	58	56	58	67	57	41	47	63	59		53	51	11	
10	58	60	58	55	52	53	63		37	42	58	54		49	48	45	10
9	54	56	54	51	48	49	59	47	33	37	54	50	41	45	44	9	
8	50	52	50	47	44	45	55		29	33	50	45		41	40	37	8
7	46	47	46	44	40	41	51	38	25	28	46	41	32	37	37	33	7
6	42	43	41	40	36	37	47		20	24	41	36		33	33	29	6
5	38	39	37	37	32	33	42	28	16	19	37	32	22	29	29	25	5
4	34	34	33	33	28	29	38		12	15	33	27		25	26	21	4
3	30	30	29		24	25	34	19	8	10	29	23	12	21	22		3
2	26	26	25		20	21	30	14	4	6	25	18	8	17			2
1	22	21	20		16	17	26	9	0	1	20	14	3				1
0	17				12	21	4		0	16				11	5	0	

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 16-17 years
Age: 60-64 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	91		87		100		98				98	100	100	92		19		
18	87	93	83				94				94	95	98	88		18		
17	83	89	79		91		89			86		91		84		17		
16	79	85	76			80	84	77	82			86	89	80		16		
15	75	80	72		81		80	74			80					15		
14	71	76	69	68	76	72	75	70	73		76	77	80	72		14		
13	66	72	65		71		71	66			70		73	76	68	60	13	
12	62	67	62	62	66	63	66	62	64			67	68	71	56	12		
11	58	63	58	59	61	59	61	58	60		62	62	64	67	60	52	11	
10	54	59	55	55	56	55	57	54	55			58	59	62	56	49	10	
9	50	55	51	52	51	51	52	51	51	53		53	55	58	52	45	9	
8	45	50	48	49	46	47	48	47	46		49		50	54	48	41	8	
7	41	46	44	46	41	42	43	43	42		45	44	46	49	44	38	7	
6	37	42	41	43		38	39	39	37		41		41	45	40	34	6	
5	33	37	37	40	30	34	34	35	33		37	35	36	40	36	30	5	
4	29	33	33	37		30	29	32	28			33		32	36	32	26	4
3	24	29	30	34	20	25	25		24			29		27	31	28	23	3
2	20	25	26	31	15	21	20	24	19			24		23	27	24	19	2
1	16		23	28	10	17	16	20	15			20			20		1	
0				25		13	11	16								0		

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	81	83	93	89	99	100	94	100	100				89	90	19
18	78	79	87	83	95	99	90	99	95				85	86	18
17	75	76	81	78	91	94	86	95	91				81	82	17
16	71	72	76	73	87	90	82	90	86				77	78	16
15	68	69	70	67	83	86	78	85	81			74	73	74	15
14	64	65	65	62	79	81	74	81	77	71			69	70	14
13	61	61	59	57	75	77	70	76	72			68	68	65	13
12	57	58	54	51	70	73	66	71	68	63			61	62	12
11	54	54	48	46	66	68	62	67	63			61	62	58	11
10	50	51	42	41	62	64	58	62	59	56	58	59	54	54	10
9	47	47	37	35	58	60	54	57	54	52	54	56	50	50	9
8	44	43	31	30	54	55	50	52	50	49	51	53	46	47	8
7	40	40	26	25	50	51	46	48	45	45	47	50	42	43	7
6	37	36	20	20	46	47	42	43	41	41	44	47	38	39	6
5	33	32	15	14	42	42	38	38	36	38	41	44	34	35	5
4	30	29	9	9	38	38	34	34	31	34	37	41	30	31	4
3	26	25	4	4	33	34	30	29	27	30	34	38	27	27	3
2	23	22	0	0	29	29	26	24	22	27	30	35	23	23	2
1	19	18	0	0	25	25	22	20	18	23	27	32	19	19	1
0	16	14	0	0	21	21		15							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	70	100		100	99	90	85	90	77						19	
18	66	72	100	100	94	86	81	86	74	75				95	18	
17	62	68	100	96	90	82	77	82			85				17	
16	57	63	96	91	86	79	74	78	66		82				16	
15	53	59	91	87	82	75	70	74	62	65	78	73	62	82	15	
14	49	55	86	82	78	71	66	70	58	62	74		59		14	
13	45	50	81	78	73	67	62	66	54	59	70	66		73	13	
12	41	46	76	74	69	63	59	62	50		67	62	53	69	12	
11	36	42	71	69	65	59	55	58	46	52	63	59		65	11	
10	32	37	66	65	61	55	51	54	42	49	59	55	47	60	10	
9	28	33	60	61	56	51	47	50		46	55	51	45	56	9	
8	24	29	55	56	52	47	44	46	34	43	51	48	42	52	8	
7	19	24	50	52	48	44	40	42	31		48	44	39	47	7	
6	15	20	45	48	44	40	36	38	27	36	44	41	36	43	6	
5	11	16	40	43	39	36	32	34	23	33	40	37	33	39	5	
4	7	11	35	39	35	32	29	31		19		36	34	30	34	4
3	2	7	30	34	31	28	25	27	15	27	33	30	27	30	3	
2	0	3	24	30	27	24	21	23		11		29	26	25	26	2
1	0	0	19	26	23	20	17	19		20	25	23	22	21	1	
0	0	0	14	21				15		17	21	19	19		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	97	97	97		89		100		73								19
18	93	97	93	84			99		69								18
17	89	93	89	81	81		95		65	74				75	74		17
16	85	89	85	77	78	79	91		61	69	82			71	70	69	16
15	81	84	81	74	74	75	87		57	65				67	66		15
14	77	80	77	70	70	71	82		52	60	73			63	63	61	14
13	73	76	72	67	66	67	78		48	56	71	68		59	59	57	13
12	69	71	68	63	62	63	74		44	51			56	55	55	53	12
11	65	67	64	59	58	59	70	57	40	47	63	59		51	52	49	11
10	61	63	60	56	54	55	66		36	42	58	55		47	48	45	10
9	57	58	56	52	50	51	62	48	32	37	54	50	41	43	44	41	9
8	53	54	52	49	46	47	57		27	33	50	46		39	41	37	8
7	49	50	47	45	42	42	53	38	23	28	46	41	32	35	37	33	7
6	45	45	43	42	38	38	49		19	24	41	37		31	33	29	6
5	41	41	39	38	34	34	45	29	15	19	37	32	22	27	30	25	5
4	37	37	35	34	30	30	41		11	15	33	28		23	26	21	4
3	33	32	31		26	26	19		7	10	29	24	12	19	22		3
2	29	28	26		22	22	32	14	3	6	25	19	8	15			2
1	25	24	22		18	18	28	9	0	1	20	15	3				1
0	19	19			14	24	5		0	16				11	5		0

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 16-17 years
Age: 65-69 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		87		100		100				100	100	100	93		19
18	88	94	84				96				95	97	100	89		18
17	84	90	80		92		92			88		92		85		17
16	79	86	77			82	87	80	84			88	91	81		16
15	75	81	73		82		82	76				82				15
14	71	77	70	68	77	74	78	72	75		77	79	82	73		14
13	67	73	66		72		73	68		72		74	77	69	60	13
12	63	69	63	62	67	65	69	64	66		68	70	73		56	12
11	59	64	59	59	62	61	64	61	61	63	64	65	69	61	52	11
10	54	60	55	56	57	57	59	57	57		59	61	64	57	49	10
9	50	56	52	53	52	53	55	53	52	55	55	56	60	53	45	9
8	46	51	48	50	47	48	50	49	48		50	52	55	49	41	8
7	42	47	45	46	42	44	46	45	43	47	46	47	51	45	38	7
6	38	43	41	43		40	41	42	39	43	42	46	41	34		6
5	33	39	38	40	32	36	37	38	34	39	37	38	42	37	30	5
4	29	34	34	37		31	32	34	30	34		33	38	34	26	4
3	25	30	31	34	22	27	27		25	30		29	33	30	23	3
2	21	26	27	31	17	23	23	26	21	26		24	29	26	19	2
1	17		24	28	12	19	18	23	16	22				22		1
0				25		15	14	19								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	84	94	90	100	100	96	100	100				90	92	19
18	79	81	89	85	97	100	92	100	97				86	88	18
17	76	77	83	79	93	97	88	97	93				82	84	17
16	72	74	77	74	89	92	84	92	88				79	80	16
15	69	70	72	69	85	88	80	88	84				76	75	15
14	65	66	66	63	81	84	76	83	79	73			71	72	14
13	62	63	61	58	77	79	72	78	75				71	70	13
12	59	59	55	53	73	75	68	74	70	66			63	64	12
11	55	55	50	48	69	71	64	69	66				64	59	11
10	52	52	44	42	65	66	60	64	61	59	60	61	55	56	10
9	48	48	38	37	60	62	56	59	56	55	57	58	51	52	9
8	45	45	33	32	56	58	52	55	52	52	54	55	47	48	8
7	41	41	27	26	52	53	48	50	47	48	50	52	44	44	7
6	38	37	22	21	48	49	44	45	43	44	47	49	40	40	6
5	34	34	16	16	44	45	40	41	38	41	43	46	36	36	5
4	31	30	11	10	40	41	36	36	34	37	40	43	32	32	4
3	27	26	5	5	36	36	31	31	29	33	37	40	28	28	3
2	24	23	0	0	32	32	27	27	25	30	33	37	24	24	2
1	21	19	0	0	28	28	23	22	20	26	30	34	20	20	1
0	17	16	0	0	24	23		17							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	69	71	100	100	100	91	86	92	77	76					19
18	64	71	100	100	97	87	82	88	74	76				97	18
17	60	66	100	98	92	84	79	84			87				17
16	56	62	99	94	88	80	75	80	66		83				16
15	52	58	94	89	84	76	71	76	62	66	79	73	62	84	15
14	47	53	89	85	80	72	67	72	58	63	75		60		14
13	43	49	84	80	75	68	64	68	54	59	71	66		75	13
12	39	45	79	76	71	64	60	64	50		68	62	54	71	12
11	35	41	73	72	67	60	56	60	46	53	64	59		66	11
10	30	36	68	67	63	56	52	56	42	50	60	55	48	62	10
9	26	32	63	63	58	53	49	52		47	56	52	45	58	9
8	22	28	58	59	54	49	45	48	34	43	53	48	43	53	8
7	18	23	53	54	50	45	41	44	31		49	45	40	49	7
6	13	19	48	50	46	41	37	40	27	37	45	41	37	45	6
5	9	15	43	45	42	37	34	37	23	34	41	38	34	40	5
4	5	10	37	41	37	33	30	33	19		37	34	31	36	4
3	1	6	32	37	33	29	26	29	15	27	34	30	28	32	3
2	0	2	27	32	29	25	22	25	11		30	27	25	27	2
1	0	0	22	28	25	22	19	21		21	26	23	23	23	1
0	0	0	17	24				17		17	22	20	20		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	99			91		100		72							19	
18	96	100	95	86			100		68							18	
17	92	95	91	82	83		97		64	74			72	74		17	
16	88	91	87	79	79	81	93		59	69	82		68	70	69	16	
15	84	87	83	75	75	76	89		55	65			64	67		15	
14	80	82	78	71	71	72	85		51	60	73		60	63	61	14	
13	76	78	74	68	67	68	81		47	56	71	69		56	59	57	13
12	72	74	70	64	64	64	77		43	51			56	52	56	53	12
11	68	69	66	61	60	60	72	58	39	47	63	60		48	52	49	11
10	64	65	62	57	56	56	68		34	42	58	55		44	48	45	10
9	60	61	58	54	52	52	64	48	30	37	54	51	41	40	45	41	9
8	56	56	53	50	48	48	60		26	33	50	46		36	41	37	8
7	52	52	49	46	44	44	56	39	22	28	46	42	32	32	37	33	7
6	48	48	45	43	40	40	51		18	24	41	37		28	34	29	6
5	44	43	41	39	36	35	47	29	14	19	37	33	22	24	30	25	5
4	40	39	37	36	32	31	43		10	15	33	29		20	26	21	4
3	36	35	33		28	27	39	19	5	10	29	24	13	16	23		3
2	32	30	28		24	23	35	15	1	6	25	20	8	12			2
1	28	26	24		20	19	31	10	0	1	20	15	3				1
0	21				15	26	5		0	16			12	5		0	

(continued)

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 70-74 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	93		88		100		100				100	100	100	94		19
18	88	95	84				99				97	98	100	90		18
17	84	91	81		93		94				90	94		86		17
16	80	87	77			84	90	82	86			89	93	82		16
15	76	82	74		83		85	78				83				15
14	72	78	70	68	78	75	80	74	77		79	80	84	74		14
13	68	74	67		73		76	71			73		76	79	71	13
12	63	70	63	62	68	67	71	67	68			70	71	75	56	12
11	59	65	60	59	63	63	67	63	63		65	65	67	70	63	11
10	55	61	56	56	58	59	62	59	59			61	62	66	59	10
9	51	57	53	53	53	54	58	55	54		57	56	58	62	55	9
8	47	53	49	50	48	50	53	52	50			52	53	57	51	8
7	42	48	46	47	43	46	48	48	45		48	47	49	53	47	7
6	38	44	42	44		42	44	44	40			44	44	48	43	6
5	34	40	38	41	33	37	39	40	36		40	38	39	44	39	5
4	30	35	35	38		33	35	36	31			36	35	39	35	4
3	26	31	31	34	23	29	30		27			32	30	35	31	3
2	21	27	28	31	18	25	25	29	22			28	26	31	27	2
1	17		24	28	13	21	21	25	18			24			23	1
0				25		16	16	21								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	86	96	92	100	100	98	100	100				92	93	19
18	80	82	90	86	100	100	94	100	100				88	89	18
17	77	78	85	81	96	99	90	99	95				84	85	17
16	73	75	79	76	92	94	86	95	91				80	81	16
15	70	71	74	70	87	90	82	90	86			79	76	77	15
14	67	68	68	65	83	86	78	85	81	77			72	73	14
13	63	64	62	60	79	82	74	81	77			74	73	68	13
12	60	60	57	54	75	77	70	76	72	69			64	65	12
11	56	57	51	49	71	73	66	71	68			67	67	61	11
10	53	53	46	44	67	69	62	67	63	62	63	64	57	58	10
9	49	49	40	39	63	64	58	62	59	58	60	61	53	54	9
8	46	46	35	33	59	60	54	57	54	55	57	58	49	50	8
7	42	42	29	28	55	56	50	52	50	51	53	55	45	46	7
6	39	39	23	23	50	51	45	48	45	47	50	52	41	42	6
5	36	35	18	17	46	47	41	43	41	44	46	49	37	38	5
4	32	31	12	12	42	43	37	38	36	40	43	46	33	34	4
3	29	28	7	7	38	38	33	34	31	36	40	43	30	30	3
2	25	24	1	1	34	34	29	29	27	33	36	40	26	26	2
1	22	21	0	0	30	30	25	24	22	29	33	37	22	22	1
0	18	17	0	0	26	25		20							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	67	100		100	100	93	88	94	77						19	
18	63	70	100	100	99	89	84	90	74	76				98	18	
17	58	65	100	100	94	85	80	86			88				17	
16	54	61	100	96	90	81	76	82	66		84				16	
15	50	57	97	92	86	77	73	79	62	66	80	74	63	85	15	
14	46	52	92	87	82	73	69	75	58	63	76		60		14	
13	41	48	86	83	77	69	65	71	54	60	72	66		77	13	
12	37	44	81	78	73	65	61	67	50		69	63	55	72	12	
11	33	39	76	74	69	62	58	63	46	53	65	59		68	11	
10	29	35	71	70	65	58	54	59	42	50	61	56	49	64	10	
9	25	31	66	65	61	54	50	55		47	57	52	46	59	9	
8	20	26	61	61	56	50	46	51	34	44	54	49	43	55	8	
7	16	22	56	57	52	46	43	47	31		50	45	40	51	7	
6	12	18	51	52	48	42	39	43	27	37	46	41	38	46	6	
5	8	13	45	48	44	38	35	39	23	34	42	38	35	42	5	
4	3	9	40	43	39	34	31	35		19		38	34	32	38	4
3	0	5	35	39	35	31	28	31	15	28	35	31	29	33	3	
2	0	1	30	35	31	27	24	27	11		31	27	26	29	2	
1	0	0	25	30	27	23	20	23		21	27	24	23	25	1	
0	0	0	20	26				19		18	23	20	21		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100			93		100		71							19	
18	99	100	97	87			100		66							18	
17	95	98	93	83	85		100		62	74			69	74		17	
16	91	93	89	80	81	82	96		58	69	83		65	71	69	16	
15	87	89	84	76	77	78	92		54	65			61	67		15	
14	83	85	80	73	73	74	87		50	60	74		57	63	61	14	
13	79	80	76	69	69	69	83		46	56	71	69		53	60	57	13
12	75	76	72	66	65	65	79		41	51			56	49	56	53	12
11	71	72	68	62	61	61	75	58	37	47	63	60		45	52	49	11
10	67	67	64	58	57	57	71		33	42	58	56		41	49	45	10
9	63	63	59	55	53	53	67	49	29	37	54	51	41	37	45	41	9
8	59	59	55	51	50	49	62		25	33	50	47		33	41	37	8
7	55	54	51	48	46	45	58	39	21	28	46	42	32	29	38	33	7
6	51	50	47	44	42	41	54		17	24	41	38		25	34	29	6
5	47	46	43	41	38	37	50	30	12	19	37	34	22	21	30	25	5
4	43	41	39	37	34	33	46		8	15	33	29		17	27	21	4
3	39	37	34		30	28	41	20	4	10	29	25	13	13	23		3
2	36	32	30		26	24	37	15	0	6	25	20	8	9			2
1	32	28	26		22	20	33	10	0	1	20	16	3				1
0	24				16	29	6		0	16				12	5		0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 16-17 years
Age: 75-79 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	93		89		100		100				100	100	100	96		19	
18	89	96	85				100				98	100	100	92		18	
17	85	92	82		95		97				91	95		88		17	
16	81	88	78			86	93	85	87			91	94	84		16	
15	76	84	75		85		88	81				84				15	
14	72	79	71	69	79	77	83	77	78		80	82	86	76		14	
13	68	75	67		74		79	73			75	77	81	72	60	13	
12	64	71	64	63	69	69	74	70	69			71	73	77	56	12	
11	60	66	60	59	64	64	70	66	65		67	66	68	72	64	11	
10	56	62	57	56	59	60	65	62	60			62	64	68	60	10	
9	51	58	53	53	54	56	60	58	56		58	57	59	63	56	9	
8	47	54	50	50	49	52	56	54	51			53	55	59	52	41	8
7	43	49	46	47	44	48	51	51	47		50	49	50	55	48	7	
6	39	45	43	44		43	47	47	42			46	46	50	44	34	6
5	35	41	39	41	34	39	42	43	38		42	40	41	46	40	5	
4	30	36	36	38		35	38	39	33			38	36	41	36	26	4
3	26	32	32	35	24	31	33		29			34	32	37	32	23	3
2	22	28	29	32	19	26	28	32	24			30	27	32	28	19	2
1	18		25	29	14	22	24	28	20					24		1	
0				26		18	19	24								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	87	98	94	100	100	100	100	100				93	95	19
18	82	83	92	88	100	100	96	100	100				89	91	18
17	78	80	87	83	98	100	92	100	97				85	87	17
16	75	76	81	78	94	96	88	97	93				81	83	16
15	71	72	76	72	90	92	84	92	88				82	78	15
14	68	69	70	67	86	88	80	88	84	80			74	75	14
13	64	65	64	62	82	83	76	83	79				77	76	13
12	61	62	59	56	77	79	72	78	75	73			70	66	12
11	57	58	53	51	73	75	68	74	70				70	62	11
10	54	54	48	46	69	70	64	69	65	65	66	67	58	59	10
9	51	51	42	40	65	66	59	64	61	62	63	64	54	55	9
8	47	47	37	35	61	62	55	60	56	58	60	61	50	51	8
7	44	44	31	30	57	57	51	55	52	54	56	58	47	47	7
6	40	40	25	25	53	53	47	50	47	51	53	55	43	43	6
5	37	36	20	19	49	49	43	45	43	47	49	52	39	39	5
4	33	33	14	14	45	44	39	41	38	43	46	49	35	35	4
3	30	29	9	9	41	40	35	36	34	40	43	46	31	31	3
2	26	25	3	3	36	36	31	31	29	36	39	43	27	27	2
1	23	22	0	0	32	31	27	27	25	32	36	40	23	24	1
0	20	18	0	0	28	27									0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	67	100		100	100	94	90	97	77						19	
18	63	68	100	100	100	90	86	93	74	77				100	18	
17	58	64	100	100	97	86	82	89			89				17	
16	54	60	100	98	92	82	78	85	66		85				16	
15	50	56	100	94	88	78	75	82	62	67	81	74	64	87	15	
14	46	51	95	90	84	75	71	78	58	64	77		61		14	
13	41	47	89	85	80	71	67	74	54	60	74	67		79	13	
12	37	43	84	81	76	67	63	70	50		70	63	56	74	12	
11	33	38	79	77	71	63	60	66	46	54	66	60		70	11	
10	29	34	74	72	67	59	56	62	42	51	62	56	50	66	10	
9	25	30	69	68	63	55	52	58		48	59	53	47	61	9	
8	20	25	64	64	59	51	48	54	34	44	55	49	44	57	8	
7	16	21	59	59	54	47	45	50	31		51	45	41	53	7	
6	12	17	54	55	50	43	41	46	27	38	47	42	39	48	6	
5	8	12	48	50	46	40	37	42	23	35	43	38	36	44	5	
4	3	8	43	46	42	36	33	38		19		40	35	33	39	4
3	0	4	38	42	37	32	30	34	15	28	36	31	30	35	3	
2	0	0	33	37	33	28	26	30	11		32	28	27	31	2	
1	0	0	28	33	29	24	22	26		22	28	24	24	26	1	
0	0	0	23	29				22		18	25	21	21		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		93		100		71							19	
18	99	100	99	88			100		66							18	
17	95	100	95	85	85		100		62	74			65	75		17	
16	91	96	91	81	81	83	98		58	69	83		61	71	69	16	
15	87	92	86	78	77	79	94		54	65			57	67		15	
14	83	87	82	74	73	75	90		50	60	74		53	64	61	14	
13	79	83	78	71	69	71	86		46	56	71	70		49	60	57	13
12	75	78	74	67	65	67	82		41	51		56	45	56	53	12	
11	71	74	70	63	61	63	78	59	37	47	63	61		41	53	49	11
10	67	70	66	60	57	58	73		33	42	58	56		37	49	45	10
9	63	65	61	56	53	54	69	49	29	37	54	52	41	33	45	41	9
8	59	61	57	53	50	50	65		25	33	50	48		29	42	37	8
7	55	57	53	49	46	46	61	40	21	28	46	43	32	25	38	33	7
6	51	52	49	46	42	42	57		17	24	41	39		21	34	29	6
5	47	48	45	42	38	38	53	30	12	19	37	34	22	17	31	25	5
4	43	44	41	38	34	34	48		8	15	33	30		13	27	21	4
3	39	39	36		30	30	44	20	4	10	29	25	13	9	23		3
2	36	35	32		26	26	40	16	0	6	24	21	8	5			2
1	32	31	28		22	22	36	11	0	1	20	16	3				1
0	26				17	32	6		0	16				12	5		0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 16-17 years

Age: 80-85 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	94		89		100		100				100	100	100	97		19
18	90	98	86				100				99	100	100	93		18
17	86	93	82		96		100				93	97		89		17
16	81	89	79			88	96	88	89			92	96	85		16
15	77	85	75		86		91	84			86					15
14	73	81	72	69	81	79	87	80	80		81	83	88	77		14
13	69	76	68		76		82	76			77	79	83	73	60	13
12	65	72	65	63	71	71	78	73	71		72	74	79		56	12
11	60	68	61	60	66	66	73	69	67		69	68	70	74	65	11
10	56	63	58	57	61	62	68	65	62		64	65	70	61	49	10
9	52	59	54	54	56	58	64	61	58		60	59	61	65	57	9
8	48	55	51	51	51	54	59	57	53		55	56	61	53	41	8
7	44	51	47	47	46	50	55	54	48		52	50	52	49	38	7
6	39	46	44	44		45	50	50	44		48	47	52	45	34	6
5	35	42	40	41	35	41	46	46	39		44	41	43	48	41	5
4	31	38	36	38		37	41	42	35		40	38	43	37	26	4
3	27	33	33	35	25	33	36		30		36	34	39	33	23	3
2	23	29	29	32	20	28	32	35	26		31	29	34	29	19	2
1	18		26	29	15	24	27	31	21		27			25		1
0			26		20	23	27									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	86	88	100	96	100	100	100	100	100				95	96	19	
18	83	85	95	91	100	100	98	100	100				91	92	18	
17	79	81	89	85	100	100	94	100	100				87	88	17	
16	76	77	84	80	96	97	90	100	95				83	85	16	
15	73	74	78	75	92	93	86	95	91		85	79	81		15	
14	69	70	72	69	88	89	82	90	86	84		75	77		14	
13	66	67	67	64	84	85	78	86	82		80	79	71	73		13
12	62	63	61	59	80	80	74	81	77	77		68	69		12	
11	59	59	56	53	76	76	70	76	72		73	73	64	65		11
10	55	56	50	48	72	72	66	72	68	69	70	70	60	61		10
9	52	52	45	43	68	67	61	67	63	66	66	67	56	57		9
8	48	49	39	38	64	63	57	62	59	62	63	64	52	53		8
7	45	45	34	32	60	59	53	58	54	58	60	61	48	49		7
6	42	41	28	27	55	54	49	53	50	55	56	58	44	45		6
5	38	38	22	22	51	50	45	48	45	51	53	55	40	41		5
4	35	34	17	16	47	46	41	43	41	47	50	52	37	37		4
3	31	30	11	11	43	41	37	39	36	44	46	49	33	33		3
2	28	27	6	6	39	37	33	34	32	40	43	46	29	29		2
1	24	23	0	0	35	33	29	29	27	36	39	43	25	25		1
0	21	20	0	0	31	28		25								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	77	86		84	79	76	76	79	75							19
18	72	74	81	79	75	73	73	75	71	69						18
17	68	70	76	75	70	69	69	71			74					17
16	64	66	71	71	66	65	65	67	63		70					16
15	60	62	66	66	62	61	61	64	59	59	66	68	55	66		15
14	55	57	61	62	58	57	58	60	55	56	63		53			14
13	51	53	56	57	54	53	54	56	51	53	59	61		58		13
12	47	49	50	53	49	49	50	52	47		55	58	47	53		12
11	43	44	45	49	45	45	46	48	43	46	51	54		49		11
10	39	40	40	44	41	42	43	44	39	43	47	50	41	45		10
9	34	36	35	40	37	38	39	40	40	44	47	38	40			9
8	30	31	30	36	32	34	35	36	32	36	40	43	36	36		8
7	26	27	25	31	28	30	31	32	28		36	40	33	32		7
6	22	23	20	27	24	26	28	28	24	30	32	36	30	27		6
5	17	18	14	22	20	22	24	24	20	27	29	33	27	23		5
4	13	14	9	18	15	18	20	20	16		25	29	24	19		4
3	9	10	4	14	11	14	16	16	12	20	21	25	21	14		3
2	5	5	0	9	7	10	13	12	8		17	22	18	10		2
1	0	1	0	5	3	7	9	8	14	13	18	16	6			1
0	0	0		1				4	11	10	15	13				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	80	80			79		82		78								19	
18	76	72	76	74			77		74								18	
17	72	68	72	70	71		73		70	68				76	67		17	
16	68	63	68	67	67	63	69		66	63		74		72	63	64	16	
15	64	59	64	63	63	59	65		62	59				68	59		15	
14	60	55	60	60	59	55	61		58	54		65		64	56	56	14	
13	56	50	55	56	55	51	57		54	50	68	61		60	52	52	13	
12	52	46	51	53	51	47	52		49	45			52	56	49	48	12	
11	49	42	47	49	47	43	48	52	45	41	60	52		52	45	44	11	
10	45	37	43	45	43	39	44		41	36	55	47		48	41	40	10	
9	41	33	39	42	39	34	40	42	37	31	51	43	38	44	38	36	9	
8	37	29	35	38	35	30	36		33	27	47	38		40	34	32	8	
7	33	24	30	35	31	26	31	33	29	22	43	34	28	36	30	28	7	
6	29	20	26	31	27	22	27		24	18	38	30		32	27	24	6	
5	25	15	22	28	23	18	23	23	20	13	34	25	19	28	23	20	5	
4	21	11	18	24	19	14	19		16	9	30	21		24	19	16	4	
3	17	7	14		15	10	15	14	12	4	26	16	9	20	16		3	
2	13	2	10		11	6	11	9	8	0	22	12	4	16			2	
1	9	0	5		7	2	6	4	4	0	17	7	0				1	
0	0	0			0	2	0		0	13				5	1		0	

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 18-20 years

Age: 20-34 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	84		80		91		83				88	86	87	82		19
18	80	81	77				79				83	82	83	78		18
17	76	77	73		81		74			74		77		74		17
16	72	73	70			65	70	64	67			73	74	70		16
15	67	69	66		71		65	60			70					15
14	63	64	63	64	66	56	60	56	58		65	64	65	62		14
13	59	60	59		61		56	52		57		59	60	58	60	13
12	55	56	56	58	55	48	51	48	49		56	55	56	56		12
11	51	51	52	55	50	44	47	44	45	49	52	50	52	51	52	11
10	47	47	49	52	45	39	42	41	40		47	46	47	47		10
9	42	43	45	49	40	35	37	37	36	41	43	41	43	43		9
8	38	39	41	46	35	31	33	33	31		38	37	38	39		8
7	34	34	38	43	30	27	28	29	27		32	34	32	34	35	7
6	30	30	34	40		22	24	25	22		28		28	29	31	6
5	26	26	31	37	20	18	19	22	18		24	25	23	25	27	5
4	21	22	27	34		14	15	18	13		20		18	21	23	4
3	17	17	24	31	10	10	10		9		16		14	16	19	3
2	13	13	20	28	5	6	5	10	4		12		9	12	15	2
1	9		17	24	0	1	1	6	0		8				11	1
0				21		0	0	3								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	71	73	88	84	80	84	80	86	83				78	78	19
18	68	69	82	78	76	79	76	81	78				74	74	18
17	65	65	77	73	72	75	72	77	74				70	70	17
16	61	62	71	68	68	71	68	72	69				66	66	16
15	58	58	65	62	64	66	63	67	65		58		62	62	15
14	54	55	60	57	60	62	59	63	60	55			58	58	14
13	51	51	54	52	56	58	55	58	56		55	52	55	54	13
12	47	47	49	46	52	53	51	53	51	48			51	50	12
11	44	44	43	41	47	49	47	48	46		48	46	47	47	11
10	40	40	38	36	43	45	43	44	42	41	45	43	43	43	10
9	37	36	32	30	39	41	39	39	37	37	41	40	39	39	9
8	34	33	27	25	35	36	35	34	33	34	38	37	35	35	8
7	30	29	21	20	31	32	31	30	28	30	35	34	31	31	7
6	27	26	15	15	27	28	27	25	24	26	31	31	27	27	6
5	23	22	10	9	23	23	23	20	19	23	28	28	23	23	5
4	20	18	4	4	19	19	19	16	15	19	24	25	20	19	4
3	16	15	0	0	15	15	15	11	10	15	21	22	16	15	3
2	13	11	0	0	11	10	11	6	6	12	18	19	12	11	2
1	9	8	0	0	6	6	7	1	1	8	14	16	8	7	1
0	6	4	0	0	2	2	0								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	75	92	88	83	79	77	80	75							19
18	71	72	87	84	79	75	73	76	71	70				83	18
17	67	68	82	80	75	71	70	72			76				17
16	62	64	76	75	70	67	66	68	63		72				16
15	58	59	71	71	66	63	62	64	59	60	68	69	57	70	15
14	54	55	66	66	62	59	58	60	55	57	65		54		14
13	50	51	61	62	58	56	54	56	51	54	61	62		61	13
12	45	46	56	58	53	52	51	53	47		57	58	49	57	12
11	41	42	51	53	49	48	47	49	43	47	53	55		52	11
10	37	38	46	49	45	44	43	45	39	44	50	51	43	48	10
9	33	33	41	45	41	40	39	41	41	46	48	40	44		9
8	28	29	35	40	37	36	36	37	32	37	42	44	37	39	8
7	24	25	30	36	32	32	32	33	28		38	41	34	35	7
6	20	20	25	31	28	28	28	29	24	31	34	37	31	31	6
5	16	16	20	27	24	25	24	25	20	28	31	33	29	26	5
4	12	12	15	23	20	21	21	21	16		27	30	26	22	4
3	7	7	10	18	15	17	17	17	12	21	23	26	23	18	3
2	3	3	5	14	11	13	13	13	8		19	23	20	13	2
1	0	0	0	10	7	9	9	9	15		16	19	17	9	1
0	0	0	0	5				5	12	12	16	14			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	83	84			81		87		77							19	
18	79	77	80	76			82		73							18	
17	75	72	76	73	73		78		69	68			77	68		17	
16	71	68	72	69	69	66	74		65	63	74		73	64	64	16	
15	68	64	67	66	65	61	70		61	59			69	60		15	
14	64	59	63	62	61	57	66		56	54	65		65	57	56	14	
13	60	55	59	59	57	53	61		52	50	68	60		61	53	52	13
12	56	51	55	55	53	49	57		48	45			52	57	49	48	12
11	52	46	51	52	49	45	53	53	44	41	60	51		53	46	44	11
10	48	42	47	48	45	41	49		40	36	55	47		49	42	40	10
9	44	37	42	44	41	37	45	43	36	31	51	42	38	45	38	36	9
8	40	33	38	41	37	33	41		31	27	47	38		41	35	32	8
7	36	29	34	37	33	29	36	34	27	22	43	33	29	37	31	28	7
6	32	24	30	34	29	25	32		23	18	38	29		33	27	24	6
5	28	20	26	30	25	20	28	24	19	13	34	25	19	29	24	20	5
4	24	16	22	27	21	16	24		15	9	30	20		25	20	16	4
3	20	11	17		17	12	20	15	11	4	26	16	9	21	16		3
2	16	7	13		13	8	16	10	7	0	22	11	5	17			2
1	12	3	9		9	4	11	5	2	0	17	7	0				1
0	0	0	0		0	7	0		0	13				5	0	0	0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 35-39 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	85		82		93		86				90	89	91	85		19		
18	81	84	78				81				86	85	86	81		18		
17	77	79	75		83		77				77	80		77		17		
16	73	75	71			68	72	66	71			76	77	73		16		
15	69	71	68		73		67	62			73					15		
14	64	67	64	65	68	60	63	58	62		68	67	68	65		14		
13	60	62	61		63		58	54			61		62	64	61	60	13	
12	56	58	57	59	58	51	54	51	53		59	58	60		56	12		
11	52	54	53	56	53	47	49	47	48		52	55	53	55	53	52	11	
10	48	49	50	53	48	43	45	43	44		50	49	51	49		10		
9	44	45	46	50	43	39	40	39			44	46	44	46	45	45	9	
8	39	41	43	47	38	34	35	35			41	40	42	41	41		8	
7	35	37	39	44	33	30	31	32	30		36	37	35	37	38		7	
6	31	32	36	40		26	26	28	26		32		31	33	33	34	6	
5	27	28	32	37	23	22	22	24	21		28	28	26	29	30		5	
4	23	24	29	34		18	17	20	17			23		21	24	25	27	4
3	18	19	25	31	13	13	12		12			19		17	20	21	23	3
2	14	15	22	28	8	9	8	13	8		15		12	15	17	19	2	
1	10		18	25	3	5	3	9	3		11				13		1	
0				22		1	0	5								0		

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	74	75	88	84	85	88	83	91	87				81	81	19	
18	70	72	83	79	81	83	79	86	83				77	77	18	
17	67	68	77	74	77	79	75	81	78				73	73	17	
16	64	64	72	68	73	75	71	77	74				69	69	16	
15	60	61	66	63	69	70	67	72	69			60	65	65	15	
14	57	57	61	58	64	66	63	67	65	58			61	62	14	
13	53	53	55	52	60	62	59	63	60		56	54	57	58	13	
12	50	50	50	47	56	57	55	58	55	51			54	54	12	
11	46	46	44	42	52	53	51	53	51	49	48	50	50		11	
10	43	43	38	37	48	49	47	49	46	44	45	45	46	46	10	
9	39	39	33	31	44	44	43	44	42	40	42	42	42	42	9	
8	36	35	27	26	40	40	39	39	37	36	39	39	38	38	8	
7	33	32	22	21	36	36	35	34	33	33	35	36	34		7	
6	29	28	16	15	32	31	31	30	28	29	32	33	30	30	6	
5	26	25	11	10	28	27	27	25	24	25	28	30	26		5	
4	22	21	5	5	23	23	23	20	19	22	25	27	23	22		4
3	19	17	0	0	19	19	19	16	15	18	22	24	19	18		3
2	15	14	0	0	15	14	14	11	10	14	18	21	15	14		2
1	12	10	0	0	11	10	10	6	5	11	15	18	11	10		1
0	8	6	0	0	7	6	2								0	

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	75		95	91	85	80	77	81	75						19
18	71	71	89	86	81	76	74	77	71	70				84	18
17	67	67	84	82	77	72	70	73			77				17
16	62	63	79	78	73	68	66	69	63		73				16
15	58	58	74	73	68	65	62	65	59	60	69	69	56	71	15
14	54	54	69	69	64	61	59	61	55	57	66		53		14
13	50	50	64	64	60	57	55	57	51	54	62	62		63	13
12	45	45	59	60	56	53	51	53	47		58	59	47	58	12
11	41	41	54	56	51	49	47	49	43	48	54	55		54	11
10	37	37	48	51	47	45	44	45	39	44	51	52	42	50	10
9	33	32	43	47	43	41	40	41	41	47	48	39	45		9
8	28	28	38	43	39	37	36	37	32	38	43	44	36	41	8
7	24	24	33	38	34	34	32	33	28		39	41	33	37	7
6	20	19	28	34	30	29	29		24	31	36	37	30	32	6
5	16	15	23	29	26	26	25	25	20	28	32	34	27	28	5
4	12	11	18	25	22	22	21	22	16		28	30	25	24	4
3	7	6	12	21	17	18	17	18	12	22	24	27	22	19	3
2	3	2	7	16	13	14	14	14	8		20	23	19	15	2
1	0	0	2	12	9	10	10	10	15	17	20	16	11		1
0	0	0	0	8				6	12	13	16	13			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	83		86		81		89		77							19	
18	79	79	82	77			85		73							18	
17	75	75	78	73	73		81		69	68				76	68	17	
16	71	70	73	70	69	67	76		65	63	74		72	64	64	16	
15	68	66	69	66	65	63	72		61	59			68	61		15	
14	64	62	65	62	61	59	68		56	54	65		64	57	56	14	
13	60	57	61	59	57	54	64		52	50	68	61		60	53	52	13
12	56	53	57	55	53	50	60		48	45			53	56	50	48	12
11	52	48	53	52	49	46	56	53	44	41	59	52		52	46	44	11
10	48	44	48	48	45	42	51		40	36	55	47		48	42	40	10
9	44	40	44	45	41	38	47	44	36	31	51	43	38	44	39	36	9
8	40	35	40	41	37	34	43		31	27	47	38		40	35	32	8
7	36	31	36	38	33	30	39	34	27	22	43	34	29	36	31	28	7
6	32	27	32	34	29	26	35		23	18	38	29		32	28	24	6
5	28	22	28	30	25	22	31	25	19	13	34	25	19	28	24	20	5
4	24	18	23	27	21	18	26		15	9	30	21		24	20	16	4
3	20	14	19		17	13	22	15	11	4	26	16	9	20	17		3
2	16	9	15		13	9	18	10	7	0	21	12	5	16			2
1	12	5	11		9	5	14	6	2	0	17	7	0				1
0	1				1	10	1		0	13				6	0	0	0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 18-20 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	86		82		94		87				92	91	92	86		19	
18	82	85	79				83				87	86	88	82		18	
17	78	80	75		84		78				79	82		78		17	
16	73	76	72			70	74	67	72			77	79	74		16	
15	69	72	68		74		69	63				74				15	
14	65	68	65	65	69	62	64	60	63		69	68	70	66		14	
13	61	63	61		64		60	56			62		64	66	62	60	13
12	57	59	58	59	59	53	55	52	54		60	59	61		56	12	
11	52	55	54	56	54	49	51	48	50		54	56	55	57	54	52	11
10	48	50	51	53	49	45	46	44	45		51	50	53	50	49		10
9	44	46	47	50	44	40	42	41	41		46	47	46	48	46	45	9
8	40	42	44	47	39	36	37	37	36		42	41	44	42	41		8
7	36	38	40	44	34	32	32	33	32		38	38	37	39	38	38	7
6	32	33	37	41		28	28	29	27		33		32	35	34	34	6
5	27	29	33	38	24	24	23	25	23		29	29	28	30	30	30	5
4	23	25	29	35		19	19	22	18		25		23	26	26	27	4
3	19	21	26	32	14	15	14		14		21		18	22	22	23	3
2	15	16	22	28	9	11	9	14	9		17		14	17	18	19	2
1	11		19	25	4	7	5	10	5		13				14		1
0				22		2	0	6								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	75	76	89	85	87	90	85	93	90				82	83	19
18	72	73	83	80	83	86	81	89	85				78	79	18
17	68	69	78	74	79	81	77	84	80				75	75	17
16	65	66	72	69	75	77	73	79	76				71	71	16
15	61	62	67	64	71	73	69	74	71				63	67	15
14	58	58	61	58	67	68	65	70	67	60			63	63	14
13	54	55	56	53	63	64	61	65	62		57	57	59	59	13
12	51	51	50	48	59	60	57	60	58	53			55	55	12
11	47	48	44	42	55	55	53	56	53	50	51	51	51	51	11
10	44	44	39	37	50	51	49	51	49	45	47	48	47	47	10
9	41	40	33	32	46	47	45	46	44	42	43	45	43	43	9
8	37	37	28	26	42	42	41	42	40	38	40	42	40	39	8
7	34	33	22	21	38	38	37	37	35	34	37	39	36	35	7
6	30	29	17	16	34	34	33	32	30	31	33	36	32	31	6
5	27	26	11	10	30	30	28	27	26	27	30	33	28	28	5
4	23	22	6	5	26	25	24	23	21	24	26	30	24	24	4
3	20	19	0	0	22	21	20	18	17	20	23	27	20	20	3
2	16	15	0	0	18	17	16	13	12	16	20	24	16	16	2
1	13	11	0	0	13	12	12	9	8	13	16	21	12	12	1
0	10	8	0	0	9	8		4							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	73		97	93	87	81	78	82	75						19	
18	69	70	92	89	83	77	74	78	71	71				86	18	
17	65	66	87	84	79	74	70	74			78				17	
16	61	61	82	80	75	70	67	70	63		74				16	
15	56	57	77	76	70	66	63	66	59	61	71	70	57	73	15	
14	52	53	72	71	66	62	59	62	55	58	67		54		14	
13	48	48	67	67	62	58	55	58	51	54	63	63		64	13	
12	44	44	61	62	58	54	52	54	47		59	59	48	60	12	
11	40	40	56	58	53	50	48	50	43	48	55	56		56	11	
10	35	36	51	54	49	46	44	46	39	45	52	52	42	51	10	
9	31	31	46	49	45	42	40	42	42	48	48	40	47		9	
8	27	27	41	45	41	39	37	38	32	38	44	45	37	43	8	
7	23	23	36	41	37	35	33	34	28		40	41	34	38	7	
6	18	18	31	36	32	31	29	30	24	32	37	38	31	34	6	
5	14	14	26	32	28	27	25	26	20	29	33	34	28	30	5	
4	10	10	20	27	24	23	22	22	16		29	31	25	25	4	
3	6	5	15	23	20	19	18	18	12	22	25	27	23	21	3	
2	1	1	10	19	15	15	14	14	8		21	23	20	17	2	
1	0	0	5	14	11	11	10	10	16		18	20	17	12	1	
0	0	0	0	10				6	12	14	16	14			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	87		88		83		91		76								
18	83	81	84	78			87		72								
17	79	77	79	74	75		83		68	68				76	68		
16	75	72	75	71	71	68	79		63	63		75		72	65	64	
15	71	68	71	67	67	64	75		59	59				68	61		
14	67	64	67	64	63	60	71		55	54		66		64	57	56	
13	63	59	63	60	59	56	66		51	50	68	61		60	54	52	
12	59	55	59	57	55	52	62		47	45			53	56	50	48	
11	55	51	54	53	51	47	58	54	43	41	59	52		52	46	44	
10	51	46	50	49	47	43	54		38	36	55	48		48	43	40	
9	47	42	46	46	43	39	50	44	34	31	51	43	38	44	39	36	
8	43	38	42	42	39	35	46		30	27	47	39		40	35	32	
7	39	33	38	39	35	31	41	35	26	22	43	35	29	36	32	28	
6	35	29	34	35	31	27	37		22	18	38	30		32	28	24	
5	31	25	29	32	27	23	33	25	18	13	34	26	19	28	24	20	
4	27	20	25	28	23	19	29		13	9	30	21		24	21	16	
3	23	16	21		19	15	25	16	9	4	26	17	9	20	17		
2	19	12	17		15	11	21	11	5	0	21	12	5	16			
1	15	7	13		11	6	16	6	1	0	17	8	0		6	0	
0	3				2	12	1		0	13							

(continued)

APPENDIX E (*continued*)

Sex: Male
Education: 18-20 years
Age: 45-49 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	87		83		96		89				93	92	94	87		19
18	82	86	80				84				89	88	90	83		18
17	78	82	76		86		80			80		83		79		17
16	74	77	73			72	75	69	74			79	81	75		16
15	70	73	69		76		71	65			75					15
14	66	69	66	66	70	63	66	61	65		71	70	72	67		14
13	61	64	62		65		62	57		64		65	68	63	60	13
12	57	60	58	60	60	55	57	54	56		62	61	63	56		12
11	53	56	55	56	55	51	52	50	52	56	57	56	59	55	52	11
10	49	52	51	53	50	46	48	46	47		53	52	54	51	49	10
9	45	47	48	50	45	42	43	42	43	47	48	47	50	47	45	9
8	40	43	44	47	40	38	39	38	38		44	43	46	43	41	8
7	36	39	41	44	35	34	34	35	33		39	39	38	41	39	7
6	32	34	37	41		30	29	31	29		35		34	37	35	6
5	28	30	34	38	25	25	25	27	24		31	30	29	32	31	5
4	24	26	30	35		21	20	23	20		27		24	28	27	4
3	20	22	27	32	15	17	16		15		23		20	23	23	3
2	15	17	23	29	10	13	11	16	11		19		15	19	19	2
1	11		20	26	5	8	7	12	6		14			16		1
0				23		4	2	8								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	76	78	90	86	90	93	87	96	92				84	84	19
18	73	74	84	80	86	88	83	91	87				80	80	18
17	69	71	79	75	81	84	79	86	83				76	76	17
16	66	67	73	70	77	80	75	82	78				72	73	16
15	62	63	67	64	73	75	71	77	74		65		68	69	15
14	59	60	62	59	69	71	67	72	69	62			64	65	14
13	56	56	56	54	65	67	63	67	64		59	59	60	61	13
12	52	52	51	48	61	62	59	63	60	55			57	57	12
11	49	49	45	43	57	58	55	58	55	52	53	53	53	53	11
10	45	45	40	38	53	54	51	53	51	47	49	50	49	49	10
9	42	42	34	32	49	49	46	49	46	44	45	47	45	45	9
8	38	38	29	27	45	45	42	44	42	40	42	44	41	41	8
7	35	34	23	22	40	41	38	39	37	36	39	42	37	37	7
6	31	31	17	16	36	36	34	35	33	33	35	39	33	33	6
5	28	27	12	11	32	32	30	30	28	29	32	36	29	29	5
4	25	24	6	6	28	28	26	25	24	26	28	33	26	25	4
3	21	20	1	1	24	23	22	20	19	22	25	30	22	21	3
2	18	16	0	0	20	19	18	16	14	18	22	27	18	17	2
1	14	13	0	0	16	15	14	11	10	15	18	24	14	13	1
0	11	9	0	0	12	10		6							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	73	100		95	89	82	79	83	75						19
18	69	69	95	91	85	79	75	79	71	71				88	18
17	65	65	90	87	81	75	71	75			79				17
16	61	60	85	82	77	71	67	71	63		75				16
15	56	56	80	78	72	67	64	67	59	61	72	70	58	75	15
14	52	52	74	73	68	63	60	63	55	58	68		55		14
13	48	47	69	69	64	59	56	59	51	55	64	63		66	13
12	44	43	64	65	60	55	52	55	47		60	60	49	62	12
11	40	39	59	60	56	51	49	51	43	49	57	56		57	11
10	35	34	54	56	51	48	45	47	39	45	53	52	43	53	10
9	31	30	49	52	47	44	41	43	42	49	49	40	49		9
8	27	26	44	47	43	40	37	39	32	39	45	45	38	44	8
7	23	21	39	43	39	36	34	35	28		41	42	35	40	7
6	18	17	33	38	34	32	30	31	24	32	38	38	32	36	6
5	14	13	28	34	30	28	26	27	20	29	34	35	29	31	5
4	10	9	23	30	26	24	22	23	16		30	31	26	27	4
3	6	4	18	25	22	20	19	19	12	23	26	27	23	23	3
2	1	0	13	21	17	17	15	15	8		23	24	21	18	2
1	0	0	8	17	13	13	11	12	16	19	20	18	14		1
0	0	0	3	12				8	13	15	17	15			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	87	90			83		94		76							19	
18	83	83	85	79			90		72							18	
17	79	79	81	76	75		86		68	68			75	69		17	
16	75	75	77	72	71	69	81		63	63		75		71	65	64	16
15	71	70	73	69	67	65	77		59	59				67	61		15
14	67	66	69	65	63	61	73		55	54		66		63	58	56	14
13	63	62	65	61	59	57	69		51	50	68	62		59	54	52	13
12	59	57	60	58	55	53	65		47	45			53	55	50	48	12
11	55	53	56	54	51	49	61	54	43	41	59	53		51	47	44	11
10	51	49	52	51	47	45	56		38	36	55	49		47	43	40	10
9	47	44	48	47	43	40	52	45	34	31	51	44	38	43	39	36	9
8	43	40	44	44	39	36	48		30	27	47	40		39	36	32	8
7	39	36	40	40	35	32	44	35	26	22	43	35	29	35	32	28	7
6	35	31	35	36	31	28	40		22	18	38	31		31	28	24	6
5	31	27	31	33	27	24	36	26	18	13	34	26	19	27	25	20	5
4	27	23	27	29	23	20	31		13	9	30	22		23	21	16	4
3	23	18	23		19	16	27	16	9	4	26	17	10	19	17		3
2	19	14	19		15	12	23	11	5	0	21	13	5	15			2
1	15	10	15		11	8	19	7	1	0	17	8	0				1
0	5				4	15	2		0	13				6	0	0	0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 50-54 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	87		84		97		91				95	94	96	88		19
18	83	87	80				86				90	89	92	84		18
17	79	83	77		87		82				82	85		80		17
16	75	78	73			73	77	71	76			80	83	76		16
15	70	74	70		77		73	67			77					15
14	66	70	66	66	72	65	68	63	67		72	71	74	68		14
13	62	66	63		67		64	59			66	67	70	64	60	13
12	58	61	59	60	62	57	59	55	58		63	62	65	56	56	12
11	54	57	56	57	57	52	54	52	53		57	59	58	61	56	11
10	49	53	52	54	52	48	50	48	49		54	53	56	53	49	10
9	45	48	49	51	46	44	45	44			49	50	49	52	49	9
8	41	44	45	48	41	40	41	40			45	44	47	45	41	8
7	37	40	42	44	36	35	36	36	35		41	41	40	43	41	7
6	33	36	38	41		31	31	33	31		37	35	39	37	34	6
5	29	31	34	38	26	27	27	29	26		33	32	31	34	33	5
4	24	27	31	35		23	22	25	22		29		26	30	29	4
3	20	23	27	32	16	19	18		17		24		21	25	23	3
2	16	18	24	29	11	14	13	17	13		20		17	21	19	2
1	12		20	26	6	10	9	14	8		16			17		1
0				23		6	4	10								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	77	79	91	86	92	95	89	98	94				85	86	19
18	74	75	85	81	88	91	85	93	89				81	82	18
17	71	72	79	76	84	87	81	89	85				77	78	17
16	67	68	74	70	80	82	77	84	80				74	74	16
15	64	65	68	65	76	78	73	79	76				68	70	15
14	60	61	63	60	72	74	69	75	71	64			66	66	14
13	57	57	57	54	67	69	65	70	67		61	62	62	62	13
12	53	54	52	49	63	65	60	65	62	57		58	58	58	12
11	50	50	46	44	59	61	56	60	58		54	56	54	54	11
10	46	46	41	39	55	56	52	56	53	50	51	53	50	50	10
9	43	43	35	33	51	52	48	51	49	46	48	50	46	46	9
8	40	39	29	28	47	48	44	46	44	42	44	47	43	42	8
7	36	36	24	23	43	43	40	42	39	39	41	44	39	39	7
6	33	32	18	17	39	39	36	37	35	35	37	41	35	35	6
5	29	28	13	12	35	35	32	32	30	31	34	38	31	31	5
4	26	25	7	7	30	30	28	28	26	28	31	35	27	27	4
3	22	21	2	1	26	26	24	23	21	24	27	32	23	23	3
2	19	18	0	0	22	22	20	18	17	20	24	29	19	19	2
1	15	14	0	0	18	17	16	13	12	17	20	26	15	15	1
0	12	10	0	0	14	13		9							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	72		100	98	91	84	79	84	77							19
18	68	68	98	93	87	80	76	80	74	72						18
17	63	64	93	89	83	76	72	76			80					17
16	59	59	87	85	79	72	68	72	66		76					16
15	55	55	82	80	75	68	64	68	62	62	73	71	58	76		15
14	51	51	77	76	70	64	61	64	58	59	69		55			14
13	46	46	72	71	66	60	57	60	54	55	65	64		68		13
12	42	42	67	67	62	57	53	56	50		61	60	50	63		12
11	38	38	62	63	58	53	49	52	46	49	58	56		59		11
10	34	33	57	58	53	49	46	48	42	46	54	53	44	55		10
9	29	29	52	54	49	45	42	44	43	50	49	41	50			9
8	25	25	46	50	45	41	38	41	34	39	46	46	38	46		8
7	21	20	41	45	41	37	34	37	31		42	42	36	42		7
6	17	16	36	41	36	33	31	33	27	33	39	39	33	37		6
5	13	12	31	36	32	29	27	29	23	30	35	35	30	33		5
4	8	7	26	32	28	26	23	25	19		31	31	27	29		4
3	4	3	21	28	24	22	19	21	15	23	27	28	24	24		3
2	0	0	16	23	20	18	16	17	11		24	24	21	20		2
1	0	0	10	19	15	14	12	13		17	20	21	18	16		1
0			5	15				9		13	16	17	16			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score	
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	93		91		88		96		75								19	
18	90	89	87	81			92		70								18	
17	86	85	83	77	80		88		66	68				74	69		17	
16	82	80	79	73	76	74	84		62	63	76		70	65	64		16	
15	78	76	75	70	72	70	80		58	59			66	62			15	
14	74	72	71	66	68	66	76		54	54	67		62	58	56		14	
13	70	67	66	63	64	62	71		50	50	68	63		58	54	52		13
12	66	63	62	59	60	58	67		45	45			53	54	51	48		12
11	62	59	58	56	56	54	63	55	41	41	59	54		50	47	44		11
10	58	54	54	52	52	50	59		37	36	55	49		46	43	40		10
9	54	50	50	48	48	45	55	45	33	31	51	45	38	42	40	36		9
8	50	46	46	45	44	41	51		29	27	47	40		38	36	32		8
7	46	41	41	41	40	37	46	36	25	22	43	36	29	34	32	28		7
6	42	37	37	38	36	33	42		20	18	38	31		30	29	24		6
5	38	33	33	34	32	29	38	26	16	13	34	27	19	26	25	20		5
4	34	28	29	31	28	25	34		12	9	30	22		22	21	16		4
3	30	24	25		24	21	30	17	8	4	26	18	10	18	18			3
2	26	19	21		20	17	25	12	4	0	21	13	5	14				2
1	22	15	16		16	13	21	7	0	0	17	9	0					1
0		11			9	17	2		0	13				7	0			0

(continued)

APPENDIX E (continued)

Sex: Male
Education: 18-20 years
Age: 55-59 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	88		85		98		93				96	95	98	90		19
18	84	88	81				89				92	91	94	86		18
17	79	84	78		88		84			84		86		82		17
16	75	79	74			75	79	73	77			82	85	78		16
15	71	75	71		78		75	69			78					15
14	67	71	67	66	73	67	70	65	68		74	73	76	70		14
13	63	67	63		68		66	61		67		68	71	66	60	13
12	58	62	60	60	63	58	61	57	59		65	64	67	56		12
11	54	58	56	57	58	54	56	54	55	59	60	59	63	58	52	11
10	50	54	53	54	53	50	52	50	50		56	55	58	54		10
9	46	49	49	51	48	46	47	46	46	51	51	50	54	50		9
8	42	45	46	48	43	41	43	42	41		47	46	49	46		8
7	37	41	42	45	38	37	38	38	37	43	42	41	45	42		7
6	33	37	39	42		33	34	34	32		38	37	40	38		6
5	29	32	35	39	28	29	29	31	28	34	33	32	36	34		5
4	25	28	32	36		25	24	27	23		30		28	32		4
3	21	24	28	32	17	20	20		19		26		23	27		3
2	17	20	25	29	12	16	15	19	14		22		18	23		2
1	12		21	26	7	12	11	15	10		18			18		1
0				23		8	6	12								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	79	80	92	87	94	98	91	100	96				87	88	19
18	75	77	86	82	90	94	87	96	92				83	84	18
17	72	73	81	77	86	89	83	91	87				79	80	17
16	68	69	75	71	82	85	79	86	83				75	76	16
15	65	66	69	66	78	81	74	82	78				71	71	15
14	61	62	64	61	74	76	70	77	74	67			67	68	14
13	58	59	58	56	70	72	66	72	69		64	65	63	64	13
12	55	55	53	50	66	68	62	68	64	59			60	60	12
11	51	51	47	45	62	63	58	63	60		57	59	56	56	11
10	48	48	42	40	57	59	54	58	55	52	54	56	52	52	10
9	44	44	36	34	53	55	50	53	51	48	50	53	48	48	9
8	41	41	30	29	49	50	46	49	46	45	47	50	44	44	8
7	37	37	25	24	45	46	42	44	42	41	43	47	40	40	7
6	34	33	19	18	41	42	38	39	37	37	40	44	36	36	6
5	30	30	14	13	37	37	34	35	33	34	37	41	32	32	5
4	27	26	8	8	33	33	30	30	28	30	33	38	29	28	4
3	24	22	3	2	29	29	26	25	24	27	30	35	25	24	3
2	20	19	0	0	25	24	22	21	19	23	26	32	21	20	2
1	17	15	0	0	21	20	18	16	14	19	23	29	17	16	1
0	13	12	0	0	16	16		11							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	72	100		100	94	85	80	86	77						19
18	68	67	100	96	89	81	77	82	74	72				91	18
17	63	62	95	91	85	77	73	78			81				17
16	59	58	90	87	81	73	69	74	66		78				16
15	55	54	85	83	77	69	65	70	62	62	74	71	59	78	15
14	51	50	80	78	72	66	62	66	58	59	70		56		14
13	46	45	75	74	68	62	58	62	54	56	66	64		69	13
12	42	41	70	69	64	58	54	58	50		62	60	51	65	12
11	38	37	65	65	60	54	50	54	46	50	59	57		61	11
10	34	32	59	61	55	50	47	50	42	46	55	53	45	56	10
9	29	28	54	56	51	46	43	46	43	51	50	42	42	52	9
8	25	24	49	52	47	42	39	42	34	40	47	46	39	48	8
7	21	19	44	48	43	38	35	38	31		44	42	36	43	7
6	17	15	39	43	39	35	32	34	27	33	40	39	34	39	6
5	13	11	34	39	34	31	28	30	23	30	36	35	31	35	5
4	8	6	29	34	30	27	24	26	19		32	32	28	30	4
3	4	2	23	30	26	23	20	22	15	24	28	28	25	26	3
2	0	0	18	26	22	19	17	18	11		25	25	22	22	2
1	0	0	13	21	17	15	13	14		17	21	21	19	17	1
0	0	0	8	17				10		14	17	18	16		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	93	93			88		99		75							19
18	90	91	89	82			95		70							18
17	86	87	85	78	80		91		66	68			72	69		17
16	82	83	81	75	76	75	86		62	63	77		68	66	64	16
15	78	78	77	71	72	71	82		58	59			64	62		15
14	74	74	72	68	68	67	78		54	54	68		60	58	56	14
13	70	70	68	64	64	63	74		50	50	68	63		56	55	52
12	66	65	64	60	60	59	70		45	45			53	52	51	12
11	62	61	60	57	56	55	66	55	41	41	59	54		48	47	44
10	58	57	56	53	52	51	61		37	36	55	50		44	44	40
9	54	52	52	50	48	47	57	46	33	31	51	45	38	40	40	9
8	50	48	47	46	44	43	53		29	27	47	41		36	36	32
7	46	44	43	43	40	38	49	36	25	22	43	36	29	32	33	7
6	42	39	39	39	36	34	45		20	18	38	32		28	29	24
5	38	35	35	35	32	30	40	27	16	13	34	28	19	24	25	5
4	34	30	31	32	28	26	36		12	9	30	23		20	22	16
3	30	26	27		24	22	32	17	8	4	26	19	10	16	18	3
2	26	22	22		20	18	28	12	4	0	21	14	5	12		2
1	22	17	18		16	14	24	7	0	0	17	10	0			1
0	13				10	20	3		0	13				7	0	0

