

RELIABILITY AND VALIDITY OF THE TURKISH VERSION OF THE DISSOCIATIVE EXPERIENCES SCALE

L. Ilhan Yargic, M.D.
Hamdi Tutkun, M.D.
Vedat Şar, M.D.

L. Ilhan Yargic, M.D., and Hamdi Tutkun, M.D., are residents in the Department of Psychiatry of the Istanbul University, Istanbul Medical School, in Capa, Istanbul, Turkey.

Vedat Şar, M.D., is Associate Professor and Chief of the Clinical Psychotherapy Unit in the Department of Psychiatry, Istanbul University, Istanbul Medical School, in Capa, Istanbul, Turkey.

For reprints write to Dr. L. Ilhan Yargic, Istanbul Tip Fakultesi, Psikiyatri Anabilim Dalı, Capa, 34390 Istanbul, Turkey.

ABSTRACT

The dissociative experiences scale (DES) is a 28-item self-rating questionnaire measuring dissociation. It is a reliable and valid instrument that is able to distinguish between subjects with a dissociative disorder and those without. It is also a screening test for major dissociative psychopathology in normal and clinical populations. In order to test its validity and reliability, a Turkish version of DES was administered to 25 patients with multiple personality disorder, 23 patients with schizophrenic disorder, 21 patients with bipolar affective disorder, 26 patients with obsessive compulsive disorder and 671 subjects as a non-psychiatric control group. The Turkish version of DES has good split-half and test-retest reliability, internal consistency, and criterion-related validity. It is able to differentiate between subjects with and without chronic, complex dissociative disorders.

INTRODUCTION

Dissociation has increasingly been recognized as a continuum ranging from the minor dissociations of everyday life to major forms of psychopathology such as multiple personality disorder (Bernstein & Putnam, 1986). After the inclusion of dissociative disorders as a separate diagnostic category in *DSM-III* there has been a tremendous increase in the number of reported multiple personality cases (Ross, 1991).

Bernstein and Putnam (1986) developed the Dissociative Experiences Scale (DES), which has been shown to differentiate reliably patients with multiple personality disorder

(MPD) from patients with other disorders and non-patient groups (Bernstein & Putnam, 1986; Carlson & Putnam, 1993). The DES has been shown to possess good reliability and diagnostic validity. It serves as a clinical tool which identifies dissociative psychopathology and as a research tool which permits the quantification of reported dissociative experiences (Bernstein & Putnam, 1986; Carlson & Putnam, 1993).

MPD had not been discussed in the Turkish psychiatric literature prior to a recent review (Ozmen, Cigeroglu, & Ertan, 1992). The first case reports were published in 1994 (Tutkun, Yargic, & Sar, 1994; Yargic, Tutkun, & Sar, 1994). The purpose of the present study was to test the validity and reliability of the Turkish version of DES so that we could facilitate our research studies on dissociative disorders. We observed that this scale successfully detected dissociative symptoms in MPD patients.

METHOD

Subjects

The subjects for this study included 25 patients with multiple personality disorder, 23 patients with schizophrenic disorder, 21 patients with bipolar affective disorder, 26 patients with obsessive compulsive disorder, and 671 subjects as non-psychiatric control group. Informed consent was obtained after the study was fully explained to all subjects.

The multiple personality disorder subjects were the first 25 consecutive patients of our clinic. Their diagnoses were confirmed through either direct consultation or supervision by all of the authors. Schizophrenic and bipolar affective disorder patients were either inpatients during the study or had been hospitalized before and were being followed as outpatients. Obsessive-compulsive disorder subjects were participants in a research and treatment program in our clinic. All patients were diagnosed independently according to *DSM-III-R* criteria for their respective diagnostic groups. The non-psychiatric control group was derived from college students (N=595), students of a skill training program (N=36), staff members at the Microbiology Department of our University (N=33), and non-patient probands from various sources (n=9).

Translation of the Scale

DES was first translated into Turkish by each of the authors

independently and then a consensus translation was formed among them.

A pilot study with the first Turkish version of the scale was done on 20 normal subjects and four patients with multiple personality disorder. Some expressions were modified after the pilot study so that the questions were understood by as many subjects as possible. We omitted "driving a car" in DES item one because the majority of the population of Turkey neither possesses nor drives a car.

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 experiences described in the question. Data on age, sex, education, and occupation were also requested, and a five-level self-reporting system was used to determine the economic status of each subject.

Methods of Data Analysis

Scores for each item were determined by measuring the subject's slash mark from the left hand anchor point of the 100 mm line. An average of the 28-item scores was referred to as the DES score. Because the distribution of dissociation within the population is not known, non-parametric statistical methods were used to analyze data whenever possible.

Cronbach alpha and split-half (Guttman formula) methods were used to measure internal reliability. The Spearman rank-order correlations of the items with the item-corrected total score were also computed to establish partial construct validity of the scale.

Test-retest reliability was calculated using Spearman rank-order correlations from the scale scores of 32 normal subjects. These subjects were given the scale on two occasions separated by an average interval of 11.9 days.

For the investigation of discriminant validity we performed a comparison of scale scores according to sex, educational status, economic level, and age.

Evidence for criterion-referenced concurrent validity was obtained by performing a comparison between scale scores of different diagnostic groups and non-patient population by performing a Kruskal-Wallis test with post hoc pairwise comparisons by group.

