

THE USE OF THE DISSOCIATIVE EXPERIENCES SCALE IN PUERTO RICO

Alfonso Martínez-Taboas, M.A.

Alfonso Martínez-Taboas, M.A., is a Professor of Psychology at the University of Puerto Rico.

For reprints write Alfonso Martínez-Taboas, M.A., 17 St., #1088, Villa Nevarez, Rio Piedras, Puerto Rico 00927.

ABSTRACT

In this study we investigated whether the Dissociative Experiences Scale (DES) could differentiate three groups of individuals: a control group of 46 college students, 15 panic disorder patients and 16 multiple personality patients. A Spanish translation of the DES was prepared and utilized. Qualitative and quantitative statistical analyses revealed that the DES is a useful screening instrument to detect dissociative disorder patients. A cut-off of 35 points on the DES produced not a single false-negative case of MPD and only a few ostensible cases of false-positive identifications.

INTRODUCTION

There is an increasing consensus that multiple personality disorder (MPD) is not a culture-bound condition restricted to the continental United States. Recent clinical research has established that MPD is also to be found in diverse countries such as France, India, Australia, Canada, Italy, Japan, Israel and the Netherlands (Coons, Bowman, Kluft, & Milstein, 1991). In Puerto Rico my colleagues and I have uncovered over 25 cases of MPD in the last six years. Fifteen of these Puerto Rican cases were tabulated and compared with cases identified in Canada and the USA (Martínez-Taboas, 1991). The results clearly suggest that the Puerto Rican and North American patients experience MPD in a nearly identical manner. According to Coons et al. (1991) cases of MPD have also been identified in other Hispanic countries, such as Colombia, Guatemala, and Mexico.

Nevertheless, up until now the Hispanic clinical researcher with an interest in dissociative disorders has not had at his/her disposal a reliable screening instrument to assess the possible presence of MPD or other dissociative disorders in his/her patients. In 1990 I made a Spanish translation of the Dissociative Experience Scale (DES) (Bernstein & Putnam, 1986) to address this situation. Interestingly, two years later I was informed by Dr. Roberto Lewis-Fernandez that two fur-

ther translations of the DES were circulating in the United States. One was by Daniel Grosz, M.D. and Pedro Martinez, M.D., and the second was done by Roberto Lewis-Fernandez, and Peter Guarnaccia, Ph.D.

The main purpose of this article is to verify the clinical usefulness of the DES in a Hispanic population. The trans-cultural project of comparing indigenous norms with the ones available in the United States is important because culture imposes meanings on personal experience and may transform the core manifestations or the frequency of a dissociative experience in another country (Cardena, 1992). This was observed in the investigations of Ensink and van Otterlos (1989), who found that the mean score for the DES in a sample of Dutch participants was higher than that of an American sample.

METHOD

Subjects

The Spanish translation of the DES was given to three groups of subjects. Group 1 was composed of 46 undergraduate female college students with a mean age of 20.1 years (range 18-31 years). This was our control group. As a second group we had 15 female patients with a *DSM-III-R* diagnoses of panic disorder (PD) with a mean age of 33.6 years (range 17-48 years). This type of patient was chosen because many PD patients report depersonalization among these symptoms (Barlow et al., 1985), and depersonalization episodes are a well-recognized type of dissociative experience (Sackheim & Vingiano, 1984). Also, some recent research indicates an overlap between panic disorder, *ataque de nervios*, and dissociative disorders in Puerto Rican subjects (Liebowitz et al., 1994; Oquendo, Horwath, & Martínez, 1992). This last point offers an additional clinical rationale for the inclusion of the PD patients as another comparison group. The third group was composed of 16 MPD patients diagnosed according to *DSM-III-R* criteria. All except one are female. Their mean age is 26.5 years (range 16-37 years). All of our subjects are Puerto Ricans.