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 18-20 years

Age: 60-64 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	88		85		99		95				97	97	100	91		19	
18	84	89	82				91				93	92	95	87		18	
17	80	85	78		89		86			86		88		83		17	
16	76	81	75			77	82	75	79			83	86	79		16	
15	72	76	71		79		77	71			79					15	
14	67	72	68	67	74	69	73	67	70		75	74	78	71		14	
13	63	68	64		69		68	63		69		70	73	67	60	13	
12	59	63	61	60	64	60	63	59	61		66	65	69	56		12	
11	55	59	57	57	59	56	59	56	56	61	62	61	64	59	52	11	
10	51	55	54	54	54	52	54	52	52		57	56	60	55		10	
9	46	51	50	51	49	47	50	48	47	53	53	52	55	51		9	
8	42	46	46	48	44	43	45	44	43		48	47	51	47		8	
7	38	42	43	45	39	39	40	40	38	44	44	43	47	43		7	
6	34	38	39	42		35	36	37	34		40		38	42	39	34	6
5	30	33	36	39	29	31	31	33	29		36	35	34	38	35	30	5
4	25	29	32	36		26	27	29	25		32		29	33	31	27	4
3	21	25	29	33	19	22	22		20		28		24	29	27	23	3
2	17	21	25	30	14	18	18	21	16		24		20	25	23	19	2
1	13		22	27	9	14	13	18	11		20				19		1
0				24		9	8	14								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	80	82	93	89	97	100	92	100	98				88	89	19
18	76	78	87	83	93	96	88	98	94				84	85	18
17	73	74	82	78	89	92	84	93	89				80	81	17
16	70	71	76	73	84	88	80	89	85				77	77	16
15	66	67	71	67	80	83	76	84	80				72	73	15
14	63	64	65	62	76	79	72	79	76	69			69	69	14
13	59	60	60	57	72	75	68	75	71				66	67	13
12	56	56	54	51	68	70	64	70	67	62			61	61	12
11	52	53	48	46	64	66	60	65	62				60	61	11
10	49	49	43	41	60	62	56	61	58	55	56	58	53	54	10
9	45	45	37	35	56	57	52	56	53	51	53	55	49	50	9
8	42	42	32	30	52	53	48	51	48	47	49	52	46	46	8
7	38	38	26	25	47	49	44	46	44				42	42	7
6	35	35	21	20	43	44	40	42	39	40	43	46	38	38	6
5	32	31	15	14	39	40	36	37	35	36	39	43	34	34	5
4	28	27	9	9	35	36	32	32	30	33	36	40	30	30	4
3	25	24	4	4	31	31	28	28	26	29	33	37	26	26	3
2	21	20	0	0	27	27	24	23	21	26	29	34	22	22	2
1	18	16	0	0	23	23	20	18	17	22	26	31	18	18	1
0	14	13	0	0	19	18		14							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	70	100		100	96	86	82	87	77						19
18	66	66	100	98	91	82	78	83	74	73				93	18
17	62	61	98	94	87	78	74	79			82				17
16	57	57	93	89	83	75	70	76	66		79				16
15	53	53	88	85	79	71	67	72	62	63	75	71	60	80	15
14	49	48	83	80	74	67	63	68	58	60	71		57		14
13	45	44	78	76	70	63	59	64	54	56	67	64		71	13
12	41	40	72	72	66	59	55	60	50		64	61	51	67	12
11	36	35	67	67	62	55	51	56	46	50	60	57		62	11
10	32	31	62	63	58	51	48	52	42	47	56	54	46	58	10
9	28	27	57	59	53	47	44	48	44	52	50	43	54		9
8	24	23	52	54	49	43	40	44	34	40	48	46	40	49	8
7	19	18	47	50	45	40	36	40	31		45	43	37	45	7
6	15	14	42	46	41	36	33	36	27	34	41	39	34	41	6
5	11	10	37	41	36	32	29	32	23	31	37	36	31	36	5
4	7	5	31	37	32	28	25	28	19		33	32	29	32	4
3	2	1	26	32	28	24	21	24	15	24	30	29	26	28	3
2	0	0	21	28	24	20	18	20	11		26	25	23	23	2
1	0	0	16	24	19	16	14	16		18	22	21	20	19	1
0	0	0	11	19				12		14	18	18	17		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97		95		89		100		73							19	
18	93	94	91	83			97		69							18	
17	89	89	87	80	81		93		65	68				70	70	17	
16	85	85	83	76	78	77	89		61	63	77		66	66	63	16	
15	81	81	78	72	74	73	85		57	59			62	62		15	
14	77	76	74	69	70	68	81		52	54	68		58	59	56	14	
13	73	72	70	65	66	64	76		48	50	68	64		54	55	52	13
12	69	68	66	62	62	60	72		44	45			53	50	51	48	12
11	65	63	62	58	58	56	68	56	40	41	59	55		46	48	44	11
10	61	59	58	55	54	52	64		36	36	55	50		42	44	40	10
9	57	55	53	51	50	48	60	46	32	31	51	46	38	38	40	36	9
8	53	50	49	47	46	44	55		27	27	47	42		34	37	32	8
7	49	46	45	44	42	40	51	37	23	22	42	37	29	30	33	28	7
6	45	41	41	40	38	36	47		19	18	38	33		26	29	24	6
5	41	37	37	37	34	31	43	27	15	13	34	28	19	22	26	20	5
4	37	33	33	33	30	27	39		11	9	30	24		18	22	16	4
3	33	28	28		26	23	35	18	7	4	26	19	10	14	18		3
2	29	24	24		22	19	30	13	3	0	21	15	5	10			2
1	25	20	20		18	15	26	8	0	0	17	10	0				1
0	15				11	22	3		0	13				7	0	0	0

(continued)

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 65-69 years

Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	89		86		100		98				99	99	100	92		19	
18	85	90	83				93				94	94	97	88		18	
17	81	86	79		90		89			87		89		84		17	
16	76	82	75			79	84	77	81			85	88	80		16	
15	72	77	72		80		80	73			81					15	
14	68	73	68	67	75	70	75	69	72		76	76	79	72		14	
13	64	69	65		70		70	66		71		71	75	68	60	13	
12	60	65	61	61	65	62	66	62	63		67	67	71		56	12	
11	55	60	58	58	60	58	61	58	58	63	63	62	66	60	52	11	
10	51	56	54	55	55	53	57	54	54		58	58	62	56	49	10	
9	47	52	51	52	50	49	52	50	49	54	54	53	57	52	45	9	
8	43	47	47	48	45	45	48	47	45		49	49	53	48	41	8	
7	39	43	44	45	40	41	43	43	40	46	45	44	48	44	38	7	
6	34	39	40	42		37	38	39	36		42		40	44	40	6	
5	30	35	37	39	30	32	34	35	31	38	36	35	40	36	30	5	
4	26	30	33	36		28	29	31	27		34		31	35	32	27	4
3	22	26	30	33	20	24	25		22		30		26	31	28	23	3
2	18	22	26	30	15	20	20	24	18		25		21	26	24	19	2
1	14		22	27	10	15	15	20	13	21				20		1	
0				24		11	11	16								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	81	83	94	90	99	100	94	100	100				90	91	19
18	78	79	89	85	95	99	90	100	96				86	87	18
17	74	76	83	79	91	94	86	96	92				82	83	17
16	71	72	78	74	87	90	82	91	87				78	79	16
15	67	68	72	69	83	86	78	86	83		75		74	75	15
14	64	65	67	63	79	81	74	82	78	72			70	71	14
13	60	61	61	58	74	77	70	77	73		69	69	66	67	13
12	57	58	55	53	70	73	66	72	69	65			63	63	12
11	53	54	50	48	66	68	62	68	64		62	63	59	59	11
10	50	50	44	42	62	64	58	63	60	58	59	60	55	55	10
9	47	47	39	37	58	60	54	58	55	54	56	57	51	51	9
8	43	43	33	32	54	55	50	54	51	50	52	54	47	47	8
7	40	39	28	26	50	51	46	49	46	47	49	51	43	43	7
6	36	36	22	21	46	47	42	44	42	43	46	48	39	39	6
5	33	32	17	16	42	42	38	39	37	39	42	45	35	35	5
4	29	29	11	10	38	38	34	35	33	36	39	42	32	31	4
3	26	25	5	5	33	34	29	30	28	32	35	39	28	27	3
2	22	21	0	0	29	29	25	25	23	28	32	36	24	23	2
1	19	18	0	0	25	25	21	21	19	25	29	33	20	20	1
0	16	14	0	0	21	21		16							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	69	100		100	98	87	83	89	77						19
18	64	65	100	100	93	83	79	86	74	73				95	18
17	60	60	100	96	89	80	75	82			83				17
16	56	56	96	92	85	76	72	78	66		80				16
15	52	52	91	87	81	72	68	74	62	63	76	72	61	81	15
14	47	47	85	83	77	68	64	70	58	60	72		58		14
13	43	43	80	78	72	64	60	66	54	57	68	65		73	13
12	39	39	75	74	68	60	57	62	50		65	61	52	68	12
11	35	34	70	70	64	56	53	58	46	50	61	58		64	11
10	30	30	65	65	60	52	49	54	42	47	57	54	47	60	10
9	26	26	60	61	55	49	45	50		44	53	50	44	55	9
8	22	21	55	57	51	45	42	46	34	41	49	47	41	51	8
7	18	17	50	52	47	41	38	42	31		46	43	38	47	7
6	13	13	44	48	43	37	34	38	27	34	42	40	35	42	6
5	9	8	39	43	38	33	30	34	23	31	38	36	32	38	5
4	5	4	34	39	34	29	27	30	19		34	33	29	34	4
3	1	0	29	35	30	25	23	26	15	25	31	29	27	29	3
2	0	0	24	30	26	21	19	22	11		27	25	24	25	2
1	0	0	19	26	22	18	15	18		18	23	22	21	21	1
0	0	0	14	22				14	15	19	18	18			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		97		91		100		72							19	
18	96	96	93	84			100		68							18	
17	92	92	89	81	83		96		64	68				67	70	17	
16	88	87	84	77	79	78	91		59	63	78		63	66	63	16	
15	84	83	80	74	75	74	87		55	59			59	63		15	
14	80	79	76	70	71	70	83		51	54	69		55	59	55	14	
13	76	74	72	67	67	66	79		47	50	68	64		51	55	51	13
12	72	70	68	63	64	61	75		43	45			53	47	52	47	12
11	68	65	64	59	60	57	70	56	39	41	59	55		43	48	43	11
10	64	61	59	56	56	53	66		34	36	55	51		39	44	39	10
9	60	57	55	52	52	49	62	47	30	31	51	47	39	35	41	36	9
8	56	52	51	49	48	45	58		26	27	47	42		31	37	32	8
7	52	48	47	45	44	41	54	37	22	22	42	38	29	27	33	28	7
6	48	44	43	42	40	37	50		18	18	38	33		23	30	24	6
5	44	39	39	38	36	33	45	28	14	13	34	29	19	19	26	20	5
4	40	35	34	34	32	29	41		10	9	30	24		15	22	16	4
3	36	31	30		28	24	37	18	5	4	26	20	10	11	19		3
2	32	26	26		24	20	33	13	1	0	21	15	5	7			2
1	28	22	22		20	16	29	8	0	0	17	11	0				1
0	18				12	25	4		0	13				8	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 18-20 years

Age: 70-74 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	89		87		100		100				100	100	100	93		19	
18	85	91	83				96				96	95	99	89		18	
17	81	87	80		92		92			89		91		85		17	
16	77	83	76			81	87	79	82			86	90	81		16	
15	73	78	73		82		82	76			82					15	
14	69	74	69	67	77	72	78	72	73		78	77	81	73		14	
13	64	70	66		72		73	68		72		73	77	69	60	13	
12	60	66	62	61	67	64	69	64	64		69	68	72		56	12	
11	56	61	59	58	61	59	64	60	60	64	64	64	68	61	52	11	
10	52	57	55	55	56	55	59	57	55		60	59	64	57	49	10	
9	48	53	51	52	51	51	55	53	51	56	55	55	59	53	45	9	
8	43	49	48	49	46	47	50	49	46		51	50	55	49	41	8	
7	39	44	44	46	41	43	46	45	42	48	46	46	50	45	38	7	
6	35	40	41	43		38	41	41	37	44		41	46	41	34	6	
5	31	36	37	40	31	34	37	38	33	39	37	37	41	37	30	5	
4	27	31	34	36		30	32	34	28		35		32	37	33	27	4
3	22	27	30	33	21	26	27		24		31		28	33	29	23	3
2	18	23	27	30	16	21	23	26	19	27		23	28	25	19	2	
1	14		23	27	11	17	18	22	15					21		1	
0				24		13	14	19								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	82	84	96	92	100	100	96	100	100				91	92	19
18	79	81	91	86	97	100	92	100	98				87	88	18
17	75	77	85	81	93	96	88	98	94				83	84	17
16	72	73	79	76	89	92	84	93	89				80	80	16
15	68	70	74	70	85	88	80	89	85		78		76	76	15
14	65	66	68	65	81	83	76	84	80	75			72	72	14
13	62	62	63	60	77	79	72	79	76		72		68	68	13
12	58	59	57	54	73	75	68	75	71	68			64	65	12
11	55	55	52	49	69	70	64	70	67		65		66	60	11
10	51	52	46	44	64	66	60	65	62	61			62	63	10
9	48	48	41	39	60	62	56	61	57	57			60	52	9
8	44	44	35	33	56	58	52	56	53	53			55	49	8
7	41	41	29	28	52	53	48	51	48		50		52	54	7
6	37	37	24	23	48	49	43	47	44		46		49	51	6
5	34	34	18	17	44	45	39	42	39	42			45	48	5
4	31	30	13	12	40	40	35	37	35		39		42	45	4
3	27	26	7	7	36	36	31	32	30		35		38	42	3
2	24	23	2	1	32	32	27	28	26		32		35	39	2
1	20	19	0	0	28	27	23	23	21		28		32	36	1
0	17	15	0	0	23	23			18				21	21	0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	67	100		100	100	89	84	92	77						19	
18	63	64	100	100	96	85	81	88	74	74				96	18	
17	58	59	100	98	91	81	77	84			85				17	
16	54	55	99	94	87	77	73	80	66		81				16	
15	50	51	93	90	83	73	69	76	62	64	77	72	62	83	15	
14	46	46	88	85	79	69	66	72	58	61	73		59		14	
13	41	42	83	81	74	65	62	68	54	57	69	65		74	13	
12	37	38	78	76	70	61	58	64	50		66	62	53	70	12	
11	33	33	73	72	66	58	54	60	46	51	62	58		66	11	
10	29	29	68	68	62	54	51	56	42	48	58	54	47	61	10	
9	25	25	63	63	57	50	47	52		45	54	51	44	57	9	
8	20	20	57	59	53	46	43	48	34	41	51	47	42	53	8	
7	16	16	52	55	49	42	39	44	31		47	44	39	48	7	
6	12	12	47	50	45	38	36	40	27	35	43	40	36	44	6	
5	8	7	42	46	41	34	32	36	23	32	39	37	33	40	5	
4	3	3	37	41	36	30	28	32		19		35	33	30	35	4
3	0	0	32	37	32	27	24	28	15	25	32	29	27	31	3	
2	0	0	27	33	28	23	21	24	11		28	26	25	27	2	
1	0	0	21	28	24	19	17	21		19	24	22	22	22	1	
0	0	0	16	24				17		15	20	19	19		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		99		93		100		71							19	
18	99	98	95	86			100		66							18	
17	95	94	90	82	85		98		62	68			64	70		17	
16	91	90	86	79	81	79	94		58	63	78		60	67	63	16	
15	87	85	82	75	77	75	90		54	59			56	63		15	
14	83	81	78	71	73	71	85		50	54	69		52	59	55	14	
13	79	76	74	68	69	67	81		46	50	68	65		48	56	51	13
12	75	72	70	64	65	63	77		41	45			53	44	52	47	12
11	71	68	65	61	61	59	73	57	37	41	59	56		40	48	43	11
10	67	63	61	57	57	54	69		33	36	55	52		36	45	39	10
9	63	59	57	54	53	50	65	47	29	31	51	47	39	32	41	35	9
8	59	55	53	50	50	46	60		25	27	47	43		28	37	31	8
7	55	50	49	46	46	42	56	38	21	22	42	38	29	24	34	27	7
6	51	46	45	43	42	38	52		17	18	38	34		20	30	23	6
5	47	42	40	39	38	34	48	28	12	13	34	29	19	16	26	20	5
4	43	37	36	36	34	30	44		8	9	30	25		12	23	16	4
3	39	33	32		30	26	40	18	4	4	26	20	10	8	19		3
2	36	29	28		26	22	35	14	0	0	21	16	5	4			2
1	32	24	24		22	17	31	9	0	0	17	11	0				1
0	20				13	27	4		0	13				8	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 18-20 years

Age: 75-79 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	90		88		100		100				100	100	100	94		19
18	86	92	84				99				97	97	100	90		18
17	82	88	80		93		94				91	92		86		17
16	78	84	77			82	90	82	84			88	92	82		16
15	73	80	73		83		85	78				84				15
14	69	75	70	68	78	74	81	75	75		79	79	83	74		14
13	65	71	66		73		76	71		74		74	79	70	60	13
12	61	67	63	61	68	65	72	67	66		70	70	74	56		12
11	57	62	59	58	63	61	67	63	61	66	66	65	70	62	52	11
10	52	58	56	55	58	57	62	59	57		61	61	65	58		10
9	48	54	52	52	53	53	58	55	52	58	57	56	61	54		9
8	44	50	49	49	48	48	53	52	48		52	52	57	51		8
7	40	45	45	46	43	44	49	48	43	49	48	47	52	47		7
6	36	41	42	43		40	44	44	39	45	43	48	43	34		6
5	31	37	38	40	32	36	39	40	34	41	39	38	43	39		5
4	27	32	34	37		32	35	36	30		37	34	39	35		4
3	23	28	31	34	22	27	30		25		33	29	34	31		3
2	19	24	27	31	17	23	26	29	21		29	24	30	27		2
1	15		24	28	12	19	21	25	16		25			23		1
0				24		15	17	21								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	85	98	94	100	100	98	100	100				93	94	19
18	80	82	93	88	100	100	94	100	100				89	90	18
17	77	78	87	83	96	98	90	100	96				85	86	17
16	73	75	81	78	91	94	86	96	92				81	82	16
15	70	71	76	72	87	89	82	91	87				77	78	15
14	66	67	70	67	83	85	78	86	82	79			73	74	14
13	63	64	65	62	79	81	74	82	78				69	70	13
12	59	60	59	56	75	77	70	77	73	71			66	66	12
11	56	57	54	51	71	72	66	72	69				69	62	11
10	52	53	48	46	67	68	62	68	64	64	65	66	58	58	10
9	49	49	43	40	63	64	57	63	60	60	62	63	54	54	9
8	46	46	37	35	59	59	53	58	55	57	58	60	50	50	8
7	42	42	31	30	55	55	49	54	51	53	55	57	46	46	7
6	39	38	26	25	50	51	45	49	46	49	52	54	42	42	6
5	35	35	20	19	46	46	41	44	42	46	48	51	38	38	5
4	32	31	15	14	42	42	37	40	37	42	45	48	35	34	4
3	28	28	9	9	38	38	33	35	32	38	41	45	31	31	3
2	25	24	4	3	34	33	29	30	28	35	38	42	27	27	2
1	21	20	0	0	30	29	25	25	23	31	35	39	23	23	1
0	18	17	0	0	26	25		21							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Male

Education: 18-20 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	67	100		100	100	90	86	95	77						19
18	63	62	100	100	98	86	82	91	74	74				98	18
17	58	58	100	100	94	82	79	87			86				17
16	54	54	100	96	89	78	75	83	66		82				16
15	50	49	96	92	85	74	71	79	62	64	78	73	62	85	15
14	46	45	91	88	81	71	67	75	58	61	74		60		14
13	41	41	86	83	77	67	64	71	54	58	71	66		76	13
12	37	36	81	79	72	63	60	67	50		67	62	54	72	12
11	33	32	76	75	68	59	56	63	46	52	63	58		68	11
10	29	28	71	70	64	55	52	59	42	48	59	55	48	63	10
9	25	23	66	66	60	51	49	55		45	56	51	45	59	9
8	20	19	60	61	56	47	45	51	34	42	52	48	43	55	8
7	16	15	55	57	51	43	41	47	31		48	44	40	50	7
6	12	10	50	53	47	39	37	43	27	35	44	41	37	46	6
5	8	6	45	48	43	36	34	39	23	32	40	37	34	42	5
4	3	2	40	44	39	32	30	35	19		37	33	31	37	4
3	0	0	35	40	34	28	26	31	15	26	33	30	28	33	3
2	0	0	30	35	30	24	22	27	11		29	26	25	29	2
1	0	0	25	31	26	20	19	24		19	25	23	23	24	1
0	0	0	19	27				20		16	22	19	20		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100			93		100		71							19	
18	99	100	97	87			100		66							18	
17	95	96	93	83	85		100		62	68				60	71	17	
16	91	92	88	80	81	80	97		58	63	79			56	67	63	16
15	87	88	84	76	77	76	92		54	59				52	63		15
14	83	83	80	73	73	72	88		50	54	70			48	60	55	14
13	79	79	76	69	69	68	84		46	50	68	65		44	56	51	13
12	75	75	72	66	65	64	80		41	45			53	40	52	47	12
11	71	70	67	62	61	60	76	57	37	41	59	57		36	49	43	11
10	67	66	63	59	57	56	72		33	36	55	52		32	45	39	10
9	63	62	59	55	53	52	67	48	29	31	51	48	39	28	41	35	9
8	59	57	55	51	50	48	63		25	27	47	43		24	38	31	8
7	55	53	51	48	46	43	59	38	21	22	42	39	29	20	34	27	7
6	51	49	47	44	42	39	55		17	18	38	34		16	30	23	6
5	47	44	42	41	38	35	51	29	12	13	34	30	20	12	27	19	5
4	43	40	38	37	34	31	46		8	9	30	25		8	23	15	4
3	39	36	34		30	27	42	19	4	4	26	21	10	4	19		3
2	36	31	30		26	23	38	14	0	0	21	16	5	0			2
1	32	27	26		22	19	34	9	0	0	17	12	0				1
0	23				15	30	5		0	13				8	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Male

Education: 18-20 years

Age: 80-85 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	91		88		100		100				100	100	100	96		19	
18	87	94	85				100				99	99	100	92		18	
17	82	89	81		94		98				93	94		88		17	
16	78	85	78			84	93	85	86			90	94	84		16	
15	74	81	74		84		89	81				85				15	
14	70	77	71	68	79	76	84	78	77		81	81	85	76		14	
13	66	72	67		74		80	74			76	76	81	72	60	13	
12	61	68	64	62	69	67	75	70	68		72	71	76	56		12	
11	57	64	60	59	64	63	70	66	63		68	67	72	64	52	11	
10	53	59	57	56	59	59	66	62	59			63	62	67	60	49	10
9	49	55	53	53	54	55	61	59	54		60	58	58	63	56	45	9
8	45	51	49	49	49	50	57	55	50			54	53	59	52	41	8
7	40	47	46	46	44	46	52	51	45		51	49	49	54	48	38	7
6	36	42	42	43		42	47	47	41			47	44	50	44	34	6
5	32	38	39	40	34	38	43	43	36		43	40	40	45	40	30	5
4	28	34	35	37		34	38	40	32			39	35	41	36	27	4
3	24	29	32	34	24	29	34		27			35	31	36	32	23	3
2	20	25	28	31	19	25	29	32	23			31	26	32	28	19	2
1	15		25	28	14	21	25	28	18			27			24		1
0				25		17	20	24								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	87	100	96	100	100	100	100	100				94	95	19
18	81	83	95	91	100	100	96	100	100				90	92	18
17	78	80	90	85	98	99	92	100	99				87	88	17
16	74	76	84	80	94	95	88	99	94				83	84	16
15	71	72	78	75	90	91	84	94	89				84	79	15
14	68	69	73	69	86	86	80	89	85	83			75	76	14
13	64	65	67	64	82	82	76	84	80			79	78	71	13
12	61	62	62	59	78	78	72	80	76	75			67	68	12
11	57	58	56	53	74	74	68	75	71			72	72	63	11
10	54	54	51	48	69	69	64	70	67	68	69	69	59	60	10
9	50	51	45	43	65	65	59	66	62	64	65	66	56	56	9
8	47	47	39	38	61	61	55	61	58	61	62	63	52	52	8
7	43	43	34	32	57	56	51	56	53	57	58	60	48	48	7
6	40	40	28	27	53	52	47	52	49	53	55	57	44	44	6
5	37	36	23	22	49	48	43	47	44	50	52	54	40	40	5
4	33	33	17	16	45	43	39	42	39	46	48	51	36	36	4
3	30	29	12	11	41	39	35	37	35	42	45	48	32	32	3
2	26	25	6	6	37	35	31	33	30	39	41	45	28	28	2
1	23	22	1	0	32	30	27	28	26	35	38	42	25	24	1
0	19	18	0	0	28	26		23							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	100	100	100	95	91	93	93	93	91	87	80				19
18	98	100	96	91	87	89	89	89						88	18
17	94	98	91	87	83	85	85	85			89				17
16	89	94	85	82	78	81	81	81	80		85				16
15	85	90	80	78	74	77	78	77	76	70	81	74	62	75	15
14	81	85	75	74	70	74	74	73	72	67	78		59		14
13	77	81	70	69	66	70	70	69	68	64	74	67		66	13
12	72	77	65	65	61	66	66	65	64		70	63	54	62	12
11	68	72	60	60	57	62	63	61	60	57	66	60		57	11
10	64	68	55	56	53	58	59	57	56	54	62	56	48	53	10
9	60	64	49	52	49	54	55	53		51	59	53	45	49	9
8	55	59	44	47	45	50	51	49	48	48	55	49	42	44	8
7	51	55	39	43	40	46	47	46	44		51	46	39	40	7
6	47	51	34	39	36	43	44	42	40	41	47	42	37	36	6
5	43	47	29	34	32	39	40	38	37	38	44	38	34	31	5
4	38	42	24	30	28	35	36	34	33		40	35	31	27	4
3	34	38	19	25	23	31	32	30	29	32	36	31	28	23	3
2	30	34	14	21	19	27	29	26	25		32	28	25	18	2
1	26	29	8	17	15	23	25	22		25	29	24	22	14	1
0	25	25	3	12				18	22	25	21	19			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93		89		95		91		100							19	
18	89	99	85	77			87		99							18	
17	85	95	81	73	87		82		94	96			97	83		17	
16	81	91	77	70	83	73	78		90	91	96		93	79	83	16	
15	77	86	72	66	79	69	74		86	87			89	76		15	
14	73	82	68	63	75	65	70		82	82	87		85	72	75	14	
13	69	78	64	59	71	61	66		78	77	79	83		81	68	71	13
12	65	73	60	56	67	56	61		74	73		63	77	65	67	12	
11	61	69	56	52	64	52	57	60	69	68	70	74		73	61	63	11
10	57	65	52	49	60	48	53		65	64	66	70		69	57	59	10
9	53	60	47	45	56	44	49	51	61	59	62	65	48	65	54	56	9
8	49	56	43	41	52	40	45		57	55	58	61		61	50	52	8
7	45	52	39	38	48	36	41	41	53	50	53	56	39	57	46	48	7
6	41	47	35	34	44	32	36		49	46	49	52		53	43	44	6
5	37	43	31	31	40	28	32	32	45	41	45	47	29	49	39	40	5
4	33	39	27	27	36	24	28		40	37	41	43		45	35	36	4
3	30	34	22		32	20	24	22	36	32	36	38	20	41	32		3
2	26	30	18		28	15	20	17	32	27	32	34	15	37			2
1	22	25	14		24	11	16	13	28	23	28	29	10				1
0	21	25			7	11	8		18	24			21	20		0	

(continued)

APPENDIX E (continued)

Sex: Female
Education: 7-8 years
Age: 20-34 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		100		95		90				92	100	99	88		19
18	96	100	96				85				87	96	95	84		18
17	92	96	92		85		81				78	92		80		17
16	88	92	89				75	76	71	78		87	86	76		16
15	84	88	85		75		71	67				74				15
14	80	83	82	68	70	67	67	63	69		69	78	77	68		14
13	75	79	78		65		62	60			61	74	73	64	61	13
12	71	75	75	62	60	58	58	56	60		60	69	68	57	57	12
11	67	71	71	59	55	54	53	52	56		53	56	65	64	56	11
10	63	66	68	56	50	50	49	48	51		51	60	60	52	50	10
9	59	62	64	53	45	46	44	44	47		45	47	56	55	48	9
8	55	58	61	50	39	41	39	41	42		42	51	51	44	42	8
7	50	54	57	46	34	37	35	37	38		37	38	47	46	41	7
6	46	49	54	43		33	30	33	33		33	42	42	37	35	6
5	42	45	50	40	24	29	26	29	29		28	29	38	37	33	5
4	38	41	47	37		24	21	25	24		24	33	33	29	27	4
3	34	36	43	34	14	20	16		20		20	28	29	25	24	3
2	29	32	39	31	9	16	12	18	15		16	24	24	21	20	2
1	25		36	28	4	12	7	14	11		12			17		1
0				25		8	3	10								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	87	88	100	100	91	95	89	93	89				84	81	19
18	84	84	100	99	86	91	85	88	84				80	77	18
17	81	80	96	94	82	87	81	83	80				76	73	17
16	77	77	90	88	78	82	77	79	75				72	69	16
15	74	73	85	83	74	78	73	74	71				63	68	15
14	70	69	79	78	70	74	69	69	66	61			64	62	14
13	67	66	73	72	66	69	65	65	62		59	57	61	58	13
12	63	62	68	67	62	65	61	60	57	53			57	54	12
11	60	59	62	62	58	61	56	55	52	52	51	53	50		11
10	56	55	57	56	54	56	52	50	48	46	49	48	49	46	10
9	53	51	51	51	50	52	48	46	43	42	46	45	45	42	9
8	49	48	46	46	45	48	44	41	39	39	42	42	41	38	8
7	46	44	40	40	41	43	40	36	34	35	39	39	37	34	7
6	43	41	34	35	37	39	36	32	30	31	35	36	33	30	6
5	39	37	29	30	33	35	32	27	25	28	32	33	30	26	5
4	36	33	23	24	29	30	28	22	21	24	29	30	26	22	4
3	32	30	18	19	25	26	24	18	16	20	25	27	22	18	3
2	29	26	12	14	21	22	20	13	12	17	22	24	18	14	2
1	25	22	7	9	17	18	16	8	7	13	18	21	14	10	1
0	22	19	1	3	13	13		4							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	100	100	100	100	95	95	93	94	91	87	81				19
18	96	100	100	96	91	92	89	90						91	18
17	92	96	96	91	87	88	86	86			91				17
16	88	92	91	87	83	84	82	82	80		87				16
15	83	88	86	83	78	80	78	78	76	71	84	75	64	78	15
14	79	83	81	78	74	76	74	74	72	68	80		61		14
13	75	79	76	74	70	72	71	70	68	65	76	68		69	13
12	71	75	70	69	66	68	67	66	64		72	64	55	65	12
11	66	70	65	65	61	64	63	62	60	58	68	61		61	11
10	62	66	60	61	57	60	59	58	56	55	65	57	50	56	10
9	58	62	55	56	53	57	56	54		52	61	54	47	52	9
8	54	57	50	52	49	53	52	50	48	49	57	50	44	48	8
7	50	53	45	48	44	49	48	46	44		53	46	41	43	7
6	45	49	40	43	40	45	44	42	40	42	50	43	38	39	6
5	41	44	34	39	36	41	41	38	37	39	46	39	35	35	5
4	37	40	29	35	32	37	37	35	33		42	36	32	30	4
3	33	36	24	30	28	33	33	31	29	33	38	32	30	26	3
2	28	31	19	26	23	29	29	27	25		34	29	27	22	2
1	24	27	14	21	19	26	26	23		26	31	25	24	17	1
0	23	29	9	17				19		23	27	21	21		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97		93		97		96		100							19	
18	93	99	89	80			91		97							18	
17	89	94	84	76	89		87		93	96			97	84		17	
16	85	90	80	72	85	75	83		89	91	96		93	80	83	16	
15	81	86	76	69	81	71	79		85	87			89	76		15	
14	77	81	72	65	77	67	75		81	82	87		85	73	75	14	
13	73	77	68	62	73	63	71		76	77	79	82		81	69	71	13
12	69	72	64	58	69	59	66		72	73		63	77	65	67	12	
11	65	68	59	55	65	55	62	61	68	68	70	73		73	62	63	11
10	61	64	55	51	61	51	58		64	64	66	69		69	58	59	10
9	57	59	51	47	57	47	54	52	60	59	62	65	49	65	54	55	9
8	53	55	47	44	53	42	50		56	55	57	60		61	51	51	8
7	49	51	43	40	50	38	46	42	52	50	53	56	39	57	47	47	7
6	45	46	39	37	46	34	41		47	46	49	51		53	43	43	6
5	41	42	34	33	42	30	37	33	43	41	45	47	29	49	40	39	5
4	37	38	30	30	38	26	33		39	37	41	42		45	36	35	4
3	33	33	26		34	22	29	23	35	32	36	38	20	41	32		3
2	29	29	22		30	18	25	18	31	27	32	33	15	37			2
1	25	25	18		26	14	21	14	27	23	28	29	10				1
0	20				10	16	9		18	24			21	20		0	

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 7-8 years
Age: 35-39 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		100		97		92				95	100	100	91		19
18	98	100	97				88				90	99	99	87		18
17	93	99	94		87		83			81		95		83		17
16	89	94	90			79	79	73	82			90	90	79		16
15	85	90	87		77		74	69			77					15
14	81	86	83	69	72	70	69	66	73		72	81	81	71		14
13	77	81	80		67		65	62		65		77	77	67	61	13
12	72	77	76	62	62	62	60	58	64		63	72	72	57		12
11	68	73	73	59	57	57	56	54	59	57	59	68	68	59	53	11
10	64	69	69	56	52	53	51	50	55		54	63	63	55	50	10
9	60	64	66	53	47	49	46	47	50	48	50	59	59	51	46	9
8	56	60	62	50	42	45	42	43	46		45	54	54	47	42	8
7	51	56	59	47	37	41	37	39	41	40	41	50	50	43	39	7
6	47	51	55	44		36	33	35	37		36	45	46	39	35	6
5	43	47	51	41	27	32	28	31	32		32	41	41	35	31	5
4	39	43	48	38		28	24	28	28		28	36	37	31	27	4
3	35	39	44	35	17	24	19		23		24	31	32	27	24	3
2	31	34	41	32	12	19	14	20	19		19	27	28	23	20	2
1	26		37	29	7	15	10	16	14		15			19		1
0				25		11	5	12								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	90	90	100	100	95	99	93	98	93				87	84	19	
18	86	87	100	100	91	95	88	93	89				83	81	18	
17	83	83	96	94	87	91	84	88	84				79	77	17	
16	79	79	91	89	83	86	80	83	80				75	73	16	
15	76	76	85	84	79	82	76	79	75				65	71	15	
14	73	72	80	78	75	78	72	74	71	63			67	65	14	
13	69	68	74	73	71	73	68	69	66		60	59	64	61	13	
12	66	65	69	68	67	69	64	65	62	56		60	57		12	
11	62	61	63	62	62	65	60	60	57		53	53	56	53		11
10	59	58	57	57	58	60	56	55	52	49	49	50	52	49		10
9	55	54	52	52	54	56	52	51	48	45	46	47	48	45		9
8	52	50	46	46	50	52	48	46	43	42	43	44	44	41		8
7	48	47	41	41	46	47	44	41	39	38	39	41	40	37		7
6	45	43	35	36	42	43	40	36	34	34	36	38	36	33		6
5	42	39	30	30	38	39	36	32	30	31	33	35	33	29		5
4	38	36	24	25	34	34	32	27	25	27	29	32	29	25		4
3	35	32	19	20	30	30	28	22	21	23	26	29	25	21		3
2	31	29	13	15	25	26	24	18	16	20	22	26	21	17		2
1	28	25	7	9	21	21	20	13	12	16	19	23	17	13		1
0	24	21	2	4	17	17		8								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	100	100		100	97	97	94	95	91						19
18	96	99	100	98	93	93	90	91	87	82				93	18
17	92	95	99	94	89	89	86	87			92				17
16	88	91	94	89	85	85	82	83	80		88				16
15	83	86	89	85	80	81	79	79	76	72	85	75	64	80	15
14	79	82	83	81	76	77	75	75	72	69	81		61		14
13	75	78	78	76	72	73	71	71	68	65	77	68		71	13
12	71	73	73	72	68	69	67	67	64		73	65	55	67	12
11	66	69	68	67	63	66	63	63	60	59	69	61		62	11
10	62	65	63	63	59	62	60	59	56	56	66	57	49	58	10
9	58	61	58	59	55	58	56	55		52	62	54	46	54	9
8	54	56	53	54	51	54	52	51	48	49	58	50	44	49	8
7	50	52	47	50	47	50	48	47	44		54	47	41	45	7
6	45	48	42	46	42	46	45	43	40	43	51	43	38	41	6
5	41	43	37	41	38	42	41	39	37	40	47	40	35	36	5
4	37	39	32	37	34	38	37	35	33		43	36	32	32	4
3	33	35	27	32	30	35	33	31	29	33	39	33	29	28	3
2	28	30	22	28	25	31	30	27	25		35	29	27	23	2
1	24	26	17	24	21	27	26	23		27	32	25	24	19	1
0		22	12	19				19		23	28	22	21		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97		95		97		98		100							19	
18	93	100	90	81			94		97							18	
17	89	97	86	77	89		90		93	96			97	84		17	
16	85	92	82	74	85	77	86		89	91	96		93	80	83	16	
15	81	88	78	70	81	72	81		85	87			89	77		15	
14	77	83	74	67	77	68	77		81	82	87		85	73	75	14	
13	73	79	70	63	73	64	73		76	77	83		81	69	71	13	
12	69	75	65	59	69	60	69		72	73		63	77	66	67	12	
11	65	70	61	56	65	56	65	62	68	68	70	74		73	62	63	11
10	61	66	57	52	61	52	61		64	64	66	69		69	58	59	10
9	57	62	53	49	57	48	56	52	60	59	62	65	49	65	55	55	9
8	53	57	49	45	53	44	52		56	55	57	61		61	51	51	8
7	49	53	45	42	50	40	48	43	52	50	53	56	39	57	47	47	7
6	45	49	40	38	46	35	44		47	46	49	52		53	44	43	6
5	41	44	36	34	42	31	40	33	43	41	45	47	30	49	40	39	5
4	37	40	32	31	38	27	36		39	37	41	43		45	36	35	4
3	33	36	28		34	23	31	24	35	32	36	38	20	41	33		3
2	29	31	24		30	19	27	19	31	27	32	34	15	37			2
1	25	27	20		26	15	23	14	27	23	28	29	10				1
0		23			11	19	9		18	24			22	19		0	

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 7-8 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		100		98		94				96	100	100	92		19
18	98	100	98				89				91	100	100	88		18
17	94	100	95		88		85				83		96		84	17
16	90	95	91				80	80	75	83			92	92	80	16
15	86	91	88		77		75	71				78				15
14	81	87	84	69	72	72	71	67	74		74	83	83	72		14
13	77	83	80		67		66	63			67		78	78	68	13
12	73	78	77	63	62	63	62	59	65			65	74	74	59	12
11	69	74	73	60	57	59	57	56	61		58	60	69	69	60	11
10	65	70	70	57	52	55	53	52	56			56	65	65	56	10
9	60	65	66	54	47	51	48	48	52		50	51	60	61	52	9
8	56	61	63	50	42	47	43	44	47			47	56	56	48	8
7	52	57	59	47	37	42	39	40	43		42	42	51	52	44	7
6	48	53	56	44		38	34	37	38			38	47	47	40	6
5	44	48	52	41	27	34	30	33	34		34	33	42	43	36	5
4	40	44	49	38		30	25	29	29			29	38	39	32	4
3	35	40	45	35	17	25	20		25			25	33	34	28	3
2	31	35	42	32	12	21	16	21	20			21	28	30	24	2
1	27		38	29	7	17	11	18	16		17			20		1
0				26		13	7	14								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	91	91	100	100	98	100	94	100	96				88	86	19
18	88	88	100	100	94	97	90	95	91				84	82	18
17	84	84	97	95	89	93	86	91	86				81	78	17
16	81	81	91	89	85	89	82	86	82				77	74	16
15	77	77	86	84	81	84	78	81	77				66	73	15
14	74	73	80	79	77	80	74	76	73	65			69	66	14
13	70	70	75	74	73	76	70	72	68				62	60	13
12	67	66	69	68	69	71	66	67	64	58			61	58	12
11	63	62	64	63	65	67	62	62	59				55	54	11
10	60	59	58	58	61	63	58	58	55	51	52	51	53	50	10
9	57	55	52	52	57	58	54	53	50	47	49	48	50	47	9
8	53	52	47	47	52	54	50	48	46	43	45	45	46	43	8
7	50	48	41	42	48	50	46	44	41	40	42	42	42	39	7
6	46	44	36	36	44	45	42	39	36	36	38	39	38	35	6
5	43	41	30	31	40	41	38	34	32	32	35	36	34	31	5
4	39	37	25	26	36	37	34	29	27	29	32	33	30	27	4
3	36	34	19	20	32	32	30	25	23	25	28	30	26	23	3
2	32	30	14	15	28	28	25	20	18	21	25	27	22	19	2
1	29	26	8	10	24	24	21	15	14	18	21	24	18	15	1
0	25	23	2	4	20	19		11							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	99	100		100	99	98	94	95	91						19	
18	94	98	100	100	95	94	90	92	87	82				95	18	
17	90	94	100	96	91	90	87	88			93				17	
16	86	90	96	92	87	86	83	84	80		89				16	
15	82	85	91	87	82	82	79	80	76	72	86	76	64	81	15	
14	78	81	86	83	78	78	75	76	72	69	82		62		14	
13	73	77	81	79	74	75	72	72	68	66	78	69		73	13	
12	69	72	76	74	70	71	68	68	64		74	65	56	68	12	
11	65	68	71	70	66	67	64	64	60	59	71	61		64	11	
10	61	64	66	65	61	63	60	60	56	56	67	58	50	60	10	
9	56	59	60	61	57	59	57	56		53	63	54	47	55	9	
8	52	55	55	57	53	55	53	52	48	50	59	51	44	51	8	
7	48	51	50	52	49	51	49	48	44		55	47	42	47	7	
6	44	46	45	48	44	47	45	44	40	43	52	44	39	42	6	
5	39	42	40	44	40	44	42	40	37	40	48	40	36	38	5	
4	35	38	35	39	36	40	38	36		33		44	36	33	34	4
3	31	34	30	35	32	36	34	32	29	34	40	33	30	29	3	
2	27	29	25	30	27	32	30	28	25		37	29	27	25	2	
1	23	25	19	26	23	28	26	24		27	33	26	25	21	1	
0	21	14		22				20		24	29	22	22		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		96		99		100		100							19	
18	96	100	92	82			96		96							18	
17	92	99	88	79	91		92		92	96				97	84	17	
16	88	94	84	75	87	78	88		88	91	97			93	81	83	16
15	84	90	80	71	83	74	84		83	87				89	77		15
14	80	86	76	68	79	70	80		79	82	88			85	73	75	14
13	76	81	71	64	75	65	76		75	77	79	83		81	70	71	13
12	72	77	67	61	71	61	71		71	73			63	77	66	67	12
11	68	73	63	57	67	57	67	62	67	68	70	75		73	62	63	11
10	64	68	59	54	63	53	63		63	64	66	70		69	59	59	10
9	60	64	55	50	59	49	59	53	59	59	62	66	49	65	55	55	9
8	56	60	51	46	55	45	55		54	55	57	61		61	51	51	8
7	52	55	46	43	51	41	51	43	50	50	53	57	39	57	48	47	7
6	48	51	42	39	47	37	46		46	46	49	52		53	44	43	6
5	44	47	38	36	43	33	42	34	42	41	45	48	30	49	40	39	5
4	40	42	34	32	39	28	38		38	37	41	43		45	37	35	4
3	36	38	30		36	24	34	24	34	32	36	39	20	41	33		3
2	32	34	26		32	20	30	19	29	27	32	34	15	37			2
1	28	29	21		28	16	25	15	25	23	28	30	10				1
0	25				12	21	10		18	24				22	19		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 7-8 years
Age: 45-49 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		100		99		96				97	100	100	93		19	
18	100	100	99				91				93	100	100	89		18	
17	96	100	95		89		86			85		98		85		17	
16	91	96	92			82	82	76	85			93	93	81		16	
15	87	92	88		79		77	72			79					15	
14	83	88	85	69	74	74	73	69	76		75	84	85	73		14	
13	79	84	81		69		68	65			68		80	80	69	63	13
12	75	79	78	63	64	65	63	61	67		66	75	76		59	12	
11	70	75	74	60	58	61	59	57	62		60	61	71	71	61	55	11
10	66	71	71	57	53	57	54	53	58		57	66	67	57	52	10	
9	62	66	67	54	48	53	50	50	53	52	52	62	62	53	48	9	
8	58	62	64	51	43	48	45	46	49		48	57	58	49	44	8	
7	54	58	60	48	38	44	41	42	44		44	43	53	54	45	41	7
6	50	54	56	45		40	36	38	40		39	48	49	41	37	6	
5	45	49	53	42	28	36	31	34	35		35	35	44	45	37	33	5
4	41	45	49	38		31	27	31	31		31		39	40	33	29	4
3	37	41	46	35	18	27	22		26		27		35	36	29	26	3
2	33	37	42	32	13	23	18	23	22		23		30	31	25	22	2
1	29		39	29	8	19	13	19	17		19				21		1
0				26		15	8	15								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	93	100	100	100	100	96	100	98				90	88	19
18	89	89	100	100	96	100	92	98	93				86	84	18
17	85	85	98	95	92	95	88	93	89				82	80	17
16	82	82	92	90	88	91	84	88	84				78	76	16
15	78	78	87	85	84	87	80	84	80				68	74	15
14	75	75	81	79	79	82	76	79	75	67			70	68	14
13	72	71	75	74	75	78	72	74	71		64	62	67	64	13
12	68	67	70	69	71	74	68	69	66	60			63	60	12
11	65	64	64	64	67	70	64	65	61	57	56	59	56	56	11
10	61	60	59	58	63	65	60	60	57	53	54	53	55	52	10
9	58	57	53	53	59	61	56	55	52	49	50	50	51	48	9
8	54	53	48	48	55	57	52	51	48	45	47	47	47	44	8
7	51	49	42	42	51	52	48	46	43	42	44	44	43	40	7
6	47	46	36	37	47	48	44	41	39	38	40	41	39	36	6
5	44	42	31	32	42	44	39	37	34	34	37	38	35	32	5
4	40	38	25	26	38	39	35	32	30	31	34	35	32	28	4
3	37	35	20	21	34	35	31	27	25	27	30	32	28	24	3
2	34	31	14	16	30	31	27	22	21	23	27	29	24	20	2
1	30	28	9	10	26	26	23	18	16	20	23	26	20	16	1
0	27	24	3	5	22	22		13							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	99	100		100	100	99	95	97	91						19
18	94	97	100	100	97	95	91	93	87	83				96	18
17	90	93	100	98	93	91	87	89			94				17
16	86	89	99	94	89	87	83	85	80		91				16
15	82	84	94	90	85	84	80	81	76	73	87	76	65	83	15
14	78	80	89	85	80	80	76	77	72	70	83		62		14
13	73	76	84	81	76	76	72	73	68	66	79	69		74	13
12	69	71	79	76	72	72	68	69	64		75	65	57	70	12
11	65	67	74	72	68	68	65	65	60	60	72	62		66	11
10	61	63	68	68	63	64	61	61	56	57	68	58	51	61	10
9	56	58	63	63	59	60	57	57		53	64	55	48	57	9
8	52	54	58	59	55	56	53	53	48	50	60	51	45	53	8
7	48	50	53	55	51	53	50	49	44		57	48	42	48	7
6	44	45	48	50	46	49	46	45	40	44	53	44	40	44	6
5	39	41	43	46	42	45	42	41	37	41	49	40	37	40	5
4	35	37	38	42	38	41	38	37	33		45	37	34	35	4
3	31	32	32	37	34	37	35	33	29	34	41	33	31	31	3
2	27	28	27	33	30	33	31	29	25		38	30	28	27	2
1	23	24	22	28	25	29	27	25		28	34	26	25	22	1
0	19	17		24				21		24	30	23	22		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		98		99		100		100							19	
18	96	100	94	83			99		96							18	
17	92	100	90	80	91		95		92	96				96	85	17	
16	88	97	86	76	87	79	91		88	91	97		92	81	83	16	
15	84	92	82	73	83	75	86		83	87			88	77		15	
14	80	88	77	69	79	71	82		79	82	89		84	74	75	14	
13	76	84	73	66	75	67	78		75	77	79	84		80	70	71	13
12	72	79	69	62	71	63	74		71	73		63	76	66	67	12	
11	68	75	65	58	67	58	70	63	67	68	70	75		72	63	63	11
10	64	71	61	55	63	54	66		63	64	66	71		68	59	59	10
9	60	66	57	51	59	50	61	53	59	59	62	66	49	64	55	55	9
8	56	62	52	48	55	46	57		54	55	57	62		60	52	51	8
7	52	58	48	44	51	42	53	44	50	50	53	57	39	56	48	47	7
6	48	53	44	41	47	38	49		46	46	49	53		52	44	43	6
5	44	49	40	37	43	34	45	34	42	41	45	48	30	48	41	39	5
4	40	45	36	33	39	30	40		38	37	41	44		44	37	35	4
3	36	40	32		36	26	36	25	34	32	36	39	20	40	33		3
2	32	36	27		32	22	32	20	29	27	32	35	15	36			2
1	28	32	23		28	17	28	15	25	23	28	31	10				1
0	27				13	24	10		18	24				22	19		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 7-8 years
Age: 50-54 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		100		100		97				99	100	100	94		19
18	99	100	100				93				94	100	100	90		18
17	95	100	96		90		88			86		99		86		17
16	91	98	93				84	84	78		87		95	95	82	16
15	87	93	89		80		79	74			81					15
14	83	89	85	70	75	75	75	70	78		76	86	86	74		14
13	78	85	82		70		70	67		70		81	82	70	63	13
12	74	80	78	63	65	67	65	63	69		67	77	78		59	12
11	70	76	75	60	60	63	61	59	64	62	63	72	73	62	55	11
10	66	72	71	57	55	59	56	55	60		58	68	69	58	52	10
9	62	68	68	54	50	54	52	51	55	53	54	63	64	54	48	9
8	57	63	64	51	45	50	47	48	51		49	59	60	50	44	8
7	53	59	61	48	40	46	42	44	46	45	45	54	55	46	41	7
6	49	55	57	45		42	38	40	42	41		50	51	42	37	6
5	45	50	54	42	29	37	33	36	37	37	36	45	47	39	33	5
4	41	46	50	39		33	29	32	33		33	41	42	35	29	4
3	37	42	47	36	19	29	24		28		29	36	38	31	26	3
2	32	38	43	33	14	25	20	25	24		25	31	33	27	22	2
1	28		39	29	9	21	15	21	19		20			23		1
0				26		16	10	17								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	94	100	100	100	100	98	100	100				91	89	19
18	90	90	100	100	98	100	94	100	96				87	85	18
17	87	87	99	96	94	98	90	95	91				84	81	17
16	83	83	93	91	90	94	86	91	86				80	77	16
15	80	80	87	86	86	89	82	86	82	71			76	73	15
14	76	76	82	80	82	85	78	81	77	69			72	69	14
13	73	72	76	75	78	81	74	77	73		66	65	68	65	13
12	69	69	71	70	74	76	70	72	68	62			64	61	12
11	66	65	65	64	69	72	66	67	64		59	59	60	58	11
10	62	61	60	59	65	68	62	62	59	55	56	56	56	54	10
9	59	58	54	54	61	64	57	58	55	51	53	53	53	50	9
8	55	54	49	48	57	59	53	53	50	48	49	50	49	46	8
7	52	51	43	43	53	55	49	48	46	44	46	47	45	42	7
6	49	47	37	38	49	51	45	44	41	40	43	44	41	38	6
5	45	43	32	33	45	46	41	39	36	37	39	41	37	34	5
4	42	40	26	27	41	42	37	34	32	33	36	38	33	30	4
3	38	36	21	22	37	38	33	30	27	29	32	35	29	26	3
2	35	32	15	17	33	33	29	25	23	26	29	32	25	22	2
1	31	29	10	11	28	29	25	20	18	22	26	29	21	18	1
0	28	25	4	6	24	25		15							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	97	100		100	100	100	96	98	89						19
18	93	96	100	100	99	96	92	94	85	83				98	18
17	89	92	100	100	95	93	88	90			95				17
16	84	87	100	96	91	89	84	86	77		92				16
15	80	83	97	92	87	85	81	82	73	73	88	76	66	85	15
14	76	79	92	88	82	81	77	78	70	70	84		63		14
13	72	75	87	83	78	77	73	74	66	67	80	69		76	13
12	67	70	81	79	74	73	69	70	62		76	66	57	72	12
11	63	66	76	74	70	69	66	66	58	60	73	62		67	11
10	59	62	71	70	65	65	62	62	54	57	69	59	52	63	10
9	55	57	66	66	61	61	58	58		54	65	55	49	59	9
8	51	53	61	61	57	58	54	54	46	51	61	52	46	54	8
7	46	49	56	57	53	54	50	50	42		58	48	43	50	7
6	42	44	51	53	49	50	47	46	38	44	54	44	40	46	6
5	38	40	45	48	44	46	43	42	34	41	50	41	38	41	5
4	34	36	40	44	40	42	39	38	30		46	37	35	37	4
3	29	31	35	39	36	38	35	34	27	35	42	34	32	33	3
2	25	27	30	35	32	34	32	30	23		39	30	29	28	2
1	21	23	25	31	27	30	28	26		28	35	27	26	24	1
0	18	20		26				23		25	31	23	23		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100	100			100		100		99							19	
18	96	100	96	85			100		95							18	
17	92	100	92	81	93		97		90	96			95	85		17	
16	89	99	88	78	89	80	93		86	91	98		91	81	83	16	
15	85	95	83	74	85	76	89		82	87			87	78		15	
14	81	90	79	70	81	72	85		78	82	89		83	74	75	14	
13	77	86	75	67	77	68	81		74	77	79	85		79	70	71	13
12	73	82	71	63	73	64	76		70	73		63	75	67	67	12	
11	69	77	67	60	69	60	72	63	65	68	70	76		71	63	63	11
10	65	73	63	56	65	56	68		61	64	66	71		67	59	59	10
9	61	69	58	53	61	51	64	54	57	59	62	67	49	63	56	55	9
8	57	64	54	49	57	47	60		53	55	57	62		59	52	51	8
7	53	60	50	45	53	43	55	44	49	50	53	58	39	55	48	47	7
6	49	56	46	42	49	39	51		45	46	49	53		51	45	43	6
5	45	51	42	38	45	35	47	35	41	41	45	49	30	47	41	39	5
4	41	47	38	35	41	31	43		36	37	40	45		43	37	35	4
3	37	43	33		37	27	39	25	32	32	36	40	20	38	34		3
2	33	38	29		33	23	35	20	28	27	32	36	15	34			2
1	29	34	25		29	19	30	16	24	23	28	31	11				1
0	30	34			15	26	11		18	24			23	19		0	

