

Variable Descriptions of Extant Dataset for
Abecedarian Project
and
Project Care

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FPG Child Development Center
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Subject Identifier

Variable Name	Type	Length	Variable Description	Values
SUBJECT	NUM	8	Unique ID variable. For convenience, subjects in similar treatment groups are assigned similar numbers. ABC subjects are numbered starting from 1001, and CARE subjects from 2001. To enhance confidentiality, the value of SUBJECT differs from the unique identifying variable (ID) used in the confidential database.	5000 +

Treatment Groups

Variable Name	Type	Length	Variable Description	Values
DC_TRT	NUM	3	Day Care (Preschool) Treatment Group	1=Treatment 0=Control
HV_TRT	NUM	3	Home Visit Treatment Group	1=Treatment 0=Control
SA_TRT	NUM	3	Schoolage Treatment Group	1=Treatment 0=Control . =Not assigned

The Abecedarian study randomized subjects into DAYCARE TREATMENT (treatment versus control) and SCHOOLAGE TREATMENT (treatment, control, and not assigned: subjects left study before receiving an assignment). These two factors are crossed, forming six groups in all. No Abecedarian subjects received Home Visits, so HV_TRT is always "0".

The CARE study randomized subjects into three groups:

DAYCARE TREATMENT plus HOME VISIT TREATMENT plus SCHOOLAGE TREATMENT,
HOME VISIT TREATMENT plus SCHOOLAGE TREATMENT,
and CONTROL (no treatment of any kind).

A note on the naming of variables across the timepoints: When the same instrument is used at more than one timepoint, that fact is reflected in the name of the variable itself. We used three conventions for coining such names. If the variable refers to a preschool period, then the age of the child in months is often part of the variable name (e.g., DAYCARE42). If the variable refers to something in the School Age years (abbreviated **SCYR** in SAS variable "labels"), the variable name reflects the grade level expected of a student making normal progress. Thus, School Year 1 is Kindergarten ("K"), School Year 2 is First Grade ("1"), and School Year 3 is Second Grade ("2"). For example, HOSTILE1 refers to First grade, which is School Year 2. This can be a source of confusion. Finally, variables referring to School Years 7 or, in Abecedarian, 10, usually have a suffix of "YR7" or "YR10" (e.g., IEPYR7).

Truncation of extreme values. To maintain confidentiality, outliers were truncated by replacing outliers with certain percentile points of the distribution. For variables in both studies, the values were truncated at the 2nd and 98th percentiles. For variables occurring in only one study, the values were truncated at the 5th and 95th percentiles.

Missing data codes. SAS datafiles permit "special missing codes" on numeric-type variables. In this dataset, only one variable (PST1RCAS) contains such a code, whose meaning is explained below.

Variable Name	Type	Length	Variable Description	Values
AGEENTRY	NUM	3	CHILD'S AGE IN WEEKS WHEN ENTERED PROGRAM	
APGAR5	NUM	3	APGAR SCORE-5 MIN	
DAYCAR42	NUM	4	NO. OF MONTHS IN DAY CARE @ 42 MOS	
DAYCAR54	NUM	4	NO. OF MONTHS IN DAY CARE @ 54 MOS	
FATHER0	NUM	3	FATHER LIVE IN HOME @ BIRTH	1=Yes 2=No
GESTAGE	NUM	3	GESTATION AGE IN WEEKS	Extremes truncated: 35 and below, 43 and higher
HH4SCORE	NUM	8	HOLLINGHEAD 4-FACTOR INDEX SCORE @ BIRTH	Extremes truncated: 11 and below, 29 and higher
HOSTILEK	NUM	8	CBI 42-SCALE HOSTILITY @ SCHOOL YEAR 1 (KINDERGARTEN) SPRING	
HOSTILE1	NUM	8	CBI 42-SCALE HOSTILITY @ SCHOOL YEAR 2 (1ST GRADE) SPRING	
HOSTILE2	NUM	8	CBI 42-SCALE HOSTILITY @ SCHOOL YEAR 3 (2ND GRADE) SPRING	
HRI0	NUM	3	HIGH RISK INDEX @ BIRTH	Extremes truncated: 13 and below, 32 and higher
HSTOT6	NUM	3	HOME STIMULATION TOTAL SCORE @6 MOS	See Notes on HOME STIMULATION instrument
HSTOT18	NUM	3	HOME STIMULATION TOTAL SCORE @18 MOS	
HSTOT30	NUM	3	HOME STIMULATION TOTAL SCORE @30 MOS	