Dissociation Instrument

The DES is a 28-item self-administered questionnaire that measures the extent of dissociative symptomatology in both normal and clinical populations. The format of the DES requires that individuals make a slash on a horizontal line to indicate the percentage of time that a particular type of experience occurs to the subject. The DES was translated to Spanish by the author. In order to obtain a useful instrument we carefully translated each item and also adapted words and phrases that are consonant with our cultural milieu. A copy of our Spanish DES can be found as Appendix 1. The DES was chosen for this investigation because it has become the most widely used self-report measure of dissociative phenomena (Bernstein et al., 1993). Also, the DES has a high test-retest reliability (.80) and has validity for the construct of dissociation (Frischholz et al., 1991; Ross, Norton, & Anderson, 1988; Steinberg, Rounsville, & Cicchetti, 1991).

Data Analysis

Median, mean and standard deviation DES scores were computed for the entire DES. A one-way analysis of variance was conducted to evaluate significant differences between groups (controls, PD patients, and MPD patients) in the DES mean scores. Finally, the mean scores for the four items of the DES which form a scale factor called the Activities of Dissociated States was computed, because such items had been identified to predict the frequency of MPD in clinical populations (Rose, Anderson, Fleisher, & Norton, 1992).

RESULTS

Table 1 demonstrates the median (Md), mean (X) and standard deviations (SD) of the DES scores for the three groups of subjects. The MPD patients showed a marked higher median and mean score as compared to the other two groups. To evaluate a significant difference between the mean DES scores of the groups an F-test was conducted. As shown in Table 2, a significant difference at a lower alpha of .001 was found.

TABLE 1
Median, Mean, Standard Deviation and Range DES Scores
by Diagnostic Category

Diagnostic Category	N	Median	Mean (SD)	Range
Control Group	46	13.5	17.4 (13.8)	1-51
PD Group	15	22	22.6 (10.1)	2-36
MPD Group	16	64	60.3 (13.6)	36-82

TABLE 2
One-Way Test Summary for the DES Scores with the
Three Groups of Subjects

Source of Variance	Sum of Square	Mean Squares	Degree of Freedom	F Value
Between groups	22284.8891	11142.4445	2	63.7499*
CG vs. PD				
**CG vs. MPD				
**PD vs. MPD				
Within groups	12933.9940	174.7837	74	
Total	35218.8831		76	

*p, .001
**pairs of groups significantly different at the .05 level.

A Scheffe post-hoc test demonstrated significant differences between the control and MPD groups and between the MPD and PD groups ($p<.05$). Specifically MPD patients obtained a significantly higher score on the DES than the PD and control subjects.

To be more comparable in terms of the number of subjects, a random sample of 27 subjects from the control group was selected. Then a one-way ANOVA test was repeated and the statistical significance of the results was maintained once

USE OF DES IN PUERTO RICO

TABLE 3
Mean (\bar{X}) Score for the Activities of Dissociated States Factors of the DES

Item	Control	PD	MPD
	\bar{X}	\bar{X}	\bar{X}
Not recognizing friends or family	6.3	13.8	33.9
Finding oneself in a place but not knowing how one got there	4.7	11.6	42.8
Finding unfamiliar things among one's belongings	5.3	7.8	28.1
Finding oneself dressing in clothes one can not remember putting on	4.4	6.6	36.8
TOTAL	5.1	9.9	35.4

TABLE 4
Mean (\bar{X}) DES Scores in Young Undergraduate Students

Authors	\bar{X} DES Score
Ensink & Otterloo (1989)	24.2
Frischholz, et al. (1990)	23.8
Ross et al. (1989)*	7.9
Sandberg & Lynn (1992)	12.10
Sanders et al. (1989)	14.6

*Reported as Median Score

again.

If we use as a cut-off point a mean score of 35 then we have not a single false-negative for MPD. With a 35 cut-off point we have a 13% false-positive in the control and PD groups. Or, as an alternative explanation, persons with an unrecognized dissociative disorder or persons with a high degree of the absorption factor in the DES may have been present in these two groups.

In Table 3 we present the mean score for the Activities of Dissociated States factor of the DES. This factor had been

identified by Ross et al. (1992) as containing the four rarest items of dissociated states, and the ones that most reliably estimate the frequency of MPD in a clinical population. The results clearly replicate the findings of Ross et al. (1992), as our control and PD groups showed very low mean scores for each one of those four items. Contrary to those two groups of subjects, the MPD patients had a mean score of over 30 in three of the four items, and a mean score of 28.1 in the other.