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 7-8 years
Age: 55-59 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		100		100		100				100	100	100	95		19
18	100	100	100				95				96	100	100	91		18
17	96	100	97		91		90			88		100		87		17
16	92	99	93			86	86	80	88			96	97	83		16
15	87	94	90		81		81	76			82					15
14	83	90	86	70	76	77	77	72	79		78	87	88	76		14
13	79	86	83		71		72	69		72		83	84	72	63	13
12	75	82	79	64	66	69	68	65	70		69	78	79	59		12
11	71	77	76	61	61	65	63	61	66	63	64	74	75	64	55	11
10	66	73	72	58	56	60	58	57	61		60	69	71	60	52	10
9	62	69	69	54	51	56	54	53	57	55	55	65	66	56	48	9
8	58	64	65	51	46	52	49	50	52		51	60	62	52	44	8
7	54	60	61	48	41	48	45	46	48	47	46	56	57	48	41	7
6	50	56	58	45		43	40	42	43		43	51	53	44	37	6
5	45	52	54	42	31	39	35	38	39	39	37	47	48	40	33	5
4	41	47	51	39		35	31	34	34		35	42	44	36	29	4
3	37	43	47	36	21	31	26		30		30	38	40	32	26	3
2	33	39	44	33	16	27	22	27	25		26	33	35	28	22	2
1	29		40	30	11	22	17	23	21		22			24		1
0				27		18	13	19								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	95	100	100	100	100	100	100	100				93	91	19
18	91	92	100	100	100	100	96	100	98				89	87	18
17	88	88	100	97	96	100	92	98	93				85	83	17
16	84	84	94	92	92	96	88	93	89				81	79	16
15	81	81	89	87	88	92	84	88	84		74	77	75		15
14	77	77	83	81	84	88	80	84	80	72			73	71	14
13	74	74	77	76	80	83	76	79	75		69	68	70	67	13
12	70	70	72	71	76	79	71	74	70	65			66	63	12
11	67	66	66	65	72	75	67	70	66	62	62	62	62	59	11
10	64	63	61	60	68	71	63	65	61	57	59	59	58	55	10
9	60	59	55	55	64	66	59	60	57	54	55	56	54	51	9
8	57	55	50	49	60	62	55	55	52	50	52	53	50	47	8
7	53	52	44	44	55	58	51	51	48	46	48	50	46	43	7
6	50	48	38	39	51	53	47	46	43	43	45	47	42	39	6
5	46	45	33	34	47	49	43	41	39	39	42	44	38	35	5
4	43	41	27	28	43	45	39	37	34	35	38	41	35	31	4
3	39	37	22	23	39	40	35	32	30	32	35	38	31	27	3
2	36	34	16	18	35	36	31	27	25	28	32	35	27	24	2
1	33	30	11	12	31	32	27	23	20	24	28	32	23	20	1
0	29	27	5	7	27	27		18							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	97	100		100	100	100	97	99	89						19
18	93	95	100	100	100	98	93	95	85	84				100	18
17	89	91	100	100	97	94	89	91			96				17
16	84	86	100	99	93	90	85	87	77		93				16
15	80	82	100	94	89	86	81	83	73	74	89	77	67	87	15
14	76	78	94	90	85	82	78	80	70	71	85		64		14
13	72	73	89	86	80	78	74	76	66	67	81	70		78	13
12	67	69	84	81	76	74	70	72	62		78	66	58	73	12
11	63	65	79	77	72	70	66	68	58	61	74	63		69	11
10	59	60	74	72	68	67	63	64	54	58	70	59	53	65	10
9	55	56	69	68	63	63	59	60		54	66	55	50	60	9
8	51	52	64	64	59	59	55	56	46	51	62	52	47	56	8
7	46	48	58	59	55	55	51	52	42		59	48	44	52	7
6	42	43	53	55	51	51	48	48	38	45	55	45	41	47	6
5	38	39	48	51	46	47	44	44	34	42	51	41	38	43	5
4	34	35	43	46	42	43	40	40	30		47	38	35	39	4
3	29	30	38	42	38	39	36	36	27	35	44	34	33	34	3
2	25	26	33	37	34	36	33	32	23		40	31	30	30	2
1	21	22	28	33	29	32	29	28		29	36	27	27	26	1
0	17	23		29				24		25	32	23	24		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		99							19	
18	96	100	98	86			100		95							18	
17	92	100	94	82	93		100		90	96			93	85		17	
16	89	100	89	79	89	81	96		86	91	99		89	82	83	16	
15	85	97	85	75	85	77	91		82	87			85	78		15	
14	81	93	81	72	81	73	87		78	82	90		81	74	75	14	
13	77	88	77	68	77	69	83		74	77	78	85		77	71	71	13
12	73	84	73	65	73	65	79		70	73		63	73	67	67	12	
11	69	80	69	61	69	61	75	64	65	68	70	76		69	63	63	11
10	65	75	64	57	65	57	70		61	64	66	72		65	60	59	10
9	61	71	60	54	61	53	66	54	57	59	62	67	49	61	56	55	9
8	57	67	56	50	57	49	62		53	55	57	63		57	52	51	8
7	53	62	52	47	53	44	58	45	49	50	53	59	39	53	49	47	7
6	49	58	48	43	49	40	54		45	46	49	54		49	45	43	6
5	45	54	44	40	45	36	50	35	41	41	45	50	30	45	41	39	5
4	41	49	39	36	41	32	45		36	37	40	45		41	38	35	4
3	37	45	35		37	28	41	26	32	32	36	41	20	37	34		3
2	33	41	31		33	24	37	21	28	27	32	36	15	33			2
1	29	36	27		29	20	33	16	24	23	28	32	11				1
0	32				16	29	11		18	24				23	19		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 7-8 years
Age: 60-64 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS
19	100		100		100		100				100	100	100	97	19
18	100	100	100				97				97	100	100	93	18
17	96	100	98		93		93				90	100		89	17
16	92	100	94			87	88	82	90			98	99	85	16
15	88	95	90		83		84	78				84			15
14	84	91	87	70	78	79	79	74	81		79	89	90	77	14
13	80	87	83		73		74	71			73	84	86	73	13
12	75	83	80	64	68	71	70	67	72			70	80	81	56
11	71	78	76	61	63	66	65	63	67		65	66	75	77	11
10	67	74	73	58	58	62	61	59	63			61	71	72	49
9	63	70	69	55	53	58	56	55	58		57	57	66	68	45
8	59	65	66	52	48	54	52	52	54			52	62	64	53
7	54	61	62	49	43	49	47	48	49		49	48	57	59	38
6	50	57	59	46		45	42	44	45			44	53	55	45
5	46	53	55	42	33	41	38	40	40		40	39	48	50	30
4	42	48	52	39		37	33	36	36			36	44	46	37
3	38	44	48	36	23	33	29		31			32	39	41	33
2	33	40	44	33	18	28	24	29	27			28	35	37	29
1	29		41	30	13	24	19	25	22			24			25
0				27		20	15	21							0

Scaled score	Lateralized sensorimotor/Psychomotor comparisons													Scaled score	
	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	
19	96	97	100	100	100	100	100	100	100				94	92	19
18	92	93	100	100	100	100	98	100	100				90	88	18
17	89	89	100	98	99	100	94	100	95				87	84	17
16	85	86	95	93	95	99	90	95	91				83	80	16
15	82	82	90	88	91	95	85	91	86			76	79	76	15
14	79	78	84	83	86	90	81	86	82	75			75	73	14
13	75	75	79	77	82	86	77	81	77			71	70	71	13
12	72	71	73	72	78	82	73	77	73	67			67	65	12
11	68	68	68	67	74	77	69	72	68			65	64	63	11
10	65	64	62	61	70	73	65	67	64	60	61	61	59	57	10
9	61	60	56	56	66	69	61	63	59	56	58	58	55	53	9
8	58	57	51	51	62	64	57	58	55	53	55	55	52	49	8
7	54	53	45	45	58	60	53	53	50	49	51	52	48	45	7
6	51	50	40	40	54	56	49	48	45	45	48	49	44	41	6
5	48	46	34	35	50	52	45	44	41	42	44	46	40	37	5
4	44	42	29	29	45	47	41	39	36	38	41	43	36	33	4
3	41	39	23	24	41	43	37	34	32	34	38	40	32	29	3
2	37	35	17	19	37	39	33	30	27	31	34	37	28	25	2
1	34	31	12	14	33	34	29	25	23	27	31	34	24	21	1
0	30	28	6	8	29	30		20							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	95	100		100	100	100	98	100	89						19
18	91	94	100	100	100	99	94	97	85	84				100	18
17	87	90	100	100	99	95	90	93			97				17
16	83	85	100	100	95	91	86	89	77		94				16
15	79	81	100	97	91	87	83	85	73	74	90	77	68	88	15
14	74	77	97	92	87	83	79	81	70	71	86		65		14
13	70	72	92	88	82	79	75	77	66	68	82	70		79	13
12	66	68	87	83	78	76	71	73	62		79	67	59	75	12
11	62	64	82	79	74	72	68	69	58	61	75	63		71	11
10	57	59	77	75	70	68	64	65	54	58	71	59	53	66	10
9	53	55	72	70	65	64	60	61		55	67	56	51	62	9
8	49	51	66	66	61	60	56	58	46	52	64	52	48	58	8
7	45	46	61	62	57	56	53	54	42		60	49	45	53	7
6	40	42	56	57	53	52	49	50	38	45	56	45	42	49	6
5	36	38	51	53	49	48	45	46	34	42	52	42	39	45	5
4	32	33	46	49	44	45	41	42	30		48	38	36	40	4
3	28	29	41	44	40	41	38	38	27	36	45	34	33	36	3
2	24	25	36	40	36	37	34	34	23		41	31	31	32	2
1	19	20	30	35	32	33	30	30		29	37	27	28	27	1
0		16	25	31				26		26	33	24	25		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		97							19	
18	100	100	100	87			100		93							18	
17	96	100	95	84	95		100		89	96				91	86	17	
16	92	100	91	80	91	83	98		85	91		99		87	82	83	16
15	88	99	87	77	87	79	94		81	87				83	78		15
14	84	95	83	73	83	74	90		77	82		90		79	75	75	14
13	80	91	79	69	79	70	85		72	77	78	86		75	71	71	13
12	76	86	75	66	75	66	81		68	73			63	71	67	67	12
11	72	82	70	62	71	62	77	64	64	68	70	77		67	64	63	11
10	68	78	66	59	67	58	73		60	64	66	73		63	60	59	10
9	64	73	62	55	63	54	69	55	56	59	62	68	49	59	56	55	9
8	60	69	58	52	59	50	65		52	55	57	64		55	53	51	8
7	56	65	54	48	55	46	60	45	48	50	53	59	39	51	49	47	7
6	52	60	50	44	51	42	56		43	46	49	55		47	45	43	6
5	48	56	45	41	47	37	52	36	39	41	45	50	30	43	42	39	5
4	44	52	41	37	43	33	48		35	37	40	46		39	38	35	4
3	40	47	37		39	29	44	26	31	32	36	41	20	35	34		3
2	36	43	33		35	25	40	21	27	27	32	37	15	31			2
1	32	38	29		31	21	35	16	23	23	28	32	11				1
0		34			17	31	12		18	24				23	19		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 7-8 years
Age: 65-69 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		100		100		100				100	100	100	98		19	
18	100	100	100				100				98	100	100	94		18	
17	97	100	98		95		95				92	100		90		17	
16	93	100	95				89	91	84	92		99	100	86		16	
15	89	97	91		85		86	81				85				15	
14	84	92	88	70	80	81	82	77	83		80	90	92	78		14	
13	80	88	84		74		77	73			75	86	87	74	60	13	
12	76	84	81	64	69	72	72	69	74		72	81	83	56		12	
11	72	79	77	61	64	68	68	65	69		67	67	77	79	66	11	
10	68	75	73	58	59	64	63	62	65		63	72	74	62	49	10	
9	63	71	70	55	54	60	59	58	60		59	58	68	70	58	9	
8	59	67	66	52	49	55	54	54	56		54	63	65	54	41	8	
7	55	62	63	49	44	51	49	50	51		50	49	59	61	50	7	
6	51	58	59	46		47	45	46	47		46	54	57	46	34	6	
5	47	54	56	43	34	43	40	43	42		42	40	50	52	42	5	
4	42	49	52	40		38	36	39	38			38	45	48	38	26	4
3	38	45	49	37	24	34	31		33			34	41	43	34	23	3
2	34	41	45	34	19	30	27	31	29		30	36	39	30	19	2	
1	30		42	30	14	26	22	27	24		26			26		1	
0				27	22	17	24									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	97	98	100	100	100	100	100	100	100				96	94	19	
18	94	94	100	100	100	100	99	100	100				92	90	18	
17	90	91	100	100	100	100	95	100	98				88	86	17	
16	87	87	97	95	97	100	91	98	93				84	82	16	
15	83	83	91	89	93	97	87	93	89			79	80	78	15	
14	80	80	86	84	89	93	83	88	84	77			76	74	14	
13	76	76	80	79	85	89	79	84	79		74	73	73	70	13	
12	73	73	75	73	81	84	75	79	75	70		69	66		12	
11	69	69	69	68	77	80	71	74	70		68	67	65	62		11
10	66	65	63	63	72	76	67	70	66	63	64	64	61	58		10
9	63	62	58	57	68	71	63	65	61	59	61	61	57	54		9
8	59	58	52	52	64	67	59	60	57	56	57	58	53	50		8
7	56	54	47	47	60	63	55	56	52	52	54	55	49	46		7
6	52	51	41	41	56	58	51	51	48	48	51	52	45	42		6
5	49	47	36	36	52	54	47	46	43	45	47	49	41	39		5
4	45	44	30	31	48	50	43	41	39	41	44	46	38	35		4
3	42	40	25	26	44	45	39	37	34	37	40	43	34	31		3
2	38	36	19	20	40	41	35	32	29	34	37	40	30	27		2
1	35	33	13	15	35	37	31	27	25	30	34	37	26	23		1
0	31	29	8	10	31	32		23								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	94	100		100	100	100	99	100	89						19
18	90	93	100	100	100	100	95	99	85	85				100	18
17	85	89	100	100	100	96	91	95			99				17
16	81	84	100	100	97	92	88	91	77		95				16
15	77	80	100	99	93	88	84	87	73	75	91	78	68	90	15
14	73	76	100	95	89	85	80	83	70	72	87		66		14
13	68	71	95	90	84	81	76	79	66	68	83	71		81	13
12	64	67	90	86	80	77	73	75	62		80	67	60	77	12
11	60	63	85	81	76	73	69	71	58	62	76	63		72	11
10	56	58	79	77	72	69	65	68	54	59	72	60	54	68	10
9	52	54	74	73	68	65	61	64		55	68	56	51	64	9
8	47	50	69	68	63	61	58	60	46	52	65	53	48	59	8
7	43	45	64	64	59	57	54	56	42		61	49	46	55	7
6	39	41	59	60	55	53	50	52	38	46	57	46	43	51	6
5	35	37	54	55	51	50	46	48	34	43	53	42	40	46	5
4	30	32	49	51	46	46	43	44	30		49	38	37	42	4
3	26	28	43	46	42	42	39	40	27	36	46	35	34	38	3
2	22	24	38	42	38	38	35	36	23		42	31	31	33	2
1	18	19	33	38	34	34	31	32		30	38	28	29	29	1
0	15	28		33				28		26	34	24	26		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		96							19	
18	100	100	100	89			100		92							18	
17	99	100	97	85	97		100		88	96				88	86	17	
16	95	100	93	81	93	84	100		84	91		100		84	82	83	16
15	91	100	89	78	89	80	96		79	87				80	79		15
14	87	97	85	74	85	76	92		75	82		91		76	75	75	14
13	83	93	81	71	81	72	88		71	77	78	87		72	71	71	13
12	79	89	76	67	77	67	84		67	73			63	68	68	67	12
11	75	84	72	64	73	63	80	65	63	68	70	78		64	64	63	11
10	71	80	68	60	69	59	75		59	64	66	73		60	60	59	10
9	67	76	64	56	65	55	71	55	55	59	62	69	49	56	57	55	9
8	63	71	60	53	61	51	67		50	55	57	64		52	53	51	8
7	59	67	56	49	57	47	63	46	46	50	53	60	39	48	49	47	7
6	55	63	51	46	53	43	59		42	46	49	55		44	46	43	6
5	51	58	47	42	49	39	55	36	38	41	45	51	30	40	42	39	5
4	47	54	43	39	45	35	50		34	37	40	46		36	38	35	4
3	43	49	39		41	30	46	26	30	32	36	42	20	32	35		3
2	39	45	35		37	26	42	22	25	27	32	37	15	28			2
1	35	41	31		33	22	38	17	21	23	28	33	11				1
0	36				18	34	12		18	24				24	19		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 7-8 years
Age: 70-74 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		100		100		100				100	100	100	99		19	
18	100	100	100				100				100	100	100	95		18	
17	97	100	99		96		98				93	100	91			17	
16	93	100	95			91	93	87	93			100	100	87		16	
15	89	98	92		86		89	83				86				15	
14	85	93	88	71	81	82	84	79	84		82	92	94	79		14	
13	81	89	85		76		80	75			77	87	89	75	60	13	
12	77	85	81	65	71	74	75	72	75		73	83	85		56	12	
11	72	81	78	62	66	70	70	68	71		68	68	78	80	67	11	
10	68	76	74	58	61	66	66	64	66		64	74	76	63	49	10	
9	64	72	71	55	56	61	61	60	62		60	59	69	72	59	9	
8	60	68	67	52	51	57	57	56	57			55	65	67	55	41	8
7	56	63	64	49	45	53	52	53	53		52	50	60	63	51	7	
6	51	59	60	46		49	48	49	48			48	56	58	47	34	6
5	47	55	57	43	35	44	43	45	44		44	41	51	54	43	30	5
4	43	51	53	40		40	38	41	39			40	47	49	39	26	4
3	39	46	49	37	25	36	34		35			35	42	45	35	23	3
2	35	42	46	34	20	32	29	34	30			31	38	41	31	19	2
1	30		42	31	15	28	25	30	26					27		1	
0				28		23	20	26								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	98	99	100	100	100	100	100	100	100				97	95	19
18	95	96	100	100	100	100	100	100	100				93	91	18
17	91	92	100	100	100	100	97	100	100				90	87	17
16	88	88	99	96	99	100	93	100	95				86	84	16
15	84	85	93	91	95	99	89	96	91				82	80	15
14	81	81	87	86	91	95	85	91	86	81			78	76	14
13	78	77	82	80	87	91	81	86	82		77	76	74	72	13
12	74	74	76	75	83	86	77	81	77	73			70	68	12
11	71	70	71	70	79	82	73	77	73		71	70	66	64	11
10	67	67	65	64	75	78	69	72	68	66	67	67	62	60	10
9	64	63	60	59	71	73	65	67	64	62	64	64	58	56	9
8	60	59	54	54	67	69	61	63	59	59	60	61	55	52	8
7	57	56	49	48	62	65	57	58	54	55	57	58	51	48	7
6	53	52	43	43	58	60	53	53	50	51	54	55	47	44	6
5	50	48	37	38	54	56	49	49	45	48	50	52	43	40	5
4	46	45	32	33	50	52	45	44	41	44	47	49	39	36	4
3	43	41	26	27	46	47	40	39	36	40	43	46	35	32	3
2	40	38	21	22	42	43	36	34	32	37	40	43	31	28	2
1	36	34	15	17	38	39	32	30	27	33	37	40	27	24	1
0	33	30	10	11	34	35		25							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	92	92	100	100	100	100	100	100	89	85	85	100	100	100	19
18	88	92	100	100	100	100	97	100	85	85	85	100	100	100	18
17	84	87	100	100	100	100	97	93	98	98	98	100	100	100	17
16	80	83	100	100	99	93	89	94	77	77	77	96	96	96	16
15	75	79	100	100	100	95	90	85	73	75	75	92	92	92	15
14	71	74	100	97	91	86	82	86	70	72	72	88	88	88	14
13	67	70	98	93	87	82	78	82	66	69	69	71	71	71	13
12	63	66	92	88	82	78	74	78	62	62	62	67	67	67	12
11	58	62	87	84	78	74	70	74	58	62	62	64	64	64	11
10	54	57	82	79	74	70	67	70	54	59	59	60	60	60	10
9	50	53	77	75	70	66	63	66	56	69	69	57	57	57	9
8	46	49	72	71	65	62	59	62	46	53	66	53	49	49	8
7	41	44	67	66	61	59	55	58	42	42	42	46	46	46	7
6	37	40	62	62	57	55	52	54	38	46	46	44	44	44	6
5	33	36	56	58	53	51	48	50	34	43	54	42	41	41	5
4	29	31	51	53	48	47	44	46	30	30	30	38	38	38	4
3	25	27	46	49	44	43	40	42	27	37	47	35	35	35	3
2	20	23	41	44	40	39	37	38	23	23	43	32	32	35	2
1	16	18	36	40	36	35	33	34	30	39	39	28	29	31	1
0	14	14	31	36	36	36	30	30	27	35	25	27	27	27	0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	100	100	100	100	100	100	100	100	95	95	95	95	95	95	95	19
18	100	100	100	90	100	100	100	100	91	91	91	91	91	91	91	18
17	100	100	99	86	99	100	100	100	86	96	96	96	96	96	96	17
16	98	100	95	83	95	85	100	100	82	91	91	100	100	81	83	82
15	94	100	91	79	91	81	99	99	78	87	87	77	77	79	79	15
14	90	100	87	76	87	77	95	95	74	82	82	92	92	73	75	74
13	86	95	82	72	83	73	90	90	70	77	78	87	87	69	72	71
12	82	91	78	68	79	69	86	86	66	73	73	63	63	65	68	67
11	78	87	74	65	75	65	82	65	62	68	70	78	61	64	63	11
10	74	82	70	61	71	60	78	78	57	64	66	74	57	61	59	10
9	70	78	66	58	67	56	74	56	53	59	62	69	49	53	57	9
8	66	73	62	54	63	52	70	70	49	55	57	65	49	53	51	8
7	62	69	57	51	59	48	65	46	45	50	53	60	40	45	50	7
6	58	65	53	47	55	44	61	61	41	46	49	56	41	46	43	6
5	54	60	49	43	51	40	57	36	37	41	45	51	30	37	42	5
4	50	56	45	40	47	36	53	53	32	37	40	47	33	39	35	4
3	46	52	41	37	43	32	49	27	28	32	36	42	20	29	35	3
2	42	47	37	37	39	28	45	22	24	27	32	38	16	25	25	2
1	38	43	32	32	35	23	40	17	20	23	28	33	11	24	19	1
0	39	43	32	32	19	36	13	13	18	23	23	11	24	19	19	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 7-8 years
Age: 75-79 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		100		100		100				100	100	100	100	100	19
18	100	100	100				100				100	100	100	96		18
17	98	100	100			97	100				95	100		92		17
16	94	100	96				93	96	90	95		100	100	88		16
15	90	99	93			87		92	86			88				15
14	86	94	89	71	82	84	87	82	86		83	93	96	80		14
13	81	90	86			77		83	78		78	89	91	76	60	13
12	77	86	82	65	72	76	78	74	77		74	84	87		56	12
11	73	82	78	62	67	72	73	71	72		70	70	80	82	68	11
10	69	77	75	59	62	67	69	67	68		65	75	78	64	49	10
9	65	73	71	56	57	63	64	63	63		62	61	71	73	60	9
8	60	69	68	53	52	59	60	59	59		56	66	69	56	41	8
7	56	65	64	50	47	55	55	55	54		54	52	62	65	52	7
6	52	60	61	46		50	50	52	50		50	57	60	48	34	6
5	48	56	57	43	37	46	46	48	45		45	43	53	56	44	5
4	44	52	54	40		42	41	44	41		41	48	51	40	26	4
3	39	47	50	37	27	38	37		36		37	44	47	37	23	3
2	35	43	47	34	22	34	32	36	32		33	39	42	33	19	2
1	31		43	31	16	29	28	33	27		29			29		1
0				28	25	23	29									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	99	100	100	100	100	100	100	100	100				99	97	19
18	96	97	100	100	100	100	100	100	100				95	93	18
17	93	93	100	100	100	100	99	100	100				91	89	17
16	89	90	100	98	100	100	95	100	98				87	85	16
15	86	86	95	93	98	100	91	98	93			85	83	81	15
14	82	82	89	88	94	97	87	93	89	84			79	77	14
13	79	79	84	82	89	92	83	89	84		80	79	75	73	13
12	75	75	78	77	85	88	79	84	79		77		72	69	12
11	72	71	73	72	81	84	75	79	75		74	73	68	65	11
10	68	68	67	66	77	79	71	74	70	69	70	70	64	61	10
9	65	64	62	61	73	75	67	70	66	66	67	67	60	57	9
8	61	61	56	56	69	71	63	65	61	62	63	64	56	53	8
7	58	57	51	50	65	66	59	60	57	58	60	61	52	50	7
6	55	53	45	45	61	62	54	56	52	55	57	58	48	46	6
5	51	50	39	40	57	58	50	51	48	51	53	55	44	42	5
4	48	46	34	34	52	54	46	46	43	47	50	52	41	38	4
3	44	43	28	29	48	49	42	42	39	44	47	49	37	34	3
2	41	39	23	24	44	45	38	37	34	40	43	46	33	30	2
1	37	35	17	18	40	41	34	32	29	36	40	43	29	26	1
0	34	32	12	13	36	36		27							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 7-8 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	92	100		100	100	100	100	100	89						19
18	88	91	100	100	100	100	99	100	85	86				100	18
17	84	86	100	100	100	99	95	100			100				17
16	80	82	100	100	100	95	91	97	77		97				16
15	75	78	100	100	97	91	87	93	73	76	93	78	70	93	15
14	71	73	100	99	93	87	84	89	70	73	89		67		14
13	67	69	100	95	89	83	80	85	66	69	86	71		85	13
12	63	65	95	91	85	79	76	81	62		82	68	62	80	12
11	58	60	90	86	80	75	72	77	58	63	78	64		76	11
10	54	56	85	82	76	72	69	73	54	60	74	61	56	72	10
9	50	52	80	78	72	68	65	69		56	71	57	53	67	9
8	46	47	75	73	68	64	61	65	46	53	67	54	50	63	8
7	41	43	70	69	63	60	57	61	42		63	50	47	59	7
6	37	39	65	65	59	56	54	57	38	47	59	46	44	54	6
5	33	34	60	60	55	52	50	53	34	44	55	43	42	50	5
4	29	30	54	56	51	48	46	49	30		52	39	39	46	4
3	25	26	49	51	47	44	42	45	27	37	48	36	36	41	3
2	20	21	44	47	42	41	38	41	23		44	32	33	37	2
1	16	17	39	43	38	37	35	37		31	40	29	30	33	1
0	13	34		38				33		27	37	25	27		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		95							19	
18	100	100	100	91			100		91							18	
17	100	100	100	88	99		100		86	96				81	87	17	
16	98	100	97	84	95	86	100		82	91		100		77	83	82	16
15	94	100	93	80	91	82	100		78	87				73	79		15
14	90	100	89	77	87	78	97		74	82		92		69	76	74	14
13	86	98	85	73	83	74	93		70	77	78	88		65	72	70	13
12	82	93	80	70	79	70	89		66	73			64	61	68	66	12
11	78	89	76	66	75	66	85	66	62	68	70	79		57	65	62	11
10	74	85	72	63	71	62	81		57	64	66	74		53	61	58	10
9	70	80	68	59	67	58	76	56	53	59	61	70	49	49	57	54	9
8	66	76	64	56	63	54	72		49	55	57	65		45	54	51	8
7	62	72	59	52	59	49	68	47	45	50	53	61	40	41	50	47	7
6	58	67	55	48	55	45	64		41	46	49	56		37	46	43	6
5	54	63	51	45	51	41	60	37	37	41	45	52	30	33	43	39	5
4	50	59	47	41	47	37	56		32	37	40	47		29	39	35	4
3	46	54	43		43	33	51	27	28	32	36	43	20	25	35		3
2	42	50	39		39	29	47	23	24	27	32	39	16	21			2
1	38	46	34		35	25	43	18	20	23	28	34	11				1
0	41				21	39	13		18	23				24	19		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 7-8 years
Age: 80-85 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		100		100		100				100	100	100	100	19		
18	100	100	100				100				100	100	100	98	18		
17	99	100	100		98		100			97		100		94	17		
16	95	100	97			95	100	93	97			100	100	90	16		
15	90	100	93		88		95	89			89				15		
14	86	96	90	71	83	86	91	85	88		85	95	98	82	14		
13	82	91	86		78		86	81		80		91	93	78	60	13	
12	78	87	83	65	73	78	81	77	79		76	86	89	56	12		
11	74	83	79	62	68	73	77	74	74	72	71	81	84	70	52	11	
10	69	79	76	59	63	69	72	70	70		67	77	80	66	49	10	
9	65	74	72	56	58	65	68	66	65	64	62	72	75	62	45	9	
8	61	70	69	53	53	61	63	62	61		58	68	71	58	41	8	
7	57	66	65	50	48	57	58	58	56		56	53	63	67	54	38	7
6	53	61	62	47		52	54	55	52		51		59	62	50	34	6
5	48	57	58	44	38	48	49	51	47	47	44	54	58	46	30	5	
4	44	53	54	41		44	45	47	43		43		50	53	42	26	4
3	40	49	51	38	28	40	40		38		39		45	49	38	23	3
2	36	44	47	34	23	35	36	39	34		35		41	44	34	19	2
1	32		44	31	18	31	31	36	29		31			30		1	
0				28		27	26	32								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	100	100	100	100	100	100	100	100	100				100	99	19
18	97	98	100	100	100	100	100	100	100				97	95	18
17	94	95	100	100	100	100	100	100	100				93	91	17
16	90	91	100	100	100	100	97	100	100				89	87	16
15	87	87	98	95	100	100	93	100	96				87	85	15
14	83	84	92	90	96	98	89	96	91	88			81	79	14
13	80	80	86	85	92	94	85	91	86		84	81	77	75	13
12	77	77	81	79	88	89	81	86	82	81			73	71	12
11	73	73	75	74	84	85	77	82	77		77	76	69	67	11
10	70	69	70	69	80	81	73	77	73	73	74	73	65	63	10
9	66	66	64	63	76	76	69	72	68	70	70	70	62	59	9
8	63	62	59	58	71	72	65	68	64	66	67	67	58	55	8
7	59	58	53	53	67	68	61	63	59	62	64	64	54	51	7
6	56	55	47	47	63	63	56	58	55	59	60	61	50	47	6
5	52	51	42	42	59	59	52	54	50	55	57	58	46	43	5
4	49	48	36	37	55	55	48	49	46	51	53	55	42	39	4
3	46	44	31	32	51	50	44	44	41	48	50	52	38	35	3
2	42	40	25	26	47	46	40	39	36	44	47	49	34	32	2
1	39	37	20	21	43	42	36	35	32	40	43	46	31	28	1
0	35	33	14	16	39	38		30							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	96	97	97	93	88	89	89	91	87						19	
18	92	97	92	89	84	85	85	87	83	78				86	18	
17	88	92	87	85	80	81	82	83			86				17	
16	83	88	82	80	75	77	78	79	76		82				16	
15	79	84	77	76	71	73	74	75	72	68	78	73	60	73	15	
14	75	79	72	72	67	70	70	71	68	65	75		58		14	
13	71	75	67	67	63	66	67	67	64	61	71	66		64	13	
12	66	71	62	63	58	62	63	63	60		67	62	52	60	12	
11	62	66	56	58	54	58	59	59	56	55	63	59		55	11	
10	58	62	51	54	50	54	55	55	52	52	59	55	46	51	10	
9	54	58	46	50	46	50	52	51		49	56	51	43	46	9	
8	49	53	41	45	41	46	48	47	44	45	52	48	41	42	8	
7	45	49	36	41	37	42	44	43	40		48	44	38	38	7	
6	41	45	31	37	33	39	40	39	37	39	44	41	35	33	6	
5	37	40	26	32	29	35	37	35	33	36	41	37	32	29	5	
4	33	36	20	28	25	31	33	31	29		37	34	29	25	4	
3	28	32	15	23	20	27	29	27	25	29	33	30	26	20	3	
2	24	27	10	19	16	23	25	23	21		29	26	23	16	2	
1	20	23	5	15	12	19	22	19		23	25	23	21	12	1	
0	19	0		10				15		19	22	19	18		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	89		87		92		89		97								19
18	85	96	83	76			85		93								18
17	81	91	78	72	84		80		88	90				92	79		17
16	77	87	74	69	80	70	76		84	85	92			88	75	78	16
15	73	83	70	65	76	66	72		80	80				84	72		15
14	69	78	66	61	72	62	68		76	76	83			80	68	70	14
13	65	74	62	58	68	58	64		72	71	75	79		76	64	66	13
12	61	69	58	54	64	54	60		68	67			60	72	61	62	12
11	57	65	53	51	60	50	55	59	63	62	67	70		68	57	58	11
10	53	61	49	47	56	46	51		59	58	63	65		64	53	54	10
9	49	56	45	44	52	41	47	49	55	53	59	61	46	60	50	50	9
8	45	52	41	40	48	37	43		51	49	54	56		56	46	46	8
7	41	48	37	36	44	33	39	40	47	44	50	52	36	52	42	42	7
6	37	43	33	33	40	29	35		43	40	46	47		48	39	38	6
5	33	39	28	29	36	25	30	30	38	35	42	43	27	44	35	34	5
4	29	35	24	26	32	21	26		34	30	37	38		40	31	30	4
3	26	30	20		28	17	22	21	30	26	33	34	17	36	28		3
2	22	26	16		24	13	18	16	26	21	29	29	12	32			2
1	18	22	12		20	9	14	11	22	17	25	25	7				1
0	17				5	9	6		12	21				17	14		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 9-11 years
Age: 20-34 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	97		90		93		87			91	98	97	87		19		
18	93	97	86				82			87	94	93	83		18		
17	89	92	82		83		78			77	89		79		17		
16	85	88	79			72	73	68	75			84	84	75	16		
15	81	84	75		73		69	65			73				15		
14	76	79	72	67	68	63	64	61	66		69	75	75	67	14		
13	72	75	68		63		60	57		61		71	70	63	61	13	
12	68	71	65	61	58	55	55	53	57		60	66	66	57	12		
11	64	67	61	58	53	51	50	49	53	52	55	62	62	55	53	11	
10	60	62	58	55	48	46	46	45	48		51	57	57	51	50	10	
9	56	58	54	51	43	42	41	42	44	44	46	53	53	47	46	9	
8	51	54	51	48	38	38	37	38	39		42	48	48	43	42	8	
7	47	50	47	45	33	34	32	34	35	36	37	44	44	39	39	7	
6	43	45	44	42		30	27	30	30		32	39	39	35	35	6	
5	39	41	40	39	23	25	23	26	26	28	28	35	35	31	31	5	
4	35	37	36	36		21	18	23	21		24		30	31	27	28	4
3	30	32	33	33	13	17	14		17		19		26	26	23	24	3
2	26	28	29	30	8	13	9	15	12		15		21	22	19	20	2
1	22		26	27	3	8	5	11	8	11				15		1	
0			24		4	0	7									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	86	86	100	100	88	93	87	91	88				80	80	19
18	82	83	100	99	84	89	83	87	83				76	76	18
17	79	79	96	94	80	84	79	82	79				73	73	17
16	76	75	90	88	76	80	75	77	74				69	69	16
15	72	72	85	83	72	76	71	73	69				62	65	15
14	69	68	79	78	68	71	67	68	65	59			61	61	14
13	65	64	74	72	64	67	63	63	60		58	56	57	57	13
12	62	61	68	67	59	63	59	59	56	52			53	53	12
11	58	57	63	62	55	58	54	54	51	51	50	49	49	49	11
10	55	54	57	56	51	54	50	49	47	45	48	47	45	45	10
9	51	50	52	51	47	50	46	45	42	41	44	44	42	41	9
8	48	46	46	46	43	45	42	40	38	38	41	41	38	37	8
7	44	43	40	40	39	41	38	35	33	34	37	38	34	33	7
6	41	39	35	35	35	37	34	30	29	30	34	35	30	29	6
5	38	35	29	30	31	32	30	26	24	27	31	32	26	25	5
4	34	32	24	24	27	28	26	21	19	23	27	29	22	21	4
3	31	28	18	19	22	24	22	16	15	19	24	26	18	17	3
2	27	25	13	14	18	19	18	12	10	16	20	23	14	13	2
1	24	21	7	9	14	15	14	7	6	12	17	20	10	9	1
0	20	17	1	3	10	11		2							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	94	90	100	98	92	91	90	91	87	84	79				19	
18	90	94	98	94	88	88	86	87	84	88				89	18	
17	86	90	93	89	84	84	82	84							17	
16	82	86	88	85	79	80	78	80	76			84			16	
15	77	81	82	81	75	76	75	76	72	69	80	74	62	76	15	
14	73	77	77	76	71	72	71	72	68	66	77	59			14	
13	69	73	72	72	67	68	67	68	64	62	73	66			13	
12	65	68	67	67	63	64	63	64	60		69	63	54	63	12	
11	61	64	62	63	58	60	60	60	56	56	65	59			11	
10	56	60	57	59	54	57	56	56	52	53	62	56	48	54	10	
9	52	55	52	54	50	53	52	52		50	58	52	45	50	9	
8	48	51	47	50	46	49	48	48	44	46	54	49	42	45	8	
7	44	47	41	46	41	45	45	44	41		50	45	39	41	7	
6	39	43	36	41	37	41	41	40	37	40	46	41	36	37	6	
5	35	38	31	37	33	37	37	36	33	37	43	38	34	32	5	
4	31	34	26	32	29	33	33	32		29		39	34	31	28	4
3	27	30	21	28	24	29	30	28	25	30	35	31	28	24	3	
2	22	25	16	24	20	25	26	24	21		31	27	25	19	2	
1	18	21	11	19	16	22	22	20		24	28	24	22	15	1	
0	17	17	5	15				16		20	24	20	19		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93		91		94		94		95							19	
18	89	95	86	78			90		91							18	
17	85	90	82	75	86		85		87	90			93	80		17	
16	81	86	78	71	82	73	81		83	85	91		89	76	78	16	
15	77	82	74	68	78	69	77		79	80			85	72		15	
14	73	77	70	64	74	64	73		75	76	83		81	69	70	14	
13	69	73	65	60	70	60	69		70	71	75	78		77	65	66	13
12	65	69	61	57	66	56	65		66	67		60	73	61	62	12	
11	61	64	57	53	62	52	60	60	62	62	67	69	69	58	58	11	
10	57	60	53	50	58	48	56		58	58	63	65	65	54	54	10	
9	53	56	49	46	54	44	52	50	54	53	59	60	46	61	50	9	
8	49	51	45	43	50	40	48		50	49	54	56	57	47	46	8	
7	45	47	40	39	46	36	44	41	45	44	50	51	36	53	43	7	
6	41	43	36	35	42	32	39		41	40	46	47		49	39	38	6
5	37	38	32	32	38	27	35	31	37	35	42	42	27	45	36	34	5
4	33	34	28	28	34	23	31		33	30	37	38		41	32	30	4
3	29	30	24		30	19	27	22	29	26	33	33	17	37	28		3
2	25	25	20		26	15	23	17	25	21	29	29	12	33			2
1	21	21	15		22	11	19	12	21	17	25	25	8				1
0	17	17			7	14	7		12	20			17	14		0	

(continued)

APPENDIX E (continued)

Sex: Female
Education: 9-11 years
Age: 35-39 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	99		91		96		90				94	100	100	89		19
18	94	99	87				85				89	97	96	85		18
17	90	95	84		86		80				81	92		81		17
16	86	90	80			75	76	71	78			88	87	77		16
15	82	86	77		76		71	67				76				15
14	78	82	73	68	71	67	67	63	69		71	78	78	69		14
13	73	77	70		65		62	59			64	74	74	65	61	13
12	69	73	66	61	60	58	57	55	60		62	69	70	57	57	12
11	65	69	63	58	55	54	53	52	56		56	58	65	65	58	11
10	61	65	59	55	50	50	48	48	51		53	60	61	54	50	10
9	57	60	56	52	45	46	44	44	47		48	49	56	56	50	9
8	53	56	52	49	40	41	39	40	42		44	51	52	46	42	8
7	48	52	49	46	35	37	35	36	38		39	40	47	48	42	7
6	44	47	45	43		33	30	33	33		35	42	43	38	35	6
5	40	43	41	40	25	29	25	29	29		31	31	38	39	34	5
4	36	39	38	37		25	21	25	24		27	33	34	30	28	4
3	32	35	34	34	15	20	16		20		23	29	30	26	24	3
2	27	30	31	31	10	16	12	17	15		19	24	25	22	20	2
1	23		27	27	5	12	7	14	11		15			18		1
0				24		8	2	10								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	89	100	100	93	97	91	96	92				83	84	19
18	85	85	100	100	89	92	86	92	88				79	80	18
17	81	81	97	94	85	88	82	87	83				76	76	17
16	78	78	91	89	81	84	78	82	79				72	72	16
15	74	74	86	84	76	79	74	77	74				64	68	15
14	71	71	80	78	72	75	70	73	69	62			64	64	14
13	68	67	75	73	68	71	66	68	65		58	58	60	60	13
12	64	63	69	68	64	67	62	63	60	55			56	56	12
11	61	60	63	62	60	62	58	59	56		52	52	52	52	11
10	57	56	58	57	56	58	54	54	51	48	48	49	48	48	10
9	54	53	52	52	52	54	50	49	47	44	45	46	44	44	9
8	50	49	47	46	48	49	46	45	42	40	41	43	41	40	8
7	47	45	41	41	44	45	42	40	38	37	38	40	37	36	7
6	43	42	36	36	39	41	38	35	33	33	35	37	33	32	6
5	40	38	30	30	35	36	34	30	29	29	31	34	29	28	5
4	37	34	24	25	31	32	30	26	24	26	28	31	25	24	4
3	33	31	19	20	27	28	26	21	19	22	24	28	21	20	3
2	30	27	13	15	23	23	22	16	15	18	21	25	17	16	2
1	26	24	8	9	19	19	18	12	10	15	18	22	13	12	1
0	23	20	2	4	15	15		7							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	94	100		100	94	93	90	92	87						19	
18	90	93	100	96	90	89	86	88	84	79				91	18	
17	86	89	95	92	86	85	83	84			89				17	
16	82	85	90	87	82	81	79	80	76		85				16	
15	77	80	85	83	77	77	75	76	72	69	82	74	62	78	15	
14	73	76	80	79	73	73	71	72	68	66	78		59		14	
13	69	72	75	74	69	69	68	68	64	63	74	67		69	13	
12	65	67	70	70	65	65	64	64	60		70	63	53	65	12	
11	61	63	65	65	60	62	60	60	56	56	66	60		60	11	
10	56	59	60	61	56	58	56	56	52	53	63	56	48	56	10	
9	52	54	54	57	52	54	53	52		50	59	53	45	52	9	
8	48	50	49	52	48	50	49	49	44	47	55	49	42	47	8	
7	44	46	44	48	43	46	45	45	41		51	45	39	43	7	
6	39	41	39	44	39	42	41	41	37	40	48	42	36	38	6	
5	35	37	34	39	35	38	38	37	33	37	44	38	33	34	5	
4	31	33	29	35	31	34	34	33		29		40	35	31	30	4
3	27	28	24	30	27	31	30	29	25	31	36	31	28	25	3	
2	22	24	18	26	22	27	26	25	21		32	28	25	21	2	
1	18	20	13	22	18	23	23	21		24	29	24	22	17	1	
0	16	16	8	17				17		21	25	20	19		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93		92		94		96		95							19	
18	89	97	88	80			92		91							18	
17	85	93	84	76	86		88		87	90			92	80		17	
16	81	88	80	72	82	74	84		83	85		92		88	76	78	16
15	77	84	76	69	78	70	80		79	80				84	73		15
14	73	80	72	65	74	66	75		75	76		83		80	69	70	14
13	69	75	67	62	70	62	71		70	71	75	79		76	65	66	13
12	65	71	63	58	66	57	67		66	67			60	72	62	62	12
11	61	67	59	55	62	53	63	60	62	62	67	70		68	58	58	11
10	57	62	55	51	58	49	59		58	58	63	65		64	54	54	10
9	53	58	51	47	54	45	55	51	54	53	58	61	46	60	51	50	9
8	49	54	46	44	50	41	50		50	49	54	56		56	47	46	8
7	45	49	42	40	46	37	46	41	45	44	50	52	36	52	43	42	7
6	41	45	38	37	42	33	42		41	40	46	47		48	40	38	6
5	37	41	34	33	38	29	38	32	37	35	42	43	27	44	36	34	5
4	33	36	30	30	34	25	34		33	30	37	38		40	32	30	4
3	29	32	26		30	20	29	22	29	26	33	34	17	36	29		3
2	25	28	21		26	16	25	17	25	21	29	29	12	32			2
1	21	23	17		22	12	21	13	21	17	25	25	8				1
0	19	19			8	17	8		12	20				18	14		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 9-11 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	99		92		96		91				95	100	100	91		19		
18	95	100	88				87				91	98	98	87		18		
17	91	96	85		86		82				82	94		83		17		
16	87	91	81			77	77	72	80			89	89	79		16		
15	82	87	78		76		73	68				77				15		
14	78	83	74	68	71	69	68	64	71		73	80	80	71		14		
13	74	79	70		66		64	61			66		75	76	67	63	13	
12	70	74	67	62	61	60	59	57	62		64	71	71		59	12		
11	66	70	63	59	56	56	54	53	58		58	59	66	67	59	55	11	
10	61	66	60	56	51	52	50	49	53			55	62	63	55	52	10	
9	57	61	56	52	46	47	45	45	49		49	50	57	58	51	48	9	
8	53	57	53	49	41	43	41	42	44			46	53	54	47	44	8	
7	49	53	49	46	35	39	36	38	40		41	41	48	49	43	41	7	
6	45	49	46	43		35	32	34	35			37	44	45	39	37	6	
5	41	44	42	40	25	31	27	30	31			33	32	39	40	35	5	
4	36	40	39	37		26	22	26	26			29		35	36	31	30	4
3	32	36	35	34	15	22	18		22			25		30	32	27	26	3
2	28	31	32	31	10	18	13	19	17			20		26	27	23	22	2
1	24		28	28	5	14	9	15	12			16			19		1	
0				25		9	4	11								0		

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	89	90	100	100	95	99	92	99	94				85	85	19	
18	86	86	100	100	91	95	88	94	90				81	81	18	
17	83	83	97	95	87	90	84	89	85				77	77	17	
16	79	79	92	89	83	86	80	85	81				73	73	16	
15	76	76	86	84	79	82	76	80	76				65	69	15	
14	72	72	81	79	75	78	72	75	72	64			65	65	14	
13	69	68	75	74	71	73	68	70	67			61	59	62	61	13
12	65	65	70	68	66	69	64	66	63	57			58	57	12	
11	62	61	64	63	62	65	60	61	58			54	53	54	54	11
10	58	57	58	58	58	60	56	56	53	49	51	50	50	50	10	
9	55	54	53	52	54	56	52	52	49	46	47	47	46	46	9	
8	52	50	47	47	50	52	48	47	44	42	44	44	42	42	8	
7	48	47	42	42	46	47	44	42	40	38	40	41	38	38	7	
6	45	43	36	36	42	43	40	38	35	35	37	38	34	34	6	
5	41	39	31	31	38	39	36	33	31	31	34	35	30	30	5	
4	38	36	25	26	34	34	32	28	26	28	30	32	27	26	4	
3	34	32	19	20	30	30	28	23	22	24	27	29	23	22	3	
2	31	28	14	15	25	26	23	19	17	20	24	26	19	18	2	
1	27	25	8	10	21	19	14	13	17	20	23	15	14		1	
0	24	21	3	4	17	17		9							0	

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	93	100		100	96	94	91	93	87						19
18	89	92	100	98	92	90	87	89	84	80				92	18
17	84	88	98	94	88	86	83	85			90				17
16	80	84	93	90	84	82	79	81	76		86				16
15	76	79	88	85	79	78	76	77	72	70	83	74	63	79	15
14	72	75	83	81	75	74	72	73	68	67	79		60		14
13	67	71	78	77	71	71	68	69	64	63	75	67		71	13
12	63	66	73	72	67	67	64	65	60		71	64	54	66	12
11	59	62	67	68	62	63	61	61	56	57	68	60		62	11
10	55	58	62	63	58	59	57	57	52	54	64	57	48	58	10
9	50	53	57	59	54	55	53	53		50	60	53	46	53	9
8	46	49	52	55	50	51	49	49	44	47	56	49	43	49	8
7	42	45	47	50	46	47	46	45	41		52	46	40	44	7
6	38	40	42	46	41	43	42	41	37	41	49	42	37	40	6
5	34	36	37	42	37	40	38	37	33	38	45	39	34	36	5
4	29	32	31	37	33	36	34	34	29		41	35	31	31	4
3	25	27	26	33	29	32	31	30	25	31	37	32	29	27	3
2	21	23	21	28	24	28	27	26	21		34	28	26	23	2
1	17	19	16	24	20	24	23	22		25	30	24	23	18	1
0	14	11		20				18		21	26	21	20		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	96		94		96		99		94							19
18	92	99	90	81			95		90							18
17	88	95	86	77	88		90		86	90				92	80	17
16	84	91	82	74	84	75	86		82	85	93		88	77	78	16
15	80	86	78	70	80	71	82		77	80				84	73	15
14	76	82	73	67	76	67	78		73	76	84			80	69	70
13	72	78	69	63	72	63	74		69	71	75	79		76	66	66
12	68	73	65	59	68	59	70		65	67		60	72	62	62	12
11	64	69	61	56	64	55	65	61	61	62	67	70		68	58	11
10	60	65	57	52	60	50	61		57	58	63	66		64	55	54
9	56	60	52	49	56	46	57	51	52	53	58	61	46	60	51	50
8	52	56	48	45	52	42	53		48	49	54	57		56	47	46
7	48	52	44	42	48	38	49	42	44	44	50	52	36	52	44	42
6	44	47	40	38	44	34	44		40	40	46	48		48	40	38
5	40	43	36	34	40	30	40	32	36	35	42	43	27	44	36	34
4	36	39	32	31	36	26	36		32	30	37	39		40	33	30
3	32	34	27		32	22	32	23	28	26	33	34	17	36	29	3
2	28	30	23		28	18	28	18	23	21	29	30	12	32		2
1	24	25	19		24	13	24	13	19	17	25	26	8			1
0	21				9	19	8		12	20				18	14	0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 9-11 years
Age: 45-49 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	100		92		97		93				97	100	100	92		19		
18	96	100	89				88				92	100	100	88		18		
17	91	97	85		87		84				84		95		84	17		
16	87	92	82			79	79	74	82			91	91	80		16		
15	83	88	78		77		75	70				79				15		
14	79	84	75	68	72	70	70	66	73		74	81	82	72		14		
13	75	80	71		67		65	62			67		77	78	68	63	13	
12	70	75	68	62	62	62	61	58	64			65	72	73	59	12		
11	66	71	64	59	57	58	56	55	59		59	61	68	69	60	55	11	
10	62	67	61	56	52	53	52	51	55			56	63	64	56	52	10	
9	58	62	57	53	47	49	47	47	50		51	52	59	60	52	48	9	
8	54	58	53	50	42	45	42	43	46			47	54	56	48	44	8	
7	50	54	50	47	37	41	38	39	41		43	43	50	51	44	41	7	
6	45	50	46	43		37	33	36	37			39	45	47	40	37	6	
5	41	45	43	40	27	32	29	32	32		34	34	41	42	36	33	5	
4	37	41	39	37		28	24	28	28			30		36	38	32	29	4
3	33	37	36	34	17	24	20		23			26		32	33	28	26	3
2	29	33	32	31	11	20	15	20	19			22		27	29	24	22	2
1	24		29	28	6	15	10	17	14			18			20		1	
0				25		11	6	13								0		

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	91	91	100	100	98	100	94	100	97				86	87	19	
18	87	88	100	100	93	97	90	96	92				82	83	18	
17	84	84	98	95	89	93	86	92	88				79	79	17	
16	80	80	93	90	85	89	82	87	83				75	75	16	
15	77	77	87	85	81	84	78	82	78				67	71	15	
14	73	73	81	80	77	80	74	78	74	66			67	67	14	
13	70	70	76	74	73	76	70	73	69			63	61	63	63	13
12	67	66	70	69	69	71	66	68	65	59			59	59	12	
11	63	62	65	64	65	67	62	63	60			56	55	55	55	11
10	60	59	59	58	61	63	58	59	56	51	53	52	51	51	10	
9	56	55	54	53	56	58	54	54	51	48	49	49	47	47	9	
8	53	51	48	48	52	54	50	49	47	44	46	46	44	43	8	
7	49	48	42	42	48	50	46	45	42	40	42	43	40	39	7	
6	46	44	37	37	44	46	42	40	38	37	39	40	36	35	6	
5	42	41	31	32	40	41	37	35	33	33	36	37	32	31	5	
4	39	37	26	26	36	37	33	31	28	29	32	34	28	27	4	
3	35	33	20	21	32	33	29	26	24	26	29	31	24	23	3	
2	32	30	15	16	28	28	25	21	19	22	25	28	20	20	2	
1	29	26	9	10	24	24	21	16	15	19	22	25	16	16	1	
0	25	23	3	5	20	20		12							0	

