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Development, Reliability, and Validity of a Dissociation Scale

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Dissociation is a lack of the normal integration of thoughts, feelings, and experiences into the stream of consciousness and memory. Dissociation occurs to some degree in normal individuals and is thought to be more prevalent in persons with major mental illnesses. The Dissociative Experiences Scale (DES) has been developed to offer a means of reliably measuring dissociation in normal and clinical populations. Scale items were developed using clinical data and interviews, scales involving memory loss, and consultations with experts in dissociation. Pilot testing was performed to refine the wording and format of the scale. The scale is a 28-item self-report questionnaire. Subjects were asked to make slashes on 100-mm lines to indicate where they fall on a continuum for each question. In addition, demographic information (age, sex, occupation, and level of education) was collected so that the connection between these variables and scale scores could be examined. The mean of all item scores ranges from 0 to 100 and is called the DES score. The scale was administered to between 10 and 39 subjects in each of the following populations: normal adults, late adolescent college students, and persons suffering from alcoholism, agoraphobia, phobic-anxious disorders, posttraumatic stress disorder, schizophrenia, and multiple personality disorder. Reliability testing of the scale showed that the scale had good test-retest and good split-half reliability. Item-scale score correlations were all significant, indicating good internal consistency and construct validity. A Kruskal-Wallis test and post hoc comparisons of the scores of the eight populations provided evidence of the scale's criterion-referenced validity. The scale was able to distinguish between subjects with a dissociative disorder (multiple personality) and all other subjects.

Dissociation is increasingly being recognized both as a normal process and as a psychophysiological mechanism that plays a major role in the psychopathology of a number of mental disorders. The creation of the dissociative disorders category in the DSM-III (American Psychiatric Association [APA], 1980), together with other developments in psychiatry, has recently led to an increased interest in the nature of dissociation and its role in specific symptoms and syndromes.

The DSM-III identifies five dissociative disorders: a) psychogenic amnesia, b) psychogenic fugue states, c) depersonalization syndrome, d) multiple personality disorder, and e) atypical dissociative disorder (APA, 1980). Additional forms of dissociative phenonema such as hypnoid states, abreactions, possession syndromes, the Ganser syndrome, and out-of-body experiences have been described in the clinical literature for well over 100 years (Cocores *et al.*, 1984; Ellenberger, 1970; Putnam, 1985).

The contribution of dissociation to the psychopathology of other psychiatric conditions such as posttraumatic stress disorder (Blank, 1985; Bliss, 1983; Gelinas, 1984; Kolb, 1985), eating disorders (Pettinati *et al.*,1985), and phobic disorders (Frankel and Orne, 1976) has been recently documented. Dissociative symptoms, primarily feelings of depersonalization and/or derealization, are common in psychiatric patients as a group, irrespective of diagnosis (Brauer *et al.*, 1970; Cattell, 1972; Fliess *et al.*, 1975; Tucker *et al.*, 1973).

A strong linkage between the development of dissociative symptoms and traumatic experiences has been documented to occur after a wide variety of traumatic situations (Putnam, 1985). Mild transient feelings of depersonalization and derealization appear also to be a normal experience that is particularly common during adolescence (Dixon, 1963; Myers and Grant, 1970). The overall incidence of transient feelings of depersonalization in normal subjects ranges from 8.5 to 70% depending on the definitions, methodology, and age of the sample population (Dixon, 1963; Harper, 1969; Myers and Grant, 1970; Roberts, 1960; Sedman, 1966).

Attempts to Quantify Dissociative Experiences

A review of articles in the literature purporting to quantify dissociative experiences reveals that the overwhelming majority of reports focus on experiences

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of depersonalization. Most of these studies relied on clinical judgments or case history information as their method of investigation (Meares and Grose, 1978; Sedman and Reed, 1963). Those studies using original questionnaires relied primarily on a dichotomous format (symptoms were either present or absent) and were primarily interested in any experiences of depersonalization occurring during the year before the study (Brauer *et al.*, 1970; Dixon, 1963; Noyes and Kletti, 1977; Noyes *et al.*, 1977; Roberts, 1960). Survey samples included: young normal adults (Dixon, 1963; Roberts, 1960), psychiatric patients (Brauer *et al.*, 1970; Parikh *et al.*, 1981; Tucker *et al.*, 1973), and persons who had experienced life-threatening danger (Noyes and Kletti, 1977; Noyes *et al.*, 1977). Typically these studies did not compare the incidence or types of experiences across different diagnostic samples. Of the studies in which questionnaires were used to quantify depersonalization experiences, none have used basic statistical analyses to establish the reliability or validity of their instruments.