DISCUSSION

In this study we have obtained support for the following empirical assertions. First, the median DES score for the "normal" students (13.5) is nearly identical with the late adolescent students (14.1) presented in Bernstein and Putnam's (1986) original research. In Table 4 we can appreciate that our results with college students are more or less consonant with research in the USA, Canada and the Netherlands (compare with Table 1). In no case do we have a discrepancy of more than 9 points across these groups.

A second interesting finding is that PD patients report more dissociative experiences than do the undergraduate students (13.5 vs. 22). This finding is associated with clinical experience because it is well known that frightening depersonalization experiences are a frequent occurrence in PD patients (Barlow et al., 1985). In a related investigation Strick and Wilcoxon (1991) found that the DES scores for PD patients (29.1) were also

considerably higher than the published norms for college students.

A third important finding of our investigation is that the median and mean score for the MPD patients were considerably higher than for the PD and control groups. This replicates all previous published studies, in which it has been found that the DES can reliably distinguish patients with dissociative disorders from those that present affective disorders (Strick & Wilcoxon, 1991), epilepsy (Loewenstein & Putnam, 1988), multiple sclerosis (Ross et al., 1990), person-

TABLE 5
Mean (X) DES Scores for MPD in Seven Large Series of Cases

Authors	X DES Score
Bernstein & Putnam (1986)*	57.06
Boon & Draijer (1993)	49.30
Ensink & Otterloo (1989)	53.40
Fink & Golinkoff (1990)	48.60
Frischholz et al. (1990)	55.00
Loewenstein & Putnam (1988)	47.50
Ross et al. (1990)	41.40

*Reported as Median Score.

ality disorders (Fink & Golinkoff, 1990), and other medical and psychiatric populations.

In Table 5 the reader can compare the mean DES score of MPD patients as reported on other large series of cases. If we compare such results with the ones reported on Table 1, it can be observed that the Puerto Rican MPD patients had a slight tendency to score higher than did the MPD patients in other series. We do not have a ready explanation for this slight discrepancy, but we are tempted to speculate that maybe the Puerto Rican MPD patients had a cultural proclivity to dissociate more readily and pervasively than did their counterparts in other parts of the world. This speculation is somewhat consonant with some recent research that indicates that some Hispanic populations experience striking dissociative experiences at times of crisis (Oquendo, Horwath, & Martinez, 1992).

In summary, our research with the Spanish translation of the DES has produced findings consistent with those reported in Canada, the USA, and the Netherlands. The mean and median DES scores for the MPD subjects were markedly higher than those which presented a panic disorder or those of those undergraduate students. These preliminary results suggest that the DES is a potentially useful screening instrument to detect Hispanic persons with a marked proclivity to experience dissociative phenomena. ■

* I would like to acknowledge the expert assistance of Janet Bonilla, M.A. in the preparation of the statistical aspects of this paper.