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	93	100		100	98	95	91	94	87						19
18	89	91	100	100	94	91	88	90	84	80				94	18
17	84	87	100	96	90	87	84	86			91				17
16	80	82	96	92	86	83	80	82	76		87				16
15	76	78	91	88	82	80	76	78	72	70	84	75	63	81	15
14	72	74	86	83	77	76	73	74	68	67	80		61		14
13	67	69	80	79	73	72	69	70	64	64	76	68		72	13
12	63	65	75	74	69	68	65	66	60		72	64	55	68	12
11	59	61	70	70	65	64	61	62	56	57	69	60		64	11
10	55	57	65	66	60	60	58	58	52	54	65	57	49	59	10
9	50	52	60	61	56	56	54	54		51	61	53	46	55	9
8	46	48	55	57	52	52	50	50	44	48	57	50	44	51	8
7	42	44	50	53	48	49	46	46	41		53	46	41	46	7
6	38	39	45	48	43	45	43	42	37	41	50	43	38	42	6
5	34	35	39	44	39	41	39	39	33	38	46	39	35	37	5
4	29	31	34	39	35	37	35	35	29		42	36	32	33	4
3	25	26	29	35	31	33	31	31	25	32	38	32	29	29	3
2	21	22	24	31	26	29	28	27	21		35	28	26	24	2
1	17	18	19	26	22	25	24	23		25	31	25	24	20	1
0	13	14		22				19		22	27	21	21		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	96	96			96		100		94							19	
18	92	100	92	82			97		90							18	
17	88	97	88	79	88		93		86	90				91	81	17	
16	84	93	84	75	84	76	89		82	85	93		87	77	77	16	
15	80	89	79	71	80	72	85		77	80				83	73	15	
14	76	84	75	68	76	68	80		73	76	84		79	70	69	14	
13	72	80	71	64	72	64	76		69	71	75	80		75	66	66	13
12	68	76	67	61	68	60	72		65	67		60	71	62	62	12	
11	64	71	63	57	64	56	68	61	61	62	67	71		67	59	58	11
10	60	67	59	54	60	52	64		57	58	63	66		63	55	54	10
9	56	63	54	50	56	48	59	52	52	53	58	62	46	59	51	50	9
8	52	58	50	46	52	43	55		48	49	54	57		55	48	46	8
7	48	54	46	43	48	39	51	42	44	44	50	53	36	51	44	42	7
6	44	50	42	39	44	35	47		40	40	46	48		47	40	38	6
5	40	45	38	36	40	31	43	33	36	35	42	44	27	43	37	34	5
4	36	41	33	32	36	27	39		32	30	37	40		39	33	30	4
3	32	36	29		32	23	34	23	28	26	33	35	17	35	29		3
2	28	32	25		28	19	30	18	23	21	29	31	13	31			2
1	24	28	21		24	15	26	14	19	17	25	26	8				1
0	23	28			11	22	9		12	20				18	14		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 9-11 years
Age: 50-54 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		93		98		95				98	100	100	93		19	
18	96	100	90				90				93	100	100	89		18	
17	92	98	86		88		86			86		97		85		17	
16	88	94	83				81	81	75	83			92	93	81	16	
15	84	89	79		78		76	72			80					15	
14	79	85	75	68	73	72	72	68	74		76	83	84	73		14	
13	75	81	72		68		67	64		69		78	80	69	63	13	
12	71	76	68	62	63	64	63	60	65		67	74	75		59	12	
11	67	72	65	59	58	59	58	56	61	61	62	69	71	61	55	11	
10	63	68	61	56	53	55	54	53	56		58	65	66	57	52	10	
9	58	64	58	53	48	51	49	49	52	53	53	60	62	53	48	9	
8	54	59	54	50	43	47	44	45	47		49	56	57	49	44	8	
7	50	55	51	47	38	43	40	41	43	44	44	51	53	45	41	7	
6	46	51	47	44		38	35	37	38	40		47	49	41	37	6	
5	42	46	44	41	28	34	31	34	34	36	35	42	44	37	33	5	
4	38	42	40	38		30	26	30	29		32		38	40	33	29	4
3	33	38	37	35	18	26	21		25		28		33	35	29	26	3
2	29	34	33	31	13	21	17	22	20		24		29	31	25	22	2
1	25		29	28	8	17	12	18	16	20				21		1	
0				25		13	8	15								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	93	100	100	100	100	96	100	99				88	88	19
18	88	89	100	100	96	100	92	99	94				84	84	18
17	85	85	99	96	92	96	88	94	90				80	80	17
16	81	82	93	91	88	91	84	89	85				76	76	16
15	78	78	88	86	83	87	80	85	81		70	72	72	72	15
14	75	74	82	80	79	83	76	80	76	68		68	68	68	14
13	71	71	77	75	75	78	72	75	72		65	64	64	65	13
12	68	67	71	70	71	74	68	71	67	61		61	61	61	12
11	64	64	66	64	67	70	64	66	63		58	58	57	57	11
10	61	60	60	59	63	65	60	61	58	54	55	55	53	53	10
9	57	56	54	54	59	61	55	56	53	50	51	52	49	49	9
8	54	53	49	48	55	57	51	52	49	46	48	49	45	45	8
7	50	49	43	43	51	52	47	47	44	43	45	46	41	41	7
6	47	46	38	38	47	48	43	42	40	39	41	43	37	37	6
5	44	42	32	33	42	44	39	38	35	35	38	40	33	33	5
4	40	38	27	27	38	40	35	33	31	32	34	37	30	29	4
3	37	35	21	22	34	35	31	28	26	28	31	34	26	25	3
2	33	31	15	17	30	31	27	24	22	24	28	31	22	21	2
1	30	27	10	11	26	27	23	19	17	21	24	28	18	17	1
0	26	24	4	6	22	22		14							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	91	100		100	100	96	92	95	85						19	
18	87	90	100	100	96	92	88	91	81	81				96	18	
17	83	86	100	99	92	89	85	87			92				17	
16	78	81	99	94	88	85	81	83	74		89				16	
15	74	77	93	90	84	81	77	79	70	71	85	75	64	83	15	
14	70	73	88	86	79	77	73	75	66	68	81		61		14	
13	66	68	83	81	75	73	70	71	62	64	77	68		74	13	
12	61	64	78	77	71	69	66	68	58		73	64	56	70	12	
11	57	60	73	72	67	65	62	64	54	58	70	61		65	11	
10	53	55	68	68	62	61	58	60	50	55	66	57	50	61	10	
9	49	51	63	64	58	57	55	56		51	62	54	47	57	9	
8	45	47	58	59	54	54	51	52	42	48	58	50	44	52	8	
7	40	42	52	55	50	50	47	48	38		55	47	42	48	7	
6	36	38	47	51	46	46	43	44	34	42	51	43	39	43	6	
5	32	34	42	46	41	42	40	40	31	39	47	39	36	39	5	
4	28	30	37	42	37	38	36	36	27		43	36	33	35	4	
3	23	25	32	37	33	34	32	32	23	32	39	32	30	30	3	
2	19	21	27	33	29	30	28	28	19		36	29	27	26	2	
1	15	17	22	29	24	26	25	24		26	32	25	24	22	1	
0	12	16		24				20		22	28	22	22		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	96		98		98		100		93								19
18	92	100	94	83			100		89								18
17	88	100	90	80	90		95		84	90				90	81	17	
16	85	95	85	76	86	77	91		80	85	94		86	77	77	16	
15	81	91	81	73	82	73	87		76	80				82	74	15	
14	77	87	77	69	78	69	83		72	76	85		78	70	69	14	
13	73	82	73	66	74	65	79		68	71	75	80		74	66	65	13
12	69	78	69	62	70	61	74		64	67			60	70	63	61	12
11	65	74	65	58	66	57	70	62	59	62	67	71		66	59	57	11
10	61	69	60	55	62	53	66		55	58	63	67		62	55	53	10
9	57	65	56	51	58	49	62	52	51	53	58	63	46	58	52	50	9
8	53	60	52	48	54	45	58		47	49	54	58		54	48	46	8
7	49	56	48	44	50	41	54	43	43	44	50	54	37	50	44	42	7
6	45	52	44	41	46	36	49		39	40	46	49		46	41	38	6
5	41	47	39	37	42	32	45	33	34	35	42	45	27	42	37	34	5
4	37	43	35	33	38	28	41		30	30	37	40		38	33	30	4
3	33	39	31		34	24	37	24	26	26	33	36	17	34	30		3
2	29	34	27		30	20	33	19	22	21	29	31	13	30			2
1	25	30	23		26	16	29	14	18	17	25	27	8				1
0	26				12	24	9		12	20				19	14		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 9-11 years
Age: 55-59 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		94		100		97				99	100	100	94		19
18	97	100	90				92				95	100	100	90		18
17	93	99	87		90		88			87		98		86		17
16	88	95	83			82	83	77	85			94	95	82		16
15	84	90	80		79		79	74			81					15
14	80	86	76	69	74	74	74	70	76		77	84	86	74		14
13	76	82	73		69		69	66		71		80	81	70	63	13
12	72	78	69	63	64	65	65	62	67		68	75	77	59		12
11	67	73	66	60	59	61	60	58	63	63	63	71	73	62	55	11
10	63	69	62	56	54	57	56	54	58		59	66	68	58		10
9	59	65	58	53	49	53	51	51	54	54	54	62	64	54		9
8	55	60	55	50	44	49	46	47	49		50	57	59	50		8
7	51	56	51	47	39	44	42	43	45	46	46	53	55	46		7
6	46	52	48	44		40	37	39	40	42		48	50	42		6
5	42	48	44	41	29	36	33	35	35	38	37	44	46	38		5
4	38	43	41	38		32	28	32	31		34		39	42		4
3	34	39	37	35	19	27	24		26		30		35	37		3
2	30	35	34	32	14	23	19	24	22		26		30	33		2
1	26		30	29	9	19	14	20	17	21				22		1
0				26		15	10	16								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	94	100	100	100	100	98	100	100				89	90	19
18	90	90	100	100	98	100	94	100	97				85	86	18
17	86	87	100	97	94	98	90	96	92				82	82	17
16	83	83	94	92	90	94	86	92	87				78	78	16
15	79	79	89	87	86	90	82	87	83				72	74	15
14	76	76	83	81	82	85	78	82	78	71			70	70	14
13	72	72	78	76	78	81	74	78	74		67	66	66	66	13
12	69	69	72	71	73	77	69	73	69	63			62	62	12
11	65	65	67	65	69	72	65	68	65		61	60	58	58	11
10	62	61	61	60	65	68	61	64	60	56	57	58	54	54	10
9	59	58	55	55	61	64	57	59	56	52	54	55	50	50	9
8	55	54	50	49	57	59	53	54	51	49	51	52	47	46	8
7	52	50	44	44	53	55	49	49	47	45	47	49	43	42	7
6	48	47	39	39	49	51	45	45	42	41	44	46	39	38	6
5	45	43	33	34	45	47	41	40	37	38	40	43	35	34	5
4	41	40	28	28	41	42	37	35	33	34	37	40	31	31	4
3	38	36	22	23	37	38	33	31	28	30	34	37	27	27	3
2	34	32	17	18	32	34	29	26	24	27	30	34	23	23	2
1	31	29	11	12	28	29	25	21	19	23	27	31	19	19	1
0	28	25	5	7	24	25		17							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	91	100		100	100	97	93	97	85						19
18	87	89	100	100	98	94	89	93	81	81				97	18
17	83	85	100	100	94	90	86	89			93				17
16	78	80	100	97	90	86	82	85	74		90				16
15	74	76	96	92	86	82	78	81	70	71	86	76	65	84	15
14	70	72	91	88	81	78	74	77	66	68	82		62		14
13	66	67	86	84	77	74	71	73	62	65	78	68		76	13
12	61	63	81	79	73	70	67	69	58		74	65	57	71	12
11	57	59	76	75	69	66	63	65	54	58	71	61		67	11
10	53	54	71	70	65	63	59	61	50	55	67	58	51	63	10
9	49	50	65	66	60	59	56	57	52	63	54	48	58		9
8	45	46	60	62	56	55	52	53	42	49	59	51	45	54	8
7	40	41	55	57	52	51	48	49	38		56	47	42	50	7
6	36	37	50	53	48	47	44	45	34	42	52	43	39	45	6
5	32	33	45	49	43	43	41	41	31	39	48	40	37	41	5
4	28	28	40	44	39	39	37	37	27		44	36	34	36	4
3	23	24	35	40	35	35	33	33	23	33	41	33	31	32	3
2	19	20	29	35	31	32	29	29	19		37	29	28	28	2
1	15	15	24	31	26	28	26	25		26	33	26	25	23	1
0	11	19		27				22		23	29	22	22		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	96	100	100		98		100		93							19
18	92	100	96	85			100		89							18
17	88	100	91	81	90		98		84	90				88	81	17
16	85	98	87	78	86	79	94		80	85	94		84	78	77	16
15	81	93	83	74	82	75	89		76	80			80	74		15
14	77	89	79	70	78	70	85		72	76	85		76	70	69	14
13	73	85	75	67	74	66	81		68	71	81		72	67	65	13
12	69	80	71	63	70	62	77		64	67		61	68	63	61	12
11	65	76	66	60	66	58	73	62	59	62	67	72		64	59	57
10	61	71	62	56	62	54	69		55	58	63	68	60	56	53	10
9	57	67	58	53	58	50	64	53	51	53	58	63	46	56	52	9
8	53	63	54	49	54	46	60		47	49	54	59	52	48	45	8
7	49	58	50	45	50	42	56	43	43	44	50	54	37	48	45	7
6	45	54	46	42	46	38	52		39	40	46	50		44	41	6
5	41	50	41	38	42	34	48	34	34	35	41	45	27	40	37	5
4	37	45	37	35	38	29	44		30	30	37	41	36	34	30	4
3	33	41	33		34	25	39	24	26	26	33	36	17	32	30	3
2	29	37	29		30	21	35	19	22	21	29	32	13	28		2
1	25	32	25		26	17	31	14	18	17	25	27	8			1
0	28				13	27	10		12	20			19	14		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 9-11 years
Age: 60-64 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		95		100		99				100	100	100	95		19	
18	97	100	91				95				96	100	100	91		18	
17	93	100	87		92		90				89	100		87		17	
16	89	96	84			84	85	79	87			95	96	83		16	
15	85	91	80		82		81	76				83				15	
14	81	87	77	69	77	76	76	72	78		78	86	88	75		14	
13	76	83	73		72		72	68			73		81	83	71	60	13
12	72	79	70	63	67	67	67	64	69			69	77	79	56	12	
11	68	74	66	60	62	63	63	60	64		64	65	72	74	63	52	11
10	64	70	63	57	56	59	58	57	60			60	68	70	59	49	10
9	60	66	59	54	51	55	53	53	55		56	56	63	66	56	45	9
8	55	61	56	51	46	50	49	49	51			51	59	61	52	41	8
7	51	57	52	47	41	46	44	45	46		48	47	54	57	48	38	7
6	47	53	49	44		42	40	41	42			44	50	52	44	34	6
5	43	49	45	41	31	38	35	38	37		40	38	45	48	40	30	5
4	39	44	42	38		33	30	34	33			35	41	43	36	26	4
3	35	40	38	35	21	29	26		28			31	36	39	32	23	3
2	30	36	34	32	16	25	21	26	24			27	32	35	28	19	2
1	26		31	29	11	21	17	22	19			23			24		1
0				26		17	12	19								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	95	100	100	100	100	100	100	100				91	91	19
18	91	92	100	100	100	100	96	100	99				87	87	18
17	87	88	100	99	96	100	92	99	94				83	83	17
16	84	84	96	93	92	97	88	94	90				79	80	16
15	80	81	90	88	88	92	83	89	85			75	75	76	15
14	77	77	85	83	84	88	79	85	81	73			71	72	14
13	74	73	79	77	80	84	75	80	76		70	69	67	68	13
12	70	70	73	72	76	79	71	75	72	66		66	64	64	12
11	67	66	68	67	72	75	67	71	67	63	63	60	60	60	11
10	63	63	62	61	68	71	63	66	62	59	60	60	56	56	10
9	60	59	57	56	64	66	59	61	58	55	57	57	52	52	9
8	56	55	51	51	59	62	55	57	53	51	53	54	48	48	8
7	53	52	46	45	55	58	51	52	49	48	50	51	44	44	7
6	49	48	40	40	51	53	47	47	44	44	46	48	40	40	6
5	46	44	35	35	47	49	43	42	40	40	43	45	36	36	5
4	43	41	29	29	43	45	39	38	35	37	40	42	33	32	4
3	39	37	23	24	39	41	35	33	31	33	36	39	29	28	3
2	36	34	18	19	35	36	31	28	26	29	33	36	25	24	2
1	32	30	12	14	31	32	27	24	22	26	30	33	21	20	1
0	29	26	7	8	27	28		19							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	89	100		100	100	99	94	99	85							19
18	85	88	100	100	100	95	91	95	81	82						18
17	81	83	100	100	96	91	87	91			94					17
16	77	79	100	99	92	87	83	87	74		91					16
15	73	75	99	95	88	83	79	83	70	72	87	76	66	86		15
14	68	71	94	90	84	79	75	79	66	69	83		63			14
13	64	66	89	86	79	75	72	75	62	65	79	69		77		13
12	60	62	84	81	75	72	68	71	58		76	65	57	73		12
11	56	58	78	77	71	68	64	67	54	59	72	62		69		11
10	51	53	73	73	67	64	60	63	50	56	68	58	52	64		10
9	47	49	68	68	62	60	57	59		52	64	55	49	60		9
8	43	45	63	64	58	56	53	55	42	49	60	51	46	56		8
7	39	40	58	60	54	52	49	51	38		57	47	43	51		7
6	34	36	53	55	50	48	45	47	34	43	53	44	40	47		6
5	30	32	48	51	45	44	42	43	31	40	49	40	37	43		5
4	26	27	42	46	41	41	38	39	27		45	37	35	38		4
3	22	23	37	42	37	37	34	35	23	33	42	33	32	34		3
2	18	19	32	38	33	33	30	31	19		38	30	29	29		2
1	13	14	27	33	29	29	27	27		27	34	26	26	25		1
0	10	22		29				23		23	30	22	23			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	100	100			100		100		91								19	
18	96	100	97	86			100		87								18	
17	92	100	93	82	92		100		83	90				86	82		17	
16	88	100	89	79	88	80	96		79	85		95		82	78	77	16	
15	84	96	85	75	84	76	92		75	80				78	74		15	
14	80	91	81	72	80	72	88		71	76		86		74	71	69	14	
13	76	87	77	68	76	68	84		66	71	75	82		70	67	65	13	
12	72	82	72	65	72	64	79		62	67			61	66	63	61	12	
11	68	78	68	61	68	59	75	63	58	62	67	73		62	60	57	11	
10	64	74	64	57	64	55	71		54	58	63	68		58	56	53	10	
9	60	69	60	54	60	51	67	53	50	53	58	64	46	54	52	49	9	
8	56	65	56	50	56	47	63		46	49	54	59		50	49	45	8	
7	52	61	52	47	52	43	59	44	41	44	50	55	37	46	45	41	7	
6	48	56	47	43	48	39	54		37	40	46	50		42	41	37	6	
5	44	52	43	40	44	35	50	34	33	35	41	46	27	38	38	33	5	
4	40	48	39	36	40	31	46		29	30	37	41		34	34	29	4	
3	36	43	35		36	27	42	24	25	26	33	37	17	30	30		3	
2	32	39	31		32	22	38	20	21	29	33	13	26				2	
1	28	35	26		28	18	33	15	17	17	25	28	8				1	
0	30	30			14	29	10		12	20				19	13		0	

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 9-11 years
Age: 65-69 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		95		100		100				100	100	100	96		19	
18	98	100	92				97				98	100	100	93		18	
17	94	100	88		93		93				91	100		89		17	
16	90	97	85				86	88	82	88		97	98	85		16	
15	85	93	81		83		83	78				84				15	
14	81	88	78	69	78	77	79	74	79		80	88	89	77		14	
13	77	84	74		73		74	70			74	83	85	73	60	13	
12	73	80	71	63	68	69	70	67	70			71	78	81	56	12	
11	69	75	67	60	63	65	65	63	66		66	74	76	65	52	11	
10	64	71	63	57	58	60	60	59	61			62	69	72	61	49	10
9	60	67	60	54	53	56	56	55	57		58	57	65	67	57	45	9
8	56	63	56	51	48	52	51	51	52			53	60	63	53	41	8
7	52	58	53	48	43	48	47	48	48		50	48	56	58	49	38	7
6	48	54	49	45		44	42	44	43			45	51	54	45	34	6
5	43	50	46	42	33	39	38	40	39		41	39	47	50	41	30	5
4	39	45	42	39		35	33	36	34			37	42	45	37	26	4
3	35	41	39	35	22	31	28		30			33	38	41	33	23	3
2	31	37	35	32	17	27	24	29	25		29		33	36	29	19	2
1	27		32	29	12	22	19	25	21		25				25		1
0				26		18	15	21								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	96	100	100	100	100	100	100	100				92	93	19
18	92	93	100	100	100	100	97	100	100				88	89	18
17	89	89	100	100	99	100	93	100	96				84	85	17
16	85	86	97	95	95	99	89	97	92				81	81	16
15	82	82	92	89	91	95	85	92	87			78	77	77	15
14	78	78	86	84	86	90	81	87	83	76			73	73	14
13	75	75	81	79	82	86	77	82	78			73	72	69	13
12	71	71	75	73	78	82	73	78	74	69			65	65	12
11	68	67	69	68	74	77	69	73	69			66	66	61	11
10	64	64	64	63	70	73	65	68	65	62	63	63	57	57	10
9	61	60	58	57	66	69	61	64	60	58	59	60	53	53	9
8	58	57	53	52	62	65	57	59	56	54	56	57	50	49	8
7	54	53	47	47	58	60	53	54	51	51	53	54	46	46	7
6	51	49	42	42	54	56	49	50	46	47	49	51	42	42	6
5	47	46	36	36	49	52	45	45	42	43	46	48	38	38	5
4	44	42	30	31	45	47	41	40	37	40	43	45	34	34	4
3	40	39	25	26	41	43	37	35	33	36	39	42	30	30	3
2	37	35	19	20	37	39	33	31	28	32	36	39	26	26	2
1	33	31	14	15	33	34	29	26	24	29	32	36	22	22	1
0	30	28	8	10	29	30		21							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	88	100		100	100	100	96	100	85						19
18	84	87	100	100	100	96	92	97	81	82				100	18
17	79	82	100	100	98	92	88	93			96				17
16	75	78	100	100	94	88	84	89	74		92				16
15	71	74	100	97	90	84	81	85	70	72	88	76	67	88	15
14	67	69	97	93	86	81	77	81	66	69	84		64		14
13	62	65	91	88	81	77	73	77	62	66	80	69		79	13
12	58	61	86	84	77	73	69	73	58		77	66	58	75	12
11	54	56	81	79	73	69	66	69	54	59	73	62		70	11
10	50	52	76	75	69	65	62	65	50	56	69	58	52	66	10
9	46	48	71	71	64	61	58	61		53	65	55	50	62	9
8	41	44	66	66	60	57	54	57	42	50	62	51	47	57	8
7	37	39	61	62	56	53	51	53	38		58	48	44	53	7
6	33	35	56	58	52	50	47	49	34	43	54	44	41	49	6
5	29	31	50	53	48	46	43	45	31	40	50	41	38	44	5
4	24	26	45	49	43	42	39	41	27		46	37	35	40	4
3	20	22	40	44	39	38	35	37	23	34	43	34	33	35	3
2	16	18	35	40	35	34	32	33	19		39	30	30	31	2
1	12	13	30	36	31	30	28	29		27	35	26	27	27	1
0	9	25		31				25		24	31	23	24		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	100		100		100		100		90							19
18	99	100	99	87			100		86							18
17	95	100	95	84	94		100		82	90				83	82	17
16	91	100	91	80	90	81	99		78	85	96		79	78	77	16
15	87	98	87	76	86	77	94		73	80			75	75		15
14	83	93	83	73	82	73	90		69	76	87		71	71	69	14
13	79	89	78	69	78	69	86		65	71	82		67	67	65	13
12	75	85	74	66	74	65	82		61	67		61	63	64	61	12
11	71	80	70	62	70	61	78	63	57	62	67	73	59	60	57	11
10	67	76	66	59	66	57	74		53	58	63	69	55	56	53	10
9	63	72	62	55	62	52	69	54	48	53	58	64	46	51	53	9
8	59	67	58	52	58	48	65		44	49	54	60	47	49	45	8
7	55	63	53	48	54	44	61	44	40	44	50	55	37	43	45	7
6	51	59	49	44	50	40	57		36	40	46	51	39	42	37	6
5	47	54	45	41	46	36	53	34	32	35	41	46	27	35	38	5
4	43	50	41	37	42	32	49		28	30	37	42	31	34	29	4
3	39	46	37		38	28	44	25	24	26	33	38	18	27	31	3
2	35	41	33		34	24	40	20	19	21	29	33	13	23		2
1	31	37	28		30	20	36	15	15	17	25	29	8			1
0	33				15	32	11		12	20			20	13		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 9-11 years
Age: 70-74 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		96		100		100				100	100	100	98		19	
18	99	100	92				100				99	100	100	94		18	
17	94	100	89		94		95				92	100		90		17	
16	90	98	85				88	91	84	90		98	100	86		16	
15	86	94	82		84		86	80				86				15	
14	82	89	78	70	79	79	82	77	81		81	89	91	78		14	
13	78	85	75		74		77	73			76	84	87	74	60	13	
12	73	81	71	64	69	71	72	69	72		72	80	82		56	12	
11	69	77	68	60	64	66	68	65	68		68	75	78	66	52	11	
10	65	72	64	57	59	62	63	61	63		63	71	74	62	49	10	
9	61	68	61	54	54	58	59	58	59		59	59	66	69	58	9	
8	57	64	57	51	49	54	54	54	54		54	62	65	54	41	8	
7	52	59	54	48	44	50	49	50	49		51	50	57	60	50	7	
6	48	55	50	45		45	45	46	45		47	53	56	46	34	6	
5	44	51	46	42	34	41	40	42	40		43	41	48	51	42	5	
4	40	47	43	39		37	36	39	36			39	44	47	38	26	4
3	36	42	39	36	24	33	31		31			35	39	43	34	23	3
2	31	38	36	33	19	28	27	31	27			31	35	38	30	19	2
1	27		32	30	14	24	22	27	22			26			26		1
0				27		20	17	23								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	97	98	100	100	100	100	100	100	100				94	94	19
18	93	94	100	100	100	100	99	100	100				90	91	18
17	90	90	100	100	100	100	95	100	99				86	87	17
16	86	87	99	96	97	100	91	99	94				82	83	16
15	83	83	93	91	93	97	87	94	90				81	78	15
14	79	80	88	86	89	93	83	90	85	79			74	75	14
13	76	76	82	80	85	88	79	85	81				76	75	13
12	72	72	77	75	81	84	75	80	76	72			67	67	12
11	69	69	71	70	76	80	71	75	71				69	63	11
10	66	65	66	64	72	75	67	71	67				66	59	10
9	62	62	60	59	68	71	63	66	62				62	55	9
8	59	58	54	54	64	67	59	61	58				60	51	8
7	55	54	49	48	60	62	55	57	53				54	57	7
6	52	51	43	43	56	58	51	52	49				52	43	6
5	48	47	38	38	52	54	47	47	44				46	49	5
4	45	43	32	33	48	49	43	43	40				46	48	4
3	41	40	27	27	44	45	38	38	35				42	45	3
2	38	36	21	22	39	41	34	33	31				39	42	2
1	35	33	15	17	35	36	30	28	26				39	24	1
0	31	29	10	11	31	32			24						0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	86	100		100	100	100	97	100	85						19
18	82	86	100	100	100	97	93	99	81	83				100	18
17	78	81	100	100	100	93	90	95			97				17
16	74	77	100	100	96	90	86	91	74		93				16
15	69	73	100	99	92	86	82	87	70	73	89	77	67	89	15
14	65	68	99	95	88	82	78	83	66	70	85		65		14
13	61	64	94	91	83	78	75	79	62	66	81	70		81	13
12	57	60	89	86	79	74	71	75	58		78	66	59	76	12
11	52	55	84	82	75	70	67	71	54	60	74	62		72	11
10	48	51	79	77	71	66	63	67	50	57	70	59	53	68	10
9	44	47	74	73	67	62	60	63		53	66	55	50	63	9
8	40	42	69	69	62	58	56	59	42	50	63	52	48	59	8
7	35	38	63	64	58	55	52	55	38		59	48	45	55	7
6	31	34	58	60	54	51	48	52	34	44	55	45	42	50	6
5	27	29	53	56	50	47	45	48	31	41	51	41	39	46	5
4	23	25	48	51	45	43	41	44	27		48	37	36	42	4
3	19	21	43	47	41	39	37	40	23	34	44	34	33	37	3
2	14	16	38	42	37	35	33	36	19		40	30	31	33	2
1	10	12	33	38	33	31	29	32		28	36	27	28	28	1
0	8	27		34				28		24	32	23	25		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		89							19	
18	100	100	100	88			100		85							18	
17	98	100	97	85	96		100		80	90				80	82	17	
16	94	100	93	81	92	82	100		76	85	96			76	79	77	16
15	90	100	89	78	88	78	97		72	80				72	75		15
14	86	96	84	74	84	74	93		68	76	87			68	71	69	14
13	82	91	80	71	80	70	89		64	71	83			64	68	65	13
12	78	87	76	67	76	66	84		60	67				61	60	64	12
11	74	83	72	63	72	62	80	64	55	62	67	74		56	60	57	11
10	70	78	68	60	68	58	76		51	58	63	69		52	57	53	10
9	66	74	64	56	64	54	72	54	47	53	58	65	46	48	53	49	9
8	62	70	59	53	60	50	68		43	49	54	60		44	49	45	8
7	58	65	55	49	56	45	64	44	39	44	50	56	37	40	46	41	7
6	54	61	51	46	52	41	59		35	40	46	51		36	42	37	6
5	50	57	47	42	48	37	55	35	31	35	41	47	27	32	38	33	5
4	46	52	43	39	44	33	51		26	30	37	43		28	35	29	4
3	42	48	39		40	29	47	25	22	26	33	38	18	24	31		3
2	38	44	34		36	25	43	21	18	21	29	34	13	20			2
1	34	39	30		32	21	38	16	14	17	25	29	8				1
0	35				17	34	11		12	20				20	13		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 9-11 years
Age: 75-79 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory							Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	100		97		100		100				100	100	100	99		19		
18	99	100	93				100				100	100	100	95		18		
17	95	100	90		95		98				94	100		91		17		
16	91	99	86			89	94	87	92			100	100	87		16		
15	87	95	83		85		89	83				87				15		
14	82	90	79	70	80	81	84	79	83		82	91	93	79		14		
13	78	86	75		75		80	75			78		86	89	75	60	13	
12	74	82	72	64	70	72	75	72	74		74	81	84		56	12		
11	70	78	68	61	65	68	71	68	69		69	69	77	80	67	52	11	
10	66	73	65	58	60	64	66	64	65			65	72	75	63	49	10	
9	61	69	61	55	55	60	62	60	60		61	60	68	71	59	45	9	
8	57	65	58	52	50	56	57	56	56			56	63	67	55	41	8	
7	53	61	54	48	45	51	52	53	51		53	51	59	62	51	38	7	
6	49	56	51	45		47	48	49	47		49		54	58	47	34	6	
5	45	52	47	42	35	43	43	45	42		45	42	50	53	43	30	5	
4	40	48	44	39		39	39	41	38			41		45	49	39	26	4
3	36	43	40	36	25	34	34		33			36		41	44	35	23	3
2	32	39	37	33	20	30	29	34	29			32		36	40	31	19	2
1	28		33	30	15	26	25	30	24			28			27		1	
0				27	22	20	26										0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	98	99	100	100	100	100	100	100	100				95	96	19
18	94	95	100	100	100	100	100	100	100				91	92	18
17	91	92	100	100	100	100	97	100	100				87	88	17
16	87	88	100	98	99	100	93	100	96				84	84	16
15	84	85	95	93	95	99	89	97	92			83	80	80	15
14	81	81	90	88	91	94	85	92	87	83			76	76	14
13	77	77	84	82	87	90	81	87	83		79	77	72	72	13
12	74	74	79	77	83	86	77	83	78	75			68	68	12
11	70	70	73	72	79	81	73	78	74		72	71	64	64	11
10	67	66	68	66	75	77	69	73	69	68	69	68	60	60	10
9	63	63	62	61	71	73	65	68	65	64	66	65	56	57	9
8	60	59	56	56	66	68	61	64	60	61	62	62	53	53	8
7	56	56	51	50	62	64	57	59	56	57	59	60	49	49	7
6	53	52	45	45	58	60	52	54	51	53	55	57	45	45	6
5	50	48	40	40	54	55	48	50	46	50	52	54	41	41	5
4	46	45	34	34	50	51	44	45	42	46	49	51	37	37	4
3	43	41	29	29	46	47	40	40	37	42	45	48	33	33	3
2	39	37	23	24	42	42	36	36	33	39	42	45	29	29	2
1	36	34	17	19	38	38	32	31	28	35	38	42	25	25	1
0	32	30	12	13	34	34	26								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 9-11 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	86	100		100	100	100	99	100	85						19
18	82	84	100	100	100	99	95	100	81	83				100	18
17	78	80	100	100	100	95	91	98			98				17
16	74	76	100	100	98	91	88	94	74		94				16
15	69	71	100	100	94	87	84	90	70	73	90	77	68	91	15
14	65	67	100	97	90	83	80	86	66	70	86		66		14
13	61	63	97	93	86	79	76	82	62	67	83	70		82	13
12	57	58	92	89	82	75	73	78	58		79	66	60	78	12
11	52	54	87	84	77	71	69	74	54	60	75	63		74	11
10	48	50	82	80	73	68	65	70	50	57	71	59	54	69	10
9	44	46	77	76	69	64	61	66		54	68	56	51	65	9
8	40	41	72	71	65	60	58	62	42	51	64	52	48	61	8
7	35	37	66	67	60	56	54	58	38		60	49	46	56	7
6	31	33	61	62	56	52	50	54	34	44	56	45	43	52	6
5	27	28	56	58	52	48	46	51	31	41	52	41	40	48	5
4	23	24	51	54	48	44	43	47	27		49	38	37	43	4
3	19	20	46	49	43	40	39	43	23	35	45	34	34	39	3
2	14	15	41	45	39	37	35	39	19		41	31	31	35	2
1	10	11	36	41	35	33	31	35		28	37	27	29	30	1
0		7	30	36				31		25	34	24	26		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		89							19	
18	100	100	100	90			100		85							18	
17	98	100	99	86	96		100		80	90				76	83	17	
16	94	100	95	83	92	84	100		76	85		97		72	79	77	16
15	90	100	91	79	88	80	100		72	80				68	75		15
14	86	98	86	76	84	75	95		68	76		88		64	72	69	14
13	82	94	82	72	80	71	91		64	71	75	83		60	68	65	13
12	78	90	78	68	76	67	87		60	67			61	56	64	61	12
11	74	85	74	65	72	63	83	64	55	62	67	74		52	61	57	11
10	70	81	70	61	68	59	79		51	58	63	70		48	57	53	10
9	66	77	66	58	64	55	75	55	47	53	58	65	46	44	53	49	9
8	62	72	61	54	60	51	70		43	49	54	61		40	50	45	8
7	58	68	57	51	56	47	66	45	39	44	50	56	37	36	46	41	7
6	54	64	53	47	52	43	62		35	40	46	52		32	42	37	6
5	50	59	49	43	48	39	58	35	31	35	41	48	27	28	39	33	5
4	46	55	45	40	44	34	54		26	30	37	43		24	35	29	4
3	42	51	41		40	30	50	26	22	26	33	39	18	20	31		3
2	38	46	36		36	26	45	21	18	21	29	34	13	16			2
1	34	42	32		32	22	41	16	14	17	24	30	8				1
0		37			18	37	12		12	20				20	13		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 9-11 years
Age: 80-85 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		98		100		100				100	100	100	100	100	19
18	100	100	94				100				100	100	100	96		18
17	96	100	90		97		100				96	100	100	92		17
16	91	100	87			91	97	90	94			100	100	88		16
15	87	96	83		87		92	86			89					15
14	83	92	80	70	82	83	88	82	85		84	92	95	80		14
13	79	87	76		77		83	79			80	88	91	76	60	13
12	75	83	73	64	72	74	79	75	76		75	83	86	56		12
11	70	79	69	61	67	70	74	71	71		71	71	79	82	68	11
10	66	75	66	58	62	66	70	67	66		66	74	77	64	49	10
9	62	70	62	55	56	62	65	63	62		63	62	70	73	60	9
8	58	66	59	52	51	57	60	60	57		57	65	69	56	41	8
7	54	62	55	49	46	53	56	56	53		55	53	60	64	52	7
6	49	57	52	46		49	51	52	48		51	56	60	48	34	6
5	45	53	48	43	36	45	47	48	44		47	44	51	55	44	5
4	41	49	44	40		41	42	44	39		42	47	51	41	26	4
3	37	45	41	36	26	36	37		35		38	42	46	37	23	3
2	33	40	37	33	21	32	33	37	30		34	38	42	33	19	2
1	29		34	30	16	28	28	33	26		30			29		1
0				27		24	24	29								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	99	100	100	100	100	100	100	100	100				97	98	19
18	96	97	100	100	100	100	100	100	100				93	94	18
17	92	93	100	100	100	100	99	100	100				89	90	17
16	89	90	100	100	100	100	95	100	99				85	86	16
15	85	86	98	95	98	100	91	99	94				86	81	15
14	82	82	92	90	94	96	87	95	90	87			77	78	14
13	78	79	87	85	90	91	83	90	85		83	80	74	74	13
12	75	75	81	79	85	87	79	85	81	79			70	70	12
11	72	71	76	74	81	83	75	80	76		76	74	66	66	11
10	68	68	70	69	77	78	71	76	72	72	71	62	62		10
9	65	64	65	63	73	74	67	71	67	68	69	68	58	58	9
8	61	61	59	58	69	70	63	66	63	65	66	65	54	54	8
7	58	57	53	53	65	65	59	62	58	61	62	62	50	50	7
6	54	53	48	47	61	61	54	57	53	57	59	59	46	46	6
5	51	50	42	42	57	57	50	52	49	54	55	56	43	42	5
4	47	46	37	37	53	52	46	48	44	50	52	53	39	39	4
3	44	42	31	32	49	48	42	43	40	46	49	50	35	35	3
2	41	39	26	26	44	44	38	38	35	43	45	47	31	31	2
1	37	35	20	21	40	39	34	33	31	39	42	45	27	27	1
0	34	32	14	16	36	35		29							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	90	95		92	86	86	87	89	82						19	
18	86	92	90	87	81	82	83	85	78	76				84	18	
17	82	87	85	83	77	78	79	81			83				17	
16	77	83	79	79	73	74	75	77	71		80				16	
15	73	79	74	74	69	70	71	73	67	66	76	72	58	71	15	
14	69	74	69	70	64	66	68	69	63	63	72		55		14	
13	65	70	64	66	60	63	64	65	59	59	68	65		62	13	
12	60	66	59	61	56	59	60	61	55		65	61	50	58	12	
11	56	61	54	57	52	55	56	57	51	53	61	57		53	11	
10	52	57	49	52	47	51	53	53	47	50	57	54	44	49	10	
9	48	53	43	48	43	47	49	49		47	53	50	41	45	9	
8	43	48	38	44	39	43	45	45	39	43	49	47	38	40	8	
7	39	44	33	39	35	39	41	41	35		46	43	35	36	7	
6	35	40	28	35	31	35	38	37	31	37	42	40	32	32	6	
5	31	35	23	31	26	31	34	33	28	34	38	36	30	27	5	
4	27	31	18	26	22	28	30	29	24		34	32	27	23	4	
3	22	27	13	22	18	24	26	25	20	27	31	29	24	19	3	
2	18	23	8	17	14	20	23	21	16		27	25	21	14	2	
1	14	18	2	13	9	16	19	17		21	23	22	18	10	1	
0	14	0		9				13		17	19	18	15		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	85		85		89		87		91								19
18	81	87	81	75			83		86								18
17	77	83	77	71	81		79		82	85				88	76	17	
16	73	78	73	68	77	68	75		78	80	89		84	72	74	16	
15	69	74	68	64	73	64	71		74	76			80	68		15	
14	65	70	64	60	69	60	66		70	71	80		76	65	66	14	
13	61	65	60	57	65	56	62		66	67	73	75		72	61	62	13
12	57	61	56	53	61	52	58		62	62			58	68	57	58	12
11	53	57	52	50	57	48	54	58	57	57	64	66		64	54	54	11
10	49	52	48	46	53	43	50		53	53	60	62		60	50	50	10
9	45	48	43	43	49	39	46	48	49	48	56	57	44	56	46	46	9
8	41	44	39	39	45	35	41		45	44	52	53		52	43	42	8
7	37	39	35	35	41	31	37	39	41	39	48	48	34	48	39	38	7
6	33	35	31	32	37	27	33		37	35	43	44		44	35	34	6
5	29	31	27	28	33	23	29	29	32	30	39	39	24	40	32	30	5
4	25	26	22	25	29	19	25		28	26	35	35		36	28	26	4
3	21	22	18		25	15	20	20	24	21	31	30	15	32	24		3
2	17	18	14		21	11	16	15	20	17	26	26	10	28			2
1	13	13	10		17	6	12	10	16	12	22	22	5				1
0	9				2	8	5		7	18				13	10		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 12 years
Age: 20-34 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	95		85		92		85				90	96	95	86		19	
18	91	93	81				80				86	91	91	82		18	
17	87	89	77		82		76			77		87		78		17	
16	82	85	74			69	71	66	73			82	82	74		16	
15	78	81	70		72		67	62			72					15	
14	74	76	67	66	67	61	62	59	64		68	73	73	66		14	
13	70	72	63		62		57	55		60		69	68	62	60	13	
12	66	68	60	60	57	52	53	51	55		59	64	64	56		12	
11	61	63	56	57	52	48	48	47	50	52	54	60	60	54	52	11	
10	57	59	53	54	47	44	44	43	46		50	55	55	50	49	10	
9	53	55	49	51	42	40	39	40	41	44	46	50	51	46	45	9	
8	49	51	46	48	37	35	34	36	36		41	46	46	42	41	8	
7	45	46	42	44	31	31	30	32	32	35	37	41	42	38	38	7	
6	40	42	39	41		27	25	28	27	31		37	37	34	34	6	
5	36	38	35	38	21	23	21	24	23	27	28	32	33	30	30	5	
4	32	33	32	35		18	16	21	18		23		28	29	26	27	4
3	28	29	28	32	11	14	12		14		19		23	24	22	23	3
2	24	25	24	29	6	10	7	13	9		15		19	20	18	19	2
1	20		21	26	1	6	2	9	5	11				14		1	
0				23		2	0	5								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	85	100	100	86	91	85	90	87				79	80	19
18	81	81	100	99	82	87	81	86	82				75	76	18
17	78	78	96	94	78	82	77	81	78				71	72	17
16	74	74	91	88	74	78	73	76	73				67	68	16
15	71	71	85	83	70	74	69	72	69				60	63	15
14	67	67	80	78	66	69	65	67	64	59			60	60	14
13	64	63	74	72	62	65	61	62	59		58	54	56	56	13
12	60	60	69	67	57	61	57	58	55	51			52	52	12
11	57	56	63	62	53	56	53	53	50		51	48	48	48	11
10	54	52	57	56	49	52	49	48	46	44	48	45	44	44	10
9	50	49	52	51	45	48	45	43	41	40	44	42	40	40	9
8	47	45	46	46	41	43	41	39	37	37	41	39	36	36	8
7	43	42	41	40	37	39	37	34	32	33	37	36	32	32	7
6	40	38	35	35	33	35	33	29	28	29	34	33	28	28	6
5	36	34	30	30	29	30	29	25	23	26	31	30	25	24	5
4	33	31	24	24	25	26	24	20	19	22	27	27	21	20	4
3	29	27	18	19	21	22	20	15	14	18	24	24	17	16	3
2	26	23	13	14	16	18	16	11	9	15	20	21	13	13	2
1	23	20	7	9	12	13	12	6	5	11	17	18	9	9	1
0	19	16	2	3	8	9		1							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	88	100	96	90	88	87	89	82								19
18	84	89	95	92	85	84	83	78	77						87	18
17	80	85	90	88	81	80	80	81			86					17
16	76	81	85	83	77	77	76	78	71		82					16
15	71	77	80	79	73	73	72	74	67	67	78	72	60	74		15
14	67	72	75	75	69	69	68	70	63	64	74		57			14
13	63	68	70	70	64	65	65	66	59	60	70	65		65		13
12	59	64	64	66	60	61	61	62	55		67	62	51	61		12
11	55	59	59	61	56	57	57	58	51	54	63	58		57		11
10	50	55	54	57	52	53	53	54	47	51	59	55	45	52		10
9	46	51	49	53	47	49	50	50	48	55	51	43	48			9
8	42	46	44	48	43	46	46	46	39	44	52	48	40	44		8
7	38	42	39	44	39	42	42	42	35		48	44	37	39		7
6	33	38	34	40	35	38	38	38	31	38	44	40	34	35		6
5	29	33	28	35	30	34	34	34	28	35	40	37	31	31		5
4	25	29	23	31	26	30	31	30	24		37	33	28	26		4
3	21	25	18	26	22	26	27	26	20	28	33	30	26	22		3
2	16	20	13	22	18	22	23	22	16		29	26	23	18		2
1	12	16	8	18	14	18	19	18	22	25	23	20	13			1
0	12	12	3	13				14	18	21	19	17				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score	
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	88	89	90	92					89								19	
18	84	95	85	77			88		85								18	
17	80	90	80	74	82		84		81	85				89	76		17	
16	76	86	76	70	78	70	80		77	80	88		85	73	73		16	
15	72	82	72	67	74	66	76		73	76			81	69			15	
14	68	77	68	63	70	62	71		68	71	79		77	65	65		14	
13	64	73	64	59	66	58	67		64	67	73	75		73	62	61		13
12	60	69	60	56	62	54	63		60	62			58	69	58	57		12
11	56	64	55	52	58	50	59	59	56	57	64	66		65	54	53		11
10	52	60	51	49	54	46	55		52	53	60	61		61	51	49		10
9	48	56	47	45	50	42	51	49	48	48	56	57	44	57	47	46		9
8	44	51	43	42	46	38	46		44	44	52	52		53	43	42		8
7	40	47	39	38	42	34	42	40	39	39	47	48	34	49	40	38		7
6	36	43	34	34	38	29	38		35	35	43	43		45	36	34		6
5	32	38	30	31	34	25	34	30	31	30	39	39	25	41	32	30		5
4	28	34	26	27	30	21	30		27	26	35	34		37	29	26		4
3	24	30	22		26	17	25	20	23	21	31	30	15	33	25			3
2	20	25	18		22	13	21	16	19	17	26	26	10	29				2
1	16	21	14		18	9	17	11	14	12	22	21	5					1
0	17	17			5	13	6		7	18				14	10			0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 12 years
Age: 35-39 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		86		94		87				93	99	99	88		19	
18	92	96	82				83				89	94	94	84		18	
17	88	91	79		84		78			80		90		80		17	
16	83	87	75			73	74	68	76			85	85	76		16	
15	79	83	72		74		69	65			75					15	
14	75	78	68	67	69	64	64	61	67		71	76	77	68		14	
13	71	74	65		64		60	57		63		72	72	64	60	13	
12	67	70	61	60	59	56	55	53	58		62	67	68	56		12	
11	63	66	58	57	54	51	51	49	53	55	57	63	63	56	52	11	
10	58	61	54	54	49	47	46	46	49		53	58	59	52	49	10	
9	54	57	51	51	44	43	42	42	44	47	48	53	54	49	45	9	
8	50	53	47	48	39	39	37	38	40		44	49	50	45	41	8	
7	46	49	44	45	34	35	32	34	35		39	39	44	46	41	7	
6	42	44	40	42		30	28	30	31		35	40	41	37	34	6	
5	37	40	36	39	24	26	23	27	26		30	30	35	37	33	5	
4	33	36	33	36		22	19	23	22		26		31	32	29	27	4
3	29	31	29	33	14	18	14		17		22		26	28	25	23	3
2	25	27	26	30	9	13	9	15	13		18		22	23	21	19	2
1	21		22	27	4	9	5	11	8		14			17		1	
0				23		5	0	8								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	87	88	100	100	91	95	89	95	91				82	83	19
18	84	84	100	100	87	91	85	91	87				78	79	18
17	80	80	97	94	83	86	81	86	82				74	75	17
16	77	77	92	89	79	82	77	81	78				70	71	16
15	73	73	86	84	74	78	73	76	73				62	66	15
14	70	69	80	78	70	73	69	72	68	61			63	63	14
13	66	66	75	73	66	69	65	67	64		58	56	59	59	13
12	63	62	69	68	62	65	61	62	59	54			55	55	12
11	59	59	64	62	58	60	57	58	55		52	50	51	51	11
10	56	55	58	57	54	56	52	53	50	47	48	47	47	47	10
9	53	51	53	52	50	52	48	48	46	43	45	44	43	43	9
8	49	48	47	46	46	47	44	44	41	39	41	41	39	39	8
7	46	44	41	41	42	43	40	39	37	36	38	38	35	35	7
6	42	41	36	36	38	39	36	34	32	32	35	35	31	31	6
5	39	37	30	30	33	34	32	29	28	28	31	32	28	28	5
4	35	33	25	25	29	30	28	25	23	25	28	29	24	24	4
3	32	30	19	20	25	26	24	20	18	21	24	26	20	20	3
2	28	26	14	15	21	21	20	15	14	17	21	23	16	16	2
1	25	22	8	9	17	17	16	11	9	14	18	20	12	12	1
0	21	19	2	4	13	13		6							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	88	100	99	92	89	87	90	82								19	
18	84	88	98	94	88	86	84	86	78	77						18	
17	80	84	93	90	83	82	80	82								17	
16	76	80	88	86	79	78	76	78	71							16	
15	71	75	83	81	75	74	72	74	67	67	79	73	59	76		15	
14	67	71	77	77	71	70	69	70	63	64	75		57			14	
13	63	67	72	73	66	65	66	66	59	61	72	66				13	
12	59	62	67	68	62	62	61	62	55			68	62	51	63		12
11	55	58	62	64	58	58	57	58	51	54	64	59		58		11	
10	50	54	57	59	54	55	54	54	47	51	60	55	45	54		10	
9	46	49	52	55	49	51	50	50		48	56	51	42	50		9	
8	42	45	47	51	45	47	46	46	39	45	53	48	40	45		8	
7	38	41	41	46	41	43	42	43	35			49	44	37	41		7
6	33	37	36	42	37	39	39	39	31	38	45	41	34	37		6	
5	29	32	31	38	33	35	35	35	28	35	41	37	31	32		5	
4	25	28	26	33	28	31	31	31		24		38	34	28	28		4
3	21	24	21	29	24	27	27	27	20	29	34	30	25	24		3	
2	16	19	16	24	20	23	24	23	16		30	27	22	19		2	
1	12	15	11	20	16	20	20	19		22	26	23	20	15		1	
0	11	6		16				15		19	22	19	17			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	88	91			90		95		89								19	
18	84	97	86	77			91		85								18	
17	80	93	82	74	82		86		81	85							17	
16	76	88	78	70	78	72	82		77	80	88						16	
15	72	84	74	67	74	68	78		73	76							15	
14	68	80	70	63	70	63	74		68	71	80						14	
13	64	75	66	60	66	59	70		64	67	73	75					13	
12	60	71	61	56	62	55	66		60	62		58	69	58	57		12	
11	56	67	57	53	58	51	61	59	56	57	64	66		65	55	53	11	
10	52	62	53	49	54	47	57		52	53	60	62		61	51	49	10	
9	48	58	49	45	50	43	53	50	48	48	56	57	44	57	47	45	9	
8	44	54	45	42	46	39	49		44	44	52	53		53	44	41	8	
7	40	49	41	38	42	35	45	40	39	39	47	48	34	49	40	37	7	
6	36	45	36	35	38	31	40		35	35	43	44		45	36	33	6	
5	32	41	32	31	34	27	36	30	31	30	39	39	25	41	33	29	5	
4	28	36	28	28	30	22	32		27	26	35	35		37	29	26	4	
3	24	32	24		26	18	28	21	23	21	31	30	15	33	25		3	
2	20	28	20		22	14	24	16	19	17	26	26	10	29			2	
1	16	23	15		18	10	20	11	14	12	22	21	5				1	
0	19				6	15	7		7	18				14	10		0	

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 12 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	97		87		94		89				95	100	100	89		19	
18	92	97	83				84				90	96	96	86		18	
17	88	92	80		84		80			82		91		82		17	
16	84	88	76			74	75	70	78			87	87	78		16	
15	80	84	73		73		71	66			77					15	
14	76	80	69	67	68	66	66	62	69		72	78	78	70		14	
13	72	75	66		63		61	58		65		73	74	66	60	13	
12	67	71	62	61	58	57	57	55	59		63	69	70		56	12	
11	63	67	58	58	53	53	52	51	55	57	59	64	65	58	52	11	
10	59	62	55	55	48	49	48	47	50		54	60	61	54	49	10	
9	55	58	51	52	43	45	43	43	46	49	50	55	56	50	45	9	
8	51	54	48	48	38	41	39	39	41		45	50	52	46	41	8	
7	46	50	44	45	33	36	34	36	37	40	41	46	47	42	38	7	
6	42	45	41	42		32	29	32	32		36	41	43	38	34	6	
5	38	41	37	39	23	28	25	28	28	32	32	37	39	34	30	5	
4	34	37	34	36		24	20	24	23		28		32	34	30	27	4
3	30	32	30	33	13	19	16		19		24		28	30	26	23	3
2	25	28	27	30	8	15	11	17	14		20		23	25	22	19	2
1	21		23	27	3	11	6	13	10		16			18		1	
0				24		7	2	9								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	89	100	100	93	97	91	98	93				83	84	19
18	85	85	100	100	89	93	87	93	89				80	80	18
17	81	82	98	95	85	89	83	88	84				76	76	17
16	78	78	92	89	81	84	79	84	80				72	73	16
15	74	74	87	84	77	80	75	79	75	64			68	69	15
14	71	71	81	79	73	76	70	74	71	63			64	65	14
13	67	67	75	74	69	71	66	69	66	60	58		60	61	13
12	64	63	70	68	65	67	62	65	62	56			56	57	12
11	61	60	64	63	60	63	58	60	57	53	52		52	53	11
10	57	56	59	58	56	58	54	55	53	49	50	49	48	49	10
9	54	53	53	52	52	54	50	51	48	45	46	46	45	45	9
8	50	49	48	47	48	50	46	46	43	41	43		41	41	8
7	47	45	42	42	44	45	42	41	39	38	39	40	37	37	7
6	43	42	36	36	40	41	38	37	34	34	36	37	33	33	6
5	40	38	31	31	36	37	34	32	30	30	33	34	29	29	5
4	36	35	25	26	32	32	30	27	25	27	29	31	25	25	4
3	33	31	20	20	28	28	26	22	21	23	26	28	21	21	3
2	30	27	14	15	23	24	22	18	16	19	22	25	17	17	2
1	26	24	9	10	19	19	18	13	12	16	19	22	14	13	1
0	23	20	3	4	15	15		8							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	87	100		100	94	91	88	91	82						19	
18	83	87	100	97	90	87	84	87	78	78				90	18	
17	78	83	96	92	85	83	81	83			88				17	
16	74	79	90	88	81	79	77	79	71		84				16	
15	70	74	85	84	77	75	73	75	67	68	80	73	60	77	15	
14	66	70	80	79	73	71	69	71	63	65	76		57		14	
13	61	66	75	75	69	67	65	67	59	61	73	66		69	13	
12	57	61	70	71	64	63	62	63	55		69	63	52	64	12	
11	53	57	65	66	60	60	58	59	51	55	65	59		60	11	
10	49	53	60	62	56	56	54	55	47	52	61	55	46	56	10	
9	44	48	54	57	52	52	50	51		49	58	52	43	51	9	
8	40	44	49	53	47	48	47	47	39	45	54	48	40	47	8	
7	36	40	44	49	43	44	43	43	35		50	45	38	43	7	
6	32	35	39	44	39	40	39	39	31	39	46	41	35	38	6	
5	28	31	34	40	35	36	35	35	28	36	42	38	32	34	5	
4	23	27	29	36	30	32	32	31		24		39	34	29	30	4
3	19	22	24	31	26	29	28	28	20	29	35	30	26	25	3	
2	15	18	19	27	22	25	24	24	16		31	27	23	21	2	
1	11	14	13	22	18	21	20	20		23	27	23	20	17	1	
0	9	8		18				16		19	24	20	18		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	91		92		92		97		88							19	
18	87	99	88	79			93		84							18	
17	83	95	84	75	84		89		80	85			88	77		17	
16	79	91	80	72	80	73	85		75	80	89		84	73	73	16	
15	75	86	76	68	76	69	81		71	76			80	70		15	
14	71	82	72	64	72	65	76		67	71	80		76	66	65	14	
13	67	78	67	61	68	61	72		63	67	73	76		72	62	61	13
12	63	73	63	57	64	56	68		59	62		58	68	59	57	12	
11	59	69	59	54	60	52	64	60	55	57	64	67		64	55	53	11
10	55	65	55	50	56	48	60		51	53	60	62	60	51	49	10	
9	51	60	51	47	52	44	55	50	46	48	56	58	44	56	48	45	9
8	47	56	47	43	48	40	51		42	44	52	53		52	44	41	8
7	43	52	42	40	44	36	47	40	38	39	47	49	34	48	40	37	7
6	39	47	38	36	40	32	43		34	35	43	44		44	37	33	6
5	35	43	34	32	36	28	39	31	30	30	39	40	25	40	33	29	5
4	31	39	30	29	32	24	35		26	26	35	35		36	29	25	4
3	27	34	26		28	20	30	21	21	21	31	31	15	32	26		3
2	23	30	21		24	15	26	17	17	17	26	27	10	28			2
1	19	26	17		20	11	22	12	13	12	22	22	5				1
0	21				7	18	7		7	18			15	10		0	

(continued)

APPENDIX E (continued)