TABLE 1
Split-half Reliability Coefficients

	n	Coefficients
Multiple personality disorder	25	0.86
Schizophrenia	23	0.84
Bipolar affective disorder	21	0.74
Obsessive compulsive disorder	26	0.78
Non-patient group	673	0.89

TABLE 2
Post Hoc Pairwise Comparisons by Group
(* $p < 0.0001$; (NS) nonsignificant)

	Nonpat.	Schiz.	Bipol.	Obs.Comp.	MPD
Median Score	11.29	11.61	7.46	7.41	46.07
Mean Score	14.11	13.73	10.41	10.38	47.18
MPD	*	*	*	*	
Obs.Comp.Dis.	NS	NS	NS		
Bipol.Aff. Dis	NS	NS			
Schizoph. Dis.	NS				

RESULTS

Reliability Measures

The DES total score test-retest reliability coefficient was 0.78 ($p < 0.001$, $N=32$). Reliability coefficients of the item scores ranged from 0.35 to 0.83 with all of the 28 items yielding coefficients reaching a significance level of $p < 0.05$ and 23 of the items reaching a level of $p < 0.001$. The median correlation coefficient for item scores was 0.62.

Split-half reliability coefficients calculated for each group of subjects using the Guttman formula are shown in Table 1.

TABLE 3
Median Number of Items Endorsed by Group

Group	Median Number Endorsed
Normal subjects	14
Schizophrenic disorder	9
Bipolar affective disorder	10
Obsessive comp. disorder	8.5
MPD	23

Validity Measures

There were not any significant correlations between the DES total score and age (-0.06 $p > 0.05$), economic status (-0.01 $p > 0.05$), and educational level (-0.003 $p > 0.05$) of the non-patient group (Spearman Rank order correlation coefficient).

The Mann-Whitney U-test was performed, showing no significant differences between the scale scores of male and female subjects of the non-patient group ($z = -1.21$ $p > 0.05$).

Spearman rank order correlation coefficients between each item score and item-corrected DES total scores were calculated for non-patient group, to establish partial construct validity of the scale. These ranged from 0.35 to 0.60, with a median coefficient of 0.49; all correlations reached a level of $p < 0.001$. Cronbach alpha was calculated as a measure of internal consistency; it was found to be 0.91.

Evidence for criterion-referenced validity was obtained by performing a Kruskal-Wallis test to compare DES scores across the different groups. The test yielded "x²" value of 60.19 ($n = 768$ $d f = 4$ $p < 0.0001$). Pairwise comparisons of each groups scores were then performed, yielding the results in Table 2.

DES total score differentiates multiple personality disorder group from other diagnostic groups and non-patient population with a high significance. The median group scores are also shown in Table 2. The median number of items endorsed by group are shown in Table 3.

DISCUSSION

The Turkish version of DES has good reliability and validity.

In a recent study of 74 senior psychiatrists from various institutions in Turkey, only 1/5 of them reported that they had ever diagnosed MPD (Sar, Yargic, & Tutkun, in press).

However, the lack of previous case reports in the Turkish literature suggests that these patients were not followed and treated systematically. Although Turkish psychiatrists are experienced with *DSM-III* and *DSM-III-R* diagnostic classifications, MPD is widely regarded as a suspicious diagnosis. It is our opinion that MPD patients are usually overlooked in Turkey because we found 25 cases in one year, even though there had not been any diagnosed case in our clinic before our research study began. This supports the opinion that a clinician should have an index of suspicion for MPD and should know and deliberately search for specific symptoms (Loewenstein, 1991). We think that availability of DES in Turkish language will increase the number of detected cases in our country.

CONCLUSIONS

MPD patients in Turkey have DES scores similar to those found in cases from North America (Carlson & Putnam, 1993). Dutch MPD subjects also obtained similar scores (Carlson & Putnam, 1993). These findings suggest that dissociative experiences seem to be universal, even though clinical presentation of MPD is claimed to be culture-bound. ■

REFERENCES

- Bernstein, E.M., & Putnam, F.W. (1986). Development, reliability and validity of a dissociation scale. *Journal of Nervous and Mental Disease*, 174, 727-735.
- Carlson, E.B., & Putnam, F.W. (1993). An update on Dissociative Experiences Scale. *DISSOCIATION*, 6(1), 16-27.
- Loewenstein, R.J. (1991). An office mental status examination for complex chronic dissociative symptoms and multiple personality disorder. *Psychiatric Clinics of North America*, 14, 567-629.
- Ozmen, M., Cigeroglu, B., & Ertan, T. (1992). Cogul kisilik bozuklugu, derleme (Multiple personality disorder: An overview). *Psikiyatri Bulteni (Turkish Bulletin of Psychiatry)*, 1, 113-116.
- Ross, C.A. (1991). Epidemiology of multiple personality disorder and dissociation. *Psychiatric Clinics of North America*, 14, 503-517.
- Sar, V., Yargic, L.I., Tutkun, H. (in press). Cogul kisilik bozuklugu knousunda Turk psikiyatristlerinin deneyim ve gorusleri. (The experiences and opinions of psychiatrists on MPD in turkey). *Nöropsikiyatri Arsivi (Archives of Neuropsychiatry, Turkish)*.
- Tutkun, H., Yargic, L.Y., & Sar, V. (1994). *Adolesans doneminde bir cogul kisilik bozuklugu vakasi (Multiple personality disorder in adolescence: a case presentation)*. Paper presented at the Fourth National Congress of Child and Adolescence Psychiatry, Bursa, Turkey.

Yargic, L.I., Tutkun, H., & Sar, V. (1994). Bir cogul kisilik bozuklugu vakasi (Multiple personality disorder: A case presentation). *Nöropsikiyatri Arsivi* (Archives of Neuropsychiatry, Turkish), 31, 30-34.