Variable Name	Type	Length	Variable Description	Values
HSTOT42	NUM	8	HOME STIMULATION TOTAL SCORE @42 MOS	
HSTOT54	NUM	8	HOME STIMULATION TOTAL SCORE @54 MOS	
HSTOTY3	NUM	8	HOME STIMULATION TOTAL SCORE @ SCHOOL YEAR 3 (2ND GRADE)	
IEPYR7	NUM	8	HAS CHILD EVER RECEIVED IEP-BASED SPECIAL SERVICES IN STUDY YEARS 1 THROUGH 7 (KINDERGARTEN THROUGH GRADE 6 UNDER NORMAL PROGRESS). SUCH SERVICES ARE: SPEECH/LANGUAGE, LD, BEHAVIORAL, VISION, AND EDUCABLY MENTALLY HANDICAPPED.	1=YES 0=NO
IEPYR10	NUM	3	HAS CHILD EVER RECEIVED IEP-BASED SPECIAL SERVICES IN STUDY YEARS 1 THROUGH 10 (KINDERGARTEN THROUGH GRADE 9 UNDER NORMAL PROGRESS). SAME SERVICES AS LISTED ABOVE. ABECEDARIAN KIDS ONLY.	1=YES 0=NO
MC30VRB	NUM	3	MCCARTHY SCALE INDEX/VERBAL @30 MOS	
MC42GCI	NUM	5	MCCARTHY SCALE INDEX/GENERAL COGNITIVE @42 MOS	
MC42VRB	NUM	3	MCCARTHY SCALE INDEX/VERBAL @42 MOS	
MC54GCI	NUM	5	MCCARTHY SCALE INDEX/GENERAL COGNITIVE @54 MOS	
MC54VRB	NUM	3	MCCARTHY SCALE INDEX/VERBAL @54 MOS	
MDI12	NUM	8	BAYLEY MDI @12 MOS	
MDI18	NUM	8	BAYLEY MDI @18 MOS	
MDI3	NUM	3	BAYLEY MDI @3 MOS	
MDI6	NUM	8	BAYLEY MDI @6 MOS	
MDI9	NUM	3	BAYLEY MDI @9 MOS	
MINVOL18	NUM	3	HOME STIM/MATERNAL INVOLVEMENT W/CHILD @18 MOS	
MINVOL30	NUM	3	HOME STIM/MATERNAL INVOLVEMENT W/CHILD @30 MOS	
MINVOL6	NUM	8	HOME STIM/MATERNAL INVOLVEMENT W/CHILD @6 MOS	
MOMED0	NUM	3	MOTHER'S EDUCATION/LAST GRADE COMPLETED AT SUBJECT'S BIRTH	7=7 th grade or less 8=8 th grade 9=9 th 10=10 th 11=11 th 12=12 th 13=13 th or more

Variable Name	Type	Length	Variable Description	Values
MOMSAGE	NUM	3	MOTHER'S AGE, CATEGORIZED, AT BIRTH	1: 17 years or younger 2: 18 or 19 years 3: 20 or older
MOMWAIS0	NUM	3	BIOLOGICAL MOTHER'S WAIS FULL-SCALE SCORE AT SUBJECT'S BIRTH	
MPRFIQ0	NUM	5	BIOLOGICAL MOTHER'S WAIS PERFORMANCE IQ SCORE AT SUBJECT'S BIRTH	
MVRBIQ0	NUM	5	BIOLOGICAL MOTHER'S WAIS VERBAL IQ SCORE AT SUBJECT'S BIRTH	
MWARM18	NUM	3	HOME STIM/MATERNAL WARMTH @18 MOS	
MWARM30	NUM	3	HOME STIM/MATERNAL WARMTH @30 MOS	
MWARM6	NUM	3	HOME STIM/MATERNAL WARMTH @6 MOS	
OPPVAR18	NUM	3	HOME STIM/OPPORTUNITY FOR VARIETY @18 MOS	
OPPVAR30	NUM	3	HOME STIM/OPPORTUNITY FOR VARIETY @30 MOS	
OPPVAR6	NUM	3	HOME STIM/OPPORTUNITY FOR VARIETY @6 MOS	
ORGENV6	NUM	3	HOME STIM/ORGANIZATION OF ENVIRONMENT @6 MOS	
ORGENV18	NUM	3	HOME STIM/ORGANIZATION OF ENVIRONMENT @18 MOS	
ORGENV30	NUM	3	HOME STIM/ORGANIZATION OF ENVIRONMENT @30 MOS	
PRE1INAS	NUM	4	PIAT GENERAL INFORMATION AGE STD @ SCHOOL YEAR 2 (1ST GRADE) FALL	
PRE1TOAS	NUM	4	PIAT TOTAL TEST AGE STD @ SCHOOL YEAR 2 (1ST GRADE) FALL	
PST1INAS	NUM	4	PIAT GENERAL INFORMATION AGE STD @ SCHOOL YEAR 2 (1ST GRADE) SPRING	
PST1RCAS	NUM	4	PIAT READING COMPREHENSION AGE STD @ SCHOOL YEAR 2 (1ST GRADE) SPRING	NOTE: Special missing dot-G means that raw score was below minimum value for which Age Standardized score assigned.
PST1TOAS	NUM	4	PIAT TOTAL TEST AGE STD @ SCHOOL YEAR 2 (1ST GRADE) SPRING	
PSTKINAS	NUM	4	PIAT GENERAL INFORMATION AGE STD @ SCHOOL YEAR 1 (KINDERGARTEN) SPRING	
PSTKTOAS	NUM	4	PIAT TOTAL TEST AGE STD @ SCHOOL YEAR 1 (KINDERGARTEN) SPRING	