REFERENCES

- Barlow, D.H., Vermilyea, J., Blanchard, E.B., Vermilyea, B., Di Nardo, P., & Cerny, J.A. (1985). The phenomenon of panic. *Journal of Abnormal Psychology, 94*, 320-328.
- Bernstein, E.M., & Putnam, F.W. (1986). Development, reliability, and validity of a dissociation scale. *Journal of Nervous and Mental Disease, 174*, 727-735.
- Bernstein, E., Putnam, F.W., Ross, C.A., Torem, M., Coons, P., Dill, D.L., Lowenstein, R.J., & Braun, B.G. (1993). Validity of the dissociative experiences scale in screening for multiple personality disorder: A multicenter study. *American Journal of Psychiatry, 150*, 1030-1036.
- Boon, S., & Draijer, N. (1993). Multiple personality disorder in the Netherlands: A clinical investigation of 71 patients. *American Journal of Psychiatry, 150*, 489-494.
- Cardena, E., (1992). Trance and possession as dissociative disorders. *Transcultural Psychiatric Research Review, 29*, 287-298.
- Coons, P.M., Bowman, E.S., Kluft, R.P., & Milstein, V. (1992). The cross-cultural occurrence of MPD: Additional cases from a recent survey. *DISSOCIATION, 5*, 124-128.
- Ensink, B.J., & Van Otterloo, D. (1989). A validation of the Dissociative Experiences Scale in the Netherlands. *DISSOCIATION, 2*, 221-223.
- Fink, D., & Golinkoff, M. (1990). Multiple personality disorder, borderline personality disorder, and schizophrenia: A comparative study of clinical features. *DISSOCIATION, 3*, 127-134.
- Frischholz, E.J., Braun, B.G., Sachs, R.G., Hopkins, L., Shaeffer, D.M., Lewis, J., Leavitt, F., Pasquotto, M.A., & Schwartz, D.R. (1990). The Dissociative Experience Scale: Further replication and validation. *DISSOCIATION, 3*, 151-153.
- Frischholz, E.J., Braun, B.G., Sachs, R.G., Schwartz, D.R., Lewis, J., Shaeffer, D., Westergaard, C., & Pasquotto, J. (1991). Construct validity of the Dissociative Experiences Scale (DES): I. *DISSOCIATION, 4*, 185-188.
- Liebowitz, M.R., Salmán, E., Jusino, C.M., Garfinkel, R., Street, L., Cárdenas, D. L., Silvestre, J., Fyer, A.J., Carrasco, J. L., Davies, S., Guarnaccia, P., & Klein, D.F. (1994). Ataque de nervios and panic disorder. *American Journal of Psychiatry, 151*, 871-875.
- Loewenstein, R., & Putnam, F. W. (1988). A comparison study of dissociative symptoms in patients with complex partial seizures, multiple personality disorder, and post-traumatic stress disorder. *DISSOCIATION, 1(4)*, 17-23.

USE OF DES IN PUERTO RICO

Martínez-Taboas, A. (1991). Multiple personality in Puerto Rico: Analysis of fifteen cases. *DISSOCIATION*, 4, 189-192.

Oquendo, M., Horwath, E., & Martinez, A. (1992). Ataque de nervios: Proposed diagnostic criteria for a culture specific syndrome. *Culture, Medicine and Psychiatry*, 16, 367-376.

Ross, C. A., Anderson, G., Fleisher, W. P., & Norton, G. R. (1992). Dissociative experiences among psychiatric inpatients. *General Hospital Psychiatry*, 14, 350-354.

Ross, C. A., Fast, E., Anderson, G., Auty, A., & Todd, J. (1990). Somatic symptoms in multiple sclerosis and MPD. *DISSOCIATION*, 3, 102-106.

Ross, C. A., Miller, S. D., Reagor, P., Bjornson, L., Fraser, G. A., & Anderson, G. (1990). Structured interview data on 102 cases of multiple personality disorder from four centers. *American Journal of Psychiatry*, 147, 596-601.

Ross, C. A., Ryan, L., Anderson, G., Ross, D., & Hardy, L. (1989). Dissociative experiences in adolescents and college students. *DISSOCIATION*, 2, 240-242.

Sackheim, H. A., & Vingiano, W. A. (1984). Dissociative disorders. In S. M. Turner and M. Hersen (Eds.), *Adult psychopathology and diagnosis* (pp. 329-369). New York: Wiley.

Sandberg, D. A., & Lynn, S. J. (1992). Dissociative experiences, psychopathology and adjustment, and child and adolescent maltreatment in female college students. *Journal of Abnormal Psychology*, 101, 717-723.

Sanders, B., McRoberts, G., & Tollefson, C., (1989). Childhood stress and dissociation in a college population. *DISSOCIATION*, 2, 17-23.

Steinberg, M., Rounsville, B., & Cicchetti, D. (1991). Detection of dissociative disorders in psychiatric patients by a screening instrument and a structured diagnostic interview. *American Journal of Psychiatry*, 148, 1050-1054.

Strick, F. L., & Wilcoxon, S. A. (1991). A comparison of dissociative experiences in adult female outpatients with and without histories of early incestuous abuse. *DISSOCIATION*, 4, 193-199.