The Concept of A Dissociative Continuum

Most authorities on dissociation identify it as occurring in both minor and major or pathological forms (Hilgard, 1977; Ludwig, 1983; Nemiah, 1980; Spiegel, 1963; West, 1967). These different forms are generally conceptualized as lying along a continuum from the minor dissociations of everyday life to major forms of psychopathology such as multiple personality disorder. The concept of a dissociative continuum extends back to the work of 19th century clinicians such as Pierre Janet, Morton Prince, and William James (Hale, 1975; Taylor, 1982). Morton Prince (1909), for example, characterized dissociation as "...a general principle governing the normal psycho-nervous mechanism and therefore in a highly marked form only is pathological" (p. 123). Many others have expressed similar formulations over the ensuing years (Beahrs, 1983; Greaves, 1980; Hilgard, 1977; McKellar, 1977; Murphy, 1947; Rendon, 1973; Spiegel, 1963; Taylor & Martin, 1944). Other authors have conceptualized the dissociative disorders as forming a spectrum of increasing psychopathology (Bliss, 1983; Orne *et al.*, 1984).

Given the implicit or explicit idea of a dissociative continuum, most definitions of dissociation are primarily concerned with distinguishing normal from abnormal dissociative experiences. The emphasis on which elements define a given experience as abnormal has changed over time. Janet, who first coined the term dissociation, required the presence of an amnesia that insulated dissociated material from normal waking consciousness as the critical distinguishing factor (Ellenberger, 1970; White and Shevach, 1942). Contemporaries of Janet, however, chose to minimize the criterion of amnesia and focused on "coconsciousness" (the simultaneous but separate presence of two streams of consciousness) (Prince, 1909).

In modern times, the disruption of normal integrative functions has been the essential feature of pathological dissociation (Nemiah, 1980; West, 1967). West has defined a dissociative reaction as a:

> ...state of experience or behavior where dissociation produces a discernable alteration in a person's thoughts, feelings, or actions, so that for a period of time certain information is not associated or integrated with other information as it normally or logically would be (West, 1967, p. 890).

Nemiah (1980) has pointed out that pathological dissociative reactions are characterized by a disruption in the individual's sense of identity and disturbances of memory. In psychogenic amnesia, for example, there is usually a loss of memory for personal identity or important information revelant to identity. In psychogenic fugue states there is loss of memory for the primary identity and often the adoption of a secondary identity. In multiple personality disorder, there is a series of alternating identities that typically exhibit amnesia for information or behavior associated with the other identities (APA, 1980). Our current state of knowledge does not permit a more exact differentiation of dissociation from mental processes such as regression and isolation.

Rationale for the Development of Scale

To date there has been no attempt to develop a reliable and valid instrument that would allow for the quantification of dissociative experiences. It was our intention to develop a simple, easily administered instrument that has proven reliability and validity. This instrument would be useful in investigating the contribution of dissociation to the symptoms of a variety of psychiatric disorders and for screening patients for major dissociative psychopathology. The relatively high frequency of misdiagnosis of dissociative disorders has frequently led to ineffective treatment of these patients and the misconception that these conditions are rare (Eaton *et al.*, 1981; Putnam *et al.*, 1986).

Hypotheses to Be Tested

In the course of developing and validating our scale, we sought to test two general hypotheses advanced by clinicians working with dissociative disorders. The first is that the number and frequency of experiences and symptoms attributable to dissociation lie along a continuum. Normal individuals would be expected to

have fewer different types of dissociative experiences and these experiences should occur relatively infrequently. Individuals at the other end of the continuum, who have received clinical diagnoses of a type of dissociative disorder, or of a disorder clinically considered to have a major dissociative component, such as posttraumatic stress disorder, would be expected to experience a greater variety of dissociative symptoms and to have these experiences more frequently. Other nondissociative psychiatric disorders would be expected to fall somewhere between normal individuals and dissociative disorder patients on this continuum.

The second hypothesis is that the distribution of dissociative experiences in the population would not follow a normal probability (Gaussian) curve, but would exhibit a skewed distribution similar to that observed for the "trait" of hypnotic susceptibility (Hilgard, 1977).