Variable Name	Type	Length	Variable Description	Values
RETNYR7	NUM	8	HAS CHILD EVER BEEN RETAINED IN SCHOOL, STUDY YEARS 1 THROUGH 7 (KINDERGARTEN THROUGH GRADE 6 IF NORMAL PROGRESS)? DATA IS AVAILABLE FOR BOTH ABECEDARIAN AND CARE STUDY SUBJECTS. SUBJECTS WHO WERE MARKED FOR RETENTION IN ONE YEAR, BUT WHO NEVERTHELESS CONTINUED TO THE NEXT GRADE LEVEL, POSSIBLY IN ANOTHER SCHOOL DISTRICT, ARE <u>NOT</u> COUNTED AS RETAINED. NOTE: NO SUBJECTS IN THE ABECEDARIAN STUDY WERE RETAINED FOR GRADE 6 ALONE, SO THIS VARIABLE MEANS THE SAME THING FOR BOTH ABC AND CARE SUBJECTS.	1=Yes 0=No
RETNYR10	NUM	3	HAS CHILD EVER BEEN RETAINED IN SCHOOL, STUDY YEARS 1 THROUGH 10 (KINDERGARTEN THROUGH GRADE 9 IF NORMAL PROGRESS)? DATA IS AVAILABLE ON ONLY ABECEDARIAN STUDY SUBJECTS.	1=Yes 0=No
SBIQ24	NUM	3	STANFORD BINET IQ SCORE @24 MOS	
SBIQ36	NUM	5	STANFORD BINET IQ SCORE @36 MOS	
SBIQ48	NUM	5	STANFORD BINET IQ SCORE @48 MOS	
SEX	CHAR	1	GENDER OF CHILD	M=Male F=Female
STUDY	CHAR	4	OF WHICH STUDY WAS THIS SUBJECT ENROLLED?	ABC=Abecedarian or CARE
WISCR10	NUM	8	WISCR-REVISED FULL SCALE IQ SCORE @ SCHOOL YEAR 10	
WISCR10P	NUM	8	WISCR-REVISED PERFORMANCE IQ SCORE @ SCHOOL YEAR 10	
WISCR10V	NUM	8	WISCR-REVISED VERBAL IQ SCORE @ SCHOOL YEAR 10	
WISCR78	NUM	4	WISCR-REVISED FULL SCALE SCORE @78 MOS	
WISCR78P	NUM	4	WISCR-REVISED PERFORMANCE @78 MOS	
WISCR78V	NUM	4	WISCR-REVISED VERBAL @78 MOS	
WISCR96	NUM	4	WISCR-REVISED FULL SCALE SCORE @96 MOS	
WISCR96P	NUM	4	WISCR-REVISED PERFORMANCE @96 MOS	
WISCR96V	NUM	4	WISCR-REVISED VERBAL @96 MOS	
WISCRY7	NUM	8	WISCR-REVISED FULL SCALE IQ SCORE @ SCHOOL YEAR 7	
WISCRY7P	NUM	8	WISCR-REVISED PERFORMANCE IQ SCORE @ SCHOOL YEAR 7	
WISCRY7V	NUM	8	WISCR-REVISED VERBAL IQ SCORE @ SCHOOL YEAR 7	

Variable Name	Type	Length	Variable Description	Values
WJ10ZAFS	NUM	8	WOODCOCK-JOHNSON AGE STAND. SCORE: FULL-SCALE BROAD COGNITIVE ABILITY @ SCHOOL YEAR 10	
WJ10ZAKN	NUM	8	WOODCOCK-JOHNSON AGE STAND. SCORE-KNOWLEDGE @ SCHOOL YEAR 10	
WJ10ZAMA	NUM	8	WOODCOCK-JOHNSON AGE STAND. SCORE-MATH @ SCHOOL YEAR 10	
WJ10ZARD	NUM	8	WOODCOCK-JOHNSON AGE STAND. SCORE-READING @ SCHOOL YEAR 10	
WJ10ZAVA	NUM	8	WOODCOCK-JOHNSON AGE STAND. SCORE-VERBAL ABILITY @ SCHOOL YEAR 10	
WJ2FZAKN	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--KNOWLEDGE @ SCHOOL YEAR 2 (1ST GRADE) FALL	
WJ2FZAMA	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--MATH @ SCHOOL YEAR 2 (1ST GRADE) FALL	
WJ2FZARD	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--READING @ SCHOOL YEAR 2 (1ST GRADE) FALL	
WJ2FZASK	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--SKILLS @ SCHOOL YEAR 2 (1ST GRADE) FALL	
WJ2FZAWL	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--WRITTEN LANG @ SCHOOL YEAR 2 (1ST GRADE) FALL	
WJ2SZAKN	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--KNOWLEDGE @ SCHOOL YEAR 2 (1ST GRADE) SPRING	
WJ2SZAMA	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--MATH @ SCHOOL YEAR 2 (1ST GRADE) SPRING	
WJ2SZARD	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--READING @ SCHOOL YEAR 2 (1ST GRADE) SPRING	
WJ2SZASK	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--SKILLS @ SCHOOL YEAR 2 (1ST GRADE) SPRING	
WJ2SZAWL	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--WRITTEN LANG @ SCHOOL YEAR 2 (1ST GRADE) SPRING	
WJ3FZAKN	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--KNOWLEDGE @ SCHOOL YEAR 3 (2ND GRADE) FALL	
WJ3FZAMA	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--MATH @ SCHOOL YEAR 3 (2ND GRADE) FALL	
WJ3FZARD	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--READING @ SCHOOL YEAR 3 (2ND GRADE) FALL	