APPENDIX

DES (EED)

Eve Bernstein Carlson, Ph.D. and Frank W. Putnam, M.D.

Traducción de Alfonso Martínez-Taboas, M.A.

INSTRUCCIONES

En este cuestionario hay 28 preguntas sobre experiencias que pueden pasarle en la vida diaria. Estamos interesados en saber cuán a menudo usted tiene estas experiencias. Es importante, sin embargo, que con sus respuestas nos deje saber la frecuencia con que usted tiene estas experiencias cuando no está bajo el efecto del alcohol o las drogas.

Para contestar las preguntas por favor determine en qué medida la experiencia descrita en la pregunta le ocurre a usted, señalando en la línea con una marca vertical en el lugar apropiado, como muestra el siguiente ejemplo.

Ejemplo:

0% | ----- / ----- | 100%

1- Algunas personas tienen la experiencia de estar conduciendo un automóvil y de repente se dan cuenta de que no recuerdan lo que ha sucedido durante todo o parte del viaje. Marque la línea para que nos enseñe qué porciento del tiempo esto le pasa a usted.

0% | ----- / ----- | 100%

2- Algunas personas encuentran que hay veces que escuchan a alguien hablar y de repente se dan cuenta de que no escucharon parte o nada de lo que se dijo o que no oyeron la conversación completa. Marque la línea para que nos enseñe qué porciento del tiempo esto le pasa a usted.

0% | ----- / ----- | 100%

USE OF DES IN PUERTO RICO

3- Algunas personas tienen la experiencia de encontrarse en un lugar y no tener idea alguna de como llegaron hasta allí. Marque la línea para que nos enseñe qué porciento del tiempo esto le pasa a usted.

0% | ----- | 100%

4 - Algunas personas tienen la experiencia de encontrarse vestidas con ropa que no recuerdan haberse puesto. Marque la línea para que nos enseñe qué porciento del tiempo esto le pasa a usted.

0% | ----- | 100%

5- Algunas personas tienen la experiencia de encontrar objetos nuevos entre sus pertenencias los cuales no recuerdan haber comprado. Marque la línea para que nos enseñe qué porciento del tiempo esto le pasa a usted.

0% | ----- | 100%

6- Algunas personas tienen la experiencia de que se les acercan personas que no conocen y que los llaman por otro nombre o insisten en conocerlos anteriormente. Marque la línea para que nos enseñe qué porciento del tiempo esto le pasa a usted.

0% | ----- | 100%

7- Algunas personas tienen la experiencia de sentir como si se encontraran al lado de ellas mismas o como si se miraran a ellas mismas del mismo modo que otra persona la estuviera mirando. Marque la línea para que nos enseñe qué porciento del tiempo esto le pasa a usted.

0% | ----- | 100%

8- Algunas personas se les dice que a veces no reconocen a sus amigos o familiares. Marque con una línea para que nos enseñe qué porciento del tiempo esto le pasa a usted.

0% | ----- | 100%

9- Algunas personas se dan cuenta de que no tienen memoria de algunos eventos importantes en su vida (por ejemplo, su boda, graduación o nacimiento del primer bebé). Marque con una línea para que nos enseñe qué porciento del tiempo esto le pasa a usted.

0% | ----- | 100%

10- Algunas personas tienen la experiencia de haber sido acusados de mentir cuando ellos están convencidos de que no han mentido. Marque con una línea para que nos enseñe qué porcentaje del tiempo esto le pasa a usted.

0% | ----- | 100%

11- Algunas personas tienen la experiencia de mirarse al espejo y no poder reconocerse. Marque con una línea para que nos enseñe qué porcentaje del tiempo esto le pasa a usted.

0% | ----- | 100%

12- Algunas personas tienen la experiencia de sentir que las personas, los objetos y el mundo que les rodea no son reales. Marque con una línea para que nos enseñe qué porcentaje del tiempo esto le pasa a usted.