Methods

Subjects

The subjects for this study included 31 late adolescent college students (18 to 22 years of age), 34 normal adults, 14 alcoholics, 24 phobic-anxious patients, 29 agoraphobics, 10 posttraumatic stress disorder patients, 20 schizophrenics, and 20 patients with multiple personality disorder. These subjects were chosen to investigate the role of dissociative phenomena in these populations. All subjects were at least 18 years of age and volunteered to participate.

The adolescent subjects were undergraduate students. Some normal adult subjects were staff members at a private suburban mental hospital and the remaining normal adult subjects as well as the alcoholic subjects were participants in a National Institute of Alcoholism and Alcohol Abuse study. Some of the phobic-anxiety subjects were patients in a research and treatment program at the National Institute of Mental Health. Additional phobic-anxiety and agoraphobic patients were participants in an agoraphobia and anxiety research and treatment program. Posttraumatic stress disorder subjects were participants in a Veterans Administration study. Schizophrenic patients were inpatients at St. Elizabeths Hospital, Washington, DC. Multiple personality disorder subjects were outpatients of therapists in the Washington, DC, area. All patients were diagnosed independently according to DSM-III criteria for their respective diagnostic groups.

Development of the Scale

A self-report format was chosen because of the ease and cost-effectiveness of administration to large numbers of subjects and because the possibility of interviewer bias and the need for interrater reliability assessment were eliminated. Questions were worded to be comprehensible to the widest possible range of individuals and to avoid implications of social undesirability. These factors are considered crucial if a scale is to elicit the most accurate responses possible (Anastasi, 1982; Oppenheim, 1966; Sinclair, 1975).

A visual analogue response scale was chosen in order to avoid imposing preconceived categories on the subjects' responses (Oborne and Clarke, 1975). Our response format consists of a 100-mm line with no divisions and numerically anchored at the endpoints. Studies comparing variations and combinations of anchoring, divisions, and labeling have shown the above format to be equal or superior to other formats (Oborne and Clark, 1975; Remington *et al.*, 1979). The subject indicates his or her response to each question by making a slash across the 100-mm line at the appropriate place. The scale is designed to allow semiautomatic scoring and computer data entry using a digitizing tablet.

Scale questions were developed using data from interviews with individuals meeting DSM-III criteria for dissociative disorders and consultations with clinical experts in the treatment of dissociative disorders. The questions were all pertinent to experiences of disturbances in identity, memory, awareness, and cognition and feelings of derealization or depersonalization or associated phenomena such as déjà vu and absorption, which are thought to be related to dissociative experiences (Nemiah, 1980; West, 1967). Items identifying dissociation of moods and impulses were excluded from the scale so that experiences of dissociation would not be confused with alterations in mood and impulse associated with affective disorders.

Pilot testing was done with two preliminary forms of the scale using normal and schizophrenic subjects. During this developmental period, question wording was modified to ensure that the questions were understood by as many subjects as possible. Comments on the two versions of the scale were also solicited from clinicians working with dissociative disorders. The final form of the scale contains 28 items and is shown in the *Appendix*. Directions on the cover sheet instruct the subject how to mark the 100-mm line, provide an example of a correctly marked line, and specify that the questions apply *only* to those experiences that are *not* associated with the use of alcohol or drugs.

Procedures

Subjects were informed that the purpose of the study was to investigate the frequency of the experiences described in the questionnaire. They were asked to answer the 28 questions on the scale by marking the 100-mm line below each question to show how

often they had the experience described in the question. Data on age, sex, race, education, and occupation were also requested, and the Hollingshead Two-Factor Index of Social Position (Hollingshead and Redlich, 1958) was used to determine socioeconomic status for each subject.

Methods of Data Analysis

Scores for each item were determined by measuring the subject's slash mark to the nearest 5 mm from the left-hand anchor point of the 100-mm line. The score for the entire scale is an average of the 28 item scores and will be referred to as the DES score. Because the distribution of dissociation within the population is not known, nonparametric statistical methods were used to analyze data whenever possible.

The split-half reliability method was used to measure internal reliability. Split-half reliability coefficients calculated for each group of subjects using the Spearman-Brown formula are shown in Table 1. Test-retest reliability was calculated using Spearman rank-order correlations from the scale scores of 12 adult and 14 adolescent normal subjects. These subjects were given the scale on two occasions separated by an interval of 4 to 8 weeks.

Results

Reliability Measures

The DES score test-retest reliability coefficient was 0.84 ($p < .0001$, $N = 26$). Reliability coefficients of the item scores ranged from .19 to .75 with 25 of the 28 items yielding coefficients reaching a significance level of $p < 0.05$ and 16 of the items reaching a level of $p < .001$. The median correlation coefficient for item scores was .60.