Variable Name	Type	Length	Variable Description	Values
WJ3FZASK	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--SKILLS @ SCHOOL YEAR 3 (2ND GRADE) FALL	
WJ3FZAWL	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--WRITTEN LANG @ SCHOOL YEAR 3 (2ND GRADE) FALL	
WJ3SZAKN	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--KNOWLEDGE @ SCHOOL YEAR 3 (2ND GRADE) SPRING	
WJ3SZAMA	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--MATH @ SCHOOL YEAR 3 (2ND GRADE) SPRING	
WJ3SZARD	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--READING @ SCHOOL YEAR 3 (2ND GRADE) SPRING	
WJ3SZASK	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--SKILLS @ SCHOOL YEAR 3 (2ND GRADE) SPRING	
WJ3SZAWL	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--WRITTEN LANG @ SCHOOL YEAR 3 (2ND GRADE) SPRING	
WJ7ZAKN	NUM	3	WOODCOCK-JOHNSON AGE STANDARD SCORE - KNOWLEDGE @ SCHOOL YEAR 7	
WJ7ZAMA	NUM	3	WOODCOCK-JOHNSON AGE STANDARD SCORE - MATH @ SCHOOL YEAR 7	
WJ7ZARD	NUM	3	WOODCOCK-JOHNSON AGE STANDARD SCORE - READING @ SCHOOL YEAR 7	
WJ7ZASK	NUM	3	WOODCOCK-JOHNSON AGE STANDARD SCORE - SKILLS @ SCHOOL YEAR 7	
WJ7ZAWL	NUM	3	WOODCOCK-JOHNSON AGE STANDARD SCORE - WRITTEN LANG @ SCHOOL YEAR 7	
WJKFZAKN	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--KNOWLEDGE @ SCHOOL YEAR 1 (KINDERGARTEN) FALL	
WJKFZAMA	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--MATH @ SCHOOL YEAR 1 (KINDERGARTEN) FALL	
WJKFZARD	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--READING @ SCHOOL YEAR 1 (KINDERGARTEN) FALL	
WJKFZASK	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--SKILLS @ SCHOOL YEAR 1 (KINDERGARTEN) FALL	
WJKFZAWL	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--WRITTEN LANG @ SCHOOL YEAR 1 (KINDERGARTEN) FALL	
WJKSZAKN	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--KNOWLEDGE @ SCHOOL YEAR 1 (KINDERGARTEN) SPRING	
WJKSZAMA	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--MATH @ SCHOOL YEAR 1 (KINDERGARTEN) SPRING	

Variable Name	Type	Length	Variable Description	Values
WJKSZARD	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--READING @ SCHOOL YEAR 1 (KINDERGARTEN) SPRING	
WJKSZASK	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--SKILLS @ SCHOOL YEAR 1 (KINDERGARTEN) SPRING	
WJKSZAWL	NUM	4	WOODCOCK-JOHNSON AGE STANDARD SCORE--WRITTEN LANG @ SCHOOL YEAR 1 (KINDERGARTEN) SPRING	
WPPSI60	NUM	4	WPPSI IQ SCORE @60 MOS	
WPPSI60P	NUM	4	WPPSI PERFORMANCE IQ SCORE @60 MOS	
WPPSI60V	NUM	4	WPPSI VERBAL IQ SCORE @60 MOS	

Appendices

Appendix I: Overview of the Abecedarian Project and PROJECT CARE

Appendix II: Information about the Home Stimulation Instrument

Appendix IIIA: Descriptive Statistics on Categorical Variables

Appendix IIIB: Descriptive Statistics on Continuous Variables

Appendix IV: Print of First and Last Observations in Dataset

Appendix I: Overview of the Abecedarian Project and PROJECT CARE

Participants

Children living in or near a Southeastern university town who were determined to be "at risk" for school failure due to socioeconomic factors were recruited to participate in two consecutive longitudinal studies on the effectiveness of early intervention: the Abecedarian Project (Ramey & Campbell, 1991) and a related study, Project CARE (Wasik, Ramey, Bryant, & Sparling, 1990).

Intervention Studies

Children were enrolled in one of two sequential studies, the Abecedarian Project or Project CARE. In both projects, children were randomly assigned to treatment or control groups during the first 3 months of life and followed longitudinally. Both studies were conducted in the same community and in the same university-affiliated child development center; they used comparable criteria to determine eligibility for participation (High Risk Index: Ramey & Smith, 1977); and provided similar child care and school-aged treatments. Both studies included an intensive preschool intervention in a child care setting and a family-based school-aged intervention. Project CARE, however, also included a family-based intervention from infancy to school-age.

The Abecedarian Project recruited children born between 1972 and 1977. At entry to school, half of the children within each of the two randomized preschool groups were randomly assigned to receive a home-school resource teacher program during the first three years of elementary school (see Campbell & Ramey, 1994 for more details). Children recruited for Project CARE (Carolina Approach to Responsive Education) were born between 1978 and 1980 and randomly assigned to one of three treatment groups: child care plus home visits, home visits only, or control (see Wasik et al., 1990 for more details). All CARE children assigned to either the child care plus home visit or home visit only groups also received the home-school resource teacher treatment during the first three years of elementary school.

Essentially, three educational treatments were provided: educational child care from six weeks to school entry, home visit from six weeks to school entry, and home school resource services during the child's first three years of school. They varied in terms of intensity and orientation. The child care treatment was essentially child-centered, offered the most intensive exposure to education. The home visit and home-school treatments were less intensive and were family-oriented, emphasizing the role of the parent as a change agent in the child's development.

The child care treatment involved attending the child care at the child development center from infancy until entry to kindergarten. Children attended 6-8 hours a day, 12 months a year. The center maintained the NAEYC recommended caregiver-staff ratios (i.e., 1:3 for infants and toddlers, 1:4 for 2 year-olds, 1:6 for 3-5 year-olds), provided regular in-service training for staff members, and had a specified curriculum (viz., Learninggames; Sparling & Lewis, 1979, 1984). The curriculum was designed to provide a stable, predictable, intellectually stimulating environment to enhance cognitive, social, and emotional development in low income children. Teacher education varied from high school to masters level, and all teachers attended semi-annual in-service training.