Sex: Female
Education: 12 years
Age: 45-49 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	97		87		95		91				96	100	100	91		19	
18	93	98	84				86				91	97	98	87		18	
17	89	94	80		85		82				83	93		83		17	
16	85	89	77			76	77	71	79			88	89	79		16	
15	80	85	73		75		72	68			78					15	
14	76	81	70	67	70	68	68	64	70		74	79	80	71		14	
13	72	76	66		65		63	60			67		75	76	67	60	13
12	68	72	63	61	60	59	59	56	61		65	70	71		56	12	
11	64	68	59	58	55	55	54	52	57		59	60	66	67	59	52	11
10	60	64	56	55	49	51	49	49	52		56	61	62	55	49		10
9	55	59	52	52	44	47	45	45	48		50	51	56	58	51	45	9
8	51	55	49	49	39	42	40	41	43		47	52	54	47	41		8
7	47	51	45	46	34	38	36	37	39		42	42	47	49	43	38	7
6	43	46	41	43		34	31	33	34		38		43	45	39	34	6
5	39	42	38	40	24	30	27	30	30		34	33	38	40	35	30	5
4	34	38	34	36		25	22	26	25		30		34	36	31	27	4
3	30	34	31	33	14	21	17		21		26		29	31	27	23	3
2	26	29	27	30	9	17	13	18	16		21		25	27	23	19	2
1	22		24	27	4	13	8	14	12		17			19		1	
0			24		9	4	11									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	90	100	100	96	100	93	100	96				85	86	19
18	86	86	100	100	91	95	89	95	91				81	82	18
17	82	83	98	95	87	91	84	91	87				77	78	17
16	79	79	93	90	83	87	80	86	82				73	74	16
15	76	76	87	85	79	82	76	81	77				66	69	15
14	72	72	82	80	75	78	72	77	73	65			65	66	14
13	69	68	76	74	71	74	68	72	68				62	62	13
12	65	65	71	69	67	70	64	67	64	58			58	58	12
11	62	61	65	64	63	65	60	62	59	55	54		54	54	11
10	58	58	59	58	59	61	56	58	55	51	52	51	50	50	10
9	55	54	54	53	55	57	52	53	50	47	48	48	46	46	9
8	51	50	48	48	50	52	48	48	46	43	45	45	42	42	8
7	48	47	43	42	46	48	44	44	41	40	41	42	38	39	7
6	45	43	37	37	42	44	40	39	37	36	38	39	34	35	6
5	41	39	32	32	38	39	36	34	32	32	35	36	31	31	5
4	38	36	26	26	34	35	32	30	27	29	31	33	27	27	4
3	34	32	20	21	30	31	28	25	23	25	28	30	23	23	3
2	31	29	15	16	26	24	20	18	21	24	27	19	19		2
1	27	25	9	10	22	22	20	15	14	18	21	24	15	15	1
0	24	21	4	5	18	18		11							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	87	100		100	96	92	89	92	82						19	
18	83	86	100	99	92	88	85	88	78	78				92	18	
17	78	82	98	95	88	84	81	84			89				17	
16	74	78	93	90	83	80	77	80	71		85				16	
15	70	73	88	86	79	76	74	76	67	68	81	74	61	79	15	
14	66	69	83	82	75	72	70	72	63	65	77		58		14	
13	61	65	78	77	71	69	66	68	59	62	74	67		70	13	
12	57	60	73	73	66	65	62	64	55		70	63	53	66	12	
11	53	56	68	68	62	61	59	60	51	55	66	59		62	11	
10	49	52	62	64	58	57	55	56	47	52	62	56	47	57	10	
9	44	47	57	60	54	53	51	52		49	59	52	44	53	9	
8	40	43	52	55	49	49	47	48	39	46	55	49	41	49	8	
7	36	39	47	51	45	45	44	44	35		51	45	38	44	7	
6	32	34	42	47	41	41	40	40	31	39	47	42	35	40	6	
5	28	30	37	42	37	38	36	36	28	36	43	38	33	36	5	
4	23	26	32	38	33	34	32	33		24		40	34	30	31	4
3	19	21	26	34	28	30	29	29	20	30	36	31	27	27	3	
2	15	17	21	29	24	26	25	25	16		32	27	24	23	2	
1	11	13	16	25	20	22	21	21		23	28	24	21	18	1	
0	8	11		20				17		20	25	20	18		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	91		94		92		100		88							19	
18	87	100	90	80			96		84							18	
17	83	97	86	76	84		91		80	85				87	77	17	
16	79	93	82	73	80	74	87		75	80	90			83	74	73	16
15	75	89	78	69	76	70	83		71	76				79	70		15
14	71	84	73	66	72	66	79		67	71	81			75	66	65	14
13	67	80	69	62	68	62	75		63	67	73	76		71	63	61	13
12	63	76	65	59	64	58	70		59	62			58	67	59	57	12
11	59	71	61	55	60	54	66	60	55	57	64	67		63	55	53	11
10	55	67	57	51	56	49	62		51	53	60	63		59	52	49	10
9	51	63	53	48	52	45	58	50	46	48	56	58	44	55	48	45	9
8	47	58	48	44	48	41	54		42	44	52	54		51	44	41	8
7	43	54	44	41	44	37	50	41	38	39	47	49	34	47	41	37	7
6	39	50	40	37	40	33	45		34	35	43	45		43	37	33	6
5	35	45	36	34	36	29	41	31	30	30	39	41	25	39	33	29	5
4	31	41	32	30	32	25	37		26	26	35	36		35	30	25	4
3	27	36	28		28	21	33	22	21	21	31	32	15	31	26		3
2	23	32	23		24	17	29	17	17	17	26	27	10	27			2
1	19	28	19		20	13	25	12	13	12	22	23	6				1
0	23				8	20	8		7	18				15	9		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 12 years
Age: 50-54 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	98		88		96		93				97	100	100	92		19	
18	94	99	85				88				93	99	100	88		18	
17	89	95	81		86		83			85		94		84		17	
16	85	90	78			78	79	73	81			90	91	80		16	
15	81	86	74		76		74	69			79					15	
14	77	82	70	68	71	69	70	66	72		75	81	82	72		14	
13	73	78	67		66		65	62		69		76	78	68	60	13	
12	69	73	63	61	61	61	61	58	63		66	72	73	56		12	
11	64	69	60	58	56	57	56	54	58	60	61	67	69	60	52	11	
10	60	65	56	55	51	53	51	50	54		57	63	64	56	49	10	
9	56	60	53	52	46	48	47	47	49	52	52	58	60	52	45	9	
8	52	56	49	49	41	44	42	43	45		48	53	55	48	41	8	
7	48	52	46	46	36	40	38	39	40	44	43	49	51	44	38	7	
6	43	48	42	43		36	33	35	36		40	44	47	40	34	6	
5	39	43	39	40	26	31	28	31	31	36	35	40	42	36	30	5	
4	35	39	35	37		27	24	28	27		31		35	38	32	27	4
3	31	35	32	34	15	23	19		22		27		31	33	28	23	3
2	27	30	28	31	10	19	15	20	18		23		26	29	24	19	2
1	22		25	28	5	15	10	16	13		19			20		1	
0				24		10	6	12								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	91	91	100	100	98	100	94	100	98				86	88	19
18	87	88	100	100	94	98	90	98	93				83	84	18
17	84	84	99	96	90	94	86	93	89				79	80	17
16	80	81	94	91	86	89	82	88	84				75	76	16
15	77	77	88	86	82	85	78	84	80				69	71	15
14	73	73	83	80	77	81	74	79	75	67			67	68	14
13	70	70	77	75	73	76	70	74	71		64	63	63	64	13
12	66	66	71	70	69	72	66	70	66	60			59	60	12
11	63	62	66	64	65	68	62	65	62	57	57	55	55	56	11
10	60	59	60	59	61	64	58	60	57	53	54	54	51	52	10
9	56	55	55	54	57	59	54	55	52	49	50	51	48	48	9
8	53	52	49	48	53	55	50	51	48	45	47	48	44	44	8
7	49	48	44	43	49	51	46	46	43	42	44	45	40	40	7
6	46	44	38	38	45	46	42	41	39	38	40	42	36	36	6
5	42	41	32	33	40	42	38	37	34	34	37	39	32	32	5
4	39	37	27	27	36	38	34	32	30	31	33	36	28	28	4
3	35	34	21	22	32	33	30	27	25	27	30	33	24	24	3
2	32	30	16	17	28	29	26	23	21	23	27	30	20	20	2
1	29	26	10	11	24	25	21	18	16	20	23	27	17	16	1
0	25	23	5	6	20	20		13							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score	
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC			
19	85	100		100	98	93	89	93	83							19	
18	81	85	100	100	94	89	86	89	79	79						18	
17	77	81	100	97	90	85	82	85			90					17	
16	72	76	96	93	85	81	78	81	71		86					16	
15	68	72	91	88	81	78	74	77	67	69	82	74	62	81		15	
14	64	68	86	84	77	74	71	73	63	66	79		59			14	
13	60	63	81	80	73	70	67	69	60	62	75	67			72	13	
12	56	59	75	75	68	66	63	66	56		71	63	53	68		12	
11	51	55	70	71	64	62	59	62	52	56	67	60		63		11	
10	47	51	65	66	60	58	56	58	48	53	63	56	48	59		10	
9	43	46	60	62	56	54	52	54		50	60	53	45	55		9	
8	39	42	55	58	52	50	48	50	40	46	56	49	42	50		8	
7	34	38	50	53	47	47	44	46	36		52	46	39	46		7	
6	30	33	45	49	43	43	41	42	32	40	48	42	36	42		6	
5	26	29	39	45	39	39	37	38	28	37	45	38	33	37		5	
4	22	25	34	40	35	35	33	34		24		41	35	31	33		4
3	17	20	29	36	30	31	29	30	20	30	37	31	28	29		3	
2	13	16	24	31	26	27	26	26	16		33	28	25	24		2	
1	9	12	19	27	22	23	22	22		24	29	24	22	20		1	
0		7	14	23				18		20	26	21	19			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	94		96		95		100		87								19
18	90	100	92	81			98		82								18
17	86	97	88	78	87		94		78	85				86	78		17
16	82	92	84	74	83	75	90		74	80		90		82	74	73	16
15	78	88	79	71	79	71	85		70	76				78	70		15
14	74	84	75	67	75	67	81		66	71		81		74	67	65	14
13	70	79	71	63	71	63	77		62	67	73	77		70	63	61	13
12	66	75	67	60	67	59	73		58	62			58	66	59	57	12
11	62	70	63	56	63	55	69	61	53	57	64	68		62	56	53	11
10	58	66	59	53	59	51	65		49	53	60	64		58	52	49	10
9	54	62	54	49	55	47	60	51	45	48	56	59	44	54	48	45	9
8	50	57	50	46	51	42	56		41	44	52	55		50	45	41	8
7	46	53	46	42	47	38	52	41	37	39	47	50	34	46	41	37	7
6	42	49	42	38	43	34	48		33	35	43	46		42	37	33	6
5	38	44	38	35	39	30	44	32	28	30	39	41	25	38	34	29	5
4	34	40	34	31	35	26	40		24	26	35	37		34	30	25	4
3	30	36	29		31	22	35	22	20	21	31	32	15	30	26		3
2	27	31	25		27	18	31	18	16	17	26	28	10	26			2
1	23	27	21		23	14	27	13	12	12	22	23	6				1
0		23			10	23	8		7	18				15	9		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 12 years
Age: 55-59 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	98		89		97		95				99	100	100	93		19	
18	94	100	85				90				94	100	100	89		18	
17	90	96	82		87		86			87		96		85		17	
16	86	91	78			80	81	75	83			91	93	81		16	
15	82	87	75		77		76	71			81					15	
14	77	83	71	68	72	71	72	68	73		76	82	84	73		14	
13	73	79	68		67		67	64		70		78	79	69	60	13	
12	69	74	64	62	62	63	63	60	64		67	73	75		56	12	
11	65	70	61	59	57	59	58	56	60	62	63	69	71	61	52	11	
10	61	66	57	56	52	54	53	52	55		58	64	66	57	49	10	
9	57	61	54	52	47	50	49	49	51	54	54	60	62	53	45	9	
8	52	57	50	49	42	46	44	45	46		49	55	57	49	41	8	
7	48	53	46	46	37	42	40	41	42	46	45	50	53	45	38	7	
6	44	49	43	43		37	35	37	37	41		46	48	41	34	6	
5	40	44	39	40	27	33	31	33	33	37	36	41	44	37	30	5	
4	36	40	36	37		29	26	30	28		33		37	40	33	27	4
3	31	36	32	34	17	25	21		24		29		32	35	29	23	3
2	27	32	29	31	12	21	17	22	19		25		28	31	25	19	2
1	23		25	28	7	16	12	18	15		21			21		1	
0				25		12	8	14								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	93	100	100	100	100	96	100	100				88	89	19
18	88	89	100	100	96	100	92	100	96				84	85	18
17	85	85	100	97	92	96	88	95	91				80	81	17
16	81	82	95	92	88	92	84	91	87				76	77	16
15	78	78	89	87	84	88	80	86	82				72	72	15
14	75	75	84	81	80	83	76	81	77	70			68	69	14
13	71	71	78	76	76	79	72	77	73				66	66	13
12	68	67	72	71	72	75	68	72	68	62			61	61	12
11	64	64	67	65	67	71	64	67	64				60	60	11
10	61	60	61	60	63	66	60	63	59	55	56	57	53	54	10
9	57	56	56	55	59	62	56	58	55	52	53	54	49	50	9
8	54	53	50	50	55	58	52	53	50	48	50	51	45	46	8
7	50	49	45	44	51	53	48	48	46	44	46	48	41	42	7
6	47	46	39	39	47	49	44	44	41	41	43	45	37	38	6
5	44	42	34	34	43	45	40	39	37	37	39	42	34	34	5
4	40	38	28	28	39	40	35	34	32	33	36	39	30	30	4
3	37	35	22	23	35	36	31	30	27	30	33	36	26	26	3
2	33	31	17	18	31	32	27	25	23	26	29	33	22	22	2
1	30	28	11	12	26	27	23	20	18	22	26	30	18	18	1
0	26	24	6	7	22	23		16							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	85	100		100	100	94	90	95	83						19	
18	81	84	100	100	96	90	87	91	79	79				95	18	
17	77	80	100	99	92	87	83	87			91				17	
16	72	75	99	95	87	83	79	83	71		87				16	
15	68	71	94	91	83	79	75	79	67	69	83	74	63	82	15	
14	64	67	88	86	79	75	72	75	63	66	80		60		14	
13	60	62	83	82	75	71	68	71	60	63	76	67		74	13	
12	56	58	78	78	71	67	64	67	56		72	64	54	69	12	
11	51	54	73	73	66	63	60	63	52	56	68	60		65	11	
10	47	49	68	69	62	59	57	59	48	53	65	57	48	61	10	
9	43	45	63	64	58	56	53	55		50	61	53	46	56	9	
8	39	41	58	60	54	52	49	51	40	47	57	49	43	52	8	
7	34	36	52	56	49	48	45	47	36		53	46	40	48	7	
6	30	32	47	51	45	44	42	43	32	40	49	42	37	43	6	
5	26	28	42	47	41	40	38	39	28	37	46	39	34	39	5	
4	22	24	37	43	37	36	34	35		24		42	35	31	35	4
3	17	19	32	38	32	32	30	31	20	31	38	32	29	30	3	
2	13	15	27	34	28	28	27	27	16		34	28	26	26	2	
1	9	11	22	29	24	24	23	23		24	31	25	23	22	1	
0	6	17		25				19		21	27	21	20		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	94	98			95		100		87							19	
18	90	100	94	83			100		82							18	
17	86	99	90	79	87		96		78	85			84	78		17	
16	82	95	85	75	83	77	92		74	80	91		80	74	73	16	
15	78	90	81	72	79	72	88		70	76			76	71		15	
14	74	86	77	68	75	68	84		66	71	82		72	67	65	14	
13	70	81	73	65	71	64	80		62	67	73	78		68	63	61	13
12	66	77	69	61	67	60	75		58	62		58	64	60	57	12	
11	62	73	65	58	63	56	71	61	53	57	64	69		60	56	53	11
10	58	68	60	54	59	52	67		49	53	60	64		56	52	49	10
9	54	64	56	50	55	48	63	51	45	48	56	60	44	52	49	45	9
8	50	60	52	47	51	44	59		41	44	52	55		48	45	41	8
7	46	55	48	43	47	40	55	42	37	39	47	51	34	44	41	37	7
6	42	51	44	40	43	35	50		33	35	43	46		40	38	33	6
5	38	47	40	36	39	31	46	32	28	30	39	42	25	36	34	29	5
4	34	42	35	33	35	27	42		24	26	35	37		32	30	25	4
3	30	38	31		31	23	38	23	20	21	30	33	15	28	27		3
2	27	34	27		27	19	34	18	16	17	26	28	10	24			2
1	23	29	23		23	15	30	13	12	12	22	24	6				1
0	25				11	25	8		7	18			16	9			0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 12 years
Age: 60-64 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	99		90		100		97				100	100	100	94		19
18	95	100	86				92				96	100	100	90		18
17	91	97	83		90		88			88		97		86		17
16	86	93	79			81	83	77	84			93	95	82		16
15	82	88	75		80		79	74			82					15
14	78	84	72	68	75	73	74	70	75		78	84	86	74		14
13	74	80	68		70		70	66		72		79	81	70	60	13
12	70	75	65	62	65	65	65	62	66		69	75	77		56	12
11	65	71	61	59	60	60	60	58	62	64	64	70	72	62	52	11
10	61	67	58	56	55	56	56	55	57		60	66	68	58	49	10
9	57	63	54	53	50	52	51	51	53	55	55	61	64	54	45	9
8	53	58	51	50	45	48	47	47	48		51	56	59	50	41	8
7	49	54	47	47	40	43	42	43	44	47	46	52	55	47	38	7
6	45	50	44	44		39	37	39	39	43	47	50	43	34		6
5	40	45	40	40	30	35	33	35	35	39	37	43	46	39	30	5
4	36	41	37	37		31	28	32	30		35	38	41	35	27	4
3	32	37	33	34	20	27	24		26		31	34	37	31	23	3
2	28	33	29	31	15	22	19	24	21		27	29	33	27	19	2
1	24		26	28	10	18	15	20	17					23		1
0				25		14	10	16								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	94	100	100	100	100	98	100	100				89	91	19
18	90	90	100	100	99	100	94	100	98				85	87	18
17	86	87	100	99	94	99	90	98	93				82	83	17
16	83	83	96	93	90	95	86	93	89				78	79	16
15	79	79	90	88	86	90	82	88	84				74	74	15
14	76	76	85	83	82	86	78	84	80	72			70	71	14
13	72	72	79	77	78	82	74	79	75		69	68	66	67	13
12	69	69	74	72	74	77	70	74	71	65			62	63	12
11	65	65	68	67	70	73	66	70	66		62	62	58	59	11
10	62	61	63	61	66	69	62	65	61	58	59	59	54	55	10
9	58	58	57	56	62	65	58	60	57	54	56	56	51	51	9
8	55	54	51	51	57	60	53	56	52	51	52	53	47	47	8
7	52	51	46	45	53	56	49	51	48	47	49	50	43	43	7
6	48	47	40	40	49	52	45	46	43	43	45	47	39	39	6
5	45	43	35	35	45	47	41	41	39	40	42	44	35	35	5
4	41	40	29	29	41	43	37	37	34	36	39	41	31	31	4
3	38	36	24	24	37	39	33	32	30	32	35	38	27	27	3
2	34	32	18	19	33	34	29	27	25	29	32	35	23	23	2
1	31	29	13	14	29	30	25	23	21	25	28	32	20	20	1
0	27	25	7	8	25	26		18							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	84	100		100	100	96	92	97	83						19
18	79	83	100	100	98	92	88	93	79	80				97	18
17	75	79	100	100	94	88	84	89			92				17
16	71	74	100	97	90	84	80	85	71		88				16
15	67	70	96	93	85	80	77	81	67	70	84	75	64	84	15
14	62	66	91	89	81	76	73	77	63	67	81		61		14
13	58	61	86	84	77	72	69	73	60	63	77	68		75	13
12	54	57	81	80	73	68	65	69	56		73	64	55	71	12
11	50	53	76	75	68	64	62	65	52	57	69	61		67	11
10	45	48	71	71	64	61	58	61	48	54	66	57	49	62	10
9	41	44	65	67	60	57	54	57		50	62	53	46	58	9
8	37	40	60	62	56	53	50	53	40	47	58	50	44	54	8
7	33	35	55	58	51	49	47	49	36		54	46	41	49	7
6	29	31	50	54	47	45	43	45	32	41	50	43	38	45	6
5	24	27	45	49	43	41	39	41	28	38	47	39	35	41	5
4	20	22	40	45	39	37	35	37	24		43	36	32	36	4
3	16	18	35	41	35	33	31	33	20	31	39	32	29	32	3
2	12	14	30	36	30	30	28	29	16		35	28	27	28	2
1	7	9	24	32	26	26	24	25		25	32	25	24	23	1
0	5	5	19	27				21		21	28	21	21		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	97	100	100		96		100		85							19	
18	93	100	96	84			100		81							18	
17	89	100	91	80	88		99		77	85				82	78	17	
16	85	97	87	77	85	78	95		73	80	92			78	75	73	16
15	81	92	83	73	81	74	90		69	76				74	71	15	
14	77	88	79	70	77	70	86		65	71	83			70	67	65	14
13	73	84	75	66	73	65	82		60	67	73	78		66	64	61	13
12	69	79	71	62	69	61	78		56	62			58	62	60	57	12
11	65	75	66	59	65	57	74	61	52	57	64	69		58	56	53	11
10	61	71	62	55	61	53	70		48	53	60	65		54	53	49	10
9	57	66	58	52	57	49	65	52	44	48	56	60	44	50	49	45	9
8	53	62	54	48	53	45	61		40	44	52	56		46	45	41	8
7	50	58	50	45	49	41	57	42	35	39	47	51	34	42	42	37	7
6	46	53	46	41	45	37	53		31	35	43	47		38	38	33	6
5	42	49	41	37	41	33	49	33	27	30	39	42	25	34	34	29	5
4	38	45	37	34	37	28	45		23	26	35	38		30	31	25	4
3	34	40	33		33	24	40	23	19	21	30	34	15	26	27		3
2	30	36	29		29	20	36	18	15	17	26	29	10	22			2
1	26	32	25		25	16	32	14	10	12	22	25	6				1
0	27				12	28	9		7	18				16	9		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 12 years
Age: 65-69 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		90		100		100				100	100	100	95		19	
18	95	100	87				95				97	100	100	91		18	
17	91	98	83		92		90				90	99		87		17	
16	87	94	80				83	86	80	86		94	96	84		16	
15	83	89	76		82		81	76			84					15	
14	79	85	73	68	77	75	77	72	77		79	85	88	76		14	
13	74	81	69		72		72	68			74		81	83	72	60	13
12	70	77	66	62	66	66	67	64	68		70	76	79		56	12	
11	66	72	62	59	61	62	63	61	63		65	66	72	74	64	52	11
10	62	68	58	56	56	58	58	57	59		61	67	70	60	49		10
9	58	64	55	53	51	54	54	53	54		57	57	63	65	56	45	9
8	54	59	51	50	46	49	49	49	50		52	58	61	52	41		8
7	49	55	48	47	41	45	45	45	45		49	48	53	57	48	38	7
6	45	51	44	44		41	40	42	41		45		49	52	44	34	6
5	41	47	41	41	31	37	35	38	36		41	39	44	48	40	30	5
4	37	42	37	38		32	31	34	32		37		40	43	36	27	4
3	33	38	34	35	21	28	26		27		32		35	39	32	23	3
2	28	34	30	32	16	24	22	26	23		28		31	34	28	19	2
1	24		27	28	11	20	17	23	18		24			24		1	
0				25		16	12	19								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	95	100	100	100	100	100	100	100				91	92	19
18	91	92	100	100	100	100	96	100	100				87	88	18
17	87	88	100	100	97	100	92	100	96				83	84	17
16	84	84	98	95	93	97	88	96	91				79	80	16
15	80	81	92	89	89	93	84	91	86				77	75	15
14	77	77	86	84	84	89	80	86	82	75			71	72	14
13	73	74	81	79	80	84	76	81	77				72	71	13
12	70	70	75	73	76	80	72	77	73	68			64	65	12
11	67	66	70	68	72	76	67	72	68				65	60	11
10	63	63	64	63	68	71	63	67	64	61	62	62	56	57	10
9	60	59	59	57	64	67	59	63	59	57	58	59	52	53	9
8	56	55	53	52	60	63	55	58	55	53	55	56	48	49	8
7	53	52	47	47	56	58	51	53	50	50	52	53	44	45	7
6	49	48	42	42	52	54	47	49	46	46	48	50	40	41	6
5	46	45	36	36	48	50	43	44	41	42	45	47	37	37	5
4	42	41	31	31	43	45	39	39	36	39	42	44	33	33	4
3	39	37	25	26	39	41	35	34	32	35	38	41	29	29	3
2	36	34	20	20	35	37	31	30	27	31	35	38	25	25	2
1	32	30	14	15	31	32	27	25	23	28	31	35	21	21	1
0	29	27	8	10	27	28		20							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	82	100		100	100	97	93	99	83						19	
18	78	82	100	100	100	93	89	95	79	80				99	18	
17	73	77	100	100	96	89	85	91			93				17	
16	69	73	100	100	92	85	82	87	71		89				16	
15	65	69	99	95	87	81	78	83	67	70	86	75	64	86	15	
14	61	65	94	91	83	77	74	79	63	67	82		61		14	
13	57	60	89	87	79	73	70	75	60	64	78	68		77	13	
12	52	56	84	82	75	70	67	71	56		74	65	56	73	12	
11	48	52	79	78	70	66	63	67	52	57	70	61		68	11	
10	44	47	73	73	66	62	59	63	48	54	67	57	50	64	10	
9	40	43	68	69	62	58	55	59		51	63	54	47	60	9	
8	35	39	63	65	58	54	52	55	40	48	59	50	44	55	8	
7	31	34	58	60	54	50	48	51	36		55	47	42	51	7	
6	27	30	53	56	49	46	44	47	32	41	52	43	39	47	6	
5	23	26	48	52	45	42	40	43	28	38	48	40	36	42	5	
4	18	21	43	47	41	39	37	39		24		44	36	33	38	4
3	14	17	37	43	37	35	33	35	20	32	40	32	30	34	3	
2	10	13	32	38	32	31	29	31	16		36	29	27	29	2	
1	6	8	27	34	28	27	25	27		25	33	25	24	25	1	
0	4	4	22	30				23		22	29	22	22		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		98		100		84							19	
18	96	100	97	85			100		80							18	
17	92	100	93	82	90		100		76	85			80	79		17	
16	88	99	89	78	86	79	97		72	80	92		76	75	73	16	
15	84	95	85	74	82	75	93		67	76			72	71		15	
14	80	90	81	71	78	71	89		63	71	83		68	68	65	14	
13	76	86	77	67	74	67	85		59	67	73	79		64	64	61	13
12	72	82	72	64	71	63	80		55	62			58	60	60	12	
11	69	77	68	60	67	58	76	62	51	57	64	70		56	57	53	11
10	65	73	64	57	63	54	72		47	53	60	65		52	53	49	10
9	61	69	60	53	59	50	68	52	42	48	56	61	44	48	49	45	9
8	57	64	56	49	55	46	64		38	44	52	56		44	46	41	8
7	53	60	52	46	51	42	60	43	34	39	47	52	35	40	42	37	7
6	49	56	47	42	47	38	55		30	35	43	47		36	38	33	6
5	45	51	43	39	43	34	51	33	26	30	39	43	25	32	35	29	5
4	41	47	39	35	39	30	47		22	26	35	39		28	31	25	4
3	37	43	35		35	26	43	24	17	21	30	34	15	24	27		3
2	33	38	31		31	22	39	19	13	17	26	30	11	20			2
1	29	34	27		27	17	34	14	9	12	22	25	6				1
0	30				13	30	9		7	18				16	9		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 12 years
Age: 70-74 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		91		100		100				100	100	100	97		19	
18	96	100	88				98				98	100	100	93		18	
17	92	99	84		93		93				92	100		89		17	
16	88	95	80			85	89	82	87			96	98	85		16	
15	83	90	77		83		84	78				85				15	
14	79	86	73	69	78	76	79	75	78		80	87	89	77		14	
13	75	82	70		73		75	71			75	82	85	73	60	13	
12	71	78	66	63	68	68	70	67	69		72	78	80		56	12	
11	67	73	63	60	63	64	66	63	65		67	67	73	76	65	11	
10	62	69	59	56	58	60	61	59	60			63	69	72	61	49	10
9	58	65	56	53	53	55	56	55	56		59	58	64	67	57	45	9
8	54	60	52	50	48	51	52	52	51			54	60	63	53	41	8
7	50	56	49	47	43	47	47	48	47		51	49	55	58	49	38	7
6	46	52	45	44		43	43	44	42		46		50	54	45	34	6
5	42	48	42	41	32	38	38	40	38		42	40	46	49	41	30	5
4	37	43	38	38		34	34	36	33			38	41	45	37	27	4
3	33	39	34	35	22	30	29		29			34	37	41	33	23	3
2	29	35	31	32	17	26	24	29	24		30	32	36	29	19	2	
1	25		27	29	12	22	20	25	20		26			25		1	
0				26		17	15	21								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	97	100	100	100	100	100	100	100				92	94	19
18	92	93	100	100	100	100	98	100	100				88	90	18
17	88	89	100	100	99	100	94	100	98				85	86	17
16	85	86	99	96	95	99	90	98	93				81	82	16
15	82	82	94	91	91	95	86	93	89				80	77	15
14	78	78	88	86	87	91	81	89	84	78			73	74	14
13	75	75	83	80	83	86	77	84	80				75	74	13
12	71	71	77	75	79	82	73	79	75	71			68	66	12
11	68	68	71	70	74	78	69	74	71				68	61	11
10	64	64	66	64	70	73	65	70	66	64	65	65	57	58	10
9	61	60	60	59	66	69	61	65	61	60	61	62	54	54	9
8	57	57	55	54	62	65	57	60	57	57	58	59	50	50	8
7	54	53	49	48	58	60	53	56	52	53	55	56	46	46	7
6	51	49	44	43	54	56	49	51	48	49	51	53	42	42	6
5	47	46	38	38	50	52	45	46	43	46	48	50	38	38	5
4	44	42	32	33	46	47	41	42	39	42	44	47	34	35	4
3	40	39	27	27	42	43	37	37	34	38	41	44	30	31	3
2	37	35	21	22	38	39	33	32	30	35	38	41	26	27	2
1	33	31	16	17	33	35	29	27	25	31	34	38	23	23	1
0	30	28	10	11	29	30		23							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	80	100		100	100	98	94	100	83						19	
18	76	81	100	100	100	94	91	97	79	81				100	18	
17	72	76	100	100	98	90	87	93			94				17	
16	68	72	100	100	94	86	83	89	71		90				16	
15	63	68	100	98	89	82	79	85	67	71	87	76	65	87	15	
14	59	63	97	93	85	79	76	81	63	68	83		62		14	
13	55	59	92	89	81	75	72	77	60	64	79	68		79	13	
12	51	55	86	85	77	71	68	73	56		75	65	57	74	12	
11	46	50	81	80	73	67	64	69	52	58	72	61		70	11	
10	42	46	76	76	68	63	61	65	48	55	68	58	51	66	10	
9	38	42	71	71	64	59	57	61		51	64	54	48	61	9	
8	34	38	66	67	60	55	53	57	40	48	60	51	45	57	8	
7	29	33	61	63	56	51	49	53	36		56	47	42	53	7	
6	25	29	56	58	51	48	46	49	32	42	53	44	40	48	6	
5	21	25	50	54	47	44	42	46	28	39	49	40	37	44	5	
4	17	20	45	50	43	40	38	42		24		45	36	34	40	4
3	13	16	40	45	39	36	34	38	20	32	41	33	31	35	3	
2	8	12	35	41	34	32	31	34	16		38	29	28	31	2	
1	4	7	30	36	30	28	27	30		26	34	26	25	27	1	
0	3	3	25	32				26		22	30	22	22		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		83							19	
18	99	100	99	86			100		78							18	
17	95	100	95	83	92		100		74	85			77	79		17	
16	91	100	91	79	88	80	100		70	80	93		73	75	73	16	
15	88	97	87	76	84	76	95		66	76			69	72		15	
14	84	93	83	72	80	72	91		62	71	84		65	68	65	14	
13	80	88	78	69	76	68	87		58	67	73	79		61	64	61	13
12	76	84	74	65	72	64	83		54	62			59	57	61	57	12
11	72	80	70	61	68	60	79	62	49	57	64	70		53	57	53	11
10	68	75	66	58	64	56	75		45	53	60	66		49	53	49	10
9	64	71	62	54	60	51	70	53	41	48	56	61	44	45	50	45	9
8	60	67	58	51	57	47	66		37	44	52	57		41	46	41	8
7	56	62	53	47	53	43	62	43	33	39	47	52	35	37	42	37	7
6	52	58	49	44	49	39	58		29	35	43	48		33	39	33	6
5	48	54	45	40	45	35	54	34	24	30	39	44	25	29	35	29	5
4	44	49	41	36	41	31	49		20	26	35	39		25	31	25	4
3	40	45	37		37	27	45	24	16	21	30	35	15	21	28		3
2	36	41	33		33	23	41	19	12	17	26	30	11	17			2
1	32	36	28		29	19	37	15	8	12	22	26	6				1
0	32	32			15	33	10		7	18				17	9		0

(continued)

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 75-79 years

Race: African American

Verbal episodic memory

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	100		92		100		100				100	100	100	98		19	
18	97	100	88				100				100	100	100	94		18	
17	92	100	85		94		96				94	100	100	90		17	
16	88	96	81				87	91	85	89			97	100	86	16	
15	84	92	78		84		87	81				86				15	
14	80	87	74	69	79	78	82	77	80		82	88	91	78		14	
13	76	83	71		74		78	73			77		84	87	74	13	
12	71	79	67	63	69	70	73	70	71		73	79	82		56	12	
11	67	74	63	60	64	66	69	66	67		69	68	75	78	66	11	
10	63	70	60	57	59	61	64	62	62		64	70	73	62	49	10	
9	59	66	56	54	54	57	59	58	58		61	59	66	69	58	9	
8	55	62	53	51	49	53	55	54	53			55	61	65	54	41	8
7	50	57	49	48	44	49	50	51	49		52	50	56	60	50	7	
6	46	53	46	44		44	46	47	44		48		52	56	46	34	6
5	42	49	42	41	34	40	41	43	40		44	41	47	51	42	30	5
4	38	44	39	38		36	36	39	35		40		43	47	38	27	4
3	34	40	35	35	24	32	32		31		36		38	42	34	23	3
2	30	36	32	32	19	28	27	32	26		32		34	38	30	19	2
1	25		28	29	14	23	23	28	22		28				26		1
0				26		19	18	24								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	97	98	100	100	100	100	100	100	100				94	95	19
18	93	94	100	100	100	100	99	100	100				90	91	18
17	90	91	100	100	100	100	95	100	100				86	87	17
16	86	87	100	98	97	100	91	100	95				82	83	16
15	83	83	96	93	93	97	87	96	91			83	78	80	15
14	79	80	90	88	89	92	83	91	86	82			74	76	14
13	76	76	85	82	85	88	79	86	82		78	77	71	72	13
12	72	72	79	77	81	84	75	82	77	74			67	68	12
11	69	69	73	72	77	79	71	77	73		71	71	63	64	11
10	66	65	68	66	73	75	67	72	68	67	68	68	59	60	10
9	62	62	62	61	69	71	63	67	64	64	65	65	55	56	9
8	59	58	57	56	65	66	59	63	59	60	61	62	51	52	8
7	55	54	51	50	60	62	55	58	55	56	58	59	47	48	7
6	52	51	46	45	56	58	51	53	50	53	54	56	43	44	6
5	48	47	40	40	52	54	47	49	45	49	51	53	40	40	5
4	45	44	34	34	48	49	43	44	41	45	48	50	36	36	4
3	41	40	29	29	44	45	39	39	36	42	44	47	32	32	3
2	38	36	23	24	40	41	35	35	32	38	41	44	28	28	2
1	35	33	18	19	36	36	31	30	27	34	37	41	24	24	1
0	31	29	12	13	32	32	25								0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 12 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	80	100		100	100	99	96	100	83						19	
18	76	80	100	100	100	95	93	100	79	81				100	18	
17	72	75	100	100	100	92	89	96			95				17	
16	68	71	100	100	96	88	85	92	71		92				16	
15	63	67	100	100	92	84	81	88	67	71	88	76	66	89	15	
14	59	62	100	96	88	80	78	84	63	68	84		63		14	
13	55	58	95	91	83	76	74	80	60	65	80	69		81	13	
12	51	54	89	87	79	72	70	76	56		76	65	57	76	12	
11	46	49	84	83	75	68	66	72	52	58	73	62		72	11	
10	42	45	79	78	71	64	62	68	48	55	69	58	52	68	10	
9	38	41	74	74	66	60	59	64		52	65	55	49	63	9	
8	34	36	69	70	62	57	55	60	40	49	61	51	46	59	8	
7	29	32	64	65	58	53	51	56	36		58	48	43	55	7	
6	25	28	59	61	54	49	47	52	32	42	54	44	40	50	6	
5	21	23	53	56	49	45	44	49	28	39	50	40	38	46	5	
4	17	19	48	52	45	41	40	45		24		46	37	35	42	4
3	13	15	43	48	41	37	36	41	20	33	42	33	32	37	3	
2	8	10	38	43	37	33	32	37	16		39	30	29	33	2	
1	4	6	33	39	33	29	29	33		26	35	26	26	29	1	
0	2	28		35				29		23	31	23	23		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	100		100		100		100		83							19	
18	99	100	100	88			100		78							18	
17	95	100	97	84	92		100		74	85				73	79	17	
16	91	100	93	81	88	82	100		70	80	93			69	76	73	16
15	88	100	89	77	84	77	98		66	76				65	72		15
14	84	95	85	74	80	73	94		62	71	84			61	68	65	14
13	80	91	80	70	76	69	90		58	67	73	80		57	65	61	13
12	76	87	76	66	72	65	86		54	62			59	53	61	57	12
11	72	82	72	63	68	61	81	63	49	57	64	71		49	57	53	11
10	68	78	68	59	64	57	77		45	53	60	66		45	54	49	10
9	64	74	64	56	60	53	73	53	41	48	56	62	44	41	50	45	9
8	60	69	60	52	57	49	69		37	44	52	57		37	46	41	8
7	56	65	55	49	53	45	65	44	33	39	47	53	35	33	43	37	7
6	52	61	51	45	49	40	61		29	35	43	49		29	39	33	6
5	48	56	47	41	45	36	56	34	24	30	39	44	25	25	35	29	5
4	44	52	43	38	41	32	52		20	26	35	40		21	32	25	4
3	40	47	39		37	28	48	25	16	21	30	35	15	17	28		3
2	36	43	35		33	24	44	20	12	17	26	31	11	13			2
1	32	39	30		29	20	40	15	8	12	22	26	6				1
0	34				16	36	10		7	18				17	9		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 12 years
Age: 80-85 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory							Scaled score
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	100		93		100		100				100	100	100	99		19
18	97	100	89				100				100	100	100	95		18
17	93	100	85		95		99			95		100		91		17
16	89	97	82			89	95	88	91			99	100	87		16
15	85	93	78		85		90	84			88					15
14	80	88	75	69	80	80	86	80	82		83	90	93	79		14
13	76	84	71		75		81	77		79		85	89	75	60	13
12	72	80	68	63	70	72	77	73	73		74	81	84		56	12
11	68	76	64	60	65	67	72	69	68	71	70	76	80	67	52	11
10	64	71	61	57	60	63	67	65	64		65	72	75	63	49	10
9	60	67	57	54	55	59	63	61	59	62	61	67	71	59	45	9
8	55	63	54	51	50	55	58	57	55		56	63	67	55	41	8
7	51	59	50	48	45	51	54	54	50	54	52	58	62	51	38	7
6	47	54	47	45		46	49	50	46		50	54	58	47	34	6
5	43	50	43	42	35	42	44	46	41	46	43	49	53	43	30	5
4	39	46	40	39		38	40	42	37	42		45	49	39	27	4
3	34	41	36	36	25	34	35		32	38		40	44	35	23	3
2	30	37	32	32	20	29	31	35	28	34		35	40	32	19	2
1	26		29	29	15	25	26	31	23	29				28		1
0				26		21	22	27								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	98	99	100	100	100	100	100	100	100				95	97	19
18	94	96	100	100	100	100	100	100	100				92	93	18
17	91	92	100	100	100	100	97	100	100				88	89	17
16	88	88	100	100	100	100	93	100	98				84	85	16
15	84	85	98	95	96	98	89	98	93				85	80	15
14	81	81	93	90	92	94	85	94	89	86			76	77	14
13	77	78	87	85	88	89	81	89	84		82	80	72	73	13
12	74	74	81	79	84	85	77	84	80	78			68	69	12
11	70	70	76	74	79	81	73	79	75		75	74	64	65	11
10	67	67	70	69	75	76	69	75	71	71	71	71	61	61	10
9	63	63	65	63	71	72	65	70	66	67	68	68	57	58	9
8	60	59	59	58	67	68	61	65	62	64	65	65	53	54	8
7	57	56	54	53	63	63	57	61	57	60	61	62	49	50	7
6	53	52	48	47	59	59	53	56	52	56	58	59	45	46	6
5	50	49	43	42	55	55	49	51	48	53	54	56	41	42	5
4	46	45	37	37	51	50	45	47	43	49	51	53	37	38	4
3	43	41	31	32	47	46	41	42	39	45	48	50	33	34	3
2	39	38	26	26	42	42	37	37	34	42	44	47	30	30	2
1	36	34	20	21	38	38	33	32	30	38	41	44	26	26	1
0	32	30	15	16	34	33		28							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	84		92	90	83	83	84	86	78						19
18	80	87	87	86	79	79	80	83	75	74				82	18
17	76	82	82	81	75	75	76	79			81				17
16	71	78	77	77	70	71	73	75	67		77				16
15	67	74	72	73	66	67	69	71	63	64	73	71	57	69	15
14	63	69	66	68	62	63	65	67	59	61	70		54		14
13	59	65	61	64	58	59	61	63	55	57	66	63		60	13
12	54	61	56	60	53	55	58	59	51		62	60	48	56	12
11	50	56	51	55	49	52	54	55	47	51	58	56		52	11
10	46	52	46	51	45	48	50	51	43	48	55	53	42	47	10
9	42	48	41	46	41	44	46	47		45	51	49	40	43	9
8	38	44	36	42	37	40	43	43	35	41	47	46	37	39	8
7	33	39	31	38	32	36	39	39	32		43	42	34	34	7
6	29	35	25	33	28	32	35	35	28	35	39	39	31	30	6
5	25	31	20	29	24	28	31	31	24	32	36	35	28	26	5
4	21	26	15	25	20	24	27	27	20		32	31	25	21	4
3	16	22	10	20	15	21	24	23	16	25	28	28	23	17	3
2	12	18	5	16	11	17	20	19	12		24	24	20	12	2
1	8	13	0	11	7	13	16	15		19	21	21	17	8	1
0		9	0	7				11		15	17	17	14		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	81		83		85		86		85							19	
18	77	84	79	74			82		80							18	
17	73	80	75	70	77		77		76	80			85	72		17	
16	69	75	71	66	73	66	73		72	75	85		81	69	69	16	
15	65	71	67	63	69	62	69		68	71			77	65		15	
14	61	67	62	59	65	58	65		64	66	76		73	61	61	14	
13	57	62	58	56	61	54	61		60	62	70	72		69	58	57	13
12	53	58	54	52	57	49	57		55	57		56	65	54	53	12	
11	49	54	50	49	53	45	52	56	51	53	62	63	61	50	49	11	
10	45	49	46	45	49	41	48		47	48	58	58	57	47	45	10	
9	41	45	42	42	45	37	44	47	43	44	53	54	41	53	43	9	
8	37	41	37	38	41	33	40		39	39	49	49	49	49	39	8	
7	33	36	33	34	38	29	36	37	35	34	45	45	32	45	36	33	
6	29	32	29	31	34	25	32		31	30	41	40	41	32	29	6	
5	25	28	25	27	30	21	27	28	26	25	37	36	22	37	28	5	
4	21	23	21	24	26	17	23		22	21	32	31	33	25	21	4	
3	17	19	17		22	13	19	18	18	16	28	27	13	29	21	3	
2	13	15	12		18	8	15	14	14	12	24	23	8	25		2	
1	9	10	8		14	4	11	9	10	7	20	18	3			1	
0		6			0	6	4		3	15			10	6		0	

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 13-15 years
Age: 20-34 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	92		82		91		83				90	93	93	85		19	
18	88	90	79				78				85	89	89	81		18	
17	84	86	75		81		74			76		84		77		17	
16	80	82	72			66	69	64	70			80	80	73		16	
15	76	77	68		70		64	60			72					15	
14	71	73	65	65	65	58	60	56	61		67	71	71	65		14	
13	67	69	61		60		55	53			59		66	66	61	60	13
12	63	65	57	59	55	50	51	49	52		58	62	62	56		12	
11	59	60	54	56	50	45	46	45	47		51	54	57	58	53	52	11
10	55	56	50	53	45	41	41	41	43		49	53	53	49		10	
9	50	52	47	50	40	37	37	37	38		43	45	48	49	45		9
8	46	47	43	47	35	33	32	34	34		40	44	44	41		8	
7	42	43	40	44	30	28	28	30	29		35	36	39	40		7	
6	38	39	36	40		24	23	26	25		31		35	33		6	
5	34	35	33	37	20	20	19	22	20		26	27	30	31	29		5
4	30	30	29	34		16	14	18	16			22		25	27		4
3	25	26	26	31	10	12	9		11			18		21	22		3
2	21	22	22	28	5	7	5	11	7			14		16	18		2
1	17		19	25	0	3	0	7	2		10				13		1
0				22		0	0	3								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	84	100	100	84	89	84	89	86				78	79	19
18	80	80	100	99	80	85	80	85	81				74	75	18
17	76	77	97	94	76	80	76	80	77				70	71	17
16	73	73	91	88	72	76	72	75	72				66	67	16
15	70	69	86	83	68	72	67	71	68		59		63	63	15
14	66	66	80	78	64	67	63	66	63	58			59	59	14
13	63	62	74	72	60	63	59	61	58		57		53	55	13
12	59	58	69	67	56	59	55	57	54	50			51	51	12
11	56	55	63	62	51	54	51	52	49		50		47	47	11
10	52	51	58	56	47	50	47	47	45	43	47		44	43	10
9	49	48	52	51	43	46	43	42	40	39	43		41	39	9
8	45	44	47	46	39	42	39	38	36	36	40		38	35	8
7	42	40	41	40	35	37	35	33	31	32	36		35	32	7
6	39	37	35	35	31	33	31	28	27	28	33		32	28	6
5	35	33	30	30	27	29	27	24	22	25	30		29	24	5
4	32	30	24	24	23	24	23	19	18	21	26		26	20	4
3	28	26	19	19	19	20	19	14	13	17	23		23	16	3
2	25	22	13	14	14	16	15	10	8	14	19		20	12	2
1	21	19	8	9	10	11	11	5	4	10	16		17	8	1
0	18	15	2	3	6	7		0							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	82	98		95	87	85	84	87	78						19	
18	78	85	93	90	83	81	81	83	75	75				85	18	
17	74	80	87	86	79	77	77	79			83				17	
16	70	76	82	82	75	73	73	75	67		79				16	
15	66	72	77	77	70	70	69	72	63	65	76	71	58	72	15	
14	61	67	72	73	66	66	66	68	59	62	72		55		14	
13	57	63	67	69	62	62	62	64	55	58	68	64		64	13	
12	53	59	62	64	58	58	58	60	51		64	61	50	59	12	
11	49	54	57	60	53	54	54	56	47	52	61	57		55	11	
10	44	50	51	55	49	50	51	52	43	49	57	54	44	51	10	
9	40	46	46	51	45	46	47	48		46	53	50	41	46	9	
8	36	41	41	47	41	42	43	44	35	42	49	46	38	42	8	
7	32	37	36	42	36	38	39	40	32		45	43	36	38	7	
6	27	33	31	38	32	35	36	36	28	36	42	39	33	33	6	
5	23	28	26	34	28	31	32	32	24	33	38	36	30	29	5	
4	19	24	21	29	24	27	28	28	20		34	32	27	25	4	
3	15	20	15	25	20	23	24	24	16	26	30	29	24	20	3	
2	10	15	10	21	15	19	21	20	12		27	25	21	16	2	
1	6	11	5	16	11	15	17	16		20	23	21	18	11	1	
0	7	0		12				12		16	19	18	16		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	84		87		86		91		83								19
18	80	92	83	76			87		79								18
17	76	87	79	73	78		82		75	80				85	73	17	
16	72	83	74	69	74	68	78		71	75		85		81	69	69	16
15	68	79	70	65	70	64	74		67	71				77	66		15
14	64	74	66	62	66	60	70		62	66		76		73	62	61	14
13	60	70	62	58	62	56	66		58	62	70	71		69	58	57	13
12	56	66	58	55	58	52	62		54	57			56	65	55	53	12
11	52	61	54	51	54	48	57	57	50	53	62	62		61	51	49	11
10	48	57	49	48	50	44	53		46	48	58	58		57	47	45	10
9	44	53	45	44	46	40	49	48	42	44	53	53	41	53	44	41	9
8	40	48	41	40	42	35	45		38	39	49	49		49	40	37	8
7	36	44	37	37	38	31	41	38	33	34	45	44	32	45	36	33	7
6	32	40	33	33	34	27	36		29	30	41	40		41	33	29	6
5	28	35	29	30	30	23	32	29	25	25	36	35	22	37	29	25	5
4	24	31	24	26	26	19	28		21	21	32	31		33	25	21	4
3	20	27	20		22	15	24	19	17	16	28	27	13	29	22		3
2	16	22	16		18	11	20	14	13	12	24	22	8	25			2
1	12	18	12		15	7	16	10	8	7	20	18	3				1
0	14				3	11	5		3	15				11	5		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 13-15 years
Age: 35-39 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	94		84		93		85				93	96	97	87		19	
18	89	92	80				81				88	92	83			18	
17	85	88	77		83		76			79		87		79		17	
16	81	84	73			70	71	66	73			83	83	75		16	
15	77	80	69		73		67	63			75					15	
14	73	75	66	66	68	61	62	59	64		70	74	75	67		14	
13	68	71	62		63		58	55			63		69	70	63	60	13
12	64	67	59	60	58	53	53	51	55		61		65	66	56	56	12
11	60	62	55	57	53	49	49	47	51		55	57	60	61	55	52	11
10	56	58	52	53	48	45	44	44	46		52		56	57	51	49	10
9	52	54	48	50	43	40	39	40	42		46	48	51	52	47	45	9
8	47	50	45	47	38	36	35	36	37		43	47	48	43	41		8
7	43	45	41	44	33	32	30	32	33		38	39	42	44	40	38	7
6	39	41	38	41		28	26	28	28		34		38	39	36	34	6
5	35	37	34	38	23	23	21	25	24		30	30	33	35	32	30	5
4	31	32	31	35		19	16	21	19		26		29	30	28	27	4
3	27	28	27	32	12	15	12		15		22		24	26	24	23	3
2	22	24	24	29	7	11	7	13	10		17		19	21	20	19	2
1	18		20	26	2	7	3	9	6		13				16		1
0				23		2	0	5								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	86	86	100	100	89	93	87	94	90				81	82	19
18	82	83	100	100	85	89	83	90	86				77	78	18
17	79	79	97	94	81	84	79	85	81				73	74	17
16	75	76	92	89	77	80	75	80	77				69	70	16
15	72	72	86	84	73	76	71	75	72				61	66	15
14	68	68	81	78	68	71	67	71	68	60			62	62	14
13	65	65	75	73	64	67	63	66	63		57	55	58	58	13
12	62	61	70	68	60	63	59	61	58	53			54	54	12
11	58	57	64	62	56	58	55	57	54		51	49	50	51	11
10	55	54	58	57	52	54	51	52	49	46	47	46	46	47	10
9	51	50	53	52	48	50	47	47	45	42	44	43	42	43	9
8	48	47	47	46	44	45	43	43	40	39	40	40	38	39	8
7	44	43	42	41	40	41	39	38	36	35	37	37	35	35	7
6	41	39	36	36	36	37	35	33	31	31	34	34	31	31	6
5	37	36	31	31	31	32	31	28	27	28	30	31	27	27	5
4	34	32	25	25	27	28	27	24	22	24	27	28	23	23	4
3	31	28	19	20	23	24	22	19	18	20	23	25	19	19	3
2	27	25	14	15	19	20	18	14	13	17	20	22	15	15	2
1	24	21	8	9	15	15	14	10	8	13	17	19	11	11	1
0	20	18	3	4	11	11		5							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	82	100		97	89	86	85	88	78						19
18	78	83	95	93	85	82	81	84	75	75				87	18
17	74	79	90	88	81	78	77	80			84				17
16	70	75	85	84	77	75	74	76	67		80				16
15	66	70	80	80	72	71	70	72	63	65	77	72	58	74	15
14	61	66	75	75	68	67	66	68	59	62	73		55		14
13	57	62	70	71	64	63	62	64	55	59	69	65		65	13
12	53	58	64	67	60	59	59	60	51		65	61	50	61	12
11	49	53	59	62	56	55	55	56	47	52	62	58		57	11
10	44	49	54	58	51	51	51	52	43	49	58	54	44	52	10
9	40	45	49	53	47	47	47	48		46	54	50	41	48	9
8	36	40	44	49	43	44	43	44	35	43	50	47	38	44	8
7	32	36	39	45	39	40	40	40	32		46	43	35	39	7
6	27	32	34	40	34	36	36	37	28	36	43	40	33	35	6
5	23	27	29	36	30	32	32	33	24	33	39	36	30	31	5
4	19	23	23	32	26	28	28	29	20		35	33	27	26	4
3	15	19	18	27	22	24	25	25	16	27	31	29	24	22	3
2	10	14	13	23	17	20	21	21	12		28	25	21	18	2
1	6	10	8	18	13	16	17	17		20	24	22	18	13	1
0	6	3		14				13		17	20	18	15		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	84	89			86		93		83							19	
18	80	94	85	76			89		79							18	
17	76	90	80	73	78		85		75	80				85	73	17	
16	72	85	76	69	74	70	81		71	75		85		81	70	69	16
15	68	81	72	66	70	65	77		67	71				77	66	15	
14	64	77	68	62	66	61	72		62	66		76		73	62	61	14
13	60	72	64	59	62	57	68		58	62	70	72		69	59	57	13
12	56	68	60	55	58	53	64		54	57			56	65	55	53	12
11	52	64	55	51	54	49	60	58	50	53	62	63		61	51	49	11
10	48	59	51	48	50	45	56		46	48	58	58		57	48	45	10
9	44	55	47	44	46	41	51	48	42	44	53	54	42	53	44	41	9
8	40	51	43	41	42	37	47		38	39	49	49		49	40	37	8
7	36	46	39	37	38	33	43	39	33	34	45	45	32	45	37	33	7
6	32	42	35	34	34	28	39		29	30	41	40		41	33	29	6
5	28	38	30	30	30	24	35	29	25	25	36	36	22	37	29	25	5
4	24	33	26	26	26	20	31		21	21	32	31		33	26	21	4
3	20	29	22		22	16	26	20	17	16	28	27	13	29	22		3
2	16	25	18		18	12	22	15	13	12	24	22	8	25			2
1	12	20	14		15	8	18	10	8	7	20	18	3				1
0	16	20			4	14	5		3	15				11	5		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 13-15 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	94		84		92		87				94	98	99	88		19
18	90	94	81				82				89	93	94	84		18
17	86	89	77		82		78				81	89		81		17
16	82	85	74			72	73	68	75			84	85	77		16
15	77	81	70		72		68	64				76				15
14	73	76	67	66	67	63	64	60	66		72	75	76	69		14
13	69	72	63		62		59	56			65	71	72	65	60	13
12	65	68	60	60	57	55	55	53	57		63	66	68	56	56	12
11	61	64	56	57	52	51	50	49	52		56	58	62	63	57	11
10	56	59	53	54	47	46	46	45	48		54	57	59	53	49	10
9	52	55	49	51	42	42	41	41	43		48	49	53	54	49	9
8	48	51	45	48	37	38	36	37	39		45	48	50	45	41	8
7	44	46	42	44	32	34	32	34	34		40	40	44	45	41	7
6	40	42	38	41		29	27	30	30		36	39	41	37	34	6
5	35	38	35	38	22	25	23	26	25		32	31	35	37	33	5
4	31	34	31	35		21	18	22	21		27	30	32	29	27	4
3	27	29	28	32	12	17	13		16		23	25	28	25	23	3
2	23	25	24	29	7	13	9	15	12		19	21	23	21	19	2
1	19		21	26	2	8	4	11	7		15			17		1
0				23		4	0	7								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	87	88	100	100	91	95	89	97	92				83	84	19
18	83	84	100	100	87	91	85	92	88				79	80	18
17	80	80	98	95	83	87	81	87	83				75	76	17
16	77	77	92	89	79	82	77	83	79				71	72	16
15	73	73	87	84	75	78	73	78	74				63	67	15
14	70	70	81	79	71	74	69	73	70	62			63	64	14
13	66	66	76	74	67	69	65	68	65		59	57	59	60	13
12	63	62	70	68	63	65	61	64	61		55		55	56	12
11	59	59	65	63	58	61	57	59	56		52	51	52	52	11
10	56	55	59	58	54	56	53	54	52	48	49	48	48	48	10
9	52	51	53	52	50	52	49	50	47	44	45	45	44	44	9
8	49	48	48	47	46	48	45	45	42	40	42	42	40	40	8
7	46	44	42	42	42	43	41	40	38	37	38	39	36	36	7
6	42	41	37	36	38	39	36	36	33	33	35	36	32	32	6
5	39	37	31	31	34	35	32	31	29	29	32	33	28	28	5
4	35	33	26	26	30	31	28	26	24	26	28	30	24	24	4
3	32	30	20	20	26	26	24	21	20	22	25	27	20	20	3
2	28	26	14	15	22	22	20	17	15	18	21	24	17	17	2
1	25	23	9	10	17	18	16	12	11	15	18	21	13	13	1
0	21	19	3	4	13	13		7							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	81	100		99	91	87	85	89	78						19	
18	77	82	98	95	87	84	82	85	75	76				89	18	
17	72	78	93	91	83	80	78	81			85				17	
16	68	74	88	86	79	76	74	77	67		82				16	
15	64	69	83	82	75	72	70	73	63	66	78	72	59	76	15	
14	60	65	77	78	70	68	67	69	59	63	74		56		14	
13	55	61	72	73	66	64	63	65	55	59	70	65		67	13	
12	51	56	67	69	62	60	59	61	51		66	61	50	63	12	
11	47	52	62	65	58	56	55	57	47	53	63	58		58	11	
10	43	48	57	60	53	53	52	53	43	50	59	54	45	54	10	
9	38	43	52	56	49	49	48	49	47	55	51	42	50		9	
8	34	39	47	51	45	45	44	45	35	43	51	47	39	45	8	
7	30	35	42	47	41	41	40	41	32		48	44	36	41	7	
6	26	31	36	43	36	37	37	37	28	37	44	40	33	37	6	
5	22	26	31	38	32	33	33	33	24	34	40	37	30	32	5	
4	17	22	26	34	28	29	29	29	20		36	33	28	28	4	
3	13	18	21	30	24	25	25	25	16	27	32	29	25	24	3	
2	9	13	16	25	20	22	22	22	12		29	26	22	19	2	
1	5	9	11	21	15	18	18	18	21	25	22	19	15		1	
0	5	6		16				14	17	21	19	16			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	87	91			88		96		82								19
18	83	96	86	78			92		78								18
17	79	92	82	74	80		87		74	80				85	74	17	
16	75	88	78	71	76	71	83		69	75	86		81	70	69	16	
15	71	83	74	67	72	67	79		65	71				77	66	15	
14	67	79	70	63	68	63	75		61	66	77			73	63	14	
13	63	75	66	60	64	58	71		57	62	72			69	59	13	
12	59	70	61	56	60	54	66		53	57			56	65	55	12	
11	55	66	57	53	56	50	62	58	49	53	62	63		61	52	11	
10	51	62	53	49	52	46	58		44	48	58	59		57	48	45	10
9	47	57	49	46	48	42	54	49	40	44	53	54	42	53	44	9	
8	43	53	45	42	44	38	50		36	39	49	50		49	41	8	
7	39	49	41	38	40	34	46	39	32	34	45	45	32	45	37	7	
6	35	44	36	35	36	30	41		28	30	41	41		41	33	29	6
5	31	40	32	31	32	26	37	30	24	25	36	36	22	37	30	25	5
4	27	36	28	28	28	21	33		20	21	32	32		33	26	21	4
3	23	31	24		24	17	29	20	15	16	28	28	13	29	22		3
2	19	27	20		20	13	25	15	11	12	24	23	8	25			2
1	15	22	16		16	9	21	11	7	7	20	19	3				1
0	18				5	16	6		3	15				12	5	0	