Validity Measures

Discriminant validity was investigated to ensure that scale scores could not be accounted for by theoretically unrelated variables. The Spearman rank-order correlation between DES scores and age was −.19 ($p < .01$, $N = 183$). The Spearman rank-order correlation between DES scores and socioeconomic status was .15 ($p < .08$, $N = 143$). It was not possible to compare all group scores by sex, because some diagnostic groups contained subjects of only one sex (*e.g.*, male subjects in the PTSD group and female subjects in the MPD group). The two normal samples, adults and adolescents, were combined and a Mann-Whitney *U*-test was performed, showing no significant difference between the scale scores of male and female subjects. Due to the small number of minority subjects, a comparison of scores among different races was not possible.

TABLE 1
Split-Half Reliability Coefficients for DES

Group	Split-Half	*p*-Value	Sample Size
Normal adults	.71	.0007	34
Alcoholics	.91	.0002	14
Phobic anxiety	.96	.0001	24
Agoraphobics	.90	.0001	39
Adolescents	.95	.0001	31
Schizophrenics	.93	.0001	20
Posttraumatic stress disorder	.74	.01	10
Multiple personality disorder	.92	.0001	20

Spearman rank-order correlations between each item score and item-corrected DES scores were calculated for all subjects to establish partial construct validity of the scale. These ranged from .50 to .79, with a median coefficient of .64; all correlations reached a level of $p < .0001$. A Kendall coefficient of concordance was calculated to provide an index of agreement among the item scores in the differentiation of diagnostic groups. This yielded a coefficient of .70 ($p < .0001$, $df = 7{,}189$), which shows a high degree of agreement among items.

Evidence for criterion-referenced concurrent validity was obtained by performing a Kruskal-Wallis test to compare DES scores across the different groups. The test yielded a χ^2 value of 93.57 ($N = 192$, $df = 7$, $p < .0001$). Pairwise comparisons of each group's scores were then performed, yielding the results in Table 2 (Conover, 1980). The median group scores are also shown in Table 2. The median number of items endorsed by group and the median score for the endorsed items by group are shown in Table 3.

Dissociative Continuum

Figure 1 shows the frequency of DES scores for the different diagnostic groups. An examination of the median scores for each group, indicated by the horizontal bars, shows that there is a steady progression in the median DES scores from normal subjects to multiple personality patients. Figure 2 shows a plot of the distribution of DES scores, in 5-point increments for the entire sample. The smoothed curve connecting these points shows that the distribution of dissociative experiences in our overall sample does not follow a normal probability curve and is skewed and leptokurtic. A Kolmogorov-Smirnov test of this distribution for all groups confirms the nonnormal distribution of dissociative experiences in our overall sample ($D = .180$, $p < .01$). A Kolmogorov-Smirnov test of the distribution of scores in the normal sample, adults and adolescents combined, likewise yields a nonnormal distribution ($D = .181$, $p < .01$).

TABLE 2
Post hoc Pairwise Comparisons by Group

	Normals	Alcoholics	Phobics	Agoraphobics	Schizophrenics	Adolescents	Posttraumatic Stress Disorder	Multiple Personality Disorder
Median Score	4.38	4.72	6.04	7.41	20.63	14.11	31.25	57.06
Normal subjects		NS	*	****	****	****	****	****
Alcoholics			NS	***	****	****	****	****
Phobics				NS	***	****	****	****
Agoraphobics					*	***	****	****
Schizophrenics						NS	***	****
Adolescents							**	****
Posttraumatic stress								*

* $p < .05$; ** $p < .01$; *** $p < .005$; **** $p < .0005$.

TABLE 3
Median Number and Score of Items Endorsed by Group

Group	Median No. Endorsed	Median Score of Items Endorsed
Normal subjects	11	11
Alcoholics	9	13
Phobic anxiety	11	18
Agoraphobics	13	23
Adolescents	18	24
Schizophrenics	18	30
Posttraumatic stress disorder	22	39
Multiple personality disorder	28	58