The preschool home visit treatment involved home visitors who delivered an educational curriculum in the home. The home visitors' educational background ranged from high school to masters level educators and social workers. Home visitors encouraged and modeled positive parent-child interactions, provided the family with support, served as an advocate for the family, and promoted effective coping skills. The home visitors also used the Learninggames curriculum (Sparling & Lewis, 1979, 1984) and a problem solving approach. They demonstrated and described developmentally appropriate activities and helped the family identify home materials suitable for such activities. The problem solving curriculum (Wasik, Bryant & Lyons, 1990) involved semi-structured discussions between the home visitors and the parents regarding ongoing concerns and ways that the parents could use problem-solving strategies to deal with them. Home visits were scheduled weekly during the child's first three years and at a schedule chosen by the parents for the child's fourth and fifth year.

School-age intervention involved having a resource teacher who worked between home and school to show parents how to supplement the child's regular education in the classroom. The program was provided for the first three years the child was in public school. Resource teachers created for each target child individualized educational activities, based on the child's current needs as identified by the classroom teacher. These activities were then delivered to the family to be used with the child at home. The goal was to reinforce the child's learning of basic reading and mathematics concepts by fostering parent involvement in the educational process. The resource teacher visited the homes and classrooms on alternative weeks, more often if necessary.

Measures.

Maternal measures. Demographic characteristics and maternal IQ (Wechsler Adult Intelligence Scale; Wechsler, 1955; and the WISC-R; Wechsler, 1974 for the few very young mothers) were obtained at entry to the study. Marital status, maternal and paternal age, education, and family socio-economic status were recorded during an entry interview. Similar questions were asked during annual interviews for the child's first five years.

Quality of the family environment. The responsiveness and educational stimulation of the family environment were assessed annually from 6 to 54 months and at 84 months with the Home Observation for Measurement of the Environment (HOME; Caldwell & Bradley, 1979). The three versions of the HOME (infant, preschool, and school-aged) were used with all families.

Cognitive assessments All children were assessed with an age-appropriate, standardized, individually-administered, intelligence and achievement test between the ages of 6 months and twelve years, and an additional follow-up assessment at 15 years was conducted for the Abecedarian Project, but not Project Care. The cognitive assessments include the Bayley Scales of Infant Development (Bayley, 1969) at 3, 6, 9, 12, and 18 months; the Stanford Binet (Terman & Merrill, 1972) at 24, 36, and 48 months; the McCarthy Scales of Children's Abilities (McCarthy, 1972) at 30, 42 and 54 months; the Wechsler Preschool and Primary Scale of Intelligence (WPPSI; Wechsler, 1967) at 60 months; and the Wechsler Intelligence Scale for Children-Revised

(WISC-R; Wechsler, 1974) at 6.5, 8, 12, and 15 years. Some of the tests were administered in only one study for a particular age. These include the MDI at 3 and 9 months and WISC-R at 15 years (Abecedarian only).

Academic Achievement. Achievement was measured with individually administered achievement test. The PIAT (ref) was administered in the fall and spring of first two years of public school (Kindergarten and first grade if the child was at grade level both years) for the Abecedarian Project. The Woodcock-Johnson (ref) was administered in the fall and spring the Abecedarian child's third year of school, and in the summer following their seventh and tenth years of school, and in the fall and spring of the Project Care child's first three years of school and in the summer following their seventh year of school.

Appendix II: Information about the Home Stimulation Instrument

HOME STIMULATION, given at 6, 18, 30, 42 and 54 months and Endpoint

This instrument measures the intellectual stimulation and care provided in the child's home environment. There are three versions of this instrument:

- a 45-item version, given at 6, 18 and 30 months,
- an 80-item version, given at 42 and 54 months,
- an 85-item version, given at Endpoint.

Although the codebook lists the possible values for each item as 1 (Yes), 2 (No) or 3 (No info), 3's were not used; no information is simply missing.

From the items, a total score and several subscales were derived, varying as to which version was used. For all three versions, all subscales and total scores are derived by summing the variables that comprise them with a value of 1.

For the version given at 6, 18 and 30 months ¹:

45 items

Total score	HSTOTx	sum of all items, excluding 11 and 19
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For the version given at 42 and 54 months:

89 items

Total score	HSTOTx	sum of all items
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For the Endpoint version:

85 items

Total score	HSEPTOT	sum of all items
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¹ Items 11 and 19 were not used in the derivation of the subscales or the total score.

Appendix IIIA: Descriptive Statistics--Frequencies of Categorical Variables

There are 176 subjects in the datafile. The following tables show their distributions over the demographic variables and the measures.

