DISSOCIATIVE EXPERINCES IN ADOLESCENTS AND COLLEGE STUDENTS

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ABSTRACT

The authors administered the Dissociative eriert co' Scale to 168 children aged 12-14, 345 college students with. a median age (124 years, and 30 patients in a Geriatric Day Hospital. Scores were distributed in a highly left-skewed fashion, with no differences between males and females arnongthe adolescents or college students. The median score for the adolescents was 17. 7 fin- the college students 7. 9 and for the elderly 4.8. These findings suggest that dissociative experiences are more common in early adolescence than in young adulthood, and that they' continue to decline with increasing age after the third decade.

Three scales have been developed for self-report measurement of dissociation (Bernstein & Putnam, 1986; Dyck & Gillette, 1987; Sanders, 1986) . Only one of these, the Dissociative Experiences Scale (DES) (Bernstein & Putnam, 1986), has been subjected to a replication study (Ross, Norton, & Anderson, 1988). The DES was therefore chosen as the instrument to measure dissociative experiences in normal adolescents and college students. Because of the increasing frequency with which dissociative disorders, especially multiple personality disorder (MPD) are being diagnosed (Kluft, 1987; Putnam, Guroff, Silberman, Barban, & Post, 1986; Ross, Norton, & Wozney, 1989), it is important to know the rate of dissociative experiences in the general population, and across the life cycle.

We administered the DES to 345 college students, 168 adolescents age. 12-14, and 30 Geriatric Day Hospital patients to determine the prevalence of dissociative experiences in these three groups.

METHOD

Subjects

Subjects were recruited from three groups: 1. Students at a junior high school were asked to fill out the DES in their classrooms 2. Students at a university were likewise asked to till out the DES during classes, or when presenting to the University Health Services or Counselling Service 3. Patients at a Geriatric Dav Hospital were administered the DES.

Measures

The DES is a 28-item self-report instrument with a test-retest reliability of 0.84 (Bernstein & Putnam, 1986). It has good split-half reliability. The median Spearman rank-order correlation between the 28 items and the overall score is 0.64, with a range of 0.50 to 0.79. The DES is able to differentiate clinical groups from controls (Ross, Norton, & Anderson, 1988).

Procedure

Ethical approval for the project was received from the Faculty of Medicine and the Counselling Service at our university. The project was discussed with the principal of the junior high school, then with each classroom teacher in the school. There are 302 students in this school. Two students from the school entered the classrooms, explained the project and the questionnaire to the students, and then collected the completed forms from the teachers at a later time.

At the university, the project was discussed with the Deans, the Assistant Deans, then the Department Heads, then the individual professors. As prearranged with the individual professors, the second author or a research assistant then entered the classes, explained the project and the questionnaire, and collected the DES forms immediately upon their completion, Students were selected to complete the DES using a sampling technique in which randomization was carried out with respect to faculty and year of study only, with students chosen from the faculty of arts, faculty of science, professional training faculties, the University Counseling Service, and the University Health Service. Each of the four fall, winter, spring, and summer semesters were sampled, as were different undergraduate years. The students from the Counseling Service were seeking counseling for academic difficulties, vocational guidance or personal problerns.

At the Geriatric Day Hospital the majority of subjects re-

quired assistance in reading and filling out the DES because of impaired vision. Geriatric subjects also completed the Folstein Mini Mental Status Exam (Folstein, Folstein. McHugh, 1975) to determine whether they were cognitively impaired. Geriatric subjects were enrolled consecutively in the study until 30 subjects were completed: any persons with cognitive impairment which made it difficult for them to participate were excluded.

For the college student and the adolescen t scores, Spearman rank-order correlation coefficients between the total DES scores and each of the 28 individual items were calculated.

The Wilcoxon rank-sure test was used to compare median scores of males versus females in the adolescent and college student groups; different age groups in the adolescents; and Caucasian versus nonCaucasian among the college students.

RESULTS

At the junior high school the DES was completed by 168

TABLE 1
Spearman Correlations of Dissociative Experiences Scale (DES)
Items with Overall DES Score