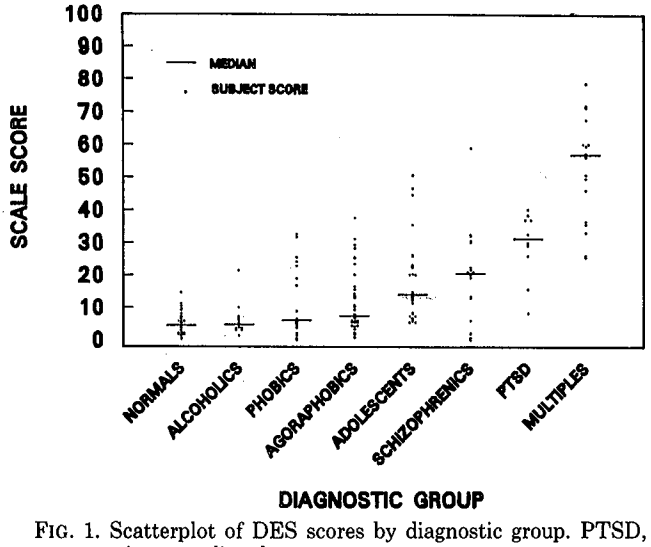

FIG. 1. Scatterplot of DES scores by diagnostic group. PTSD, posttraumatic stress disorder.

Discussion

In summary, the DES has good split-half reliability and test-retest reliability. It is internally consistent and produces scores that are stable over time. The scale has good construct validity in that item scores and scale scores are highly correlated. It shows good criterion-related validity, in that item scores differentiate subjects similarly. In addition the scale is able to differentiate between subjects with and subjects without clinical diagnoses of a dissociative disorder. Further evidence of the reliability and validity of this scale will be accumulated over time as the scale is administered to greater numbers of subjects from various clinical populations.

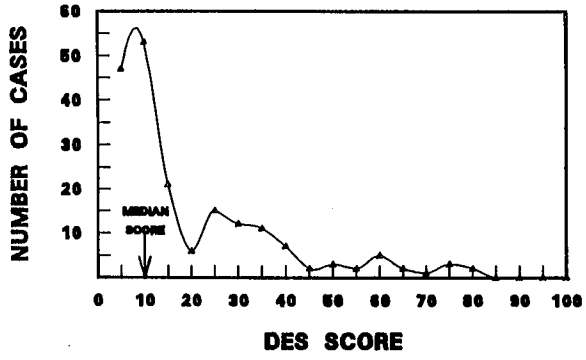

FIG. 2. Distribution of DES scores for all subjects.

The DES permits the quantification of reported dissociative experiences. The DES score is an index of the number of different types of dissociative experiences and the frequency of each experience. This quantification permits the ranking of different diagnostic groups along a continuum of dissociation. As expected, normal adults reported fewer different types of dissociative experiences and these experiences occurred relatively infrequently. Subjects with dissociative disorders reported a greater variety of dissociative symptoms and these experiences occurred frequently (Table 3).

The median DES score for each group of subjects (Table 2) is consistent with what was clinically expected for each diagnostic category. Normal adults obtained the lowest scores on the scale, but did report some degree of dissociation. The low scores of the alcoholics support the position that the scale is not measuring memory deficits associated with substance abuse. The relatively low scores of the phobic-anxious and agoraphobic subjects are as expected. Although such subjects report depersonalization and derealization, dissociation is not the major mechanism associated with these disorders.

The similar scores of the adolescents and schizophrenics on the DES indicate that the scale is not

simply a gross measure of psychopathology. The moderately high scores of our sample of normal adolescents are consistent with prior research demonstrating a high prevalence of experiences of dissociation and derealization in college student populations (Dixon, 1963; Harper, 1969; Myers and Grant, 1970; Roberts, 1960; Sedman, 1966). The high scores of the posttraumatic stress disorder subjects are consistent with descriptions of dissociative symptomatology in these subjects (Blank, 1985; Kolb, 1985). The multiple personality disorder patients obtained the highest group median scale score, scoring considerably higher than all other groups. This finding is consistent with characterization of multiple personality disorder as the most severe of the dissociative disorders (Confer and Ables, 1983; Putnam, 1985; Speigel, 1984).

The distribution of DES scores for the subjects included in this study is of interest because of what these data may imply about the distribution of dissociative experiences in the general population. Figures 1 and 2 show that there is a strong tendency for subjects to earn a low score on this scale. Clearly this distribution is not normal, and statistical analysis of the data should be handled in a nonparametric fashion. The generalization of the distribution obtained in our study to that of the larger population requires some extrapolation. Because 66.1% of the subjects in our survey were diagnosed as currently having a mental disorder, this sample is more pathological than the general population. It is likely that, because the normal population is underrepresented in our study, the distribution of dissociation in the general population is even more positively skewed.