Gender of child (M=Male F=Female)				
SEX	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	84	47.73	84	47.73
M	92	52.27	176	100.00

NO. OF MONTHS IN DAY CARE @ 42 MOS				
DAYCAR42	Frequency	Percent	Cumulative Frequency	Cumulative Percent
.	22	12.50	22	12.50
0	30	17.05	52	29.55
1	4	2.27	56	31.82
3	5	2.84	61	34.66
4	1	0.57	62	35.23
6	7	3.98	69	39.20
7	1	0.57	70	39.77
8	4	2.27	74	42.05
9	3	1.70	77	43.75
10	1	0.57	78	44.32
12	98	55.68	176	100.00

NO. OF MONTHS IN DAY CARE @ 54 MOS				
DAYCAR54	Frequency	Percent	Cumulative Frequency	Cumulative Percent
.	26	14.77	26	14.77
0	23	13.07	49	27.84
2	2	1.14	51	28.98
4	2	1.14	53	30.11
7	1	0.57	54	30.68
8	2	1.14	56	31.82
9	4	2.27	60	34.09
10	1	0.57	61	34.66
11	1	0.57	62	35.23
12	114	64.77	176	100.00

FATHER LIVE IN HOME @ BIRTH				
FATHER0	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	46	26.14	46	26.14
2	130	73.86	176	100.00

Appendix IIIB: Descriptive Statistics--Means of Continuous Variables

	Mean	Std Dev	N		10th %	50th %	90th %
			ABC	CARE			
CHILD'S AGE IN WEEKS WHEN ENTERED PROGRAM	7.91	5.47	110	64	1.00	6.50	17.00
APGAR SCORE-5 MIN	8.92	0.89	97	60	8.00	9.00	10.00
CBI 42-SCALE HOSTILITY @ SCYR 1 SPRING	8.31	3.24	89	54	4.00	8.00	13.00
CBI 42-SCALE HOSTILITY @ SCYR 2 SPRING	9.12	3.24	84	59	5.00	9.00	14.00
CBI 42-SCALE HOSTILITY @ SCYR 3 SPRING	8.88	3.55	87	61	4.00	9.00	14.00
GESTATION AGE IN WEEKS	39.60	2.13	102	64	36.00	40.00	42.00
HOLLINGHEAD 4-FACTOR INDEX SCORE @ BIRTH	19.44	5.56	75	58	13.00	19.00	29.00
HIGH RISK INDEX @ BIRTH	20.53	5.37	109	65	15.00	19.50	29.00
HOME STIMULATION TOTAL SCORE @18 MOS	29.80	5.75	99	61	21.00	30.50	37.00
HOME STIMULATION TOTAL SCORE @30 MOS	30.20	5.63	97	61	22.00	30.00	37.00
HOME STIMULATION TOTAL SCORE @42 MOS	56.47	9.31	96	59	43.00	58.00	67.00
HOME STIMULATION TOTAL SCORE @54 MOS	59.01	9.06	90	59	46.00	62.00	69.00
HOME STIMULATION TOTAL SCORE @6 MOS	27.68	5.41	105	62	21.00	28.00	35.00
HOME STIMULATION TOTAL SCORE @ SCYR 3	66.42	7.54	85	26	57.00	67.00	77.00
MCCARTHY SCALE INDEX/VERBAL @30 MOS	48.11	8.47	98	62	36.50	48.00	59.00
MCCARTHY SCALE INDEX/GENERAL COGNITIVE @42 MOS	97.92	12.39	97	60	81.00	99.00	114.00
MCCARTHY SCALE INDEX/VERBAL @42 MOS	49.89	7.33	97	60	39.00	50.00	60.00
MCCARTHY SCALE INDEX/GENERAL COGNITIVE @54 MOS	95.85	12.56	95	60	78.00	96.00	111.00
MCCARTHY SCALE INDEX/VERBAL @54 MOS	50.56	8.69	95	60	38.00	52.00	62.00
BAYLEY MDI @12 MOS	109.47	14.15	104	63	91.00	112.00	128.00
BAYLEY MDI @18 MOS	100.59	15.76	100	62	81.00	100.00	123.00
BAYLEY MDI @3 MOS	95.27	10.93	107	0	82.00	96.00	110.00
BAYLEY MDI @6 MOS	105.30	14.87	106	63	89.00	102.00	124.00
BAYLEY MDI @9 MOS	109.81	13.40	104	0	93.00	112.50	126.00
HOME STIM/MATERNAL INVOLVEMENT W/CHILD @18 MOS	3.38	1.59	99	61	1.00	3.00	5.50
HOME STIM/MATERNAL INVOLVEMENT W/CHILD @30 MOS	3.40	1.65	98	61	1.00	4.00	6.00
HOME STIM/MATERNAL INVOLVEMENT W/CHILD @6 MOS	3.40	1.49	105	63	2.00	3.00	5.00
BIO MOTHER'S WAIS FULL-SCALE SCORE @BIRTH	85.68	10.30	111	65	73.00	85.00	98.00
BIO MOTHER'S WAIS PERFORMANCE IQ SCORE AT SUBJECT'S BIRTH	88.20	11.00	111	65	73.00	89.00	102.00
BIO MOTHER'S WAIS VERBAL IQ SCORE AT SUBJECT'S BIRTH	85.48	10.59	111	65	72.00	85.00	101.00
HOME STIM/MATERNAL WARMTH @18 MOS	7.41	2.13	99	61	4.00	8.00	10.00
HOME STIM/MATERNAL WARMTH @30 MOS	7.35	1.69	97	61	5.00	8.00	9.00