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 13-15 years
Age: 45-49 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	95		85		94		89				95	100	100	90		19
18	91	95	82				84				91	95	96	86		18
17	86	90	78		83		79				83	90		82		17
16	82	86	74			73	75	69	77			86	87	78		16
15	78	82	71		73		70	66			77					15
14	74	77	67	66	68	65	66	62	68		73	77	78	70		14
13	70	73	64		63		61	58			66	72	74	66	60	13
12	65	69	60	60	58	57	56	54	59		64	68	69	56	56	12
11	61	65	57	57	53	52	52	50	54		58	59	63	65	58	11
10	57	60	53	54	48	48	47	47	50		55	59	61	54	49	10
9	53	56	50	51	43	44	43	43	45		50	50	54	56	50	9
8	49	52	46	48	38	40	38	39	41		46	50	52	46	41	8
7	44	48	43	45	33	35	34	35	36		42	41	45	47	42	7
6	40	43	39	42		31	29	31	32		37	41	43	38	34	6
5	36	39	36	39	23	27	24	28	27		33	32	36	38	34	5
4	32	35	32	36		23	20	24	23		29		32	34	30	4
3	28	30	28	32	13	19	15		18		25		27	30	26	3
2	24	26	25	29	8	14	11	16	13		21		22	25	22	2
1	19		21	26	3	10	6	12	9		17			18		1
0				23		6	1	8								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	89	100	100	94	98	91	99	95				84	85	19
18	85	85	100	100	90	94	87	94	90				80	81	18
17	81	82	99	95	85	89	83	90	86				76	77	17
16	78	78	93	90	81	85	79	85	81				72	73	16
15	74	74	88	85	77	81	75	80	77				65	69	15
14	71	71	82	80	73	76	71	76	72	64			65	65	14
13	67	67	76	74	69	72	67	71	67		61	59	61	62	13
12	64	64	71	69	65	68	63	66	63	57			57	58	12
11	61	60	65	64	61	63	59	61	58		54	53	53	54	11
10	57	56	60	58	57	59	55	57	54	50	50	50	49	50	10
9	54	53	54	53	53	55	50	52	49	46	47	47	45	46	9
8	50	49	49	48	48	50	46	47	45	42	44	44	41	42	8
7	47	46	43	42	44	46	42	43	40	39	40	41	37	38	7
6	43	42	37	37	40	42	38	38	36	35	37	38	34	34	6
5	40	38	32	32	36	37	34	33	31	31	34	35	30	30	5
4	36	35	26	26	32	33	30	29	27	28	30	32	26	26	4
3	33	31	21	21	28	29	26	24	22	24	27	29	22	22	3
2	30	27	15	16	24	22	19	17	20	23	27	18	18		2
1	26	24	10	10	20	20	18	14	13	17	20	24	14	14	1
0	23	20	4	5	16	16		10							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	81	100		100	94	89	86	90	78						19	
18	77	81	100	97	89	85	82	86	75	76				90	18	
17	72	77	96	93	85	81	78	82			86				17	
16	68	73	91	89	81	77	75	78	67		83				16	
15	64	68	85	84	77	73	71	74	63	66	79	73	60	77	15	
14	60	64	80	80	72	69	67	70	59	63	75		57		14	
13	55	60	75	76	68	65	63	66	55	60	71	65		69	13	
12	51	55	70	71	64	62	60	62	51		67	62	51	64	12	
11	47	51	65	67	60	58	56	58	47	53	64	58		60	11	
10	43	47	60	62	55	54	52	54	43	50	60	55	46	56	10	
9	38	42	55	58	51	50	48	50		47	56	51	43	51	9	
8	34	38	49	54	47	46	45	46	35	44	52	48	40	47	8	
7	30	34	44	49	43	42	41	42	32		49	44	37	43	7	
6	26	29	39	45	39	38	37	38	28	37	45	40	34	38	6	
5	22	25	34	41	34	34	33	34	24	34	41	37	31	34	5	
4	17	21	29	36	30	30	30	31	20		37	33	28	30	4	
3	13	16	24	32	26	27	26	27	16	28	34	30	26	25	3	
2	9	12	19	28	22	23	22	23	12		30	26	23	21	2	
1	5	8	13	23	17	19	18	19		21	26	23	20	17	1	
0	3	8		19				15		18	22	19	17		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	87		92		88		98		82								19
18	83	99	88	79			94		78								18
17	79	94	84	75	80		90		74	80				84	74	17	
16	75	90	80	72	76	72	86		69	75	86		80	70	69	16	
15	71	86	76	68	72	68	81		65	71				76	67	15	
14	67	81	72	65	68	64	77		61	66	77		72	63	61	14	
13	63	77	67	61	64	60	73		57	62	70	73		68	59	57	13
12	59	73	63	58	60	56	69		53	57			56	64	56	53	12
11	55	68	59	54	56	51	65	59	49	53	62	64		60	52	49	11
10	51	64	55	50	52	47	61		44	48	58	59		56	48	45	10
9	47	60	51	47	48	43	56	49	40	44	53	55	42	52	45	41	9
8	43	55	47	43	44	39	52		36	39	49	50		48	41	37	8
7	39	51	42	40	40	35	48	40	32	34	45	46	32	44	37	33	7
6	35	46	38	36	36	31	44		28	30	41	42		40	34	29	6
5	31	42	34	33	32	27	40	30	24	25	36	37	22	36	30	25	5
4	27	38	30	29	28	23	36		20	21	32	33		32	26	21	4
3	23	33	26		24	19	31	21	15	16	28	28	13	28	23		3
2	19	29	22		20	14	27	16	11	12	24	24	8	24			2
1	15	25	17		16	10	23	11	7	7	20	19	3				1
0	20				6	19	6		3	15				12	5		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 13-15 years
Age: 50-54 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	95		86		95		90				97	100	100	91		19	
18	91	96	82				86				92	96	98	87		18	
17	87	91	79		85		81			84		92		83		17	
16	83	87	75			75	77	71	78			87	89	79		16	
15	79	83	72		75		72	67			79					15	
14	74	79	68	67	70	67	68	64	69		74	78	80	71		14	
13	70	74	65		65		63	60		68		74	76	67	60	13	
12	66	70	61	61	59	58	58	56	60		65	69	71	56		12	
11	62	66	57	57	54	54	54	52	56	60	61	65	67	59	52	11	
10	58	61	54	54	49	50	49	48	51		56	60	62	55	49	10	
9	53	57	50	51	44	46	45	44	47	51	52	56	58	51	45	9	
8	49	53	47	48	39	41	40	41	42		47	51	53	47	41	8	
7	45	49	43	45	34	37	35	37	38	43	43	47	49	43	38	7	
6	41	44	40	42		33	31	33	33		39	42	45	39	34	6	
5	37	40	36	39	24	29	26	29	29	35	34	38	40	35	30	5	
4	32	36	33	36		25	22	25	24		31		33	36	31	27	4
3	28	31	29	33	14	20	17		20		27		28	31	27	23	3
2	24	27	26	30	9	16	13	18	15		23		24	27	23	19	2
1	20		22	27	4	12	8	14	11		18			19		1	
0				24		8	3	10								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	90	100	100	96	100	93	100	97				86	87	19
18	86	87	100	100	92	96	89	97	92				82	83	18
17	82	83	100	96	88	92	85	92	88				78	79	17
16	79	79	94	91	84	88	81	87	83				74	75	16
15	76	76	88	86	80	83	77	83	79				68	70	15
14	72	72	83	80	75	79	73	78	74	66			66	67	14
13	69	69	77	75	71	75	68	73	70		63	62	62	63	13
12	65	65	72	70	67	70	64	69	65	59			58	59	12
11	62	61	66	64	63	66	60	64	61		56	56	55	55	11
10	58	58	61	59	59	62	56	59	56	52	53	53	51	51	10
9	55	54	55	54	55	57	52	54	52	48	49	50	47	47	9
8	51	50	49	48	51	53	48	50	47	44	46	47	43	43	8
7	48	47	44	43	47	49	44	45	42	41	43	44	39	39	7
6	44	43	38	38	43	44	40	40	38	37	39	41	35	35	6
5	41	40	33	33	39	40	36	36	33	34	36	38	31	31	5
4	38	36	27	27	34	36	32	31	29	30	32	35	27	28	4
3	34	32	22	22	30	31	28	26	24	26	29	32	23	24	3
2	31	29	16	17	26	27	24	22	20	23	26	29	20	20	2
1	27	25	10	11	22	23	20	17	15	19	22	26	16	16	1
0	24	21	5	6	18	18		12							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	79	100		100	96	90	87	91	79						19
18	75	80	100	100	91	86	83	87	75	77				92	18
17	71	76	98	95	87	82	79	83			87				17
16	66	72	93	91	83	78	76	79	67		84				16
15	62	67	88	87	79	74	72	75	63	67	80	73	61	79	15
14	58	63	83	82	74	70	68	71	60	64	76		58		14
13	54	59	78	78	70	67	64	67	56	60	72	66		70	13
12	50	54	73	74	66	63	61	63	52		69	62	52	66	12
11	45	50	68	69	62	59	57	60	48	54	65	59		62	11
10	41	46	62	65	58	55	53	56	44	51	61	55	46	57	10
9	37	41	57	60	53	51	49	52	48	57	52	43	53		9
8	33	37	52	56	49	47	46	48	36	44	53	48	41	49	8
7	28	33	47	52	45	43	42	44	32		50	44	38	44	7
6	24	28	42	47	41	39	38	40	28	38	46	41	35	40	6
5	20	24	37	43	36	36	34	36	24	35	42	37	32	36	5
4	16	20	32	39	32	32	30	32	20		38	34	29	31	4
3	11	15	27	34	28	28	27	28	17	28	35	30	26	27	3
2	7	11	21	30	24	24	23	24	13		31	27	24	23	2
1	3	7	16	25	19	20	19	20	22	27	23	21	18		1
0	2	11		21				16	18	23	19	18			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	90		94		91		100		81							19	
18	86	98	90	80			97		76							18	
17	82	94	86	77	83		92		72	80			82	74		17	
16	78	89	82	73	79	73	88		68	75	87		78	71	69	16	
15	74	85	78	70	75	69	84		64	71			74	67		15	
14	70	80	73	66	71	65	80		60	66	78		70	63	61	14	
13	66	76	69	62	67	61	76		56	62	70	73		66	60	57	13
12	62	72	65	59	63	57	71		51	57			56	62	56	53	12
11	58	67	61	55	59	53	67	59	47	53	62	65		58	52	49	11
10	54	63	57	52	55	49	63		43	48	58	60		54	49	45	10
9	50	59	53	48	51	44	59	50	39	44	53	56	42	50	45	41	9
8	46	54	48	45	47	40	55		35	39	49	51		46	41	37	8
7	42	50	44	41	43	36	51	40	31	34	45	47	32	42	38	33	7
6	38	46	40	37	39	32	46		27	30	41	42		38	34	29	6
5	34	41	36	34	35	28	42	31	22	25	36	38	23	34	30	25	5
4	30	37	32	30	31	24	38		18	21	32	33		30	27	21	4
3	26	33	28		27	20	34	21	14	16	28	29	13	26	23		3
2	23	28	23		23	16	30	16	10	12	24	24	8	22			2
1	19	24	19		19	12	26	12	6	7	20	20	3				1
0	20				7	21	7		3	15				12	5		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 13-15 years
Age: 55-59 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		87		96		93				98	100	100	92		19	
18	92	97	83				88				94	98	100	88		18	
17	88	93	79		86		83			86		93		84		17	
16	83	88	76			77	79	73	80			89	91	80		16	
15	79	84	72		76		74	69			80					15	
14	75	80	69	67	71	69	70	65	71		76	80	82	72		14	
13	71	75	65		66		65	62		70		75	77	68	60	13	
12	67	71	62	61	61	60	60	58	62		67	71	73	56		12	
11	62	67	58	58	56	56	56	54	57	61	62	66	69	60	52	11	
10	58	63	55	55	51	52	51	50	53		58	62	64	56	49	10	
9	54	58	51	52	46	47	47	46	48	53	53	57	60	52	45	9	
8	50	54	48	48	41	43	42	43	44		49	53	55	48	41	8	
7	46	50	44	45	36	39	38	39	39	45	44	48	51	44	38	7	
6	41	45	41	42		35	33	35	35	41		44	46	40	34	6	
5	37	41	37	39	25	31	28	31	30	37	35	39	42	36	30	5	
4	33	37	33	36		26	24	27	26		33		35	38	32	27	4
3	29	33	30	33	15	22	19		21		28		30	33	28	23	3
2	25	28	26	30	10	18	15	20	17		24		25	29	24	19	2
1	20		23	27	5	14	10	16	12		20			20		1	
0				24		9	5	12								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	91	92	100	100	98	100	95	100	99				87	88	19
18	87	88	100	100	94	99	91	99	95				83	84	18
17	84	84	100	97	90	95	87	94	90				79	80	17
16	80	81	95	92	86	90	82	90	86				75	77	16
15	77	77	89	87	82	86	78	85	81	71			72	73	15
14	73	73	84	81	78	82	74	80	76	69			68	69	14
13	70	70	78	76	74	77	70	76	72		65	65	64	65	13
12	66	66	73	71	70	73	66	71	67	62			60	61	12
11	63	63	67	65	66	69	62	66	63		59	59	56	57	11
10	59	59	62	60	61	64	58	62	58	54	55	56	52	53	10
9	56	55	56	55	57	60	54	57	54	51	52	53	48	49	9
8	53	52	51	50	53	56	50	52	49	47	48	50	44	45	8
7	49	48	45	44	49	51	46	47	45	43	45	47	40	41	7
6	46	44	39	39	45	47	42	43	40	40	42	44	37	37	6
5	42	41	34	34	41	43	38	38	36	36	38	41	33	33	5
4	39	37	28	28	37	38	34	33	31	32	35	38	29	29	4
3	35	34	23	23	33	34	30	29	26	29	32	35	25	25	3
2	32	30	17	18	29	30	26	24	22	25	28	32	21	21	2
1	28	26	12	12	24	25	22	19	17	21	25	29	17	17	1
0	25	23	6	7	20	21		15							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	79	100		100	98	91	88	93	79						19
18	75	79	100	100	93	87	84	89	75	77				94	18
17	71	75	100	98	89	83	80	85			89				17
16	66	70	96	93	85	79	77	81	67		85				16
15	62	66	91	89	81	76	73	77	63	67	81	73	61	81	15
14	58	62	86	85	77	72	69	73	60	64	77		58		14
13	54	57	81	80	72	68	65	69	56	61	73	66		72	13
12	50	53	75	76	68	64	61	65	52		70	63	53	68	12
11	45	49	70	72	64	60	58	61	48	54	66	59		63	11
10	41	45	65	67	60	56	54	57	44	51	62	56	47	59	10
9	37	40	60	63	55	52	50	53		48	58	52	44	55	9
8	33	36	55	58	51	48	46	49	36	45	55	48	41	50	8
7	28	32	50	54	47	45	43	45	32		51	45	39	46	7
6	24	27	45	50	43	41	39	41	28	38	47	41	36	42	6
5	20	23	40	45	38	37	35	37	24	35	43	38	33	37	5
4	16	19	34	41	34	33	31	33	20		39	34	30	33	4
3	11	14	29	37	30	29	28	29	17	29	36	31	27	29	3
2	7	10	24	32	26	25	24	25	13		32	27	24	24	2
1	3	6	19	28	22	21	20	21		22	28	23	22	20	1
0	1	14		23				17		19	24	20	19		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	90	96			91		100		81							19	
18	86	100	92	82			99		76							18	
17	82	96	88	78	83		95		72	80				81	75	17	
16	78	91	84	74	79	74	91		68	75	87		77	71	69	16	
15	74	87	79	71	75	70	86		64	71				73	67	15	
14	70	83	75	67	71	66	82		60	66	79		69	64	61	14	
13	66	78	71	64	67	62	78		56	62	70	74		65	60	57	13
12	62	74	67	60	63	58	74		51	57			56	61	56	53	12
11	58	70	63	57	59	54	70	60	47	53	62	65		57	53	49	11
10	54	65	59	53	55	50	66		43	48	58	61		53	49	45	10
9	50	61	54	49	51	46	61	50	39	44	53	56	42	49	45	41	9
8	46	57	50	46	47	42	57		35	39	49	52		45	42	37	8
7	42	52	46	42	43	37	53	41	31	34	45	47	32	41	38	33	7
6	38	48	42	39	39	33	49		27	30	41	43		37	34	29	6
5	34	44	38	35	35	29	45	31	22	25	36	38	23	33	31	25	5
4	30	39	34	32	31	25	41		18	21	32	34		29	27	21	4
3	26	35	29		27	21	36	22	14	16	28	29	13	25	24		3
2	23	31	25		23	17	32	17	10	12	24	25	8	21			2
1	19	26	21		19	13	28	12	6	7	19	21	3				1
0	22				9	24	7		3	15				13	5		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 13-15 years
Age: 60-64 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	96		87		99		95				100	100	100	93		19	
18	92	98	84				90				95	99	100	89		18	
17	88	94	80		89		86			88		95		85		17	
16	84	89	77			79	81	75	82			90	93	81		16	
15	80	85	73		79		77	71			82					15	
14	76	81	70	67	74	70	72	68	73		77	81	84	73		14	
13	71	76	66		69		67	64		71		77	79	69	60	13	
12	67	72	62	61	64	62	63	60	64		68	72	75		56	12	
11	63	68	59	58	59	58	58	56	59	63	64	68	70	61	52	11	
10	59	64	55	55	54	53	54	52	55		59	63	66	57	49	10	
9	55	59	52	52	49	49	49	49	50	55	55	59	62	53	45	9	
8	50	55	48	49	44	45	44	45	46		50	54	57	49	41	8	
7	46	51	45	46	39	41	40	41	41	47	46	50	53	45	38	7	
6	42	47	41	43		37	35	37	37	42		45	48	41	34	6	
5	38	42	38	40	29	32	31	33	32	38	37	41	44	38	30	5	
4	34	38	34	36		28	26	30	27		34		36	39	34	27	4
3	29	34	31	33	19	24	22		23		30		32	35	30	23	3
2	25	29	27	30	14	20	17	22	18		26		27	31	26	19	2
1	21		24	27	9	15	12	18	14	22				22		1	
0				24		11	8	14								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	93	100	100	100	100	96	100	100				89	90	19
18	88	89	100	100	97	100	92	100	97				85	86	18
17	85	86	100	99	92	97	88	97	92				81	82	17
16	81	82	96	93	88	93	84	92	88				77	78	16
15	78	78	91	88	84	88	80	87	83				73	73	15
14	74	75	85	83	80	84	76	83	79	72			69	70	14
13	71	71	80	77	76	80	72	78	74		68	67	65	66	13
12	68	67	74	72	72	76	68	73	70	64			61	62	12
11	64	64	68	67	68	71	64	69	65		61	61	57	58	11
10	61	60	63	61	64	67	60	64	61	57	58	58	54	54	10
9	57	57	57	56	60	63	56	59	56	53	55	56	50	50	9
8	54	53	52	51	56	58	52	55	51	50	51	53	46	46	8
7	50	49	46	45	51	54	48	50	47	46	48	50	42	43	7
6	47	46	41	40	47	50	44	45	42	42	44	47	38	39	6
5	43	42	35	35	43	45	40	40	38	39	41	44	34	35	5
4	40	39	30	29	39	41	36	36	33	35	38	41	30	31	4
3	37	35	24	24	35	37	32	31	29	31	34	38	26	27	3
2	33	31	18	19	31	32	28	26	24	28	31	35	23	23	2
1	30	28	13	14	27	28	24	22	20	24	27	32	19	19	1
0	26	24	7	8	23	24		17							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	78	100		100	100	92	89	95	79						19
18	73	78	100	100	96	88	85	91	75	78				95	18
17	69	74	100	100	91	85	81	87			90				17
16	65	69	99	96	87	81	78	83	67		86				16
15	61	65	94	91	83	77	74	79	63	68	82	74	62	82	15
14	56	61	88	87	79	73	70	75	60	65	78		59		14
13	52	56	83	83	74	69	66	71	56	61	74	67		74	13
12	48	52	78	78	70	65	63	67	52		71	63	54	69	12
11	44	48	73	74	66	61	59	63	48	55	67	59		65	11
10	39	43	68	69	62	57	55	59	44	52	63	56	48	61	10
9	35	39	63	65	57	54	51	55		49	59	52	45	56	9
8	31	35	58	61	53	50	48	51	36	45	56	49	42	52	8
7	27	30	53	56	49	46	44	47	32		52	45	39	48	7
6	23	26	47	52	45	42	40	43	28	39	48	42	37	43	6
5	18	22	42	48	41	38	36	39	24	36	44	38	34	39	5
4	14	17	37	43	36	34	33	35	20		40	35	31	35	4
3	10	13	32	39	32	30	29	31	17	29	37	31	28	30	3
2	6	9	27	35	28	26	25	27	13		33	27	25	26	2
1	1	5	22	30	24	23	21	23		23	29	24	22	22	1
0	0	0	17	26				19	19	25	20	19			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93		98		93		100		79							19	
18	89	100	94	83			100		75							18	
17	85	98	90	79	85		97		71	80			79	75		17	
16	81	94	85	76	81	76	93		67	75	88		75	71	68	16	
15	77	89	81	72	77	71	89		63	71			71	68		15	
14	73	85	77	69	73	67	85		58	66	79		67	64	60	14	
13	69	81	73	65	69	63	81		54	62	70	75		63	60	57	13
12	65	76	69	61	65	59	76		50	57			56	59	57	53	12
11	61	72	65	58	61	55	72	60	46	53	62	66		55	53	49	11
10	57	68	60	54	57	51	68		42	48	57	61		51	49	45	10
9	53	63	56	51	53	47	64	51	38	44	53	57	42	47	46	41	9
8	49	59	52	47	49	43	60		34	39	49	52		43	42	37	8
7	45	55	48	44	45	39	56	41	29	34	45	48	32	39	38	33	7
6	42	50	44	40	41	35	51		25	30	41	43		35	35	29	6
5	38	46	40	36	37	30	47	32	21	25	36	39	23	31	31	25	5
4	34	42	35	33	33	26	43		17	21	32	35		27	28	21	4
3	30	37	31		29	22	39	22	13	16	28	30	13	23	24		3
2	26	33	27		25	18	35	17	9	12	24	26	8	19			2
1	22	29	23		21	14	30	13	4	7	19	21	4				1
0	24				10	26	8		3	15				13	5		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 13-15 years
Age: 65-69 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	97		88		100		97				100	100	100	94		19	
18	93	99	84				93				96	100	100	90		18	
17	89	95	81		90		88				90	96		86		17	
16	84	90	77			80	84	78	83			92	94	82		16	
15	80	86	74		80		79	74			83					15	
14	76	82	70	68	75	72	74	70	74		78	83	86	75		14	
13	72	78	67		70		70	66			73		78	81	71	60	13
12	68	73	63	61	65	64	65	62	65		69	74	77		56	12	
11	64	69	60	58	60	59	61	58	61		65	65	69	72	63	52	11
10	59	65	56	55	55	55	56	55	56		61	65	68	59	49		10
9	55	60	53	52	50	51	52	51	52		57	56	60	63	55	45	9
8	51	56	49	49	45	47	47	47	47		52	56	59	51	41		8
7	47	52	46	46	40	42	42	43	43		48	47	51	55	47	38	7
6	43	48	42	43		38	38	39	38		44		47	50	43	34	6
5	38	43	38	40	30	34	33	36	34		40	38	42	46	39	30	5
4	34	39	35	37		30	29	32	29		36		38	41	35	27	4
3	30	35	31	34	20	26	24		25		32		33	37	31	23	3
2	26	30	28	31	15	21	19	24	20		28		28	32	27	19	2
1	22		24	28	10	17	15	20	16		24				23		1
0				24		13	10	17								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	94	100	100	100	100	98	100	100				90	91	19
18	89	90	100	100	99	100	94	100	99				86	88	18
17	86	87	100	100	95	100	90	99	95				82	84	17
16	83	83	98	95	91	95	86	94	90				78	80	16
15	79	80	92	89	87	91	82	90	85				76	75	15
14	76	76	87	84	83	87	78	85	81	74			71	72	14
13	72	72	81	79	78	82	74	80	76				71	70	13
12	69	69	76	73	74	78	70	76	72	67			63	64	12
11	65	65	70	68	70	74	66	71	67				59	60	11
10	62	62	64	63	66	69	62	66	63	60	61	61	55	56	10
9	58	58	59	57	62	65	58	62	58	56	57	58	51	52	9
8	55	54	53	52	58	61	54	57	54	52	54	55	47	48	8
7	52	51	48	47	54	56	50	52	49	49	51	52	43	44	7
6	48	47	42	42	50	52	46	47	45	45	47	49	40	40	6
5	45	43	37	36	46	48	42	43	40	41	44	46	36	36	5
4	41	40	31	31	41	43	38	38	35	38	40	43	32	32	4
3	38	36	25	26	37	39	33	33	31	34	37	40	28	28	3
2	34	33	20	20	33	35	29	29	26	31	34	37	24	24	2
1	31	29	14	15	29	30	25	24	22	27	30	34	20	20	1
0	27	25	9	10	25	26		19							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	76	100		100	100	94	90	97	79						19
18	72	77	100	100	98	90	86	93	75	78				97	18
17	67	73	100	100	93	86	83	89			91				17
16	63	68	100	98	89	82	79	85	67		87				16
15	59	64	96	94	85	78	75	81	63	68	83	74	63	84	15
14	55	60	91	89	81	74	71	77	60	65	79		60		14
13	51	55	86	85	76	70	68	73	56	62	76	67		75	13
12	46	51	81	81	72	66	64	69	52		72	63	54	71	12
11	42	47	76	76	68	63	60	65	48	55	68	60		67	11
10	38	42	71	72	64	59	56	61	44	52	64	56	49	62	10
9	34	38	66	67	60	55	53	57		49	60	53	46	58	9
8	29	34	60	63	55	51	49	53	36	46	57	49	43	54	8
7	25	29	55	59	51	47	45	49	32		53	46	40	49	7
6	21	25	50	54	47	43	41	45	28	39	49	42	37	45	6
5	17	21	45	50	43	39	38	41	24	36	45	38	35	41	5
4	12	16	40	46	38	35	34	37	20		42	35	32	36	4
3	8	12	35	41	34	31	30	33	17	30	38	31	29	32	3
2	4	8	30	37	30	28	26	29	13		34	28	26	28	2
1	0	3	25	32	26	24	23	25		23	30	24	23	23	1
0	0	0	19	28				21		20	26	21	20		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	96	100	100		95		100		78							19	
18	92	100	96	84			100		74							18	
17	88	100	91	80	87		100		70	80				76	75	17	
16	84	96	87	77	83	77	96		65	75	89		72	72	68	16	
15	80	92	83	73	79	73	91		61	71				68	68	15	
14	76	87	79	70	75	69	87		57	66	80		64	64	60	14	
13	72	83	75	66	71	65	83		53	62	70	75		60	61	13	
12	68	79	71	63	67	60	79		49	57			56	56	57	12	
11	64	74	66	59	63	56	75	61	45	53	62	66		52	53	11	
10	61	70	62	56	59	52	71		41	48	57	62		48	50	44	10
9	57	66	58	52	55	48	66	51	36	44	53	57	42	44	46	40	9
8	53	61	54	48	51	44	62		32	39	49	53		40	42	37	8
7	49	57	50	45	47	40	58	42	28	34	45	48	32	36	39	33	7
6	45	53	46	41	43	36	54		24	30	41	44		32	35	29	6
5	41	48	41	38	39	32	50	32	20	25	36	40	23	28	32	25	5
4	37	44	37	34	35	28	45		16	21	32	35		24	28	21	4
3	33	40	33		31	23	41	23	11	16	28	31	13	20	24		3
2	29	35	29		27	19	37	18	7	12	24	26	8	16			2
1	25	31	25		23	15	33	13	3	7	19	22	4				1
0	27				11	29	8		3	15				13	5	0	

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 13-15 years
Age: 70-74 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	98		89		100		100				100	100	100	96		19
18	93	100	85				96				98	100	100	92		18
17	89	96	82		92		91				91	98		88		17
16	85	92	78			82	86	80	85			93	96	84		16
15	81	87	75		82		82	76			84					15
14	77	83	71	68	76	74	77	72	76		80	84	87	76		14
13	73	79	67		71		73	69		75		80	83	72	60	13
12	68	74	64	62	66	65	68	65	67		71	75	79	56		12
11	64	70	60	59	61	61	63	61	62	66	66	71	74	64	52	11
10	60	66	57	56	56	57	59	57	58		62	66	70	60	49	10
9	56	62	53	53	51	53	54	53	53	58	57	62	65	56	45	9
8	52	57	50	49	46	48	50	50	49		53	57	61	52	41	8
7	47	53	46	46	41	44	45	46	44	50	48	53	56	48	38	7
6	43	49	43	43		40	41	42	40	46	48	52	44	34		6
5	39	44	39	40	31	36	36	38	35	42	39	44	48	40	30	5
4	35	40	36	37		32	31	34	31		38	39	43	36	27	4
3	31	36	32	34	21	27	27		26		33	35	39	32	23	3
2	26	32	29	31	16	23	22	27	22		29	30	34	28	19	2
1	22		25	28	11	19	18	23	17		25			24		1
0				25		15	13	19								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	95	100	100	100	100	100	100	100				92	93	19
18	91	92	100	100	100	100	96	100	100				88	89	18
17	87	88	100	100	97	100	92	100	97				84	85	17
16	84	85	100	96	93	97	88	97	92				80	81	16
15	80	81	94	91	89	93	84	92	88		79	76	77	77	15
14	77	77	88	86	85	89	80	87	83	78			72	73	14
13	73	74	83	80	81	84	76	83	79		74	73	68	69	13
12	70	70	77	75	77	80	72	78	74	70			64	65	12
11	67	66	72	70	73	76	68	73	70		67	67	60	61	11
10	63	63	66	64	68	71	64	69	65	63	64	64	57	57	10
9	60	59	61	59	64	67	60	64	60	59	60	61	53	54	9
8	56	56	55	54	60	63	56	59	56	56	57	58	49	50	8
7	53	52	49	49	56	59	51	55	51	52	54	55	45	46	7
6	49	48	44	43	52	54	47	50	47	48	50	52	41	42	6
5	46	45	38	38	48	50	43	45	42	45	47	49	37	38	5
4	42	41	33	33	44	46	39	40	38	41	43	46	33	34	4
3	39	37	27	27	40	41	35	36	33	37	40	43	29	30	3
2	35	34	22	22	36	37	31	31	29	34	37	40	26	26	2
1	32	30	16	17	31	33	27	26	24	30	33	37	22	22	1
0	29	27	10	11	27	28		22							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	74	100		100	100	95	92	99	79						19
18	70	76	100	100	100	91	88	95	75	79				99	18
17	66	71	100	100	96	87	84	91			92				17
16	62	67	100	100	91	83	80	87	67		88				16
15	57	63	99	96	87	79	77	83	63	69	84	75	64	86	15
14	53	59	94	92	83	75	73	79	60	66	80		61		14
13	49	54	89	87	79	71	69	75	56	62	77	67		77	13
12	45	50	84	83	74	68	65	71	52		73	64	55	73	12
11	40	46	79	79	70	64	62	67	48	56	69	60		68	11
10	36	41	73	74	66	60	58	63	44	53	65	57	50	64	10
9	32	37	68	70	62	56	54	59		49	62	53	47	60	9
8	28	33	63	65	57	52	50	55	36	46	58	50	44	55	8
7	24	28	58	61	53	48	47	51	32		54	46	41	51	7
6	19	24	53	57	49	44	43	47	28	40	50	42	38	47	6
5	15	20	48	52	45	40	39	43	24	37	46	39	35	42	5
4	11	15	43	48	40	37	35	40	20		43	35	32	38	4
3	7	11	38	44	36	33	32	36	17	30	39	32	30	34	3
2	2	7	32	39	32	29	28	32	13		35	28	27	29	2
1	0	2	27	35	28	25	24	28		24	31	25	24	25	1
0	0	0	22	30				24	20	28	21	21			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	99	100	100		97		100		77							19
18	95	100	97	85			100		72							18
17	91	100	93	82	89		100		68	80				73	76	17
16	87	98	89	78	85	78	98		64	75	89			69	72	68
15	84	94	85	75	81	74	94		60	71				65	68	15
14	80	90	81	71	77	70	90		56	66	80			61	65	60
13	76	85	77	67	73	66	86		52	62	70	76		57	61	56
12	72	81	72	64	69	62	81		48	57			56	53	57	12
11	68	77	68	60	65	58	77	61	43	53	62	67		49	54	11
10	64	72	64	57	61	53	73		39	48	57	62		45	50	44
9	60	68	60	53	57	49	69	52	35	44	53	58	42	41	46	9
8	56	64	56	50	53	45	65		31	39	49	53		37	43	8
7	52	59	52	46	49	41	60	42	27	34	45	49	32	33	39	7
6	48	55	47	43	45	37	56		23	30	41	45		29	36	6
5	44	51	43	39	41	33	52	33	18	25	36	40	23	25	32	5
4	40	46	39	35	37	29	48		14	21	32	36		21	28	4
3	36	42	35		33	25	44	23	10	16	28	31	13	17	25	3
2	32	38	31		29	21	40	18	6	12	24	27	8	13		2
1	28	33	27		25	16	35	13	2	7	19	22	4			1
0	29	33	27		12	31	9		3	15				14	5	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 13-15 years
Age: 75-79 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	98		89		100		100				100	100	100	97		19
18	94	100	86				98				99	100	100	93		18
17	90	97	82		93		94				93	99	99	89		17
16	86	93	79			84	89	83	87			95	98	85		16
15	81	88	75		83		85	79			86					15
14	77	84	72	68	78	76	80	75	78		81	86	89	77		14
13	73	80	68		73		76	71		76		81	85	73	60	13
12	69	76	65	62	68	67	71	67	69		72	77	80	56		12
11	65	71	61	59	63	63	66	64	64	68	68	72	76	65	52	11
10	61	67	58	56	58	59	62	60	60		63	68	71	61	49	10
9	56	63	54	53	53	54	57	56	55	60	59	63	67	57	45	9
8	52	58	50	50	47	50	53	52	50		54	59	63	53	41	8
7	48	54	47	47	42	46	48	48	46	52	50	54	58	49	38	7
6	44	50	43	44		42	43	45	41		48	50	54	45	34	6
5	40	46	40	40	32	38	39	41	37	43	41	45	49	41	30	5
4	35	41	36	37		33	34	37	32		39	41	45	37	27	4
3	31	37	33	34	22	29	30		28		35	36	41	33	23	3
2	27	33	29	31	17	25	25	29	23		31	32	36	29	19	2
1	23		26	28	12	21	21	26	19		27			25		1
0				25		16	16	22								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	97	100	100	100	100	100	100	100				93	95	19
18	92	93	100	100	100	100	98	100	100				89	91	18
17	88	89	100	100	100	100	94	100	99				85	87	17
16	85	86	100	98	95	99	90	99	95				81	83	16
15	82	82	96	93	91	95	86	95	90		82	77	79		15
14	78	79	90	88	87	90	82	90	85	81		74	75		14
13	75	75	85	82	83	86	78	85	81		77	76	70	71	13
12	71	71	79	77	79	82	74	80	76	74		66	67		12
11	68	68	74	72	75	78	70	76	72		70	70	62	63	11
10	64	64	68	66	71	73	65	71	67	66	67	67	58	59	10
9	61	60	63	61	67	69	61	66	63	63	63	64	54	55	9
8	57	57	57	56	63	65	57	62	58	59	60	61	50	51	8
7	54	53	51	50	58	60	53	57	54	55	57	58	46	47	7
6	50	50	46	45	54	56	49	52	49	52	53	55	43	43	6
5	47	46	40	40	50	52	45	48	45	48	50	52	39	39	5
4	44	42	35	34	46	47	41	43	40	44	47	49	35	35	4
3	40	39	29	29	42	43	37	38	35	41	43	46	31	31	3
2	37	35	24	24	38	39	33	33	31	37	40	43	27	27	2
1	33	32	18	19	34	34	29	29	26	33	36	40	23	23	1
0	30	28	12	13	30	30		24							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 13-15 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	74	100		100	100	96	94	100	79						19
18	70	75	100	100	100	92	90	98	75	79				100	18
17	66	70	100	100	98	88	86	94			93				17
16	62	66	100	100	94	84	82	90	67		89				16
15	57	62	100	99	89	81	79	86	63	69	85	75	65	88	15
14	53	57	97	94	85	77	75	82	60	66	82		62		14
13	49	53	92	90	81	73	71	78	56	63	78	68		79	13
12	45	49	87	85	77	69	67	74	52		74	64	56	75	12
11	40	44	82	81	72	65	64	70	48	56	70	61		70	11
10	36	40	76	77	68	61	60	66	44	53	66	57	50	66	10
9	32	36	71	72	64	57	56	62		50	63	54	48	61	9
8	28	31	66	68	60	53	52	58	36	47	59	50	45	57	8
7	24	27	61	64	55	50	49	54	32		55	46	42	53	7
6	19	23	56	59	51	46	45	50	28	40	51	43	39	48	6
5	15	18	51	55	47	42	41	46	24	37	48	39	36	44	5
4	11	14	46	50	43	38	37	43	20		44	36	33	40	4
3	7	10	41	46	39	34	34	39	17	31	40	32	31	35	3
2	2	5	35	42	34	30	30	35	13		36	29	28	31	2
1	0	1	30	37	30	26	26	31		24	32	25	25	27	1
0	0	0	25	33				27		21	29	21	22		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	99	100			97		100		77							19
18	95	100	100	87			100		72							18
17	91	100	95	83	89		100		68	80				69	76	17
16	87	100	91	80	85	79	100		64	75	90			65	73	68
15	84	97	87	76	81	75	97		60	71				61	69	15
14	80	92	83	72	77	71	92		56	66	81			57	65	60
13	76	88	79	69	73	67	88		52	62	70	76		53	62	56
12	72	84	74	65	69	63	84		48	57			56	49	58	52
11	68	79	70	62	65	59	80	62	43	53	62	67		45	54	48
10	64	75	66	58	61	55	76		39	48	57	63		41	51	44
9	60	71	62	55	57	51	72	52	35	44	53	58	42	37	47	40
8	56	66	58	51	53	47	67		31	39	49	54		33	43	36
7	52	62	54	47	49	42	63	43	27	34	45	50	32	29	40	32
6	48	57	49	44	45	38	59		23	30	41	45		25	36	28
5	44	53	45	40	41	34	55	33	18	25	36	41	23	21	32	24
4	40	49	41	37	37	30	51		14	21	32	36		17	29	20
3	36	44	37		33	26	47	24	10	16	28	32	13	13	25	3
2	32	40	33		29	22	42	19	6	12	24	27	8	9		2
1	28	36	29		25	18	38	14	2	7	19	23	4			1
0	31				14	34	9		3	15				14	4	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 13-15 years
Age: 80-85 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	99		90		100		100				100	100	100	98		19	
18	95	100	87				100				100	100	100	94		18	
17	90	98	83		94		97				95	100	100	90		17	
16	86	94	80			86	93	86	88			97	100	86		16	
15	82	90	76		84		88	82				87				15	
14	78	85	72	69	79	77	84	78	79		83	88	91	78		14	
13	74	81	69		74		79	74			78	83	87	74	60	13	
12	70	77	65	62	69	69	74	71	70		74	78	82		56	12	
11	65	72	62	59	64	65	70	67	66		70	69	74	78	66	11	
10	61	68	58	56	59	61	65	63	61			65	69	74	62	49	10
9	57	64	55	53	54	56	61	59	57		62	60	65	69	58	45	9
8	53	60	51	50	49	52	56	55	52			56	60	65	54	41	8
7	49	55	48	47	44	48	51	52	48		54	51	56	60	50	38	7
6	44	51	44	44		44	47	48	43		49	51	56	46	34	6	
5	40	47	41	41	34	39	42	44	39		45	42	47	51	42	30	5
4	36	42	37	38		35	38	40	34		41	42	47	38	27	4	
3	32	38	34	35	24	31	33		30		37	38	43	34	23	3	
2	28	34	30	32	19	27	29	33	25		33	33	38	30	19	2	
1	23		27	29	14	23	24	29	21					26		1	
0				25		18	19	25								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	97	98	100	100	100	100	100	100	100				95	96	19
18	93	94	100	100	100	100	100	100	100				91	92	18
17	90	91	100	100	100	100	96	100	100				87	88	17
16	86	87	100	100	98	100	92	100	97				83	84	16
15	83	84	98	95	94	96	88	97	92			85	79	81	15
14	79	80	93	90	90	92	84	93	88	85			75	77	14
13	76	76	87	85	86	87	80	88	83		80	79	71	73	13
12	72	73	82	79	82	83	76	83	79	77			67	69	12
11	69	69	76	74	77	79	72	78	74		74	73	64	65	11
10	66	66	71	69	73	74	67	74	70	70	70	70	60	61	10
9	62	62	65	63	69	70	63	69	65	67	67	67	56	57	9
8	59	58	60	58	65	66	59	64	61	63	64	64	52	53	8
7	55	55	54	53	61	62	55	60	56	59	60	61	48	49	7
6	52	51	48	47	57	57	51	55	52	56	57	58	44	45	6
5	48	47	43	42	53	53	47	50	47	52	53	55	40	41	5
4	45	44	37	37	49	49	43	46	42	48	50	52	36	37	4
3	41	40	32	32	45	44	39	41	38	45	47	49	33	33	3
2	38	37	26	26	41	40	35	36	33	41	43	46	29	29	2
1	35	33	21	21	36	36	31	31	29	37	40	43	25	25	1
0	31	29	15	16	32	31		27							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	78	89		88	80	79	80	84	75						19
18	74	81	84	84	76	75	77	80	71	71				80	18
17	70	76	79	79	72	71	73	76			78				17
16	65	72	73	75	67	67	69	72	63		74				16
15	61	68	68	71	63	63	65	68	59	61	70	69	56	67	15
14	57	63	63	66	59	59	62	64	55	58	67		53		14
13	53	59	58	62	55	55	58	60	51	55	63	62		58	13
12	48	55	53	58	50	51	54	56	47		59	59	47	54	12
11	44	50	48	53	46	48	50	52	43	49	55	55		49	11
10	40	46	43	49	42	44	47	48	39	45	52	51	42	45	10
9	36	42	37	44	38	40	43	44		42	48	48	39	41	9
8	32	37	32	40	33	36	39	40	32	39	44	44	36	36	8
7	27	33	27	36	29	32	35	36	28		40	41	33	32	7
6	23	29	22	31	25	28	32	32	24	32	36	37	30	28	6
5	19	24	17	27	21	24	28	28	20	29	33	34	28	23	5
4	15	20	12	23	17	20	24	25	16		29	30	25	19	4
3	10	16	7	18	12	17	20	21	12	23	25	26	22	15	3
2	6	11	2	14	8	13	17	17	8		21	23	19	10	2
1	2	7	0	9	4	9	13	13		16	18	19	16	6	1
0		3	0	5				9		13	14	16	13		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	76	81			82		84		78							19	
18	73	80	77	72			80		74							18	
17	69	76	73	69	74		76		70	74			80	68		17	
16	65	72	68	65	70	63	71		66	69	81		76	65	64	16	
15	61	67	64	62	66	59	67		62	65			72	61		15	
14	57	63	60	58	62	55	63		58	60	72		68	57	56	14	
13	53	59	56	54	58	51	59		54	56	67	67		64	54	52	13
12	49	54	52	51	54	47	55		49	51			53	60	50	48	12
11	45	50	48	47	50	43	51	55	45	47	59	58		56	46	44	11
10	41	46	43	44	46	39	46		41	42	54	54		52	43	40	10
9	37	41	39	40	42	34	42		37	37	50	49	39	48	39	36	9
8	33	37	35	37	38	30	38		33	33	46	45		44	35	32	8
7	29	32	31	33	34	26	34	36	29	28	42	41	29	40	32	28	7
6	25	28	27	29	30	22	30		24	24	38	36		36	28	24	6
5	21	24	23	26	26	18	25	26	20	19	33	32	19	32	24	20	5
4	17	19	18	22	22	14	21		16	15	29	27		28	21	16	4
3	13	15	14		18	10	17	17	12	10	25	23	10	24	17		3
2	9	11	10		14	6	13	12	8	6	21	18	5	20			2
1	5	6	6		10	2	9	7	4	1	16	14	0				1
0		2			0	5	2		0	12				6	0		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 16-17 years
Age: 20-34 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	89		80		89		80				89	91	91	84		19	
18	85	86	77				75				85	86	86	80		18	
17	81	82	73		79		71			75		82		76		17	
16	77	78	70			63	66	61	67			77	77	72		16	
15	72	73	66		69		62	58			71					15	
14	68	69	63	64	64	55	57	54	58		67	68	68	64		14	
13	64	65	59		59		53	50			59		63	64	60	60	13
12	60	61	56	58	54	46	48	46	49		58	59	60		56	12	
11	56	56	52	55	49	42	43	42	44	50	53	54	55	52	53	11	
10	52	52	49	52	44	38	39	39	40		49	50	51	48	49	10	
9	47	48	45	49	39	34	34	35	35	42	44	45	46	44	45	9	
8	43	43	41	46	34	29	30	31	31		40	41	42	40	41	8	
7	39	39	38	42	29	25	25	27	26		34	35	36	37	36	7	
6	35	35	34	39		21	20	23	22		30		32	33	32	6	
5	31	31	31	36	18	17	16	20	17		26	27	29	28	30	5	
4	26	26	27	33		12	11	16	13			22	23	24	24	27	4
3	22	22	24	30	8	8	7		8		17		18	20	20	23	3
2	18	18	20	27	3	4	2	8	4		13		14	15	16	19	2
1	14		17	24	0	0	0	4	0		9				12	1	
0				21		0	0	1								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	82	82	100	100	82	87	82	88	85				77	78	19
18	78	79	100	99	78	82	78	83	80				74	74	18
17	75	75	97	94	74	78	74	79	75				70	70	17
16	71	72	91	88	70	74	70	74	71				66	66	16
15	68	68	86	83	65	69	65	69	66		58		62	62	15
14	65	64	80	78	61	65	61	65	62	56			58	58	14
13	61	61	75	72	57	61	57	60	57	55			54	54	13
12	58	57	69	67	53	56	53	55	53	49			50	50	12
11	54	53	64	62	49	52	49	51	48	49			46	46	11
10	51	50	58	56	45	48	45	46	44	42			43	43	10
9	47	46	52	51	41	43	41	41	39	38	42		40	39	9
8	44	43	47	46	37	39	37	36	35	34	38		37	35	8
7	40	39	41	40	33	35	33	32	30	31			34	31	7
6	37	35	36	35	28	30	29	27	25	27			32	31	6
5	33	32	30	30	24	26	25	22	21	23			28	28	5
4	30	28	25	25	20	22	21	18	16	20			25	19	4
3	27	24	19	19	16	18	17	13	12	16			22	15	3
2	23	21	14	14	12	13	13	8	7	13			18	11	2
1	20	17	8	9	8	9	9	4	3	9	15		8	7	1
0	16	14	2	3	4	5		0							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	76		94	93	84	81	81	85	75							19
18	72	75	89	88	80	77	77	81	71	72						18
17	68	70	84	84	76	73	74	77			80					17
16	64	66	79	80	72	69	70	73	63		76					16
15	60	62	74	75	67	66	66	69	59	62	73	70	58	70		15
14	55	57	69	71	63	62	62	65	55	59	69		55			14
13	51	53	63	67	59	58	58	61	51	56	65	63				13
12	47	49	58	62	55	54	55	57	47		61	59	49	57		12
11	43	44	53	58	50	50	51	53	43	50	57	56		53		11
10	38	40	48	53	46	46	47	49	39	46	54	52	43	48		10
9	34	36	43	49	42	42	43	45		43	50	49	41	44		9
8	30	31	38	45	38	38	40	41	32	40	46	45	38	40		8
7	26	27	33	40	33	34	36	37	28		42	42	35			7
6	21	23	28	36	29	31	32	33	24	33	39	38	32	31		6
5	17	18	22	32	25	27	28	29	20	30	35	34	29	27		5
4	13	14	17	27	21	23	25	25	16		31	31	26	22		4
3	9	10	12	23	17	19	21	21	12	24	27	27	23	18		3
2	5	5	7	18	12	15	17	17	8		23	24	21	14		2
1	0	1	2	14	8	11	13	14		17	20	20	18	9		1
0	0	0	0	10				10		14	16	17	15			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score	
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	80		85		84		89		77								19	
18	76	85	81	75			85		73								18	
17	72	81	76	71	76		81		69	74				81	69		17	
16	68	76	72	68	72	66	76		65	69	80		77	65	64		16	
15	64	72	68	64	68	61	72		61	65				73	62		15	
14	60	67	64	61	64	57	68		56	60	71		69	58	56		14	
13	56	63	60	57	60	53	64		52	56	67	67		65	54	52		13
12	52	59	55	53	56	49	60		48	51			53	61	51	48		12
11	48	54	51	50	52	45	55	56	44	47	59	58		57	47	44		11
10	44	50	47	46	48	41	51		40	42	54	53		53	43	40		10
9	40	46	43	43	44	37	47	46	36	37	50	49	39	49	40	36		9
8	36	41	39	39	40	33	43		31	33	46	44		45	36	32		8
7	32	37	35	36	36	29	39	37	27	28	42	40	29	41	32	28		7
6	28	33	30	32	32	25	35		23	24	38	36		37	29	24		6
5	24	28	26	28	28	20	30	27	19	19	33	31	20	33	25	20		5
4	20	24	22	25	24	16	26		15	15	29	27		29	21	16		4
3	16	20	18		20	12	22	18	11	10	25	22	10	25	18			3
2	12	15	14		16	8	18	13	7	6	21	18	5	21				2
1	8	11	10		12	4	14	8	2	1	16	13	0					1
0	7				0	10	3		0	12				7	0			0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 16-17 years
Age: 35-39 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	90		82		91		83				92	94	94	86		19	
18	86	88	78				78				87	89	90	82		18	
17	82	84	75		81		73				79	85		78		17	
16	78	80	71			67	69	64	70			80	81	74		16	
15	74	76	68		71		64	60				74				15	
14	69	71	64	65	66	58	60	56	61		69	71	72	66		14	
13	65	67	61		61		55	52			62		66	68	62	60	13
12	61	63	57	58	56	50	50	48	52		60	62	63		56	12	
11	57	58	53	55	51	45	46	45	48		54	56	57	59	54	53	11
10	53	54	50	52	46	41	41	41	43		51	53	54	50	49	10	
9	48	50	46	49	41	37	37	37	39		46	47	48	50	46	9	
8	44	46	43	46	36	33	32	33	34		42	44	46	42	41	8	
7	40	41	39	43	31	29	28	29	29		37	38	39	41	38	7	
6	36	37	36	40		24	23	26	25		33	35	37	34	34	6	
5	32	33	32	37	21	20	18	22	20		29	29	30	32	30	5	
4	28	28	29	34		16	14	18	16		25		26	28	26	27	4
3	23	24	25	31	11	12	9		11		21		21	23	22	23	3
2	19	20	22	28	6	7	5	10	7		17		17	19	18	19	2
1	15		18	25	1	3	0	7	2		13				14	1	
0				22		0	0	3								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	85	100	100	87	91	85	93	89				80	81	19
18	81	81	100	100	82	86	81	88	85				77	77	18
17	77	78	98	94	78	82	77	84	80				73	73	17
16	74	74	92	89	74	78	73	79	75				69	69	16
15	70	70	87	84	70	73	69	74	71				60	65	15
14	67	67	81	78	66	69	65	69	66	59			61	61	14
13	63	63	75	73	62	65	61	65	62				56	54	13
12	60	60	70	68	58	60	57	60	57	52			53	54	12
11	57	56	64	62	54	56	53	55	53	49	48		49	50	11
10	53	52	59	57	50	52	49	51	48	45	46	45	46	46	10
9	50	49	53	52	45	47	45	46	44	41	42	42	42	42	9
8	46	45	48	46	41	43	41	41	39	37	39	39	38	38	8
7	43	42	42	41	37	39	37	37	35	34	36	36	34	34	7
6	39	38	37	36	33	34	33	32	30	30	32	33	30	30	6
5	36	34	31	31	29	30	29	27	25	26	29	30	26	26	5
4	32	31	25	25	25	26	25	22	21	23	25	27	22	22	4
3	29	27	20	20	21	21	20	18	16	19	22	24	18	18	3
2	26	23	14	15	17	17	16	13	12	15	19	21	14	14	2
1	22	20	9	9	13	13	12	8	7	12	15	18	11	10	1
0	19	16	3	4	9	8		4							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	76		97	95	86	82	81	86	75						19
18	72	73	92	91	82	78	78	82	71	73				85	18
17	68	69	87	86	78	74	74	78			81				17
16	64	65	82	82	74	71	70	74	63		77				16
15	60	61	77	78	69	67	66	70	59	63	74	70	56	72	15
14	55	56	71	73	65	63	63	66	55	60	70		54		14
13	51	52	66	69	61	59	59	62	51	56	66	63		63	13
12	47	48	61	65	57	55	55	58	47		62	60	48	59	12
11	43	43	56	60	52	51	51	54	43	50	59	56		54	11
10	38	39	51	56	48	47	48	50	39	47	55	53	42	50	10
9	34	35	46	51	44	43	44	46		44	51	49	39	46	9
8	30	30	41	47	40	40	40	42	32	40	47	45	36	41	8
7	26	26	35	43	36	36	36	38	28		43	42	34	37	7
6	21	22	30	38	31	32	33	34	24	34	40	38	31	33	6
5	17	17	25	34	27	28	29	30	20	31	36	35	28	28	5
4	13	13	20	30	23	24	25	26	16		32	31	25	24	4
3	9	9	15	25	19	20	21	22	12	24	28	28	22	20	3
2	5	4	10	21	14	16	18	18	8		25	24	19	15	2
1	0	0	5	16	10	12	14	14		18	21	21	17	11	1
0	0	0	0	12				10		14	17	17	14		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	80		87		84		91		77							19	
18	76	87	82	75			87		73							18	
17	72	83	78	72	76		83		69	74			80	69		17	
16	68	78	74	68	72	67	79		65	69	81		76	66	63	16	
15	64	74	70	64	68	63	75		61	65			72	62		15	
14	60	70	66	61	64	59	70		56	60	72		68	58	55	14	
13	56	65	61	57	60	55	66		52	56	67	67		64	55	52	13
12	52	61	57	54	56	50	62		48	51			53	60	51	48	12
11	48	57	53	50	52	46	58	56	44	47	59	58		56	47	44	11
10	44	52	49	47	48	42	54		40	42	54	54		52	44	40	10
9	40	48	45	43	44	38	50	47	36	37	50	49	39	48	40	36	9
8	36	44	41	39	40	34	45		31	33	46	45		44	36	32	8
7	32	39	36	36	36	30	41	37	27	28	42	40	29	40	33	28	7
6	28	35	32	32	32	26	37		23	24	38	36		36	29	24	6
5	24	31	28	29	28	22	33	28	19	19	33	32	20	32	25	20	5
4	20	26	24	25	24	18	29		15	15	29	27		28	22	16	4
3	16	22	20		20	13	25	18	11	10	25	23	10	24	18		3
2	12	18	16		16	9	20	13	7	6	21	18	5	20			2
1	8	13	11		12	5	16	9	2	1	16	14	0				1
0	9				1	12	4		0	12				7	0	0	0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 16-17 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	91		83		93		84				93	95	96	87		19
18	87	90	79				79				89	91	92	83		18
17	83	85	75		83		75			80		86		79		17
16	78	81	72			68	70	65	72			82	83	75		16
15	74	77	68		73		66	61			75					15
14	70	72	65	65	67	60	61	58	63		71	72	74	67		14
13	66	68	61		62		57	54		64		68	70	63	60	13
12	62	64	58	59	57	51	52	50	54		62	63	65	56		12
11	57	60	54	56	52	47	47	46	49	56	57	59	61	55	53	11
10	53	55	51	53	47	43	43	42	45		53	54	56	51	49	10
9	49	51	47	50	42	39	38	38	40	47	48	50	52	47	45	9
8	45	47	44	46	37	35	34	35	36		44	45	47	43	41	8
7	41	42	40	43	32	30	29	31	31	39	39	41	43	39	38	7
6	37	38	37	40		26	24	27	27		35	36	39	35	34	6
5	32	34	33	37	22	22	20	23	22	31	30	32	34	31	30	5
4	28	30	29	34		18	15	19	18		27	27	30	27	27	4
3	24	25	26	31	12	13	11		13		23	23	25	23	23	3
2	20	21	22	28	7	9	6	12	9		18	18	21	20	19	2
1	16		19	25	2	5	2	8	4		14			16		1
0				22		1	0	4								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	86	100	100	89	93	87	95	91				82	83	19
18	82	83	100	100	85	89	83	91	87				78	79	18
17	78	79	98	95	81	84	79	86	82				74	75	17
16	75	75	93	89	77	80	75	81	78				70	71	16
15	72	72	87	84	72	76	71	77	73				63	66	15
14	68	68	82	79	68	71	67	72	69	61			63	63	14
13	65	65	76	74	64	67	63	67	64		57	57	59	59	13
12	61	61	70	68	60	63	59	62	59	54			55	55	12
11	58	57	65	63	56	58	55	58	55		51	51	51	51	11
10	54	54	59	58	52	54	51	53	50	46	47	48	47	47	10
9	51	50	54	52	48	50	47	48	46	43	44	45	43	43	9
8	47	46	48	47	44	45	43	44	41	39	40	42	39	39	8
7	44	43	43	42	40	41	39	39	37	35	37	39	35	35	7
6	41	39	37	36	36	37	34	34	32	32	34	36	31	31	6
5	37	36	32	31	31	32	30	30	28	28	30	33	28	27	5
4	34	32	26	26	27	28	26	25	23	24	27	30	24	24	4
3	30	28	20	20	23	24	22	20	19	21	24	27	20	20	3
2	27	25	15	15	19	19	18	15	14	17	20	24	16	16	2
1	23	21	9	10	15	15	14	11	9	13	17	21	12	12	1
0	20	17	4	5	11	11		6							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	75	100		97	88	83	82	86	75						19
18	71	72	95	93	84	80	78	82	71	73				86	18
17	66	68	90	89	80	76	74	78			82				17
16	62	64	84	84	76	72	71	74	63		78				16
15	58	59	79	80	71	68	67	71	59	63	75	71	57	73	15
14	54	55	74	76	67	64	63	67	55	60	71		54		14
13	49	51	69	71	63	60	59	63	51	57	67	64		65	13
12	45	46	64	67	59	56	56	59	47		63	60	49	60	12
11	41	42	59	62	55	52	52	55	43	51	60	57		56	11
10	37	38	54	58	50	49	48	51	39	47	56	53	43	52	10
9	33	34	48	54	46	45	44	47	44	52	49	40	47		9
8	28	29	43	49	42	41	41	43	32	41	48	46	37	43	8
7	24	25	38	45	38	37	37	39	28		45	42	34	39	7
6	20	21	33	41	33	33	33	35	24	34	41	39	32	34	6
5	16	16	28	36	29	29	29	31	20	31	37	35	29	30	5
4	11	12	23	32	25	25	26	27	16		33	32	26	26	4
3	7	8	18	28	21	21	22	23	12	25	29	28	23	21	3
2	3	3	13	23	16	18	18	19	8		26	24	20	17	2
1	0	0	7	19	12	14	14	15		18	22	21	17	13	1
0	0	0	2	14				11	15	18	17	15			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	83	88			86		94		76							19	
18	79	89	84	76			90		72							18	
17	75	85	80	73	78		85		68	74			80	70		17	
16	71	81	76	69	74	68	81		63	69	81		76	66	63	16	
15	67	76	72	66	70	64	77		59	65			72	62		15	
14	63	72	68	62	66	60	73		55	60	72		68	59	55	14	
13	59	68	63	59	62	56	69		51	56	67	68		64	55	51	13
12	55	63	59	55	58	52	65		47	51			53	60	51	47	12
11	51	59	55	51	54	48	60	57	43	47	59	59		56	48	43	11
10	47	55	51	48	50	43	56		38	42	54	54		52	44	39	10
9	43	50	47	44	46	39	52	47	34	37	50	50	39	48	40	36	9
8	39	46	42	41	42	35	48		30	33	46	46		44	37	32	8
7	35	42	38	37	38	31	44	38	26	28	42	41	29	40	33	28	7
6	31	37	34	34	34	27	40		22	24	37	37		36	29	24	6
5	27	33	30	30	30	23	35	28	18	19	33	32	20	32	26	20	5
4	23	29	26	26	26	19	31		13	15	29	28		28	22	16	4
3	19	24	22		22	15	27	19	9	10	25	23	10	24	18		3
2	15	20	17		18	11	23	14	5	6	21	19	5	20			2
1	11	16	13		14	6	19	9	1	1	16	14	1				1
0	11	16			2	14	4		0	12				7	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 16-17 years
Age: 45-49 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		83		94		86				95	97	98	88		19
18	87	91	80				81				90	92	93	84		18
17	83	86	76		84		77			82		88		80		17
16	79	82	73			70	72	67	73			83	85	76		16
15	75	78	69		74		67	63			77					15
14	71	73	66	65	69	62	63	59	64		72	74	76	68		14
13	66	69	62		64		58	55		65		69	71	64	60	13
12	62	65	58	59	59	53	54	51	55		63	65	67	56		12
11	58	61	55	56	54	49	49	48	51	57	59	60	62	57	53	11
10	54	56	51	53	49	45	45	44	46		54	56	58	53	49	10
9	50	52	48	50	43	41	40	40	42	49	50	51	54	49	45	9
8	45	48	44	47	38	36	35	36	37		45	47	49	45	41	8
7	41	44	41	44	33	32	31	32	33	41	41	42	45	41	38	7
6	37	39	37	41		28	26	29	28		37	38	40	37	34	6
5	33	35	34	38	23	24	22	25	24		32	32	33	33	30	5
4	29	31	30	34		19	17	21	19		28	29	32	29	27	4
3	25	26	27	31	13	15	12		15		24	24	27	25	23	3
2	20	22	23	28	8	11	8	13	10		20	20	23	21	19	2
1	16		20	25	3	7	3	10	6		16			17		1
0				22		3	0	6								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	87	88	100	100	91	95	89	98	94				83	84	19
18	83	84	100	100	87	91	85	93	89				80	80	18
17	80	80	99	95	83	87	81	88	84				76	76	17
16	76	77	93	90	79	82	77	84	80				72	72	16
15	73	73	88	85	75	78	73	79	75				65	68	15
14	69	69	82	80	71	74	69	74	71	63			64	65	14
13	66	66	77	74	67	70	65	70	66				59	59	13
12	62	62	71	69	62	65	61	65	62	56			56	57	12
11	59	59	66	64	58	61	57	60	57				53	52	11
10	56	55	60	58	54	57	53	55	53	48	49	50	48	49	10
9	52	51	54	53	50	52	48	51	48	45	46	47	45	45	9
8	49	48	49	48	46	48	44	46	44	41	42	44	41	41	8
7	45	44	43	42	42	44	40	41	39	37	39	41	37	37	7
6	42	40	38	37	38	39	36	37	34	34	36	38	33	33	6
5	38	37	32	32	34	35	32	32	30	30	32	35	29	29	5
4	35	33	27	26	30	31	28	27	25	26	29	32	25	25	4
3	31	30	21	21	26	26	24	23	21	23	25	29	21	21	3
2	28	26	16	16	21	22	20	18	16	19	22	26	17	17	2
1	24	22	10	10	17	18	16	13	12	15	19	23	14	13	1
0	21	19	4	5	13	13		8							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	75	71	100	100	90	85	83	87	75	71	74				19
18	71	71	97	95	86	81	79	83						88	18
17	66	67	92	91	82	77	75	79				83			17
16	62	63	87	87	78	73	71	76	63		80				16
15	58	58	82	82	74	69	68	72	59	64	76	71	58	75	15
14	54	54	77	78	69	65	64	68	55	61	72		55		14
13	49	50	72	74	65	61	60	64	51	57	68	64		66	13
12	45	45	67	69	61	58	56	60	47		64	61	49	62	12
11	41	41	61	65	57	54	53	56	43	51	61	57		58	11
10	37	37	56	60	52	50	49	52	39	48	57	53	44	53	10
9	33	32	51	56	48	46	45	48		45	53	50	41	49	9
8	28	28	46	52	44	42	41	44	32	41	49	46	38	45	8
7	24	24	41	47	40	38	38	40	28		46	43	35	40	7
6	20	19	36	43	35	34	34	36	24	35	42	39	32	36	6
5	16	15	31	39	31	30	30	32	20	32	38	36	30	32	5
4	11	11	26	34	27	26	26	28	16		34	32	27	27	4
3	7	6	20	30	23	23	23	24	12	25	30	28	24	23	3
2	3	2	15	25	19	19	19	20	8		27	25	21	19	2
1	0	0	10	21	14	15	15	16		19	23	21	18	14	1
0	0	0	5	17				12		15	19	18	15		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	83	92	86	78	86		96		76							19	
18	79	87	82	74	78		88		68	74				79	70	18	
17	75	87	82	74												17	
16	71	83	78	71	74	69	84		63	69	82		75	66	63	16	
15	67	79	74	67	70	65	80		59	65				71	63	15	
14	63	74	69	63	66	61	75		55	60	73		67	59	55	14	
13	59	70	65	60	62	57	71		51	56	67	68		63	55	51	13
12	55	66	61	56	58	53	67		47	51			53	59	52	47	12
11	51	61	57	53	54	49	63	57	43	47	59	60		55	48	43	11
10	47	57	53	49	50	45	59		38	42	54	55		51	44	39	10
9	43	53	48	46	46	41	55	48	34	37	50	51	39	47	41	35	9
8	39	48	44	42	42	36	50		30	33	46	46		43	37	31	8
7	35	44	40	38	38	32	46	38	26	28	42	42	29	39	33	27	7
6	31	40	36	35	34	28	42		22	24	37	37		35	30	23	6
5	27	35	32	31	30	24	38	29	18	19	33	33	20	31	26	19	5
4	23	31	28	28	26	20	34		13	15	29	28		27	22	16	4
3	19	27	23		22	16	30	19	9	10	25	24	10	23	19		3
2	15	22	19		18	12	25	14	5	6	21	19	5	19			2
1	11	18	15		14	8	21	10	1	1	16	15	1				1
0	14	14			4	17	5		0	12				8	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 16-17 years
Age: 50-54 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		84		95		88				96	98	100	90		19
18	88	92	80				83				91	94	95	86		18
17	84	87	77		85		79			84		89		82		17
16	80	83	73			72	74	68	75			85	86	78		16
15	75	79	70		75		69	65			78					15
14	71	75	66	66	70	63	65	61	66		74	75	78	70		14
13	67	70	63		65		60	57		67		71	73	66	60	13
12	63	66	59	59	60	55	56	53	57		65	66	69	56		12
11	59	62	56	56	55	51	51	49	53	59	60	62	64	58	53	11
10	54	57	52	53	50	47	46	46	48		56	57	60	54		10
9	50	53	49	50	45	42	42	42	43	51	51	53	55	50	45	9
8	46	49	45	47	40	38	37	38	39		47	48	51	46		8
7	42	45	42	44	35	34	33	34	34	42	42	44	47	42		7
6	38	40	38	41		30	28	30	30		38	39	42	38		6
5	33	36	34	38	25	25	24	27	25	34	33	35	38	34		5
4	29	32	31	35		21	19	23	21		30		33	30		4
3	25	27	27	32	14	17	14		16		26		29	26		3
2	21	23	24	29	9	13	10	15	12		22		21	24		2
1	17		20	26	4	9	5	11	7		18			18		1
0				22		4	1	8								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	88	89	100	100	94	98	91	100	96				85	86	19
18	84	85	100	100	89	94	87	95	91				81	82	18
17	81	82	100	96	85	89	83	91	87				77	78	17
16	77	78	94	91	81	85	79	86	82				73	74	16
15	74	74	89	86	77	81	75	81	78				68	69	15
14	71	71	83	80	73	76	71	77	73	65			66	66	14
13	67	67	78	75	69	72	66	72	68				62	62	13
12	64	63	72	70	65	68	62	67	64	58			58	58	12
11	60	60	67	64	61	64	58	63	59				55	56	11
10	57	56	61	59	57	59	54	58	55	51	51	53	50	50	10
9	53	53	55	54	53	55	50	53	50	47	48	50	46	46	9
8	50	49	50	49	48	51	46	48	46	43	45	47	42	42	8
7	46	45	44	43	44	46	42	44	41	40	41	44	38	38	7
6	43	42	39	38	40	42	38	39	37	36	38	41	34	35	6
5	39	38	33	33	36	38	34	34	32	32	34	38	31	31	5
4	36	35	28	27	32	33	30	30	28	29	31	35	27	27	4
3	33	31	22	22	28	29	26	25	23	25	28	32	23	23	3
2	29	27	16	17	24	25	22	20	18	21	24	29	19	19	2
1	26	24	11	11	20	20	18	16	14	18	21	26	15	15	1
0	22	20	5	6	16	16		11							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	73	100		100	93	86	83	89	77						19
18	69	74	100	98	88	82	80	85	74	74				90	18
17	65	70	95	93	84	78	76	81			84				17
16	61	65	90	89	80	74	72	77	66		81				16
15	56	61	85	85	76	70	68	73	62	64	77	72	59	77	15
14	52	57	80	80	71	66	65	69	58	61	73		56		14
13	48	52	75	76	67	63	61	65	54	58	69	64		68	13
12	44	48	69	72	63	59	57	61	50		66	61	50	64	12
11	39	44	64	67	59	55	53	57	46	51	62	57		59	11
10	35	39	59	63	54	51	50	53	42	48	58	54	45	55	10
9	31	35	54	58	50	47	46	49		45	54	50	42	51	9
8	27	31	49	54	46	43	42	45	34	42	50	47	39	46	8
7	22	27	44	50	42	39	38	41	31		47	43	36	42	7
6	18	22	39	45	38	35	35	37	27	35	43	40	33	38	6
5	14	18	33	41	33	32	31	33	23	32	39	36	30	33	5
4	10	14	28	37	29	28	27	29	19		35	32	28	29	4
3	6	9	23	32	25	24	23	25	15	26	32	29	25	25	3
2	1	5	18	28	21	20	20	21	11		28	25	22	20	2
1	0	1	13	23	16	16	16	17		19	24	22	19	16	1
0	0	0	8	19				13		16	20	18	16		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	90		92		90		99		75							19	
18	86	97	88	79			95		70							18	
17	82	93	84	75	82		90		66	74				78	70	17	
16	78	89	80	72	78	74	86		62	69	83		74	67	63	16	
15	74	84	75	68	74	70	82		58	65			70	63		15	
14	70	80	71	65	70	66	78		54	60	74		66	59	55	14	
13	66	76	67	61	66	62	74		50	56	67	69		62	56	51	13
12	62	71	63	58	62	58	70		45	51			53	58	52	47	12
11	58	67	59	54	58	54	65	58	41	47	59	60		54	48	43	11
10	54	63	55	50	54	50	61		37	42	54	56		50	45	39	10
9	50	58	50	47	50	46	57	48	33	37	50	51	39	46	41	35	9
8	46	54	46	43	46	41	53		29	33	46	47		42	37	31	8
7	42	50	42	40	43	37	49	39	25	28	42	42	29	38	34	27	7
6	38	45	38	36	39	33	45		20	24	37	38		34	30	23	6
5	34	41	34	33	35	29	40	29	16	19	33	33	20	30	26	19	5
4	30	36	29	29	31	25	36		12	15	29	29		26	23	15	4
3	26	32	25		27	21	32	20	8	10	25	24	10	22	19		3
2	22	28	21		23	17	28	15	4	6	21	20	5	18			2
1	18	23	17		19	13	24	10	0	1	16	16	1				1
0	19				9	19	5		0	12				8	0		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 16-17 years
Age: 55-59 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	93		85		96		90				97	100	100	91		19
18	89	93	81				85				93	95	97	87		18
17	84	89	78		86		81			85		91		83		17
16	80	84	74			74	76	70	77			86	88	79		16
15	76	80	71		76		72	67			79					15
14	72	76	67	66	71	65	67	63	68		75	77	79	71		14
13	68	71	63		66		62	59		69		72	75	67	60	13
12	63	67	60	60	61	57	58	55	59		66	68	71		56	12
11	59	63	56	57	56	53	53	51	54	61	61	63	66	59	53	11
10	55	59	53	54	51	48	49	48	50		57	59	62	55	49	10
9	51	54	49	50	46	44	44	44	45	52	52	54	57	51	45	9
8	47	50	46	47	41	40	39	40	41		48	50	53	47	41	8
7	42	46	42	44	36	36	35	36	36	44	43	45	48	43	38	7
6	38	41	39	41		31	30	32	32	40		41	44	39	34	6
5	34	37	35	38	26	27	26	29	27	36	34	36	40	35	30	5
4	30	33	32	35		23	21	25	23		32		35	31	27	4
3	26	29	28	32	16	19	17		18		28		27	31	23	3
2	22	24	25	29	11	15	12	17	14		24		23	26	23	2
1	17		21	26	6	10	7	13	9		19			19		1
0				23		6	3	10								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	90	100	100	96	100	93	100	98				86	87	19
18	86	86	100	100	92	96	89	98	93				83	84	18
17	82	83	100	97	88	92	85	93	89				79	80	17
16	79	79	95	92	84	88	80	88	84				75	76	16
15	75	76	90	87	79	83	76	84	80				71	71	15
14	72	72	84	81	75	79	72	79	75	68			67	68	14
13	68	68	79	76	71	75	68	74	71				64	65	13
12	65	65	73	71	67	71	64	70	66	60			59	60	12
11	61	61	68	65	63	66	60	65	62				57	59	11
10	58	58	62	60	59	62	56	60	57	53	54	56	51	52	10
9	54	54	56	55	55	58	52	56	53	49	51	53	48	48	9
8	51	50	51	50	51	53	48	51	48	46	47	50	44	44	8
7	48	47	45	44	47	49	44	46	43	42	44	47	40	40	7
6	44	43	40	39	43	45	40	41	39	38	40	44	36	36	6
5	41	39	34	34	38	40	36	37	34	35	37	41	32	32	5
4	37	36	29	28	34	36	32	32	30	31	34	38	28	28	4
3	34	32	23	23	30	32	28	27	25	27	30	35	24	24	3
2	30	29	17	18	26	27	24	23	21	24	27	32	20	20	2
1	27	25	12	12	22	23	20	18	16	20	23	29	17	16	1
0	23	21	6	7	18	19		13							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	73	100		100	95	87	84	90	75						19
18	69	73	100	100	90	83	81	86	71	75				91	18
17	65	69	98	96	86	79	77	82			85				17
16	61	64	93	91	82	75	73	78	63		82				16
15	56	60	88	87	78	72	69	74	59	65	78	72	60	78	15
14	52	56	82	83	73	68	66	70	55	62	74		57		14
13	48	51	77	78	69	64	62	66	51	58	70	65		70	13
12	44	47	72	74	65	60	58	62	47		67	61	51	65	12
11	39	43	67	69	61	56	54	58	43	52	63	58		61	11
10	35	38	62	65	57	52	51	55	39	49	59	54	45	57	10
9	31	34	57	61	52	48	47	51		46	55	51	43	52	9
8	27	30	52	56	48	44	43	47	32	42	51	47	40	48	8
7	22	25	46	52	44	41	39	43	28		48	43	37	44	7
6	18	21	41	48	40	37	36	39	24	36	44	40	34	39	6
5	14	17	36	43	35	33	32	35	20	33	40	36	31	35	5
4	10	12	31	39	31	29	28	31	16		36	33	28	31	4
3	6	8	26	35	27	25	24	27	12	26	33	29	25	26	3
2	1	4	21	30	23	21	21	23		8	29	26	23	22	2
1	0	0	16	26	18	17	17	19	20	25	22	20	18		1
0	0	0	11	21				15	16	21	19	17			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	90		94		90		100		75							19	
18	86	100	90	80			97		70							18	
17	82	95	86	77	82		93		66	74			76	71		17	
16	78	91	81	73	78	75	89		62	69	83		72	67	63	16	
15	74	87	77	69	74	71	85		58	65			68	63		15	
14	70	82	73	66	70	67	80		54	60	74		64	60	55	14	
13	66	78	69	62	66	63	76		50	56	67	70		60	56	51	13
12	62	74	65	59	62	59	72		45	51		53	56	52	47	12	
11	58	69	61	55	58	55	68	58	41	47	59	61		52	49	43	11
10	54	65	56	52	54	51	64		37	42	54	56		48	45	39	10
9	50	61	52	48	50	47	60	49	33	37	50	52	39	44	41	35	9
8	46	56	48	45	46	43	55		29	33	46	47		40	38	31	8
7	42	52	44	41	43	39	51	39	25	28	42	43	29	36	34	27	7
6	38	47	40	37	39	34	47		20	24	37	39		32	30	23	6
5	34	43	35	34	35	30	43	30	16	19	33	34	20	28	27	19	5
4	30	39	31	30	31	26	39		12	15	29	30		24	23	15	4
3	26	34	27		27	22	34	20	8	10	25	25	10	20	19		3
2	22	30	23		23	18	30	15	4	6	21	21	5	16			2
1	18	26	19		19	14	26	11	0	1	16	16	1				1
0	21				10	22	6		0	12			9	0		0	