Although the DES is not intended to be a diagnostic instrument, it has proven useful as a screening test for major dissociative psychopathology. Further studies with the DES, including its ability to blindly predict dissociative disorder diagnoses, are currently in progress.

Conclusions

These results confirm that the dissociative process does make a considerable contribution to the psychopathology of some psychiatric disorders. Before the development of the DES there was no reliable and valid means of quantifying dissociation. The DES is a reliable and valid instrument that is able to distinguish between subjects with a dissociative disorder and those without. Results showed that normal adults experienced fewer different types of dissociative experiences and that these experiences occurred relatively infrequently in contrast to subjects with dissociative disorders. Although not intended as a diagnostic instrument, this scale will serve as a useful research tool and dissociative screening device.

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APPENDIX

Directions

This questionnaire consists of twenty-eight questions about experiences that you may have in your daily life. We are interested in how often you have these experiences. It is important, however, that your answers show how often these experiences happen to you when you are not under the influence of alcohol or drugs. To answer the questions, please determine to what degree the experience described in the question applies to you and mark the line with a vertical slash at the appropriate place, as shown in the example below.

Example:

0% |———/———| 100%

1. Some people have the experience of driving a car and suddenly realizing that they don't remember what has happened during all or part of the trip. Mark the line to show what percentage of the time this happens to you.

   0% |———————————| 100%

2. Some people find that sometimes they are listening to someone talk and they suddenly realize that they did not hear part or all of what was just said. Mark the line to show what percentage of the time this happens to you.

   0% |———————————| 100%

3. Some people have the experience of finding themselves in a place and having no idea how they got there. Mark the line to show what percentage of the time this happens to you.

   0% |———————————| 100%

4. Some people have the experience of finding themselves dressed in clothes that they don't remember putting on. Mark the line to show what percentage of the time this happens to you.

   0% |———————————| 100%

5. Some people have the experience of finding new things among their belongings that they do not remember buying. Mark the line to show what percentage of the time this happens to you.

   0% |———————————| 100%

6. Some people sometimes find that they are approached by people that they do not know who call them by another name or insist that they have met them before. Mark the line to show what percentage of the time this happens to you.

   0% |———————————| 100%

7. Some people sometimes have the experience of feeling as though they are standing next to themselves or watching themselves do something and they actually see themselves as if they were looking at another person. Mark the line to show what percentage of the time this happens to you.

   0% |———————————| 100%

8. Some people are told that they sometimes do not recognize friends or family members. Mark the line to show what percentage of the time this happens to you.

   0% |———————————| 100%

9. Some people find that they have no memory for some important events in their lives (for example, a wedding or graduation). Mark the line to show what percentage of the important events in your life you have no memory for.

0% |_____| 100%

10. Some people have the experience of being accused of lying when they do not think that they have lied. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

11. Some people have the experience of looking in a mirror and not recognizing themselves. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

12. Some people sometimes have the experience of feeling that other people, objects, and the world around them are not real. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

13. Some people sometimes have the experience of feeling that their body does not seem to belong to them. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

14. Some people have the experience of sometimes remembering a past event so vividly that they feel as if they were reliving that event. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

15. Some people have the experience of not being sure whether things that they remember happening really did happen or whether they just dreamed them. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

16. Some people have the experience of being in a familiar place but finding it strange and unfamiliar. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

17. Some people find that when they are watching television or a movie they become so absorbed in the story that they are unaware of other events happening around them. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

18. Some people sometimes find that they become so involved in a fantasy or daydream that it feels as though it were really happening to them. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

19. Some people find that they sometimes are able to ignore pain. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

20. Some people find that they sometimes sit staring off into space, thinking of nothing, and are not aware of the passage of time. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

21. Some people sometimes find that when they are alone they talk out loud to themselves. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

22. Some people find that in one situation they may act so differently compared with another situation that they feel almost as if they were two different people. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

23. Some people sometimes find that in certain situations they are able to do things with amazing ease and spontaneity that would usually be difficult for them (for example, sports, work, social situations, etc.). Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

24. Some people sometimes find that they cannot remember whether they have done something or have just thought about doing that thing (for example, not knowing whether they have just mailed a letter or have just thought about mailing it). Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

26. Some people sometimes find writings, drawings, or notes among their belongings that they must have done but cannot remember doing. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

27. Some people sometimes find that they hear voices

inside their head that tell them to do things or comment on things that they are doing. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%

28. Some people sometimes feel as if they are looking at the world through a fog so that people and objects appear far away or unclear. Mark the line to show what percentage of the time this happens to you.

0% |_____| 100%