	Mean	Std Dev	N		10th %	50th %	90th %
			ABC	CARE			
HOME STIM/MATERNAL WARMTH @6 MOS	7.01	2.14	105	62	4.00	7.00	10.00
HOME STIM/OPPORTUNITY FOR VARIETY @18 MOS	2.74	1.28	99	61	1.00	3.00	5.00
HOME STIM/OPPORTUNITY FOR VARIETY @30 MOS	3.01	1.22	98	61	1.00	3.00	5.00
HOME STIM/OPPORTUNITY FOR VARIETY @6 MOS	1.97	0.87	105	63	1.00	2.00	3.00
HOME STIM/ORGANIZATION OF ENVIRONMENT @18 MOS	5.18	0.89	99	61	4.00	5.00	6.00
HOME STIM/ORGANIZATION OF ENVIRONMENT @30 MOS	5.30	0.89	98	61	4.00	6.00	6.00
PIAT GENERAL INFORMATION AGE STD @ SCYR 2 FALL	97.38	11.06	90	0	82.50	97.00	113.50
PIAT TOTAL TEST AGE STD @ SCYR 2 FALL	95.29	6.56	90	0	85.50	96.00	105.00
PIAT GENERAL INFORMATION AGE STD @ SCYR 2 SPRING	99.64	9.80	91	0	87.00	98.00	114.00
PIAT TOTAL TEST AGE STD @ SCYR 2 SPRING	97.44	8.31	91	0	87.00	98.00	107.00
PIAT GENERAL INFORMATION AGE STD @ SCYR 1 SPRING	97.26	11.26	91	0	82.00	100.00	111.00
PIAT TOTAL TEST AGE STD @ SCYR 1 SPRING	98.04	7.51	90	0	87.50	99.00	107.00
STANFORD BINET IQ SCORE @24 MOS	90.35	12.31	99	63	75.00	88.00	108.00
STANFORD BINET IQ SCORE @36 MOS	93.21	14.91	98	61	72.00	93.00	113.00
STANFORD BINET IQ SCORE @48 MOS	94.78	12.10	97	61	78.00	96.00	110.00
WISC-R FULL SCALE IQ SCORE @ SCYR 10	93.23	10.30	104	0	80.00	91.00	106.00
WISC-R PERFORMANCE IQ SCORE @ SCYR 10	98.51	12.40	104	0	82.00	100.00	117.00
WISC-R VERBAL IQ SCORE @ SCYR 10	89.50	10.30	104	0	75.00	90.00	102.00
WISC-R FULL SCALE SCORE @78 MOS	96.04	12.34	91	59	78.00	97.00	109.50
WISC-R PERFORMANCE @78 MOS	95.50	14.91	91	59	76.00	96.00	113.00
WISC-R VERBAL @78 MOS	95.42	13.09	91	59	79.00	97.50	108.50
WISC-R FULL SCALE SCORE @96 MOS	94.78	12.25	91	59	81.00	96.00	109.50
WISC-R PERFORMANCE @96 MOS	97.07	12.59	91	59	81.00	96.00	112.00
WISC-R VERBAL @96 MOS	93.80	12.71	91	59	78.50	94.50	109.00
WISC-R FULL SCALE IQ SCORE @ SCYR 7	92.70	10.59	101	61	79.00	92.00	108.00
WISC-R PERFORMANCE IQ SCORE @ SCYR 7	95.16	12.28	101	61	80.00	95.00	114.00
WISC-R VERBAL IQ SCORE @ SCYR 7	91.98	10.89	101	61	77.00	92.00	107.00
W-J AGE STAND. SCORE-FULL-SCALE BROAD COGNITIVE ABILITY @ SCYR 10	93.09	10.45	104	0	79.00	92.00	107.00
W-J AGE STAND. SCORE-KNOWLEDGE @ SCYR 10	89.76	9.22	103	0	77.00	90.00	102.00
W-J AGE STAND. SCORE-MATH @ SCYR 10	90.35	11.84	104	0	73.00	90.00	107.00
W-J AGE STAND. SCORE-READING @ SCYR 10	91.53	10.40	104	0	81.00	90.00	105.00
W-J AGE STAND. SCORE-VERBAL ABILITY @ SCYR 10	90.72	11.14	104	0	77.00	91.00	105.00
W-J AGE STANDARD SCORE--KNOWLEDGE @ SCYR 2 FALL	94.25	10.56	0	59	81.00	94.00	105.00
W-J AGE STANDARD SCORE--MATH @ SCYR 2 FALL	93.12	14.07	0	59	77.00	90.00	114.00