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 16-17 years
Age: 60-64 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	93		85		98		92				99	100	100	92		19	
18	89	94	82				88				94	97	99	88		18	
17	85	90	78		87		83			87		92		84		17	
16	81	85	75			75	78	73	78			88	90	80		16	
15	77	81	71		77		74	69			81					15	
14	72	77	68	66	72	67	69	65	69		76	78	81	72		14	
13	68	72	64		67		65	61		71		74	77	68	60	13	
12	64	68	61	60	62	59	60	57	60		67	69	72		56	12	
11	60	64	57	57	57	54	56	54	56	62	63	65	68	60	53	11	
10	56	60	54	54	52	50	51	50	51		58	60	64	56	49	10	
9	51	55	50	51	47	46	46	46	47	54	54	56	59	52	45	9	
8	47	51	46	48	42	42	42	42	42		49	51	55	48	41	8	
7	43	47	43	45	37	37	37	38	38	46	45	47	50	44	38	7	
6	39	43	39	42		33	33	35	33	42		42	46	40	34	6	
5	35	38	36	38	27	29	28	31	29	38	36	38	41	36	30	5	
4	30	34	32	35		25	23	27	24		33		33	37	32	27	4
3	26	30	29	32	17	21	19		20		29		29	33	28	23	3
2	22	25	25	29	12	16	14	19	15		25		24	28	24	19	2
1	18		22	26	7	12	10	15	11	21				20		1	
0				23		8	5	12								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	90	91	100	100	98	100	94	100	100				88	89	19
18	87	88	100	100	94	99	90	100	96				84	85	18
17	83	84	100	99	90	95	86	95	91				80	81	17
16	80	80	97	93	86	90	82	91	87				76	77	16
15	76	77	91	88	82	86	78	86	82				72	72	15
14	73	73	86	83	78	82	74	81	78	70			68	69	14
13	69	70	80	77	74	77	70	77	73				67	66	13
12	66	66	74	72	70	73	66	72	68	63			61	61	12
11	63	62	69	67	65	69	62	67	64				60	60	11
10	59	59	63	61	61	65	58	63	59	56	57	57	53	53	10
9	56	55	58	56	57	60	54	58	55	52	53	54	49	50	9
8	52	52	52	51	53	56	50	53	50	48	50	51	45	46	8
7	49	48	47	45	49	52	46	49	46	45	46	48	41	42	7
6	45	44	41	40	45	47	42	44	41	41	43	45	37	38	6
5	42	41	35	35	41	43	38	39	37	37	40	42	34	34	5
4	38	37	30	29	37	39	34	34	32	34	36	39	30	30	4
3	35	33	24	24	33	34	30	30	28	30	33	36	26	26	3
2	32	30	19	19	28	30	26	25	23	26	30	33	22	22	2
1	28	26	13	14	24	26	22	20	18	23	26	30	18	18	1
0	25	23	8	8	20	21		16							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	72	100		100	97	88	86	92	77						19
18	67	72	100	100	93	84	82	88	74	75				93	18
17	63	68	100	98	88	81	78	84			87				17
16	59	63	95	94	84	77	74	80	66		83				16
15	55	59	90	89	80	73	71	76	62	65	79	72	60	80	15
14	50	55	85	85	76	69	67	72	58	62	75		58		14
13	46	50	80	81	71	65	63	68	54	59	71	65		71	13
12	42	46	75	76	67	61	59	64	50		68	62	52	67	12
11	38	42	70	72	63	57	55	60	46	52	64	58		63	11
10	33	37	65	67	59	53	52	56	42	49	60	55	46	58	10
9	29	33	59	63	54	50	48	52		46	56	51	43	54	9
8	25	29	54	59	50	46	44	48	34	43	53	47	41	50	8
7	21	24	49	54	46	42	40	44	31		49	44	38	45	7
6	17	20	44	50	42	38	37	40	27	36	45	40	35	41	6
5	12	16	39	46	37	34	33	37	23	33	41	37	32	37	5
4	8	11	34	41	33	30	29	33	19		37	33	29	32	4
3	4	7	29	37	29	26	25	29	15	27	34	30	26	28	3
2	0	3	24	32	25	22	22	25	11		30	26	23	24	2
1	0	0	18	28	21	19	18	21		20	26	22	21	19	1
0	0	0	13	24				17		17	22	19	18		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93	96			92		100		73							19	
18	89	100	92	81			100		69							18	
17	85	98	87	78	84		95		65	74			74	71		17	
16	81	93	83	74	80	77	91		61	69	84		70	67	63	16	
15	77	89	79	71	76	73	87		57	65			66	64		15	
14	73	85	75	67	72	68	83		52	60	75		62	60	55	14	
13	69	80	71	64	68	64	79		48	56	67	70		58	56	51	13
12	65	76	67	60	64	60	75		44	51			53	54	53	47	12
11	61	71	62	56	60	56	70	59	40	47	59	61		50	49	43	11
10	57	67	58	53	56	52	66		36	42	54	57		46	45	39	10
9	53	63	54	49	52	48	62	49	32	37	50	52	39	42	42	35	9
8	49	58	50	46	48	44	58		27	33	46	48		38	38	31	8
7	45	54	46	42	44	40	54	40	23	28	42	44	30	34	34	27	7
6	41	50	42	39	40	36	49		19	24	37	39		30	31	23	6
5	37	45	37	35	36	32	45	30	15	19	33	35	20	26	27	19	5
4	33	41	33	32	32	27	41		11	15	29	30		22	23	15	4
3	29	37	29		29	23	37	21	7	10	25	26	10	18	20		3
2	25	32	25		25	19	33	16	3	6	20	21	6	14			2
1	22	28	21		21	15	29	11	0	1	16	17	1				1
0	24	28	21		11	24	6		0	12				9	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 16-17 years
Age: 65-69 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	94		86		99		95				100	100	100	93		19		
18	90	95	83				90				96	98	100	89		18		
17	86	91	79		89		86			89		94		85		17		
16	81	86	75			77	81	75	80			89	92	81		16		
15	77	82	72		79		76	71				82				15		
14	73	78	68	67	74	69	72	67	71		78	80	83	73		14		
13	69	74	65		69		67	63			72		75	79	69	60	13	
12	65	69	61	60	64	60	63	60	62			69	71	74	56	12		
11	60	65	58	57	58	56	58	56	57		64	64	66	70	61	53	11	
10	56	61	54	54	53	52	53	52	53			60	62	65	57	49	10	
9	52	56	51	51	48	48	49	48		56	55	57	61	53	45	9		
8	48	52	47	48	43	43	44	44			51	53	57	49	41	8		
7	44	48	44	45	38	39	40	41	39		48	46	48	52	45	38	7	
6	39	44	40	42		35	35	37	35		43		44	48	41	34	6	
5	35	39	37	39	28	31	31	33	30		39	37	39	43	37	30	5	
4	31	35	33	36		26	26	29	26			35		35	39	33	27	4
3	27	31	30	33	18	22	21		21			31		30	34	29	23	3
2	23	26	26	30	13	18	17	22	17		27		26	30	25	19	2	
1	19		22	26	8	14	12	18	12		23				21		1	
0				23		10	8	14								0		

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	91	93	100	100	100	100	96	100	100				89	91	19	
18	88	89	100	100	97	100	92	100	98				86	87	18	
17	84	85	100	100	92	97	88	98	93				82	83	17	
16	81	82	98	95	88	93	84	93	89				78	79	16	
15	78	78	93	89	84	89	80	88	84			75	74	75	15	
14	74	75	87	84	80	84	76	84	80	73			70	71	14	
13	71	71	81	79	76	80	72	79	75		70	69	66	67	13	
12	67	67	76	73	72	76	68	74	71	66		66	62	63	12	
11	64	64	70	68	68	71	64	70	66		63	63	58	59	11	
10	60	60	65	63	64	67	60	65	62	59	60	60	54	55	10	
9	57	56	59	57	60	63	56	60	57	55	56	57	51	51	9	
8	53	53	54	52	55	58	52	56	52	51	53	54	47	47	8	
7	50	49	48	47	51	54	48	51	48		48	49	51	43	43	7
6	47	46	43	42	47	50	44	46	43		44	46	48	39	39	6
5	43	42	37	36	43	45	40	42	39	40	43	45	35	35	5	
4	40	38	31	31	39	41	36	37	34	37	39	42	31	31	4	
3	36	35	26	26	35	37	31	32	30	33	36	39	27	27	3	
2	33	31	20	20	31	32	27	27	25	29	32	36	23	23	2	
1	29	28	15	15	27	28	23	23	21	26	29	33	20	19	1	
0	26	24	9	10	23	24		18							0	

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	70	100		100	99	90	87	94	77							19
18	66	71	100	100	95	86	83	90	74	76						18
17	61	66	100	100	90	82	79	86			88					17
16	57	62	98	96	86	78	76	82	66		84					16
15	53	58	93	92	82	74	72	78	62	66	80	73	61	82		15
14	49	53	88	87	78	70	68	74	58	63	76		58			14
13	45	49	83	83	73	66	64	70	54	59	73	66		73		13
12	40	45	78	79	69	62	61	66	50		69	62	53	69		12
11	36	41	73	74	65	59	57	62	46	53	65	59		64		11
10	32	36	67	70	61	55	53	58	42	50	61	55	47	60		10
9	28	32	62	65	57	51	49	54	47	57	51	44		56		9
8	23	28	57	61	52	47	46	50	34	43	54	48	41	51		8
7	19	23	52	57	48	43	42	46	31		50	44	38	47		7
6	15	19	47	52	44	39	38	43	27	37	46	41	36	43		6
5	11	15	42	48	40	35	34	39	23	34	42	37	33	38		5
4	6	10	37	44	35	31	31	35	19		39	34	30	34		4
3	2	6	31	39	31	27	27	31	15	27	35	30	27	30		3
2	0	2	26	35	27	24	23	27	11		31	26	24	25		2
1	0	0	21	30	23	20	19	23		21	27	23	21	21		1
0	0	0	16	26				19		17	23	19	19			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills									Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL		
19	96	98			94		100		72								19	
18	92	100	93	83			100		68								18	
17	88	100	89	79	86		98		64	74				71	71		17	
16	84	96	85	76	82	78	94		59	69	84		67	68	63		16	
15	80	91	81	72	78	74	90		55	65			63	64			15	
14	76	87	77	68	74	70	85		51	60	75		59	60	55		14	
13	72	82	73	65	70	66	81		47	56	67	71		55	57	51		13
12	68	78	68	61	66	61	77		43	51			54	51	53	47		12
11	64	74	64	58	62	57	73	59	39	47	58	62		47	49	43		11
10	60	69	60	54	58	53	69		34	42	54	58		43	46	39		10
9	56	65	56	51	54	49	64	50	30	37	50	53	39	39	42	35		9
8	52	61	52	47	50	45	60		26	33	46	49		35	38	31		8
7	48	56	48	43	46	41	56	40	22	28	42	44	30	31	35	27		7
6	44	52	43	40	42	37	52		18	24	37	40		27	31	23		6
5	41	48	39	36	38	33	48	31	14	19	33	35	20	23	27	19		5
4	37	43	35	33	34	29	44		10	15	29	31		19	24	15		4
3	33	39	31		30	25	39	21	5	10	25	26	10	15	20			3
2	29	35	27		26	20	35	16	1	6	20	22	6	11				2
1	25	30	22		22	16	31	11	0	1	16	17	1					1
0	26				12	27	7		0	12				9	0			0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 16-17 years
Age: 70-74 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	94		87		100		97				100	100	100	94		19	
18	90	96	83				93				97	100	100	90		18	
17	86	92	80		90		88				90	95		86		17	
16	82	88	76			79	84	77	82			91	94	82		16	
15	78	83	73		80		79	74			84					15	
14	74	79	69	67	75	70	74	70	73		79	81	85	74		14	
13	69	75	66		70		70	66			74		77	80	70	60	13
12	65	70	62	61	65	62	65	62	64		70	72	76		56	12	
11	61	66	59	58	60	58	61	58	59		66	66	68	72	62	53	11
10	57	62	55	54	55	54	56	55	55		61	63	67	58	49		10
9	53	58	51	51	50	49	52	51	50		57	57	59	63	55	45	9
8	48	53	48	48	45	45	47	47	46		52	54	58	51	41		8
7	44	49	44	45	40	41	42	43	41		49	48	50	54	47	38	7
6	40	45	41	42		37	38	39	37		45		45	50	43	34	6
5	36	40	37	39	29	32	33	35	32		41	39	41	45	39	30	5
4	32	36	34	36		28	29	32	28		37		36	41	35	27	4
3	27	32	30	33	19	24	24		23		33		32	36	31	23	3
2	23	28	27	30	14	20	20	24	19		29		27	32	27	19	2
1	19		23	27	9	16	15	20	14		24				23		1
0				24		11	10	16								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	93	94	100	100	100	100	98	100	100				91	92	19
18	89	90	100	100	99	100	94	100	100				87	88	18
17	86	87	100	100	95	99	90	100	96				83	84	17
16	82	83	100	96	91	95	86	96	91				79	80	16
15	79	79	94	91	87	91	82	91	87		78		75	76	15
14	75	76	89	86	82	86	78	86	82	76			71	72	14
13	72	72	83	80	78	82	74	81	77		73		72	68	13
12	68	69	78	75	74	78	70	77	73	69			64	64	12
11	65	65	72	70	70	73	66	72	68		66		66	60	11
10	62	61	67	64	66	69	62	67	64	62		63	56	57	10
9	58	58	61	59	62	65	58	63	59	58		60	52	53	9
8	55	54	55	54	58	60	54	58	55	54		56	57	48	8
7	51	51	50	49	54	56	49	53	50	51		52	54	44	7
6	48	47	44	43	50	52	45	49	46	47		49	51	40	6
5	44	43	39	38	45	47	41	44	41	43		46	48	37	5
4	41	40	33	33	41	43	37	39	37	40		42	45	33	4
3	37	36	28	27	37	39	33	35	32	36		39	42	29	3
2	34	32	22	22	33	35	29	30	27	32		35	39	25	2
1	30	29	16	17	29	30	25	25	23	29		32	36	21	1
0	27	25	11	11	25	26		20							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	68	100		100	100	91	88	96	77						19	
18	64	70	100	100	97	87	85	92	74	76				96	18	
17	60	65	100	100	92	83	81	88			89				17	
16	56	61	100	98	88	79	77	85	66		85				16	
15	51	57	96	94	84	75	73	81	62	66	81	73	62	83	15	
14	47	52	91	90	80	71	70	77	58	63	77		59		14	
13	43	48	86	85	76	67	66	73	54	60	74	66		75	13	
12	39	44	80	81	71	64	62	69	50		70	62	54	70	12	
11	34	39	75	76	67	60	58	65	46	53	66	59		66	11	
10	30	35	70	72	63	56	55	61	42	50	62	55	48	62	10	
9	26	31	65	68	59	52	51	57		47	58	52	45	57	9	
8	22	26	60	63	54	48	47	53	34	44	55	48	42	53	8	
7	18	22	55	59	50	44	43	49	31		51	45	39	49	7	
6	13	18	50	55	46	40	40	45	27	37	47	41	36	44	6	
5	9	13	44	50	42	36	36	41	23	34	43	38	34	40	5	
4	5	9	39	46	37	33	32	37		19		40	34	31	36	4
3	1	5	34	42	33	29	28	33	15	28	36	30	28	31	3	
2	0	1	29	37	29	25	25	29	11		32	27	25	27	2	
1	0	0	24	33	25	21	21	25		21	28	23	22	23	1	
0	0	0	19	28				21		18	24	20	19		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	99	99			96		100		71							19	
18	95	100	95	84			100		66							18	
17	91	100	91	80	88		100		62	74				68	72	17	
16	87	98	87	77	84	79	96		58	69	85		64	68	63	16	
15	83	93	83	73	80	75	92		54	65			60	64		15	
14	79	89	79	70	76	71	88		50	60	76		56	61	55	14	
13	75	85	74	66	72	67	84		46	56	67	71		52	57	51	13
12	71	80	70	63	68	63	79		41	51			54	48	53	47	12
11	67	76	66	59	64	59	75	60	37	47	58	63		44	50	43	11
10	63	72	62	55	60	54	71		33	42	54	58		40	46	39	10
9	60	67	58	52	56	50	67	50	29	37	50	54	39	36	42	35	9
8	56	63	54	48	52	46	63		25	33	46	49		32	39	31	8
7	52	59	49	45	48	42	59	41	21	28	42	45	30	28	35	27	7
6	48	54	45	41	44	38	54		17	24	37	40		24	31	23	6
5	44	50	41	38	40	34	50	31	12	19	33	36	20	20	28	19	5
4	40	46	37	34	36	30	46		8	15	29	31		16	24	15	4
3	36	41	33		32	26	42	21	4	10	25	27	10	12	21		3
2	32	37	29		28	22	38	17	0	6	20	22	6	8			2
1	28	33	24		24	18	34	12	0	1	16	18	1				1
0	28	33	24		13	29	7		0	12				10	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 16-17 years
Age: 75-79 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	95		88		100		100				100	100	100	96		19
18	91	97	84				96				98	100	100	92		18
17	87	93	80		91		91				92	97		88		17
16	82	89	77			81	87	80	83			92	96	84		16
15	78	84	73		81		82	76			85					15
14	74	80	70	67	76	72	77	72	74		80	83	87	76		14
13	70	76	66		71		73	69			76	78	82	72	60	13
12	66	72	63	61	66	64	68	65	65		71	74	78		56	12
11	62	67	59	58	61	60	64	61	61		67	67	69	73	64	11
10	57	63	56	55	56	55	59	57	56		63	65	69	60	49	10
9	53	59	52	52	51	51	54	53	52		59	58	60	65	56	9
8	49	54	49	49	46	47	50	50	47		54	56	60	52	41	8
7	45	50	45	46	41	43	45	46	43		51	49	51	56	48	7
6	41	46	42	42		38	41	42	38		47	47	51	44	34	6
5	36	42	38	39	31	34	36	38	34		43	40	42	47	40	5
4	32	37	34	36		30	32	34	29		39		38	42	36	4
3	28	33	31	33	21	26	27		25		34		33	38	32	3
2	24	29	27	30	16	22	22	27	20		30		29	34	28	2
1	20		24	27	11	17	18	23	16		26			24		1
0				24		13	13	19								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score	
19	94	95	100	100	100	100	100	100	100				92	94	19	
18	90	92	100	100	100	100	96	100	100				88	90	18	
17	87	88	100	100	97	100	92	100	98				85	86	17	
16	83	84	100	98	93	97	88	98	93				81	82	16	
15	80	81	96	93	89	92	84	93	89				81	77	15	
14	77	77	91	88	85	88	80	89	84	80			73	74	14	
13	73	73	85	82	81	84	76	84	80		76	75	69	70	13	
12	70	70	80	77	77	79	72	79	75	72			65	66	12	
11	66	66	74	72	72	75	68	74	71		69	69	61	62	11	
10	63	63	69	66	68	71	63	70	66		65	66	66	57	58	10
9	59	59	63	61	64	66	59	65	62	61	62	63	54	54	9	
8	56	55	57	56	60	62	55	60	57	58	59	60	50	50	8	
7	52	52	52	50	56	58	51	56	52	54	55	57	46	46	7	
6	49	48	46	45	52	54	47	51	48	50	52	54	42	42	6	
5	45	45	41	40	48	49	43	46	43	47	49	51	38	38	5	
4	42	41	35	34	44	45	39	42	39	43	45	48	34	34	4	
3	39	37	30	29	40	41	35	37	34	39	42	45	30	30	3	
2	35	34	24	24	36	36	31	32	30	36	38	42	26	27	2	
1	32	30	18	19	31	32	27	28	25	32	35	39	23	23	1	
0	28	26	13	13	27	28		23							0	

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 16-17 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	68	100		100	100	92	90	99	77						19
18	64	68	100	100	99	88	86	95	74	77				98	18
17	60	64	100	100	95	84	83	91			90				17
16	56	60	100	100	91	80	79	88	66		86				16
15	51	56	99	97	86	77	75	84	62	67	82	74	63	85	15
14	47	51	94	92	82	73	71	80	58	64	79		60		14
13	43	47	89	88	78	69	68	76	54	60	75	66		77	13
12	39	43	83	83	74	65	64	72	50		71	63	54	72	12
11	34	38	78	79	69	61	60	68	46	54	67	59		68	11
10	30	34	73	75	65	57	56	64	42	51	63	56	49	64	10
9	26	30	68	70	61	53	53	60		48	60	52	46	59	9
8	22	25	63	66	57	49	49	56	34	44	56	49	43	55	8
7	18	21	58	62	52	46	45	52	31		52	45	40	51	7
6	13	17	53	57	48	42	41	48	27	38	48	42	37	46	6
5	9	12	47	53	44	38	38	44	23	35	45	38	34	42	5
4	5	8	42	48	40	34	34	40	19		41	34	32	38	4
3	1	4	37	44	35	30	30	36	15	28	37	31	29	33	3
2	0	0	32	40	31	26	26	32	11		33	27	26	29	2
1	0	0	27	35	27	22	23	28		22	29	24	23	24	1
0	0	0	22	31				24		18	26	20	20		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	99	100	100		96		100		71							19	
18	95	100	97	85			100		66							18	
17	91	100	93	82	88		100		62	74				64	72	17	
16	87	100	89	78	84	80	99		58	69	85		60	68	63	16	
15	83	96	85	75	80	76	95		54	65			56	65		15	
14	79	92	81	71	76	72	91		50	60	76		52	61	55	14	
13	75	87	76	68	72	68	86		46	56	67	72		48	58	51	13
12	71	83	72	64	68	64	82		41	51			54	44	54	47	12
11	67	79	68	60	64	60	78	60	37	47	58	63		40	50	43	11
10	63	74	64	57	60	56	74		33	42	54	59		36	47	39	10
9	60	70	60	53	56	52	70	51	29	37	50	54	39	32	43	35	9
8	56	66	56	50	52	48	66		25	33	46	50		28	39	31	8
7	52	61	51	46	48	44	61	41	21	28	42	45	30	24	36	27	7
6	48	57	47	43	44	39	57		17	24	37	41		20	32	23	6
5	44	53	43	39	40	35	53	32	12	19	33	36	20	16	28	19	5
4	40	48	39	35	36	31	49		8	15	29	32		12	25	15	4
3	36	44	35		32	27	45	22	4	10	25	27	11	8	21		3
2	32	40	31		28	23	40	17	0	6	20	23	6	4			2
1	28	35	26		24	19	36	12	0	1	16	18	1				1
0	31				15	32	8		0	12				10	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 16-17 years
Age: 80-85 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	96		88		100		100				100	100	100	97		19		
18	92	98	85				99				100	100	100	93		18		
17	87	94	81		93		95				94	98		89		17		
16	83	90	78			83	90	83	85			94	98	98	85		16	
15	79	86	74		82		85	79				86					15	
14	75	81	71	67	77	74	81	76	76		82	85	89	77		14		
13	71	77	67		72		76	72			78		80	84	73	60	13	
12	66	73	64	61	67	66	72	68	67		73	76	80		56	12		
11	62	68	60	58	62	61	67	64	63		69	69	71	75	65	53	11	
10	58	64	57	55	57	57	62	60	58		64	67	71	61	49		10	
9	54	60	53	52	52	53	58	57	54		61	60	62	67	57	45	9	
8	50	56	49	49	47	49	53	53	49		55	57	62	53	41		8	
7	45	51	46	46	42	45	49	49	45		53	51	53	58	49	38		7
6	41	47	42	43		40	44	45	40		49		48	53	45	34		6
5	37	43	39	40	32	36	40	41	36		45	42	44	49	41	30		5
4	33	38	35	37		32	35	37	31		40		39	44	37	27		4
3	29	34	32	34	22	28	30		27		36		35	40	33	23		3
2	25	30	28	30	17	23	26	30	22		32		30	36	29	19		2
1	20		25	27	12	19	21	26	18		28				25			1
0				24		15	17	22									0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	95	97	100	100	100	100	100	100	100				94	95	19
18	92	93	100	100	100	100	98	100	100				90	91	18
17	88	89	100	100	100	100	94	100	100				86	88	17
16	85	86	100	100	96	98	90	100	96				82	84	16
15	81	82	99	95	91	94	86	96	91				84	78	15
14	78	79	93	90	87	89	82	91	87	84			75	76	14
13	74	75	88	85	83	85	78	87	82				79	78	13
12	71	71	82	79	79	81	74	82	78	76			67	68	12
11	67	68	77	74	75	76	70	77	73				72	63	11
10	64	64	71	69	71	72	65	72	69	69	69	69	59	60	10
9	61	60	65	63	67	68	61	68	64	65	66	66	55	56	9
8	57	57	60	58	63	63	57	63	59	62	62	63	51	52	8
7	54	53	54	53	59	59	53	58	55	58	59	60	47	48	7
6	50	50	49	48	55	55	49	54	50	54	55	57	44	44	6
5	47	46	43	42	50	51	45	49	46	51	52	54	40	40	5
4	43	42	38	37	46	46	41	44	41	47	49	51	36	36	4
3	40	39	32	32	42	42	37	40	37	43	45	48	32	32	3
2	36	35	26	26	38	38	33	35	32	40	42	45	28	28	2
1	33	31	21	21	34	33	29	30	28	36	39	42	24	24	1
0	30	28	15	16	30	29		25							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 20-34 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	78		85	86	77	75	77	81	75							19
18	74	74	80	82	73	71	73	77	71	69						18
17	70	70	75	77	69	67	70	73			75					17
16	65	66	70	73	64	63	66	70	63		71					16
15	61	62	65	69	60	59	62	66	59	59	67	68	54	64		15
14	57	57	60	64	56	55	58	62	55	56	64		51			14
13	53	53	55	60	52	51	55	58	51	53	60	61		56		13
12	48	49	50	55	47	47	51	54	47		56	57	46	51		12
11	44	44	44	51	43	44	47	50	43	46	52	54		47		11
10	40	40	39	47	39	40	43	46	39	43	49	50	40	43		10
9	36	36	34	42	35	36	40	42		40	45	46	37	38		9
8	32	31	29	38	30	32	36	38	32	36	41	43	34	34		8
7	27	27	24	34	26	28	32	34	28		37	39	32	30		7
6	23	23	19	29	22	24	28	30	24	30	33	36	29	25		6
5	19	18	14	25	18	20	25	26	20	27	30	32	26	21		5
4	15	14	8	21	14	16	21	22	16		26	29	23	17		4
3	10	10	3	16	9	13	17	18	12	20	22	25	20	12		3
2	6	5	0	12	5	9	13	14	8		18	22	17	8		2
1	2	1	0	7	1	5	10	10		14	15	18	14	4		1
0	0	0		3				6		11	11	14	12			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	76		79		82		82		78								19
18	73	76	75	71			78		74								18
17	69	72	70	67	74		74		70	68				75	64		17
16	65	68	66	64	70	60	69		66	63		76		71	61	58	16
15	61	63	62	60	66	56	65		62	59				67	57		15
14	57	59	58	57	62	52	61		58	54		67		63	53	50	14
13	53	55	54	53	58	48	57		54	50	64	63		59	50	46	13
12	49	50	50	50	54	44	53		49	45			50	55	46	42	12
11	45	46	45	46	50	40	49	53	45	41	56	54		51	42	38	11
10	41	42	41	42	46	36	44		41	36	51	50		47	39	34	10
9	37	37	37	39	42	32	40	44	37	31	47	45	36	43	35	30	9
8	33	33	33	35	38	28	36		33	27	43	41		39	31	26	8
7	29	29	29	32	34	24	32	34	29	22	39	36	26	35	28	22	7
6	25	24	25	28	30	19	28		24	18	34	32		31	24	18	6
5	21	20	20	25	26	15	24	25	20	13	30	27	17	27	20	14	5
4	17	16	16	21	22	11	19		16	9	26	23		23	17	11	4
3	13	11	12		18	7	15	15	12	4	22	18	7	19	13		3
2	9	7	8		14	3	11	11	8	0	17	14	2	15			2
1	5	3	4		10	0	7	6	4	0	13	9	0				1
0	0	0			0	3	1		0	9				2	0	0	0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 18-20 years
Age: 20-34 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	86		79		87		77				88	88	88	82		19	
18	82	82	76				73				84	83	84	78		18	
17	78	78	72		77		68			74		79		74		17	
16	73	74	69			60	64	59	64			74	75	70		16	
15	69	69	65		67		59	55				70				15	
14	65	65	62	63	62	51	54	51	55			66	65	66	62	14	
13	61	61	58		57		50	47			58		60	62	58	60	13
12	57	57	54	57	52	43	45	44	45			57	56	57	56	12	
11	53	52	51	54	47	39	41	40	41		50	52	51	53	50	53	11
10	48	48	47	51	42	34	36	36	36			48	47	48	46	10	
9	44	44	44	48	37	30	31	32	32	41	43	42	44	42	45	9	
8	40	39	40	44	32	26	27	28	27		39	38	39	39	41	8	
7	36	35	37	41	27	22	22	25	23		33	34	33	35	35	38	7
6	32	31	33	38		18	18	21	18		29	29	31	31	34	6	
5	27	27	30	35	17	13	13	17	14		25	25	24	26	27	30	5
4	23	22	26	32		9	9	13	9		21		20	22	23	27	4
3	19	18	23	29	7	5	4		5		17		15	17	19	23	3
2	15	14	19	26	2	1	0	6	0		13		11	13	15	19	2
1	11		16	23	0	0	0	2	0		8				11		1
0				20		0	0	0								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	80	81	100	100	79	84	80	87	83				77	77	19
18	77	77	100	99	75	80	76	82	79				73	73	18
17	73	74	97	94	71	76	72	77	74				69	69	17
16	70	70	92	88	67	71	68	73	70				65	65	16
15	66	66	86	83	63	67	63	68	65	57			62	61	15
14	63	63	81	78	59	63	59	63	61	55			58	57	14
13	60	59	75	72	55	58	55	59	56	54	51	51	54	53	13
12	56	56	70	67	51	54	51	54	52	48			50	50	12
11	53	52	64	62	47	50	47	49	47	47	45	45	46	46	11
10	49	48	58	56	42	45	43	45	42	41	44	42	42	42	10
9	46	45	53	51	38	41	39	40	38	37	41	39	38	38	9
8	42	41	47	46	34	37	35	35	33	33	37	36	34	34	8
7	39	37	42	40	30	32	31	30	29	30	34	33	30	30	7
6	35	34	36	35	26	28	27	26	24	26	30	30	27	26	6
5	32	30	31	30	22	24	23	21	20	22	27	27	23	22	5
4	28	27	25	25	18	19	19	16	15	19	24	24	19	18	4
3	25	23	19	19	14	15	15	12	11	15	20	21	15	14	3
2	22	19	14	14	10	11	11	7	6	11	17	18	11	10	2
1	18	16	8	9	6	7	7	2	2	8	13	15	7	6	1
0	15	12	3	3	1	2		0							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 35-39 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	76	91		91	81	77	78	82	75						19
18	72	72	86	86	77	73	74	78	71	70				81	18
17	68	68	81	82	73	69	70	74			77				17
16	64	64	76	78	68	65	66	70	63		73				16
15	60	59	70	73	64	62	63	66	59	60	70	69	56	68	15
14	55	55	65	69	60	58	59	62	55	57	66		53		14
13	51	51	60	65	56	54	55	59	51	54	62	62		59	13
12	47	46	55	60	52	50	51	55	47		58	58	47	55	12
11	43	42	50	56	47	46	48	51	43	47	54	54		50	11
10	38	38	45	51	43	42	44	47	39	44	51	51	42	46	10
9	34	33	40	47	39	38	40	43		41	47	47	39	42	9
8	30	29	34	43	35	34	36	39	32	37	43	44	36	37	8
7	26	25	29	38	30	30	33	35	28		39	40	33	33	7
6	21	20	24	34	26	27	29	31	24	31	36	37	30	29	6
5	17	16	19	30	22	23	25	27	20	28	32	33	27	24	5
4	13	12	14	25	18	19	21	23	16		28	29	25	20	4
3	9	7	9	21	13	15	18	19	12	21	24	26	22	16	3
2	5	3	4	16	9	11	14	15	8		20	22	19	11	2
1	0	0	0	12	5	7	10	11	15	17	19	16	7		1
0	0	0		8				7	12	13	15	13			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	80	82			84		87		77							19	
18	76	81	78	74			83		73							18	
17	72	77	74	70	76		79		69	68			76	65		17	
16	68	72	70	66	72	63	74		65	63	76		72	61	58	16	
15	64	68	66	63	68	59	70		61	59			68	58		15	
14	60	64	62	59	64	55	66		56	54	67		64	54	50	14	
13	56	59	57	56	60	51	62		52	50	64	62		60	50	46	13
12	52	55	53	52	56	46	58		48	45		50	56	47	42	12	
11	48	51	49	49	52	42	54	54	44	41	55	54		52	43	38	11
10	44	46	45	45	48	38	49		40	36	51	49		48	39	34	10
9	40	42	41	41	44	34	45	45	36	31	47	45	36	44	36	30	9
8	36	38	37	38	40	30	41		31	27	43	40		40	32	26	8
7	32	33	32	34	36	26	37	35	27	22	39	36	26	36	28	22	7
6	28	29	28	31	32	22	33		23	18	34	31		32	25	18	6
5	24	25	24	27	28	18	29	26	19	13	30	27	17	28	21	14	5
4	20	20	20	24	24	14	24		15	9	26	22		24	17	10	4
3	16	16	16		20	10	20	16	11	4	22	18	7	20	14		3
2	12	12	12		16	5	16	11	7	0	17	13	2	16			2
1	8	7	7		12	1	12	7	2	0	13	9	0				1
0	3				0	8	2		0	9				3	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 18-20 years
Age: 35-39 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	87		81		90		80				91	91	92	85		19	
18	83	84	77				75				87	86	87	81		18	
17	79	80	74		80		71				78	82		77		17	
16	75	76	70			63	66	61	67			77	79	73		16	
15	70	72	66		70		61	57			73					15	
14	66	67	63	64	65	55	57	53	58		69	68	70	65		14	
13	62	63	59		60		52	50			61		64	65	61	60	13
12	58	59	56	57	55	46	48	46	49		60	59	61		56	12	
11	54	54	52	54	49	42	43	42	44		53	55	54	56	53	53	11
10	50	50	49	51	44	38	39	38	40		51	50	52	49	49	10	
9	45	46	45	48	39	34	34	34	35		45	46	45	48	45	9	
8	41	42	42	45	34	29	29	31	31		42	41	43	41	41	8	
7	37	37	38	42	29	25	25	27	26		37	37	36	39	37	38	7
6	33	33	35	39		21	20	23	22		32	32	34	33	34	6	
5	29	29	31	36	19	17	16	19	17		28	28	27	30	29	30	5
4	24	24	28	33		13	11	15	13		24		23	25	25	27	4
3	20	20	24	30	9	8	6		8		20		18	21	21	23	3
2	16	16	21	27	4	4	2	8	4		16		14	17	17	19	2
1	12		17	23	0	0	0	4	0		12				13	1	
0				20	0	0	0	0								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	83	83	100	100	84	88	83	92	88				80	80	19
18	79	80	100	100	80	84	79	87	83				76	76	18
17	76	76	98	94	76	79	75	82	79				72	72	17
16	72	73	93	89	72	75	71	78	74				68	68	16
15	69	69	87	84	68	71	67	73	70		59	65	65	65	15
14	65	65	81	78	64	67	63	68	65	58		61	61		14
13	62	62	76	73	59	62	59	63	61		55	53	57	57	13
12	58	58	70	68	55	58	55	59	56	51		53	53		12
11	55	55	65	62	51	54	51	54	52		48	47	49	49	11
10	52	51	59	57	47	49	47	49	47	43	45	44	45	45	10
9	48	47	54	52	43	45	43	45	42	40	41	41	41	41	9
8	45	44	48	46	39	41	39	40	38	36	38	38	37	37	8
7	41	40	42	41	35	36	35	35	33	33	34	35	33	33	7
6	38	36	37	36	31	32	31	31	29	29	31	32	30	29	6
5	34	33	31	31	27	28	27	26	24	25	28	29	26	25	5
4	31	29	26	25	23	23	23	21	20	22	24	26	22	21	4
3	27	26	20	20	18	19	18	16	15	18	21	23	18	17	3
2	24	22	15	15	14	15	14	12	11	14	17	20	14	13	2
1	21	18	9	9	10	10	10	7	6	11	14	17	10	9	1
0	17	15	4	4	6	6	6	2							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 40-44 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	76		94	93	83	78	78	83	75							19
18	72	71	89	89	79	74	74	79	71	70						18
17	68	67	83	84	75	70	71	75			78					17
16	64	63	78	80	71	67	67	71	63		74					16
15	60	58	73	76	66	63	63	67	59	60	71	69	55	69		15
14	55	54	68	71	62	59	59	63	55	57	67		52			14
13	51	50	63	67	58	55	56	59	51	54	63	62				13
12	47	45	58	63	54	51	52	55	47		59	58	46	56		12
11	43	41	53	58	49	47	48	51	43	48	55	55		52		11
10	38	37	47	54	45	43	44	47	39	44	52	51	40	48		10
9	34	32	42	49	41	39	41	43		41	48	48	38	43		9
8	30	28	37	45	37	36	37	39	32	38	44	44	35	39		8
7	26	24	32	41	32	32	33	35	28		40	41	32	35		7
6	21	19	27	36	28	28	29	31	24	31	37	37	29	30		6
5	17	15	22	32	24	24	26	27	20	28	33	33	26	26		5
4	13	11	17	28	20	20	22	24	16		29	30	23	22		4
3	9	6	12	23	16	16	18	20	12	22	25	26	21	17		3
2	5	2	6	19	11	12	14	16	8		22	23	18	13		2
1	0	0	1	14	7	8	10	12	15	18	19	15	9			1
0	0	0	0	10				8	12	14	16	12				0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	80		84		84		89		77								19
18	76	83	80	74			85		73								18
17	72	79	76	70	76		81		69	68				76	65		17
16	68	75	72	67	72	64	77		65	63		76		72	62	58	16
15	64	70	68	63	68	60	73		61	59				68	58		15
14	60	66	63	60	64	56	69		56	54		67		64	54	50	14
13	56	62	59	56	60	52	64		52	50	64	63		60	51	46	13
12	52	57	55	52	56	48	60		48	45			50	56	47	42	12
11	48	53	51	49	52	44	56	55	44	41	55	54		52	43	38	11
10	44	49	47	45	48	39	52		40	36	51	50		48	40	34	10
9	40	44	43	42	44	35	48	45	36	31	47	45	36	44	36	30	9
8	36	40	38	38	40	31	44		31	27	43	41		40	32	26	8
7	32	36	34	35	36	27	39	36	27	22	39	36	26	36	29	22	7
6	28	31	30	31	32	23	35		23	18	34	32		32	25	18	6
5	24	27	26	27	28	19	31	26	19	13	30	27	17	28	21	14	5
4	20	23	22	24	24	15	27		15	9	26	23		24	18	10	4
3	16	18	18		20	11	23	17	11	4	22	18	7	20	14		3
2	12	14	13		16	7	18	12	7	0	17	14	3	16			2
1	8	10	9		12	3	14	7	2	0	13	9	0				1
0	5				0	10	2		0	9				3	0		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 18-20 years
Age: 40-44 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	88		81		91		81				92	92	94	86		19
18	84	86	78				77				88	88	89	82		18
17	79	81	74		81		72			80		83		78		17
16	75	77	71			65	68	62	69			79	80	74		16
15	71	73	67		71		63	59			74					15
14	67	68	64	64	66	57	58	55	59		70	70	71	66		14
13	63	64	60		61		54	51		63		65	67	62	60	13
12	58	60	57	58	56	48	49	47	50		61	60	63	56		12
11	54	56	53	55	51	44	45	43	46	55	56	56	58	54	53	11
10	50	51	50	52	46	40	40	40	41		52	51	54	50		10
9	46	47	46	48	41	35	36	36	37	47	48	47	49	46		9
8	42	43	42	45	36	31	31	32	32		43	42	45	42		8
7	38	38	39	42	31	27	26	28	28		38	39	38	38		7
6	33	34	35	39		23	22	24	23		34		33	36	34	6
5	29	30	32	36	20	19	17	21	19		30	30	29	32	30	5
4	25	26	28	33		14	13	17	14		26		24	27	26	4
3	21	21	25	30	10	10	8		10		22		20	23	22	3
2	17	17	21	27	5	6	3	9	5		18		15	18	19	2
1	12		18	24	0	2	0	5	1		14			14		1
0				21	0	0	2									0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	84	85	100	100	86	90	85	94	90				82	82	19
18	80	81	100	100	82	86	81	89	86				78	78	18
17	77	78	99	95	78	82	77	85	81				74	74	17
16	73	74	93	90	74	78	73	80	76				70	70	16
15	70	70	88	84	70	73	69	75	72	62			66	66	15
14	67	67	82	79	66	69	65	71	67	60			62	62	14
13	63	63	76	74	62	65	61	66	63	56	56		58	58	13
12	60	59	71	68	58	60	57	61	58	53			54	54	12
11	56	56	65	63	54	56	53	56	54	49	50		50	50	11
10	53	52	60	58	50	52	49	52	49	45	46	47	47	46	10
9	49	49	54	52	45	47	45	47	45	42	43	44	43	42	9
8	46	45	49	47	41	43	41	42	40	38	39	41	39	38	8
7	42	41	43	42	37	39	37	38	36	34	36	38	35	34	7
6	39	38	37	36	33	34	32	33	31	31	32	35	31	31	6
5	36	34	32	31	29	30	28	28	26	27	29	32	27	27	5
4	32	30	26	26	25	26	24	24	22	23	26	29	23	23	4
3	29	27	21	20	21	21	20	19	17	20	22	26	19	19	3
2	25	23	15	15	17	17	16	14	13	16	19	23	16	15	2
1	22	20	10	10	13	13	12	9	8	12	15	20	12	11	1
0	18	16	4	5	8	8		5							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 45-49 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	75	96		95	85	79	79	84	75							19
18	71	70	91	91	81	76	75	80	71	71						18
17	66	66	86	87	77	72	71	76			79					17
16	62	61	81	82	73	68	67	72	63		75					16
15	58	57	76	78	68	64	64	68	59	61	72	69	55	71		15
14	54	53	71	74	64	60	60	64	55	58	68		53			14
13	49	48	66	69	60	56	56	60	51	54	64	62			62	13
12	45	44	61	65	56	52	52	56	47		60	59	47	58		12
11	41	40	55	60	51	48	49	52	43	48	57	55		54		11
10	37	36	50	56	47	45	45	48	39	45	53	52	41	49		10
9	33	31	45	52	43	41	41	44		42	49	48	38	45		9
8	28	27	40	47	39	37	37	40	32	38	45	45	36	41		8
7	24	23	35	43	35	33	34	36	28		41	41	33	36		7
6	20	18	30	39	30	29	30	32	24	32	38	37	30	32		6
5	16	14	25	34	26	25	26	28	20	29	34	34	27	28		5
4	11	10	19	30	22	21	22	24	16		30	30	24	23		4
3	7	5	14	25	18	17	19	20	12	22	26	27	21	19		3
2	3	1	9	21	13	14	15	16	8		23	23	19	15		2
1	0	0	4	17	9	10	11	12		16	19	20	16	10		1
0	0	0		12				9		12	15	16	13			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	83		86		86		92		76								19
18	79	86	82	75			88		72								18
17	75	81	78	71	78		84		68	68				75	66		17
16	71	77	74	68	74	65	79		63	63		77		71	62	58	16
15	67	73	69	64	70	61	75		59	59				67	58		15
14	63	68	65	61	66	57	71		55	54		68		63	55	50	14
13	59	64	61	57	62	53	67		51	50	64	64		59	51	46	13
12	55	60	57	54	58	49	63		47	45			50	55	47	42	12
11	51	55	53	50	54	45	59	55	43	41	55	55		51	44	38	11
10	47	51	49	47	50	41	54		38	36	51	50		47	40	34	10
9	43	47	44	43	46	37	50	46	34	31	47	46	36	43	36	30	9
8	39	42	40	39	42	32	46		30	27	43	41		39	33	26	8
7	35	38	36	36	38	28	42	36	26	22	39	37	27	35	29	22	7
6	31	34	32	32	34	24	38		22	18	34	32		31	25	18	6
5	27	29	28	29	30	20	33	27	18	13	30	28	17	27	22	14	5
4	23	25	24	25	26	16	29		13	9	26	23		23	18	10	4
3	19	20	19		22	12	25	17	9	4	22	19	7	19	14		3
2	15	16	15		18	8	21	12	5	0	17	14	3	15			2
1	11	12	11		14	4	17	8	1	0	13	10	0				1
0	7				0	13	3		0	9				3	0		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 18-20 years
Age: 45-49 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	88		82		92		83				94	94	95	87		19
18	84	87	79				79				89	89	91	83		18
17	80	82	75		82		74				81	85		79		17
16	76	78	71			67	69	64	70			80	82	75		16
15	72	74	68		72		65	60			76					15
14	67	69	64	64	67	58	60	56	61		71	71	73	67		14
13	63	65	61		62		56	53			65	67	69	63	60	13
12	59	61	57	58	57	50	51	49	52		62	62	64	56	56	12
11	55	57	54	55	52	46	46	45	48		56	58	57	60	55	11
10	51	52	50	52	47	41	42	41	43		53	53	56	51	49	10
9	47	48	47	49	42	37	37	37	39		48	49	48	51	47	9
8	42	44	43	46	37	33	33	34	34		44	44	47	43	41	8
7	38	40	40	43	32	29	28	30	30		40	40	39	42	39	7
6	34	35	36	40		25	24	26	25		36	35	38	35	34	6
5	30	31	33	36	22	20	19	22	21		32	31	30	33	31	5
4	26	27	29	33		16	14	18	16		28	26	29	27	27	4
3	21	22	25	30	12	12	10		12		23	21	25	23	23	3
2	17	18	22	27	7	8	5	11	7		19	17	20	19	19	2
1	13		18	24	2	3	1	7	3		15			15		1
0				21		0	0	3								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	85	86	100	100	89	93	87	96	92				83	83	19
18	82	82	100	100	85	89	83	92	88				79	79	18
17	78	79	99	95	81	84	79	87	83				75	76	17
16	75	75	94	90	76	80	75	82	79				71	72	16
15	71	72	88	85	72	76	71	78	74				64	67	15
14	68	68	83	80	68	71	67	73	70	62			64	64	14
13	64	64	77	74	64	67	63	68	65		58	58	60	60	13
12	61	61	72	69	60	63	59	64	61	55			56	56	12
11	57	57	66	64	56	58	55	59	56		51	52	52	52	11
10	54	53	60	58	52	54	50	54	51	47	48	49	48	48	10
9	51	50	55	53	48	50	46	49	47	44	44	46	44	44	9
8	47	46	49	48	44	46	42	45	42	40	41	43	40	40	8
7	44	43	44	42	40	41	38	40	38	36	38	40	36	36	7
6	40	39	38	37	35	37	34	35	33	33	34	37	33	32	6
5	37	35	33	32	31	33	30	31	29	29	31	34	29	28	5
4	33	32	27	26	27	28	26	26	24	25	28	31	25	24	4
3	30	28	21	21	23	24	22	21	20	22	24	28	21	20	3
2	26	25	16	16	19	20	18	17	15	18	21	25	17	16	2
1	23	21	10	11	15	15	14	12	11	14	17	22	13	12	1
0	19	17	5	5	11	11		7							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 50-54 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	75	99		98	87	81	79	85	75						19	
18	71	69	94	93	83	77	76	81	71	71				86	18	
17	66	65	89	89	79	73	72	77			80				17	
16	62	60	84	85	75	69	68	73	63		77				16	
15	58	56	79	80	70	65	64	69	59	61	73	70	56	73	15	
14	54	52	74	76	66	61	61	65	55	58	69		53		14	
13	49	47	68	72	62	57	57	61	51	55	65	63		64	13	
12	45	43	63	67	58	54	53	57	47		61	59	48	60	12	
11	41	39	58	63	54	50	49	53	43	49	58	56		55	11	
10	37	34	53	58	49	46	45	49	39	45	54	52	42	51	10	
9	33	30	48	54	45	42	42	45	42	50	48	39	47		9	
8	28	26	43	50	41	38	38	41	32	39	46	45	36	42	8	
7	24	21	38	45	37	34	34	37	28		43	41	34	38	7	
6	20	17	32	41	32	30	30	33	24	32	39	38	31	34	6	
5	16	13	27	37	28	26	27	29	20	29	35	34	28	29	5	
4	11	9	22	32	24	23	23	25	16		31	31	25	25	4	
3	7	4	17	28	20	19	19	21	12	23	27	27	22	21	3	
2	3	0	12	23	15	15	15	18	8		24	23	19	16	2	
1	0	0	7	19	11	11	12	14	16	20	20	16	12		1	
0	0	0	2	15				10	13	16	16	14			0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	83		88		86		94		76								19
18	79	88	84	76			90		72								18
17	75	84	80	73	78		86		68	68				74	66		17
16	71	79	75	69	74	67	82		63	63		78		70	62	58	16
15	67	75	71	66	70	62	78		59	59				66	59		15
14	63	71	67	62	66	58	74		55	54		69		62	55	50	14
13	59	66	63	58	62	54	69		51	50	64	64		58	51	46	13
12	55	62	59	55	58	50	65		47	45			51	54	48	42	12
11	51	58	55	51	54	46	61	56	43	41	55	55		50	44	38	11
10	47	53	50	48	50	42	57		38	36	51	51		46	40	34	10
9	43	49	46	44	46	38	53	46	34	31	47	46	36	42	37	30	9
8	39	45	42	41	42	34	48		30	27	43	42		38	33	26	8
7	35	40	38	37	38	30	44	37	26	22	38	37	27	34	29	22	7
6	31	36	34	34	34	25	40		22	18	34	33		30	26	18	6
5	27	31	30	30	30	21	36	27	18	13	30	28	17	26	22	14	5
4	23	27	25	26	26	17	32		13	9	26	24		22	18	10	4
3	19	23	21		22	13	28	18	9	4	22	20	7	18	15		3
2	15	18	17		18	9	23	13	5	0	17	15	3	14			2
1	11	14	13		14	5	19	8	1	0	13	11	0				1
0	10				1	15	3		0	9				4	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 18-20 years
Age: 50-54 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	89		83		93		85				95	95	97	88		19	
18	85	88	79				80				91	91	93	84		18	
17	81	83	76		83		76			83		86		80		17	
16	76	79	72			69	71	66	72			82	84	76		16	
15	72	75	69		73		67	62			77					15	
14	68	71	65	64	68	60	62	58	63		73	73	75	68		14	
13	64	66	62		63		58	54		66		68	71	64	60	13	
12	60	62	58	58	58	52	53	51	54		64	63	66	56		12	
11	55	58	54	55	53	47	48	47	49	58	59	59	62	56	53	11	
10	51	53	51	52	48	43	44	43	45		55	54	57	52		10	
9	47	49	47	49	43	39	39	39	40	50	50	50	53	48		9	
8	43	45	44	46	38	35	35	35	36		46	45	49	44		8	
7	39	41	40	43	33	31	30	32	31	42	41	41	44	40		7	
6	35	36	37	40		26	25	28	27		38	36	40	37		6	
5	30	32	33	37	23	22	21	24	22		33	32	35	33		5	
4	26	28	30	34		18	16	20	18		29		27	31	29	27	4
3	22	23	26	31	13	14	12		13		25		23	26	25	23	3
2	18	19	23	27	8	9	7	13	9		21		18	22	21	19	2
1	14		19	24	3	5	3	9	4		17			17		1	
0				21		1	0	5								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	86	87	100	100	91	96	89	99	95				84	85	19
18	83	84	100	100	87	91	85	94	90				81	81	18
17	79	80	100	96	83	87	81	89	85				77	77	17
16	76	76	95	91	79	83	77	85	81				73	73	16
15	72	73	89	86	75	78	73	80	76				67	69	15
14	69	69	84	80	71	74	69	75	72	64			65	65	14
13	65	66	78	75	67	70	64	71	67		60	61	61	61	13
12	62	62	72	70	62	65	60	66	63	57			57	57	12
11	59	58	67	64	58	61	56	61	58		54	55	53	53	11
10	55	55	61	59	54	57	52	57	54	49	50	52	50	49	10
9	52	51	56	54	50	53	48	52	49	46	47	49	46	45	9
8	48	48	50	49	46	48	44	47	45	42	43	46	42	42	8
7	45	44	45	43	42	44	40	42	40		38	40	43	38	7
6	41	40	39	38	38	40	36	38	35		35	37	40	34	6
5	38	37	33	33	34	35	32	33	31		31	33	37	30	5
4	34	33	28	27	30	31	28	28	26		28	30	34	26	4
3	31	29	22	22	25	27	24	24	22		24	26	31	22	3
2	28	26	17	17	21	22	20	19	17		20	23	28	19	2
1	24	22	11	11	17	18	16	14	13		17	20	25	15	1
0	21	19	6	6	13	14		10							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 55-59 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	73	100		100	90	82	80	86	77						19
18	69	68	97	96	85	78	76	82	74	72				88	18
17	65	64	92	91	81	74	73	78			81				17
16	61	59	87	87	77	70	69	74	66		78				16
15	56	55	81	83	73	66	65	70	62	62	74	70	57	75	15
14	52	51	76	78	68	63	61	66	58	59	70		54		14
13	48	46	71	74	64	59	58	62	54	55	66	63		66	13
12	44	42	66	70	60	55	54	58	50		62	60	49	61	12
11	39	38	61	65	56	51	50	54	46	49	59	56		57	11
10	35	33	56	61	51	47	46	50	42	46	55	52	43	53	10
9	31	29	51	56	47	43	43	47		43	51	49	40	48	9
8	27	25	45	52	43	39	39	43	34	39	47	45		44	8
7	22	20	40	48	39	35	35	39	31		44	42	34	40	7
6	18	16	35	43	34	31	31	35	27	33	40	38	32	35	6
5	14	12	30	39	30	28	28	31	23	30	36	35	29	31	5
4	10	7	25	35	26	24	24	27	19		32	31	26	27	4
3	6	3	20	30	22	20	20	23	15	23	28	27	23	22	3
2	1	0	15	26	18	16	16	19	11		25	24	20	18	2
1	0	0	10	21	13	12	12	15		17	21	20	17	14	1
0	0	0	4	17				11		13	17	17	14		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	90	90			90		97		75							19
18	86	94	86	78			93		70							18
17	82	89	81	74	82		89		66	68				73	66	17
16	78	85	77	70	78	72	84		62	63	78		69	63	58	16
15	74	80	73	67	74	67	80		58	59			65	59		15
14	70	76	69	63	70	63	76		54	54	69		61	55	50	14
13	66	72	65	60	66	59	72		50	50	64	65		57	52	13
12	62	67	61	56	62	55	68		45	45			51	53	48	12
11	58	63	56	53	58	51	64	56	41	41	55	56		49	44	11
10	54	59	52	49	54	47	59		37	36	51	51		45	41	10
9	50	54	48	45	50	43	55	47	33	31	47	47	36	41	37	9
8	46	50	44	42	46	39	51		29	27	43	42		37	33	8
7	42	46	40	38	43	35	47	37	25	22	38	38	27	33	30	7
6	38	41	36	35	39	30	43		20	18	34	34		29	26	6
5	34	37	31	31	35	26	38	28	16	13	30	29	17	25	22	5
4	30	33	27	28	31	22	34		12	9	26	25		21	19	4
3	26	28	23		27	18	30	18	8	4	22	20	7	17	15	3
2	22	24	19		23	14	26	13	4	0	17	16	3	13		2
1	18	20	15		19	10	22	9	0	0	13	11	0			1
0	15				6	18	4		0	9			4	0		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 18-20 years
Age: 55-59 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	90		84		95		87				97	97	99	89		19
18	85	89	80				83				92	92	95	85		18
17	81	85	76		85		78			85		88		81		17
16	77	80	73			70	73	68	73			83	86	77		16
15	73	76	69		75		69	64			79					15
14	69	72	66	65	70	62	64	60	64		74	74	77	70		14
13	64	67	62		64		60	56		68		70	73	66	60	13
12	60	63	59	59	59	53	55	53	55		65	65	68	56		12
11	56	59	55	56	54	49	50	49	51	60	61	60	64	58	53	11
10	52	55	52	52	49	45	46	45	46		56	56	59	54		10
9	48	50	48	49	44	41	41	41	42	52	52	51	55	50		9
8	43	46	45	46	39	37	37	37	37	47	47	50	46	41		8
7	39	42	41	43	34	32	32	34	33	43	43	42	46	42		7
6	35	37	38	40		28	28	30	28		39	38	42	38		6
5	31	33	34	37	24	24	23	26	24	35	34	33	37	34		5
4	27	29	30	34		20	18	22	19		31	29	33	30		4
3	23	25	27	31	14	15	14		15		27	24	28	26		3
2	18	20	23	28	9	11	9	15	10		23	20	24	22		2
1	14		20	25	4	7	5	11	6		19			18		1
0				22		3	0	7								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	87	89	100	100	93	98	91	100	97				86	87	19
18	84	85	100	100	89	94	87	97	92				82	83	18
17	80	81	100	97	85	90	83	92	88				78	79	17
16	77	78	96	92	81	85	78	87	83				74	75	16
15	74	74	90	87	77	81	74	82	79				69	70	15
14	70	71	85	81	73	77	70	78	74	67			67	67	14
13	67	67	79	76	69	72	66	73	70				63	64	13
12	63	63	74	71	65	68	62	68	65	59			59	59	12
11	60	60	68	65	61	64	58	64	60				56	58	11
10	56	56	62	60	57	60	54	59	56	52	53	55	51	51	10
9	53	52	57	55	52	55	50	54	51	48	49	52	47	47	9
8	49	49	51	50	48	51	46	50	47	45	46	49	43	43	8
7	46	45	46	44	44	47	42	45	42	41	42	46	39	39	7
6	43	42	40	39	40	42	38	40	38	37	39	43	36	35	6
5	39	38	35	34	36	38	34	35	33	34	36	40	32	31	5
4	36	34	29	28	32	34	30	31	29	30	32	37	28	27	4
3	32	31	23	23	28	29	26	26	24	26	29	34	24	23	3
2	29	27	18	18	24	25	22	21	20	23	26	31	20	19	2
1	25	23	12	12	20	21	18	17	15	19	22	28	16	15	1
0	22	20	7	7	15	16		12							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 60-64 years