0% | ----- | 100%

13- Algunas personas tienen la experiencia de sentir que su propio cuerpo no les pertenece. Marque con una línea indicando qué porcentaje del tiempo esto le pasa a usted.

0% | ----- | 100%

14- Algunas personas tienen la experiencia de recordar un evento pasado tan intensa y vívidamente que sienten como si lo estuvieran viviendo otra vez. Marque con una línea qué porcentaje del tiempo esto le pasa a usted.

0% | ----- | 100%

15- Algunas personas tienen la experiencia de no estar seguras si cosas que recuerdan haberles pasado en realidad sucedieron o si tal vez solamente las soñaron. Marque con una línea qué porcentaje del tiempo esto le pasa a usted.

0% | ----- | 100%

16- Algunas personas tienen la experiencia de estar en un lugar conocido y sin embargo encuentran el lugar como extraño y desconocido. Marque con una línea qué porcentaje del tiempo esto le pasa a usted.

0% | ----- | 100%

USE OF DES IN PUERTO RICO

17- Algunas personas tienen la experiencia de que cuando están viendo la televisión o una película en el cine, se absorben tanto en la historia que no se dan cuenta de otras cosas que pasan a su alrededor. Marque con una línea qué porcentaje del tiempo esto le pasa a usted.

0% | ----- | 100%

18- Algunas personas encuentran que se pueden envolver tanto en una fantasía o en un soñar despierto que sienten como si lo que se imaginan les estuviera sucediendo en realidad. Marque con una línea qué porcentaje del tiempo esto le pasa a usted.

0% | ----- | 100%

19- Algunas personas se dan cuenta de que hay veces que están capacitadas para ignorar el dolor físico. Marque con una línea el porcentaje del tiempo que esto le pasa a usted.

0% | ----- | 100%

20- Algunas personas se dan cuenta de que hay veces que se encuentran sentados contemplando el vacío, pensando en nada, y sin darse cuenta del tiempo que pasa. Marque con una línea el porcentaje del tiempo que esto le pasa.

0% | ----- | 100%

21- Algunas personas en ocasiones se dan cuenta que cuando se encuentran solas, se hablan a sí mismas en voz alta. Marque con una línea el porcentaje del tiempo que esto le pasa.

0% | ----- | 100%

22- Algunas personas se dan cuenta que en cierta situación actúan de una manera tan distinta comparada a como actúan en otra situación, que se sienten casi como si fueran dos personas distintas. Marque con una línea el porcentaje del tiempo que esto le pasa a usted.

0% | ----- | 100%

23- Algunas personas a veces se dan cuenta de que en ciertas situaciones pueden hacer cosas con sorprendente facilidad y naturalidad, las cuales normalmente sería difícil para ellos realizar (ejemplo, un deporte, un trabajo, situaciones sociales). Marque con una línea el porciento del tiempo que esto le sucede a usted.

0% | ----- | 100%

24- Algunas personas a veces se percatan que no recuerdan si han hecho algo o si simplemente pensaron en hacerlo (ejemplo, no saben si enviaron una carta o simplemente pensaron en mandarla). Marque con una línea el porciento del tiempo que esto le sucede a usted.

0% | ----- | 100%

25- Algunas personas encuentran evidencia de que hicieron cosas que no recuerdan haber hecho. Marque con una línea el porciento del tiempo que esto le pasa a usted.

0% | ----- | 100%

26- Algunas personas a veces encuentran escritos, dibujos o notas dentro de sus pertenencias las cuales fueron hechas por ellas mismas pero no recuerdan haberlas hecho. Marque con una línea el porciento del tiempo que esto le pasa a usted.

0% | ----- | 100%

27- Algunas personas a veces se percatan de que escuchan voces dentro de su cabeza las cuales les dicen que hagan cosas o comentan sobre lo que la persona esta haciendo. Marque con una línea el porciento del tiempo que esto le sucede a usted.

0% | ----- | 100%

28- Algunas personas a veces se sienten como si estuvieran mirando al mundo a traves de una neblina, de tal manera que las personas y los objetos parecen lejanos o poco claros. Marque con una línea el porciento del tiempo que esto le sucede a usted.

0% | ----- | 100%