	Mean	Std Dev	N		10th %	50th %	90th %
			ABC	CARE			
W-J AGE STANDARD SCORE--READING @ SCYR 2 FALL	95.63	14.64	0	59	75.00	95.00	118.00
W-J AGE STANDARD SCORE--SKILLS @ SCYR 2 FALL	95.46	12.45	0	59	79.00	95.00	118.00
W-J AGE STANDARD SCORE--WRITTEN LANG @ SCYR 2 FALL	93.93	10.42	0	59	79.00	96.00	109.00
W-J AGE STANDARD SCORE--KNOWLEDGE @ SCYR 2 SPRING	95.58	10.30	0	60	83.00	93.00	111.00
W-J AGE STANDARD SCORE--MATH @ SCYR 2 SPRING	99.73	16.26	0	60	76.00	102.50	119.00
W-J AGE STANDARD SCORE--READING @ SCYR 2 SPRING	96.63	15.27	0	60	75.00	95.50	121.00
W-J AGE STANDARD SCORE--SKILLS @ SCYR 2 SPRING	98.13	13.54	0	60	79.50	97.00	118.00
W-J AGE STANDARD SCORE--WRITTEN LANG @ SCYR 2 SPRING	98.54	14.01	0	60	82.00	97.50	119.00
W-J AGE STANDARD SCORE--KNOWLEDGE @ SCYR 3 FALL	94.16	11.06	0	61	80.00	92.00	110.00
W-J AGE STANDARD SCORE--MATH @ SCYR 3 FALL	92.41	13.04	86	61	75.00	94.00	109.00
W-J AGE STANDARD SCORE--READING @ SCYR 3 FALL	89.41	14.55	82	61	69.00	90.00	108.00
W-J AGE STANDARD SCORE--SKILLS @ SCYR 3 FALL	90.33	13.51	86	61	74.00	90.00	108.00
W-J AGE STANDARD SCORE--WRITTEN LANG @ SCYR 3 FALL	96.98	15.58	0	61	79.00	95.00	118.00
W-J AGE STANDARD SCORE--KNOWLEDGE @ SCYR 3 SPRING	94.26	12.97	0	61	79.00	91.00	110.00
W-J AGE STANDARD SCORE--MATH @ SCYR 3 SPRING	95.52	14.39	88	61	77.00	95.00	115.00
W-J AGE STANDARD SCORE--READING @ SCYR 3 SPRING	91.07	13.39	87	61	72.00	91.00	111.00
W-J AGE STANDARD SCORE--SKILLS @ SCYR 3 SPRING	92.34	13.56	88	61	74.00	90.00	111.00
W-J AGE STANDARD SCORE--WRITTEN LANG @ SCYR 3 SPRING	99.30	16.19	0	61	78.00	101.00	120.00
W-J AGE STANDARD SCORE - KNOWLEDGE @ SCYR 7	91.41	12.07	101	61	75.00	92.00	106.00
W-J AGE STANDARD SCORE - MATH @ SCYR 7	90.17	12.52	101	61	72.00	91.00	106.00
W-J AGE STANDARD SCORE - READING @ SCYR 7	88.68	12.64	101	61	74.00	88.50	104.00
W-J AGE STANDARD SCORE - SKILLS @ SCYR 7	91.19	13.90	101	61	74.00	90.00	111.00
W-J AGE STANDARD SCORE - WRITTEN LANG @ SCYR 7	93.36	14.38	101	61	77.00	92.00	112.00
W-J AGE STANDARD SCORE--KNOWLEDGE @ SCYR 1 FALL	90.12	10.66	0	58	75.00	88.50	107.00
W-J AGE STANDARD SCORE--MATH @ SCYR 1 FALL	92.10	8.20	0	58	81.00	90.50	104.00
W-J AGE STANDARD SCORE--READING @ SCYR 1 FALL	96.40	10.55	0	58	81.00	95.00	110.00
W-J AGE STANDARD SCORE--SKILLS @ SCYR 1 FALL	93.78	15.83	0	58	67.00	96.50	116.00
W-J AGE STANDARD SCORE--WRITTEN LANG @ SCYR 1 FALL	98.40	16.45	0	58	70.00	99.00	118.00
W-J AGE STANDARD SCORE--KNOWLEDGE @ SCYR 1 SPRING	94.63	11.19	0	59	78.00	95.00	110.00
W-J AGE STANDARD SCORE--MATH @ SCYR 1 SPRING	94.07	14.38	0	59	79.00	89.00	118.00
W-J AGE STANDARD SCORE--READING @ SCYR 1 SPRING	99.41	11.12	0	59	84.00	100.00	114.00
W-J AGE STANDARD SCORE--SKILLS @ SCYR 1 SPRING	100.49	11.30	0	59	86.00	101.00	120.00
W-J AGE STANDARD SCORE--WRITTEN LANG @ SCYR 1 SPRING	100.85	10.88	0	59	86.00	103.00	118.00
WPPSI IQ SCORE @60 MOS	97.62	12.89	95	59	79.00	97.00	114.00

	Mean	Std Dev	N		10th %	50th %	90th %
			ABC	CARE			
WPPSI PERFORMANCE IQ SCORE @60 MOS	99.14	12.65	95	59	82.00	99.00	115.00
WPPSI VERBAL IQ SCORE @60 MOS	96.82	12.80	95	59	79.00	96.00	115.00

Appendix IV: Print of first and last observations in the datafile ARC010

[illegible]

S U B J E C T	H S T O T 1 8	H S T O T 3 0	H S T O T 4 2	H S T O T 5 4	H S T O T T Y 3		M D I 3	M D I 9	M D I 6	M D I 2	M D I 8	S B I Q 2 4	S B I Q 3 6	S B I Q 4 8	M C 3 0 V R B	M C 4 2 G C I	M C 4 2 V R B	M C 5 4 G C I	M C 5 4 V R B	W P P S I 6 0	W P P S I 6 0	W I S C R 7 8	W I S C R 7 8	W I S C R 9 6	W I S C R 9 6	
5001	23	.	.	.	.	88	120	107	106	88	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6216	30	18	63	61	.	.	.	107	131	123	104	108	88	51	113	61	95	50	95	94	97	98	100	96	87	90

SUBJECT	WISCR96P	WISCR97Y	WISCR97V	WISCR97P	WISCR910	WISCR910V	WISCR910P	WJKFZARD	WJKFZAMA	WJKFZAWL	WJKFZAKN	WJKFZASK	WJKSZARD	WJKSZAMA	WJKSZAWL	WJKSZAKN	WJKSZASK	WJ2FZARD	WJ2FZAMA	WJ2FZAWL	WJ2FZAKN	WJ2FZASK	WJ2SZARD	WJ2SZAMA	WJ2SZAWL	WJ2SZAKN	WJ2SZASK
5001	.85	80	92	82	80	87	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6216	86	83	96	72	.	.	.	95	88	95	96	101	116	95	100	95	108	101	91	84	96	90	97	91	89	99	94

[illegible]