Race: African American

Scaled score	Summary scores			Executive functions						Attention/Working memory						Scaled score
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC		
19	73	100		100	92	83	81	88	77							19
18	69	67	100	98	87	79	77	84	74	72						18
17	65	62	94	94	83	75	74	80			82					17
16	61	58	89	89	79	71	70	76	66		79					16
15	56	54	84	85	75	68	66	72	62	62	75	71	58	76		15
14	52	50	79	81	70	64	62	68	58	59	71		55			14
13	48	45	74	76	66	60	59	64	54	56	67	64			67	13
12	44	41	69	72	62	56	55	60	50		64	60	49	63		12
11	39	37	64	67	58	52	51	56	46	50	60	56		59		11
10	35	32	59	63	54	48	47	52	42	46	56	53	44	54		10
9	31	28	53	59	49	44	43	48	43	52	49	41	50			9
8	27	24	48	54	45	40	40	44	34	40	48	46	38	46		8
7	22	19	43	50	41	37	36	40	31		45	42	35	41		7
6	18	15	38	46	37	33	32	36	27	33	41	39	32	37		6
5	14	11	33	41	32	29	28	32	23	30	37	35	29	33		5
4	10	6	28	37	28	25	25	28	19		33	31	27	28		4
3	6	2	23	32	24	21	21	24	15	24	30	28	24	24		3
2	1	0	17	28	20	17	17	20	11		26	24	21	20		2
1	0	0	12	24	15	13	13	16		17	22	21	18	15		1
0	0	0	7	19				12		14	18	17	15			0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								Scaled score
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	
19	90		92		90		99		75								19
18	86	96	87	79			95		70								18
17	82	91	83	75	82		91		66	68				71	67		17
16	78	87	79	72	78	73	87		62	63	79		67	63	58		16
15	74	83	75	68	74	69	83		58	59			63	59			15
14	70	78	71	65	70	65	79		54	54	70		59	56	50		14
13	66	74	67	61	66	60	74		50	50	64	65		55	52	46	13
12	62	70	62	57	62	56	70		45	45			51	51	48	42	12
11	58	65	58	54	58	52	66	57	41	41	55	56		47	45	38	11
10	54	61	54	50	54	48	62		37	36	51	52		43	41	34	10
9	50	57	50	47	50	44	58	47	33	31	47	48	36	39	37	30	9
8	46	52	46	43	46	40	53		29	27	43	43		35	34	26	8
7	42	48	42	40	43	36	49	38	25	22	38	39	27	31	30	22	7
6	38	44	37	36	39	32	45		20	18	34	34		27	26	18	6
5	34	39	33	32	35	28	41	28	16	13	30	30	17	23	23	14	5
4	30	35	29	29	31	23	37		12	9	26	25		19	19	10	4
3	26	31	25		27	19	33	19	8	4	22	21	8	15	15		3
2	22	26	21		23	15	28	14	4	0	17	16	3	11			2
1	18	22	17		19	11	24	9	0	0	13	12	0				1
0	18	22	17		7	20	4		0	9				4	0		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 18-20 years
Age: 60-64 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	90		84		96		89				98	98	100	91		19	
18	86	90	81				85				93	94	97	87		18	
17	82	86	77		86		80			86		89		83		17	
16	78	81	74			72	76	70	75			85	88	79		16	
15	73	77	70		76		71	66			80					15	
14	69	73	67	65	71	64	67	62	66		76	76	79	71		14	
13	65	68	63		66		62	58		70		71	74	67	60	13	
12	61	64	59	59	61	55	57	55	57		67	67	70		56	12	
11	57	60	56	56	56	51	53	51	53	62	62	62	66	59	53	11	
10	52	56	52	53	51	47	48	47	48		58	57	61	55	49	10	
9	48	51	49	50	46	43	44	43	44	53	53	53	57	51	45	9	
8	44	47	45	47	40	38	39	39	39		49	48	52	47	41	8	
7	40	43	42	44	35	34	34	36	35	45	44	44	48	43	38	7	
6	36	39	38	40		30	30	32	30		41		39	43	39	6	
5	32	34	35	37	25	26	25	28	26		37	35	35	39	30	5	
4	27	30	31	34		21	21	24	21		33		30	35	31	27	4
3	23	26	28	31	15	17	16		17		29		26	30	27	23	3
2	19	21	24	28	10	13	12	17	12		24		21	26	23	19	2
1	15		21	25	5	9	7	13	8		20			19		1	
0				22		5	2	9								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	89	90	100	100	96	100	92	100	99				87	88	19
18	85	86	100	100	92	97	88	99	95				84	84	18
17	82	83	100	99	88	92	84	94	90				80	80	17
16	78	79	97	93	84	88	80	90	85				76	76	16
15	75	75	91	88	79	84	76	85	81		71		72	72	15
14	71	72	86	83	75	79	72	80	76	69			68	68	14
13	68	68	80	77	71	75	68	75	72		66		65	64	13
12	64	65	75	72	67	71	64	71	67	62			60	60	12
11	61	61	69	67	63	66	60	66	63		59		59	56	11
10	58	57	64	61	59	62	56	61	58	55	55		56	53	10
9	54	54	58	56	55	58	52	57	54	51	52	53	49	49	9
8	51	50	53	51	51	53	48	52	49	47	49	50	45	45	8
7	47	46	47	45	47	49	44	47	45		44		45	41	7
6	44	43	41	40	42	45	40	43	40		40		42	37	6
5	40	39	36	35	38	41	36	38	35	36	38		41	33	5
4	37	36	30	30	34	36	32	33	31	33	35	38	29	29	4
3	33	32	25	24	30	32	28	28	26	29	32	35	25	25	3
2	30	28	19	19	26	28	24	24	22	25	28	32	22	21	2
1	27	25	14	14	22	23	20	19	17	22	25	29	18	17	1
0	23	21	8	8	18	19		14							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 65-69 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	72	100		100	94	84	82	89	77						19
18	67	66	100	100	89	80	78	85	74	73				91	18
17	63	61	97	96	85	77	75	82			84				17
16	59	57	92	92	81	73	71	78	66		80				16
15	55	53	87	87	77	69	67	74	62	63	76	71	59	78	15
14	50	48	82	83	73	65	63	70	58	60	72		56		14
13	46	44	77	79	68	61	60	66	54	56	68	64		69	13
12	42	40	72	74	64	57	56	62	50		65	60	50	65	12
11	38	35	66	70	60	53	52	58	46	50	61	57		60	11
10	33	31	61	65	56	49	48	54	42	47	57	53	45	56	10
9	29	27	56	61	51	46	45	50		44	53	50	42	52	9
8	25	23	51	57	47	42	41	46	34	40	50	46	39	47	8
7	21	18	46	52	43	38	37	42	31		46	43	36	43	7
6	17	14	41	48	39	34	33	38	27	34	42	39	33	39	6
5	12	10	36	44	34	30	30	34	23	31	38	35	30	34	5
4	8	5	30	39	30	26	26	30	19		34	32	27	30	4
3	4	1	25	35	26	22	22	26	15	24	31	28	25	26	3
2	0	0	20	30	22	18	18	22	11		27	25	22	21	2
1	0	0	15	26	18	15	15	18		18	23	21	19	17	1
0	0	0	10	22				14		14	19	18	16		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	93	93			92		100		73							19	
18	89	98	89	80			98		69							18	
17	85	94	85	77	84		94		65	68			69	67		17	
16	81	89	81	73	80	74	89		61	63	79		65	63	58	16	
15	77	85	77	69	76	70	85		57	59			61	60		15	
14	73	81	73	66	72	66	81		52	54	70		57	56	50	14	
13	69	76	68	62	68	62	77		48	50	64	66		53	52	46	13
12	65	72	64	59	64	58	73		44	45			51	49	49	42	12
11	61	68	60	55	60	53	68	57	40	41	55	57		45	45	38	11
10	57	63	56	52	56	49	64		36	36	51	53		41	41	34	10
9	53	59	52	48	52	45	60	48	32	31	47	48	36	37	38	30	9
8	49	55	48	44	48	41	56		27	27	43	44		33	34	26	8
7	45	50	43	41	44	37	52	38	23	22	38	39	27	29	30	22	7
6	41	46	39	37	40	33	48		19	18	34	35		25	27	18	6
5	37	42	35	34	36	29	43	29	15	13	30	30	17	21	23	14	5
4	33	37	31	30	32	25	39		11	9	26	26		17	19	10	4
3	29	33	27		29	21	35	19	7	4	22	21	8	13	16		3
2	25	29	23		25	17	31	14	3	0	17	17	3	9			2
1	22	24	18		21	12	27	9	0	0	13	12	0				1
0	20	24	18		8	23	5		0	9				5	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 18-20 years
Age: 65-69 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	91		85		97		92				99	100	100	92		19
18	87	91	81				87				95	95	98	88		18
17	82	87	78		87		83			88		91		84		17
16	78	82	74			74	78	72	77			86	89	80		16
15	74	78	71		77		74	68			81					15
14	70	74	67	65	72	65	69	65	68		77	77	81	72		14
13	66	70	64		67		64	61		71		73	76	68	60	13
12	61	65	60	59	62	57	60	57	59		68	68	72	56		12
11	57	61	57	56	57	53	55	53	54	63	63	63	67	60	53	11
10	53	57	53	53	52	48	51	49	50		59	59	63	56	49	10
9	49	52	50	50	47	44	46	46	45	55	54	54	59	52	45	9
8	45	48	46	47	42	40	42	42	41		50	50	54	48	41	8
7	40	44	43	44	37	36	37	38	36	47	45	45	50	44	38	7
6	36	40	39	41		32	32	34	32	43	41	45	40	34		6
5	32	35	35	38	27	27	28	30	27	38	37	36	41	36	30	5
4	28	31	32	35		23	23	27	23	34		32	36	32	27	4
3	24	27	28	31	17	19	19		18	30		27	32	28	23	3
2	20	22	25	28	11	15	14	19	14	26		23	28	24	19	2
1	15		21	25	6	10	9	15	9	22				20		1
0				22		6	5	11								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	90	91	100	100	98	100	94	100	100				89	90	19
18	86	88	100	100	94	99	90	100	97				85	86	18
17	83	84	100	100	90	95	86	97	92				81	82	17
16	79	80	99	95	86	90	82	92	88				77	78	16
15	76	77	93	89	82	86	78	87	83				74	73	15
14	73	73	87	84	78	82	74	83	79	72			70	70	14
13	69	69	82	79	74	78	70	78	74				68	68	13
12	66	66	76	73	69	73	66	73	69	65			62	62	12
11	62	62	71	68	65	69	62	68	65				58	58	11
10	59	59	65	63	61	65	58	64	60	57	58	59	54	54	10
9	55	55	60	57	57	60	54	59	56	54	55	56	50	50	9
8	52	51	54	52	53	56	50	54	51	50	51	53	46	46	8
7	48	48	48	47	49	52	46	50	47	46	48	50	42	42	7
6	45	44	43	42	45	47	42	45	42	43	45	47	39	38	6
5	42	41	37	36	41	43	38	40	38	39	41	44	35	34	5
4	38	37	32	31	37	39	33	36	33	35	38	41	31	30	4
3	35	33	26	26	32	34	29	31	29	32	34	38	27	26	3
2	31	30	21	20	28	30	25	26	24	28	31	35	23	23	2
1	28	26	15	15	24	26	21	21	19	25	28	32	19	19	1
0	24	22	9	10	20	21		17							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 70-74 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	70	100		100	96	86	83	92	77						19
18	66	65	100	100	92	82	80	88	74	73				93	18
17	61	60	100	98	87	78	76	84			85				17
16	57	56	95	94	83	74	72	80	66		81				16
15	53	52	90	90	79	70	68	76	62	63	77	71	60	80	15
14	49	47	85	85	75	66	65	72	58	60	73		57		14
13	45	43	79	81	70	62	61	68	54	57	69	64		71	13
12	40	39	74	77	66	58	57	64	50		66	61	51	66	12
11	36	34	69	72	62	55	53	60	46	50	62	57		62	11
10	32	30	64	68	58	51	50	56	42	47	58	54	45	58	10
9	28	26	59	63	53	47	46	52	44	54	50	42	53		9
8	23	21	54	59	49	43	42	48	34	41	51	46	40	49	8
7	19	17	49	55	45	39	38	44	31		47	43	37	45	7
6	15	13	43	50	41	35	35	40	27	34	43	39	34	40	6
5	11	8	38	46	37	31	31	36	23	31	39	36	31	36	5
4	6	4	33	42	32	27	27	32	19		35	32	28	32	4
3	2	0	28	37	28	23	23	28	15	25	32	29	25	27	3
2	0	0	23	33	24	20	20	24	11		28	25	23	23	2
1	0	0	18	28	20	16	16	20		18	24	22	20	19	1
0	0	0	13	24				16		15	20	18	17		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	96	95			94		100		72							19
18	92	100	91	81			100		68							18
17	88	96	87	78	86		96		64	68			67	67		17
16	84	92	83	74	82	75	92		59	63	80		63	64	57	16
15	80	87	79	71	78	71	88		55	59			59	60		15
14	76	83	74	67	74	67	83		51	54	71		55	56	49	14
13	72	79	70	64	70	63	79		47	50	64	67		51	53	46
12	68	74	66	60	66	59	75		43	45			51	47	49	12
11	64	70	62	56	62	55	71	58	39	41	55	58		43	45	11
10	60	66	58	53	58	51	67		34	36	51	53	39	42	34	10
9	56	61	54	49	54	46	63	48	30	31	47	49	36	35	38	9
8	52	57	49	46	50	42	58		26	27	43	44		31	34	8
7	48	53	45	42	46	38	54	39	22	22	38	40	27	27	31	7
6	44	48	41	39	42	34	50		18	18	34	35	23	27	18	6
5	41	44	37	35	38	30	46	29	14	13	30	31	17	19	23	5
4	37	40	33	31	34	26	42		10	9	26	26	15	20	10	4
3	33	35	29		30	22	38	19	5	4	21	22	8	11	16	3
2	29	31	24		26	18	33	15	1	0	17	17	3	7		2
1	25	27	20		22	14	29	10	0	0	13	13	0			1
0	22	22			10	25	5		0	9			5	0		0

(continued)

APPENDIX E (continued)

Sex: Female
Education: 18-20 years
Age: 70-74 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score			
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS			
19	91		86		98		95				100	100	100	93		19		
18	87	92	82				90				96	97	100	89		18		
17	83	88	79		88		86				90	92		85		17		
16	79	84	75			76	81	75	78			88	91	81		16		
15	75	79	72		78		76	71				83				15		
14	70	75	68	66	73	67	72	67	69		78	79	82	73		14		
13	66	71	64		68		67	63			73		74	78	69	60	13	
12	62	66	61	60	63	59	63	59	60			69	70	74	56	12		
11	58	62	57	56	58	54	58	56	56		65	65	65	69	61	53	11	
10	54	58	54	53	53	50	53	52	51			60	60	65	57	49	10	
9	49	54	50	50	48	46	49	48	47		57	56	56	60	53	45	9	
8	45	49	47	47	43	42	44	44	42			51	51	56	49	41	8	
7	41	45	43	44	38	38	40	40	38		48	47	47	51	45	38	7	
6	37	41	40	41		33	35	37	33			44	42	47	41	34	6	
5	33	36	36	38	28	29	31	33	29		40	38	38	43	37	30	5	
4	28	32	33	35		25	26	29	24			36		33	38	33	27	4
3	24	28	29	32	18	21	21		20			32		29	34	29	23	3
2	20	24	26	29	13	16	17	21	15			28		24	29	25	19	2
1	16		22	26	8	12	12	18	11			24			21		1	
0				23		8	8	14								0		

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	91	92	100	100	100	100	96	100	100				90	91	19
18	88	89	100	100	96	100	92	100	99				87	87	18
17	84	85	100	100	92	97	88	99	94				83	83	17
16	81	82	100	96	88	93	84	94	90				79	79	16
15	77	78	95	91	84	88	80	90	85				77	75	15
14	74	74	89	86	80	84	76	85	81	75			71	71	14
13	70	71	84	80	76	80	72	80	76				71	71	13
12	67	67	78	75	72	75	68	76	72	68			63	64	12
11	63	64	72	70	68	71	64	71	67				65	59	11
10	60	60	67	64	64	67	60	66	63	61	61	62	56	56	10
9	56	56	61	59	59	62	56	61	58	57	58	59	52	52	9
8	53	53	56	54	55	58	52	57	54	53	54	56	48	48	8
7	50	49	50	49	51	54	47	52	49	50	51	53	44	44	7
6	46	45	45	43	47	49	43	47	44	46	48	50	40	40	6
5	43	42	39	38	43	45	39	43	40	42	44	47	36	36	5
4	39	38	33	33	39	41	35	38	35	39	41	44	32	32	4
3	36	35	28	27	35	36	31	33	31	35	37	41	28	28	3
2	32	31	22	22	31	32	27	29	26	31	34	38	24	24	2
1	29	27	17	17	27	28	23	24	22	28	31	35	21	20	1
0	25	24	11	11	23	24		19							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 75-79 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory							
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score	
19	68	100		100	98	87	85	94	77						19	
18	64	64	100	100	94	83	81	90	74	74				94	18	
17	60	59	100	100	89	79	77	86			86				17	
16	56	55	98	96	85	75	74	82	66		82				16	
15	51	51	92	92	81	71	70	78	62	64	78	72	60	81	15	
14	47	46	87	88	77	67	66	74	58	61	74		58		14	
13	43	42	82	83	72	63	62	70	54	57	71	65		73	13	
12	39	38	77	79	68	60	59	66	50		67	61	52	68	12	
11	34	33	72	74	64	56	55	62	46	51	63	58		64	11	
10	30	29	67	70	60	52	51	58	42	48	59	54	46	59	10	
9	26	25	62	66	56	48	47	54		45	55	50	43	55	9	
8	22	20	57	61	51	44	44	50	34	41	52	47	40	51	8	
7	18	16	51	57	47	40	40	46	31		48	43	38	46	7	
6	13	12	46	53	43	36	36	42	27	35	44	40	35	42	6	
5	9	7	41	48	39	32	32	38	23	32	40	36	32	38	5	
4	5	3	36	44	34	29	29	34		19		37	33	29	33	4
3	1	0	31	39	30	25	25	30	15	25	33	29	26	29	3	
2	0	0	26	35	26	21	21	27	11		29	25	23	25	2	
1	0	0	21	31	22	17	17	23		19	25	22	21	20	1	
0	0	0	15	26				19		15	21	18	18		0	

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills								
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL	Scaled score
19	99		97		96		100		71							19	
18	95	100	93	83			100		66							18	
17	91	98	89	79	88		98		62	68				64	68	17	
16	87	94	85	76	84	76	94		58	63	81		60	64	57	16	
15	83	90	80	72	80	72	90		54	59			56	60		15	
14	79	85	76	68	76	68	86		50	54	72		52	57	49	14	
13	75	81	72	65	72	64	82		46	50	64	67		48	53	45	13
12	71	77	68	61	68	60	78		41	45		51	44	49	41	12	
11	67	72	64	58	64	56	73	58	37	41	55	58		40	46	37	11
10	63	68	60	54	60	52	69		33	36	51	54		36	42	33	10
9	60	64	55	51	56	48	65	49	29	31	47	49	36	32	38	29	9
8	56	59	51	47	52	44	61		25	27	43	45		28	35	26	8
7	52	55	47	43	48	39	57	39	21	22	38	40	27	24	31	22	7
6	48	51	43	40	44	35	53		17	18	34	36		20	27	18	6
5	44	46	39	36	40	31	48	30	12	13	30	31	17	16	24	14	5
4	40	42	35	33	36	27	44		8	9	26	27		12	20	10	4
3	36	38	30		32	23	40	20	4	4	21	22	8	8	16		3
2	32	33	26		28	19	36	15	0	0	17	18	3	4			2
1	28	29	22		24	15	32	10	0	0	13	14	0				1
0	24				11	27	6		0	9				6	0	0	0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 18-20 years
Age: 75-79 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score	
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS	
19	92		86		100		98				100	100	100	94	19	
18	88	93	83				93				98	98	100	90	18	
17	84	89	79		90		88				91	94		86	17	
16	79	85	76			77	84	77	80			89	93	82	16	
15	75	80	72		79		79	74				84			15	
14	71	76	69	66	74	69	75	70	71		80	80	84	74	14	
13	67	72	65		69		70	66			75		76	80	60	13
12	63	68	62	60	64	60	66	62	62			71	71	75	56	12
11	58	63	58	57	59	56	61	58	58		67	66	67	71	62	11
10	54	59	55	54	54	52	56	55	53			62	62	67	58	10
9	50	55	51	51	49	48	52	51	49		58	57	57	62	54	9
8	46	50	47	48	44	44	47	47	44			53	53	58	50	8
7	42	46	44	44	39	39	43	43	40		50	48	48	53	46	7
6	37	42	40	41		35	38	39	35			46	44	49	42	6
5	33	38	37	38	29	31	33	36	31		42	39	39	44	38	5
4	29	33	33	35		27	29	32	26			38	35	40	35	4
3	25	29	30	32	19	22	24		22			34	30	36	31	3
2	21	25	26	29	14	18	20	24	17			30	26	31	27	2
1	17		23	26	9	14	15	20	12			25			23	1
0				23		10	11	16								0

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	92	94	100	100	100	100	98	100	100				92	93	19
18	89	90	100	100	99	100	94	100	100				88	89	18
17	85	87	100	100	95	99	90	100	97				84	85	17
16	82	83	100	98	91	94	86	97	92				80	81	16
15	78	79	97	93	86	90	82	92	88			79	76	77	15
14	75	76	91	88	82	86	78	87	83	79			73	73	14
13	71	72	86	82	78	81	74	83	79			74	73	69	13
12	68	68	80	77	74	77	70	78	74	71			65	65	12
11	65	65	74	72	70	73	66	73	69			68	68	61	11
10	61	61	69	66	66	68	61	69	65	64	64	65	57	57	10
9	58	58	63	61	62	64	57	64	60	60	61	62	53	53	9
8	54	54	58	56	58	60	53	59	56	57	57	59	49	49	8
7	51	50	52	50	54	55	49	54	51	53	54	56	45	45	7
6	47	47	47	45	50	51	45	50	47	49	51	53	42	41	6
5	44	43	41	40	45	47	41	45	42	46	47	50	38	37	5
4	40	39	35	34	41	43	37	40	38	42	44	47	34	34	4
3	37	36	30	29	37	38	33	36	33	38	41	44	30	30	3
2	34	32	24	24	33	34	29	31	28	35	37	41	26	26	2
1	30	29	19	19	29	30	25	26	24	31	34	38	22	22	1
0	27	25	13	13	25	25		22							0

Note. See page 16 for a description of acronyms.

APPENDIX E (continued)

Sex: Female

Education: 18-20 years

Age: 80-85 years

Race: African American

Scaled score	Summary scores			Executive functions					Attention/Working memory						
	WAIS-R FSIQ	WAIS FSIQ	AIR	CAT ERROR	TRAIL B	THUR FLU	FAS	ANIMALS	WAIS-R DIGIT SPAN	WAIS DIGIT SPAN	PASAT	DIGIT ERROR	SSHOR RHYM	SPCH PERC	Scaled score
19	68	100		100	100	88	87	97	77						19
18	64	62	100	100	96	84	83	93	74	74				96	18
17	60	58	100	100	92	80	79	89			87				17
16	56	54	100	99	87	76	76	85	66		83				16
15	51	49	95	95	83	73	72	81	62	64	79	72	61	83	15
14	47	45	90	90	79	69	68	77	58	61	75		58		14
13	43	41	85	86	75	65	64	73	54	58	72	65		74	13
12	39	36	80	81	71	61	61	69	50		68	62	53	70	12
11	34	32	75	77	66	57	57	65	46	52	64	58		66	11
10	30	28	70	73	62	53	53	61	42	48	60	54	47	61	10
9	26	23	65	68	58	49	49	57	45	57	51	44		57	9
8	22	19	60	64	54	45	46	53	34	42	53	47	41	53	8
7	18	15	54	60	49	42	42	49	31		49	44	38	48	7
6	13	10	49	55	45	38	38	45	27	35	45	40	36	44	6
5	9	6	44	51	41	34	34	41	23	32	42	37	33	40	5
4	5	2	39	46	37	30	31	37	19		38	33	30	35	4
3	1	0	34	42	32	26	27	33	15	26	34	29	27	31	3
2	0	0	29	38	28	22	23	30	11		30	26	24	27	2
1	0	0	24	33	24	18	19	26		19	26	22	21	22	1
0	0	0	18	29				22		16	23	19	19		0

Scaled score	Speed of information processing				Spatial skills				Verbal/Academic skills							
	WAIS-R DIGIT SYMB	WAIS DIGIT SYMB	TRAIL A	DIGIT TIME	WAIS-R BLOCK DESGN	WAIS BLOCK DESGN	TPT TIME	SPAT REL	WAIS-R VOCAB VOCAB	WAIS VOCAB	APHAS SCRN	BSTN NAME	BDAE COMP	PIAT RECOG	PIAT COMP	PIAT SPELL
19	99	99			96		100		71							19
18	95	100	95	84			100		66							18
17	91	100	91	81	88		100		62	68			60	68		17
16	87	97	87	77	84	78	97		58	63	81		56	64	57	16
15	83	92	83	73	80	74	93		54	59			52	61		15
14	79	88	78	70	76	70	89		50	54	72		48	57	49	14
13	75	84	74	66	72	65	85		46	50	68		44	53	45	13
12	71	79	70	63	68	61	80		41	45		51	40	50	41	12
11	67	75	66	59	64	57	76	59	37	41	55	59	36	46	37	11
10	63	70	62	56	60	53	72		33	36	51	54	32	43	33	10
9	60	66	57	52	56	49	68	49	29	31	47	50	37	28	39	9
8	56	62	53	48	52	45	64		25	27	43	45	24	35	25	8
7	52	57	49	45	48	41	59	40	21	22	38	41	27	20	32	7
6	48	53	45	41	44	37	55		17	18	34	36	16	28	17	6
5	44	49	41	38	40	33	51	30	12	13	30	32	17	12	24	5
4	40	44	37	34	36	28	47		8	9	26	28		8	21	4
3	36	40	32		32	24	43	20	4	4	21	23	8	4	17	3
2	32	36	28		28	20	39	16	0	0	17	19	3	0		2
1	28	31	24		24	16	34	11	0	0	13	14	0			1
0	27				12	30	6		0	9			6	0		0

(continued)

APPENDIX E (*continued*)

Sex: Female
Education: 18-20 years
Age: 80-85 years
Race: African American

Scaled score	Verbal episodic memory								Visual episodic memory						Scaled score		
	STORY-T1	STORY-LEARN	STORY-RECALL	STORY-LOSS	CVLT-1	CVLT-5	CVLT-TOT	CVLT-SDFR	CVLT-LDFR	TPT-MEM	TPT-LOC	FIGUR-T1	FIGUR-LEARN	FIGUR-RECALL	FIGUR-LOSS		
19	93		87		100		100				100	100	100	96		19	
18	88	94	84				96				99	100	100	92		18	
17	84	90	80		91		92				93	95		88		17	
16	80	86	77			79	87	80	82			91	95	84		16	
15	76	82	73		81		83	77				86				15	
14	72	77	69	66	76	71	78	73	73		81	82	86	76		14	
13	67	73	66		71		74	69			77	77	82	72	60	13	
12	63	69	62	60	66	62	69	65	64		72	73	77	56		12	
11	59	64	59	57	61	58	64	61	59		69	68	68	73	64	11	
10	55	60	55	54	56	54	60	58	55			63	64	69	60	49	10
9	51	56	52	51	51	50	55	54	50		60	59	59	64	56	9	
8	46	52	48	48	46	45	51	50	46			54	55	60	52	41	8
7	42	47	45	45	40	41	46	46	41		52	50	50	55	48	7	
6	38	43	41	42		37	41	42	37			48	46	51	44	34	6
5	34	39	38	39	30	33	37	39	32		44	41	41	46	40	5	
4	30	34	34	36		29	32	35	28			40	36	42	36	27	4
3	26	30	31	32	20	24	28		23			36	32	38	32	23	3
2	21	26	27	29	15	20	23	27	19			31	27	33	28	19	2
1	17		24	26	10	16	19	23	14			27			24		1
0				23		12	14	20								0	

Lateralized sensorimotor/Psychomotor comparisons

Scaled score	TAP-DH	TAP-NDH	GRIP-DH	GRIP-NDH	PEG-DH	PEG-NDH	TPT-DH	TPT-NDH	TPT-BH	SP-R	SP-L	SP-TOT	TFR-R	TFR-L	Scaled score
19	94	95	100	100	100	100	100	100	100				94	95	19
18	90	92	100	100	100	100	96	100	100				90	91	18
17	87	88	100	100	97	100	92	100	99				86	87	17
16	83	84	100	100	93	96	88	99	95				82	83	16
15	80	81	99	95	89	91	84	95	90				78	79	15
14	76	77	94	90	85	87	80	90	86	82			74	75	14
13	73	73	88	85	81	83	76	85	81				78	76	13
12	69	70	83	79	77	78	72	81	76	75			66	67	12
11	66	66	77	74	73	74	68	76	72				71	63	11
10	62	63	71	69	69	70	63	71	67	68	68	67	59	59	10
9	59	59	66	63	64	65	59	66	63	64	64	64	55	55	9
8	56	55	60	58	60	61	55	62	58	61	61	61	51	51	8
7	52	52	55	53	56	57	51	57	54	57	58	58	47	47	7
6	49	48	49	48	52	52	47	52	49	53	54	55	43	43	6
5	45	45	44	42	48	48	43	48	45	50	51	53	39	39	5
4	42	41	38	37	44	44	39	43	40	46	47	50	35	35	4
3	38	37	32	32	40	39	35	38	36	42	44	47	32	31	3
2	35	34	27	26	36	35	31	34	31	39	41	44	28	27	2
1	31	30	21	21	32	31	27	29	26	35	37	41	24	23	1
0	28	26	16	16	27	27									0

Note. See page 16 for a description of acronyms.

Appendix F

RAW SCORE TO T-SCORE CONVERSIONS FOR THE WISCONSIN CARD SORTING TEST (WCST) PERSEVERATIVE ERRORS SCORE

APPENDIX F

Education: ≤ 8 Years

T score	Age (years)										T score
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84	85-89	
>80	0-12	0-9	0-6	0-5	0-6	0-9	0-12	0-17	0-24	0-32	>80
80					7						80
79			7	6						33	79
78											78
77							13	18			77
76		10									76
75						10			25		75
74					8						74
73	13			7			14	19		34	73
72											72
71			8			11			26		71
70					9						70
69				8			15	20		35	69
68		11				12			27		68
67			9		10		16	21			67
66	14									36	66
65				9	11	13	17		28		65
64						15	17	22			64
63		12	10	10	12	14	18	23	29	37	63
62											62
61	15			11	13	15	19	24	30	38	61
60			11			16			31		60
59		13		12	14	17	20	25	32	39	59
58	16		12		15		21	26		40	58
57			13	16	18	22	27	33			57
56		14	13			19	23	28	34	41	56
55	17			14	17	20	24	29	35	42	55
54		15	14	15	18	21	25	30		43	54
53	18		15	16	19	22	26	31	36-37	44	53
52		16		17	20	23	27	32	38		52
51	19		16	18	21	24-25	28-29	33	39	45-46	51
50		17		19	22			34	40		50
49	20		17-18	20	23-24	26-27	30-31	35-36	41-42	47-48	49
48		18		21	25	28	32	37	43	49	48
47	21	19	19	22-23	26-27	29-30	33-35	38-39	44-45	50	47
46	22		20		28	31	36	40	46	51	46
45	23	20	21	24-25	29-30	32-34	37-38	41-43	47-48	52-53	45
44		21	22	26	31	35	39	44	49	54	44
43	24	22	23-24	27-28	32-33	36-37	40-42	45-47	50-51	55-56	43
42	25	23		29	34-35	38-39	43	48	52-53	57-58	42
41	26	24	25-26	30-32	36-37	40-42	44-46	49-51	54-55	59-60	41
40			27	33	38-39	43	47-48	52	56-57	61	40
39	27-28	25-26	28-29	34-35	40-41	44-46	49-51	53-55	58-60	62-64	39
38			30	36	42-43	47-48	52	56-57	61	65	38
37	29-30	27-28	31-32	37-39	44-46	49-51	53-56	58-60	62-64	66-68	37
36	31	29	33	40	47-48	52-53	57	61-62	65-66	69	36
35	32	30	34-35	41-43	49-51	54-56	58-61	63-66	67-69	70-72	35
34	33	31	36	44-45	52	57-58	62-63	67	70-71	73	34

(continued)

APPENDIX F (*continued*)

Education: ≤ 8 Years

T score	Age (years)										T score
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84	85-89	
33	34	32-33	37-38	46-47	53-56	59-61	64-67	68-71	72-74	74-76	33
32	35		39	48-49	57-58	62-63	68-69	72-73	75-76	77-78	32
31	36-37	34-35	40-41	50-52	59-61	64-67	70-72	74-77	77-80	79-81	31
30		36	42	53	62-63	68-69	73-74	78-79	81-82	82-83	30
29	38-39	37-38	43-45	54-57	64-67	70-73	75-78	80-83	83-85	84-86	29
28	40	39	46	58	68	74-75	79-80	84-85	86-87	87-88	28
27	41-42	40	47-48	59-61	69-72	76-79	81-85	86-89	88-91	89-91	27
26		41	49	62-63	73-74	80-81	86-87	90-91	92-93	92-93	26
25	43-44	42-43	50-52	64-66	75-78	82-85	88-91	92-94	94	94	25
24	45	44	53	67-68	79	86-87	92-93				24
23	46-47	45-46	54-55	69-71	80-83	88-91	94				23
22			56	72	84-85	92-93					22
21	48-49	47-48	57-59	73-75	86-88	94					21
20	50	49	60	76-77	89-90						20
<20	51-94	50-94	61-94	78-94	91-94						<20

APPENDIX F (*continued*)

Education: 9-11 Years

T score	Age (years)										T score
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84	85-89	
>80	0-8	0-5	0-2	0-1	0-2	0-4	0-8	0-13	0-20	0-28	>80
80											80
79					3	5					79
78										29	78
77			3	2			9	14			77
76											76
75									21		75
74		6				6					74
73					4						73
72							10	15			72
71	9			3		7			22		71
70			4						30		70
69					5		11	16			69
68				4						31	68
67		7			6	8	12		23		67
66			5					17			66
65	10			5		9			24		65
64					7		13	18			64
63						10	14		25		63
62		8	6	6	8			19			62
61	11				9	11	15	20	26		61
60				7		12					60
59		9	7	8	10	13	16	21	27		59
58							17	22	28		58
57	12		8	9	11	14	18	23	29		57
56		10			12	15				37	56
55	13		9	10	13	16	19-20	24-25	30-31		55
54				11	14	17					54
53		11	10	12	15	18	21-22	26-27	32-33	39-40	53
52	14		11	13	16	19	23	28			52
51		12	12	14	17	20	24	29	34-35	41-42	51
50	15			15	18	21	25	30	36		50
49	16	13	13	16	19-20	22-23	26-27	31-32	37	43-44	49
48		14	14	17	21	24	28	33	38	45	48
47	17	15	15	18	22-23	25-26	29-30	34-35	39-40	46	47
46			16	19	24	27	31	36	41	47	46
45	18	16	17	20-21	25-26	28-30	32-34	37-39	42-44	48-49	45
44	19	17	18	22	27	31	35	40	45	50	44
43	20	18	19	23-24	28-29	32-33	36-38	41-42	46-47	51-52	43
42			20	25	30	34-35	39	43-44	48	53	42
41	21-22	19-20	21-22	26-27	31-33	36-37	40-42	45-47	49-51	54-56	41
40			23	28-29	34	38-39	43	48	52-53	57	40
39	23-24	21-22	24	30-31	35-37	40-42	44-47	49-51	54-55	58-59	39
38			25	32	38-39	43	48	52-53	56-57	60-61	38
37	25-26	23-24	26-27	33-35	40-42	44-47	49-51	54-56	58-60	62-63	37
36				28	36	43	48	52-53	57-58	61-62	64-65
35	27-28	25-26	29-30	37-39	44-47	49-52	54-57	59-61	63-65	66-68	35
34	29	27	31	40	48	53-54	58-59	62-63	66-67	69	34

(continued)

APPENDIX F (*continued*)

Education: 9-11 Years

T score	Age (years)										T score
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84	85-89	
33	30	28	32-34	41-43	49-52	55-57	60-62	64-67	68-70	70-72	33
32	31	29	35	44-45	53	58-59	63-64	68-69	71-72	73-74	32
31	32	30-31	36-37	46-48	54-57	60-63	65-68	70-73	73-76	75-77	31
30	33	32	38	49	58-59	64-65	69-70	74-75	77	78-79	30
29	34-35	33	39-40	50-52	60-62	66-69	71-74	76-79	78-81	80-82	29
28	36	34	41-42	53-54	63-64	70-71	75-76	80-81	82-83	83	28
27	37	35-36	43-44	55-57	65-68	72-75	77-80	82-85	84-87	84-87	27
26	38	37	45	58-59	69-70	76-77	81-82	86-87	88-89	88	26
25	39-40	38-39	46-48	60-62	71-73	78-81	83-86	88-91	90-93	89-92	25
24	41	40	49	63	74-75	82	87-88	92-93	94	93	24
23	42	41	50-51	64-66	76-79	83-86	89-93	94		94	23
22	43	42	52	67-68	80-81	87-88	94				22
21	44-45	43-44	53-54	69-71	82-84	89-92					21
20	46	45	55-56	72-73	85-86	93-94					20
< 20	47-94	46-94	57-94	74-94	87-94						< 20

APPENDIX F (*continued*)

Education: 12 Years

T score	Age (years)										T score
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84	85-89	
>80	0-5	0-2	0		0	0-2	0-5	0-10	0-17	0-26	>80
80											80
79							6	11			79
78		3									78
77									18		77
76						3					76
75	6				1						75
74										27	74
73			1	0			7	12			73
72						4			19		72
71					2						71
70							8	13			70
69		4		1		5			20	28	69
68											68
67	7		2		3		9	14		29	67
66				2		6			21		66
65					4		10	15			65
64						7			22	30	64
63		5	3	3	5		11	16			63
62	8					8			23		62
61			4	4	6		12	17		31	61
60		6				9	13	18	24	32	60
59	9			5	7	10	14		25		59
58			5		8			19		33	58
57		7		6	9	11	15	20	26	34	57
56			6	7		12	16	21	27		56
55	10			8	10	13	17	22	28	35	55
54		8	7		11	14	18	23	29	36	54
53	11		8	9	12	15	19	24	30	37	53
52		9		10	13	16	20	25	31	38	52
51	12		9	11	14-15	17-18	21-22	26-27	32	39	51
50		10	10	12		19	23		33	40	50
49	13	11	11	13	16-17	20	24-25	28-29	34-35	41	49
48				14	18	21	26	30	36	42	48
47	14	12	12-13	15-16	19-20	22-24	27-28	31-32	37-38	43-44	47
46	15				17	21	25	29	33-34	39	46
45	16	13	14-15	18	22-23	26-27	30-31	35-36	40-41	46	45
44		14		19	24	28	32	37	42	47	44
43	17	15	16-17	20-21	25-27	29-31	33-35	38-40	43-45	48-50	43
42	18	16	18	22-23	28	32	36	41	46	51	42
41	19	17	19	24-25	29-30	33-35	37-39	42-44	47-49	52-53	41
40	20	18	20	26	31-32	36	40-41	45	50	54	40
39	21	19	21-22	27-28	33-35	37-39	42-44	46-48	51-53	55-57	39
38	22	20	23	29-30	36	40-41	45-46	49-50	54	58	38
37	23	21	24-25	31-32	37-39	42-44	47-49	51-53	55-57	59-61	37
36	24	22	26	33	40-41	45-46	50-51	54-55	58-59	62	36
35	25	23	27-28	34-36	42-44	47-49	52-54	56-59	60-62	63-65	35
34	26	24	29	37-38	45-46	50-51	55-56	60	63-64	66-67	34

(continued)

APPENDIX F (*continued*)

Education: 12 Years

T score	Age (years)										T score
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84	85-89	
33	27	25-26	30-31	39-41	47-49	52-55	57-60	61-64	65-68	68-70	33
32	28	27	32	42	50-51	56	61-62	65-66	69	71	32
31	29-30	28	33-34	43-45	52-54	57-60	63-66	67-70	70-73	72-74	31
30	31	29	35-36	46-47	55-56	61-62	67-68	71-72	74-75	75-76	30
29	32	30-31	37-38	48-50	57-60	63-66	69-72	73-76	76-79	77-79	29
28	33	32	39	51	61-62	67-68	73-74	77-78	80	80-81	28
27	34-35	33	40-41	52-54	63-65	69-72	75-78	79-82	81-84	82-84	27
26	36	34	42-43	55-56	66-67	73-74	79-80	83-84	85-86	85-86	26
25	37	35-36	44-45	57-59	68-71	75-78	81-84	85-88	87-90	87-89	25
24	38	37	46	60-61	72-73	79-80	85-86	89-90	91-92	90-91	24
23	39-40	38-39	47-48	62-64	74-76	81-84	87-90	91-94	93-94	92-94	23
22	41	40	49-50	65	77-78	85-86	91-92				22
21	42	41	51-52	66-68	79-82	87-89	93-94				21
20	43	42	53	69-70	83	90-91					20
< 20	44-94	43-94	54-94	71-94	84-94	92-94					< 20

APPENDIX F (*continued*)

Education: 13-15 Years

T score	Age (years)										T score
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84	85-89	
>80	0-4	0-1				0	0-4	0-9	0-15	0-24	>80
80											80
79										16	79
78						1					78
77										25	77
76											76
75							5	10			75
74									17		74
73					0	2					73
72		2									72
71							6	11		26	71
70						3			18		70
69	5		0		1		7				69
68								12			68
67				0		4			19	27	67
66					2		8	13			66
65		3	1			5			20	28	65
64	6			1	3		9	14			64
63						6			21	29	63
62			2	2	4		10	15			62
61		4				7	11		22	30	61
60	7			3	5			16			60
59			3		6	8	12	17		23	59
58		5		4		9	13		24		58
57	8		4	5	7	10	14	18-19	25	32	57
56					8					33	56
55		6	5	6	9	11-12	15-16	20	26	34	55
54	9			7				21	27		54
53		7	6	8	10-11	13-14	17-18	22-23	28	35	53
52	10		7		12	15	19		29	36	52
51		8	8	9-10	13	16	20	24-25	30-31	37	51
50	11				14	17	21	26	32	38	50
49		9	9	11-12	15-16	18-19	22-23	27-28	33	39-40	49
48	12		10	13		20	24	29	34		48
47	13	10	11	14	17-18	21-22	25-26	30-31	35-36	41-42	47
46		11	12	15	19	23	27	32	37	43	46
45	14	12	13	16-17	20-22	24-25	28-30	33-34	38-39	44-45	45
44	15		14	18	23	26-27	31	35-36	40-41	46	44
43	16	13-14	15	19-20	24-25	28-29	32-33	37-38	42-43	47-48	43
42			16	21	26	30	34-35	39	44	49	42
41	17	15	17-18	22-23	27-29	31-33	36-38	40-42	45-47	50-51	41
40	18	16		24	30	34-35	39	43-44	48	52-53	40
39	19	17	19-20	25-27	31-33	36-38	40-42	45-47	49-51	54-55	39
38	20	18	21	28	34-35	39	43-44	48-49	52-53	56	38
37	21	19	22-23	29-31	36-38	40-42	45-47	50-52	54-56	57-59	37
36	22	20	24	32	39	43-44	48-49	53-54	57	60-61	36
35	23-24	21-22	25-26	33-35	40-42	45-48	50-53	55-57	58-61	62-63	35
34		23	27	36	43-44	49	54	58-59	62-63	64-65	34

(continued)

APPENDIX F (*continued*)

Education: 13-15 Years

T score	Age (years)										T score
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84	85-89	
33	25-26	24	28-29	37-39	45-47	50-53	55-58	60-63	64-66	66-68	33
32	27	25	30-31	40	48-49	54-55	59-60	64-65	67-68	69-70	32
31	28	26-27	32-33	41-44	50-53	56-59	61-64	66-68	69-71	71-73	31
30	29	28	34	45	54-55	60-61	65-66	69-70	72-73	74	30
29	30-31	29	35-36	46-48	56-58	62-64	67-70	71-74	74-77	75-78	29
28	32	30	37	49-50	59-60	65-66	71-72	75-76	78-79	79	28
27	33	31-32	38-40	51-53	61-64	67-70	73-76	77-80	80-83	80-82	27
26	34	33	41	54	65-66	71-72	77-78	81-82	84-85	83-84	26
25	35-36	34	42-43	55-58	67-69	73-76	79-82	83-86	86-88	85-87	25
24	37	35	44	59	70-71	77-78	83-84	87-88	89-90	88-89	24
23	38	36-37	45-47	60-62	72-75	79-82	85-88	89-92	91-94	90-92	23
22	39	38	48	63-64	76	83-84	89-90	93-94		93-94	22
21	40-41	39-40	49-50	65-67	77-80	85-88	91-94				21
20			51	68	81-82	89-90					20
<20	42-94	41-94	52-94	69-94	83-94	91-94					<20

APPENDIX F (*continued*)

Education: 16-17 Years

T score	Age (years)									T score	
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84		
>80	0						0	0-5	0-12	0-21	>80
80							1	6			80
79											79
78	1								13		78
77											77
76											76
75							2	7		22	75
74											74
73									14		73
72											72
71							3	8		23	71
70											70
69	2					0			15		69
68							4	9			68
67						1			16	24	67
66											66
65		0				2	5	10		25	65
64									17		64
63	3				0	3	6	11			63
62						7			18	26	62
61	1				1	4		12	19		61
60					2		8	13		27	60
59	4		0	0		5	9	14	20	28	59
58				1	3	6					58
57		2	1		4	7	10-11	15	21	29	57
56	5			2	5			16	22		56
55	3	2	3	6	8-9		12	17	23	30	55
54	6						13	18	24	31	54
53	4	3	4-5	7-8	10-11	14-15	14-15	19	25	32	53
52								20	26	33	52
51	7	5	4	6	9-10	12-13	16-17	21-22	27-28	34	51
50			5	7	11	14	18	23		35	50
49	8	6	6	8-9	12	15-16	19-20	24-25	29-30	36	49
48	9		7		13	17	21	26	31	37	48
47	10	7	8	10-11	14-15	18-19	22-23	27-28	32-33	38-39	47
46		8		12	16	20	24	29	34	40	46
45	11	9	9-10	13-14	17-18	21-22	25-26	30-31	35-36	41-42	45
44			11	15	19-20	23	27-28	32	37	43	44
43	12-13	10	12	16-17	21-22	24-26	29-30	33-35	38-40	44-45	43
42		11	13	18	23	27	31-32	36	41	46	42
41	14	12	14	19-20	24-26	28-30	33-35	37-39	42-44	47-48	41
40	15	13	15	21	27	31	36	40-41	45	49	40
39	16	14	16-17	22-24	28-30	32-34	37-39	42-44	46-48	50-52	39
38	17	15	18	25	31	35-36	40-41	45	49-50	53	38
37	18	16	19-20	26-27	32-34	37-39	42-44	46-49	51-53	54-56	37
36	19	17	21	28-29	35-36	40-41	45-46	50	54	57	36
35	20	18-19	22-23	30-32	37-39	42-44	47-49	51-54	55-58	58-60	35
34	21		24	33	40-41	45-46	50-51	55-56	59	61-62	34

(continued)

APPENDIX F (*continued*)

Education: 16-17 Years

T score	Age (years)										T score
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84	85-89	
33	22-23	20-21	25-26	34-36	42-44	47-50	52-55	57-59	60-63	63-65	33
32	24	22	27	37	45-46	51-52	56-57	60-61	64-65	66	32
31	25	23-24	28-30	38-40	47-50	53-56	58-61	62-65	66-68	67-70	31
30	26		31	41-42	51	57	62-63	66-67	69-70	71	30
29	27-28	25-26	32-33	43-45	52-55	58-61	64-67	68-71	71-74	72-74	29
28		27	34	46-47	56-57	62-63	68-69	72-73	75-76	75-76	28
27	29-30	28-29	35-37	48-50	58-61	64-67	70-73	74-77	77-80	77-79	27
26	31	30	38	51	62	68-69	74-75	78-79	81	80-81	26
25	32-33	31	39-40	52-54	63-66	70-73	76-79	80-83	82-85	82-84	25
24		32	41	55-56	67-68	74-75	80-81	84-85	86-87	85-86	24
23	34-35	33-34	42-44	57-59	69-72	76-79	82-85	86-89	88-91	87-89	23
22	36	35	45	60-61	73	80-81	86-87	90-91	92-93	90-91	22
21	37	36	46-47	62-64	74-77	82-85	88-91	92-94	94	92-94	21
20	38	37	48	65	78-79	86-87	92-93				20
<20	39-94	38-94	49-94	66-94	80-94	88-94	94				<20

APPENDIX F (*continued*)

Education: ≥ 18 Years

T score	Age (years)									T score	
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84		
>80								0-3	0-10	0-19	>80
80										80	
79								4		79	
78										78	
77									11	77	
76										76	
75							0			75	
74								5		74	
73									12	73	
72										72	
71							1	6		71	
70										70	
69									13	69	
68	0						2			68	
67								7		67	
66									14	66	
65							3	8		65	
64						0			15	64	
63	1						4	9		63	
62						1			16	62	
61						2	5	10	17	61	
60							6	11		60	
59	2				0	3	7	12	18	59	
58					1	4				58	
57		0			2	5	8	13	19	57	
56	3			0			9	14	20	56	
55		1	0	1	3-4	6	10	15	21	55	
54						7	11	16	22	54	
53	4	2	1	2	5-6	8-9	12	17	23	53	
52				3			13	18	24	52	
51	5	3	2	4	7-8	10-11	14-15	19-20	25	51	
50			3	5	9	12	16	21	26	50	
49	6	4	4	6-7	10	13-14	17-18	22-23	27-28	49	
48	7				11	15	19		29	48	
47		5	5-6	8-9	12-13	16-17	20-21	24-26	30-31	47	
46	8	6			10	14	18	22	27	46	
45	9	7	7-8	11-12	15-16	19-20	23-24	28-29	33-34	45	
44				13	17	21	25-26	30	35	44	
43	10	8	9-10	14-15	18-20	22-24	27-28	31-33	36-38	43	
42	11	9	11	16	21	25	29-30	34	39	42	
41	12	10	12	17-18	22-24	26-28	31-32	35-37	40-42	41	
40	13	11	13	19	25	29	33-34	38-39	43	40	
39	14	12	14-15	20-21	26-28	30-32	35-37	40-42	44-46	39	
38	15	13	16	22-23	29	33-34	38-39	43	47	38	
37	16	14	17-18	24-25	30-32	35-37	40-42	44-47	48-51	37	
36	17	15	19	26-27	33-34	38-39	43-44	48	52	36	
35	18	16-17	20-21	28-29	35-37	40-42	45-47	49-52	53-56	35	
34	19		22	30-31	38-39	43-44	48-49	53-54	57	34	

(continued)

APPENDIX F (*continued*)

Education: ≥ 18 Years

T score	Age (years)										T score
	20-29	30-39	40-49	50-59	60-64	65-69	70-74	75-79	80-84	85-89	
33	20-21	18-19	23-24	32-34	40-42	45-48	50-53	55-57	58-61	61-63	33
32		20	25	35	43-44	49-50	54-55	58-59	62-63	64	32
31	22-23	21	26-28	36-38	45-47	51-53	56-59	60-63	64-66	65-67	31
30	24	22	29	39-40	48-49	54-55	60-61	64-65	67-68	68-69	30
29	25	23-24	30-31	41-43	50-53	56-59	62-65	66-69	69-72	70-72	29
28	26	25	32	44	54-55	60-61	66-67	70-71	73-74	73-74	28
27	27-28	26-27	33-35	45-48	56-58	62-65	68-71	72-75	75-77	75-77	27
26	29		36	49	59-60	66-67	72-73	76-77	78-79	78-79	26
25	30	28-29	37-38	50-52	61-64	68-71	75-77	78-81	80-83	80-82	25
24	31	30	39	53-54	65-66	72-73	78-79	82-83	84-85	83-84	24
23	32-33	31-32	40-42	55-57	67-69	74-77	80-83	84-87	86-89	85-87	23
22	34	33	43	58-59	70-71	78-79	84-85	88-89	90-91	88-89	22
21	35	34	44-45	60-62	72-75	80-83	86-89	90-93	92-94	90-92	21
20	36	35	46	63	76-77	84-85	90-91	94		93	20
<20	37-94	36-94	47-94	64-94	78-94	86-94	92-94			94	<20

Appendix G

RAW SCORE TO T-SCORE CONVERSIONS FOR THE GLOBAL DEFICIT SCORE (GDS)

APPENDIX G

Global Deficit raw score		Global Deficit T score
Lower bound	Upper bound	
4.3984	–	5.0000
4.2983	–	4.3983
4.1982	–	4.2982
4.0981	–	4.1981
3.9980	–	4.0980
3.8979	–	3.9979
3.7978	–	3.8978
3.6977	–	3.7977
3.5976	–	3.6976
3.4975	–	3.5975
3.3974	–	3.4974
3.2973	–	3.3973
3.1972	–	3.2972
3.0971	–	3.1971
2.9970	–	3.0970
2.8969	–	2.9969
2.7968	–	2.8968
2.6967	–	2.7967
2.5966	–	2.6966
2.4965	–	2.5965
2.3964	–	2.4964
2.2963	–	2.3963
2.1962	–	2.2962
2.0961	–	2.1961
1.9960	–	2.0960
1.8959	–	1.9959
1.7958	–	1.8958
1.6957	–	1.7957
1.5956	–	1.6956
1.4955	–	1.5955
1.3954	–	1.4954
1.2953	–	1.3953
1.1952	–	1.2952
1.0951	–	1.1951
0.9950	–	1.0950
0.8949	–	0.9949
0.7948	–	0.8948
0.6947	–	0.7947
0.5946	–	0.6946
0.4946	–	0.5945
0.3889	–	0.4945
0.3684	–	0.3888
0.3333	–	0.3683
0.3000	–	0.3332
0.2778	–	0.2999
0.2381	–	0.2777
0.2105	–	0.2380
0.2000	–	0.2104
0.1667	–	0.1999
0.1579	–	0.1666
0.1500	–	0.1578
0.1111	–	0.1499
0.1053	–	0.1110
0.1000	–	0.1052
0.0952	–	0.0999
0.0556	–	0.0951
0.0526	–	0.0555
0.0477	–	0.0525
0.0000	–	0.0476

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