Item	Spearman Correlation Coefficient* College Students (N=315)	Adolescents (N=168)
1. Forgetting part of a car trip	0.46	0.33
2. Missing part of a conversation	0.58	0.50
3. Unaware of how you got to a new location	0.39	0.44
4. Dressed in clothes, can't remember putting them on	0.37	0.44
5. Unfamiliar things in your belongings	0.38	0.51
6. Strangers know you, call you by another name	0.47	0.43
7. Out of body experience	0.55	0.43
8. Told you do not recognize friends or family	0.34	0.39
9. No memory for important events	0.43	0.33
10. Accused of lying, don't think you did	0.48	0.58
11. Not recognizing self in mirror	0.46	0.43
12. Other people, persons, objects not real	0.60	0.44
13. Body does not belong to you	0.63	0.44
14. Remembering past so vividly you relive it	0.63	0.75
15. Not sure if something really happened or a dream	0.68	0.64
16. Familiar place is strange and unfamiliar	0.61	0.63
17. Absorption in television or a movie	0.60	0.59
18. So involved in fantasy it seems real	0.66	0.70
19. Able to ignore pain	0.52	0.65
20. Staring into space, unaware of time	0.67	0.68
21. Talking out loud to self while alone	0.54	0.44
22. Act differently, almost like two different people	0.65	0.56
23. Amazing ease and spontaneity in some situations	0.65	0.63
24. Not sure you did something, just thought about it	0.64	0.66
25. Find evidence of doing something, can't remember	0.61	0.61
26. Find writing, drawings, can't remember doing them	0.55	0.53
27. Hear voices inside your head	0.53	0.53
28. Looking at the world through a fog	0.54	0.39

*All correlations are significant at p <.0001.

students out of a total population of 302. There were 79 boys (47%) and 89 (53%) girls among the respondents: there were 59 children of age 12, 15 ol'age 13, and 94 of age 14. The median DES score for the entire group was 17.7. The distribution of scores was highly left-skewed. There was no statistical difference between boys (DES median score 18.8) and girls (DES median score 17.1).

There was a decline in DES score with age. The median score at age 12 was 20.2, at age 13 it was 21.8, and at age 14 it was 14.8. The scores of the 12 and .13-year olds did not differ from each other. However, the 12-year olds differed from the 11 -year olds at p <.00(101, and the 13-tear olds differed from the 14-year olds at p < .02. Because of the small sample of 13-year olds, conclusions about this age-group are tentative.

Of the 345 college students completing the DES, 206 (60.1%) were female and 137 (39.9%) were male. Two students did not record their sex on the DES form. There were 1 76 (51.0%) Caucasian respondents, and 41 (11.9%) nonCaucasian, with the remaining 128 failing to indicate their race. Of the respondents, 75 (21.7%) were from the Counselling Service and I lealth Services while the remainder were distributed across the academic faculties. Altogether 53 (15.4%) subjects had DES scores above 20: 10 of these were from the Counselling Service and Health Services. The Corti rsel li ng and Health Services subjects accoun t.ed for 21.7% of the total population, and 18.9% of the scores above 20.

Among the college students there were no statistical differences between males and females, or between Caucasians and nonCaucasians on DES scores. The median DES score for the 345 college students was 7.9. The distribution of scores was highly left-skewed.

For the Geriatric Day Hospital subjects, the median DES score was 4.8, and the range was 0 - 21.4. Only five subjects scored above 10. The Folstcin Mini Mental Status Exam scores for the 22 subjects who completed the Exam were: 3 scored 17, 6 scored 20 - 25; and 13 scored above 25, out of a total possible score of 30. These scores indicate good cognitive function in the geriatric subjects.

As shown in Table 1, each of the 28 items on the DES are significantly related to the overall DES score among both the adolescents and the college students: each of these correlations was significant at p <.0001.

DISCUSSION

The results of this study must be viewed as preliminary and tentative. However it. appears that dissociative experiences are more common in early adolescence than in young adulthood. DES scores appear to decline further after young adulthood. There is no difference between males and females in the frequency of dissociative experiences in either adolescence or early adulthood. Males and females were not compared among the elderly group because of the small number of subjects.

The lack of differences in DES scores between males and females is consistent with the lack of differences in dissociative symptoms between males and females with MPD. Ross and Norton (1989) found that. 28 male and 207 female cases of MPD reported to them did not differ on diagnostic criteria. number of personalities, or types of alter personality.

A close link between dissociation and hypnosis has been proposed by a number of authors (Beaters. 1983; Bliss, 1986; Braun, 1984; Kluft, 1987; Spiegel, Hunt, & Dondershine, 1988). It is known that hvpnotizability peaks in late childhood and early adolescence, then declines with age (Berg & Melin, 1975; Gordon, 1972; Morgan & 1 lilgard, 1973; Spiegel & Spiegel, 1978), therefore one would expect dissociative experiences to be less common with advancing age. Our findings are consistent with this expectation.

In two studies with the DES, adult normal controls have had median DES scores of 4.38 (N=34) (Bernstein & Putnam, 1986) and 4.9 (N=28) (Ross, Norton, & Anderson, 1988). Median DES scores above 20 iur these two studies have occurred only in groups with schizophrenia, postraumatic stress disorder or MPD. The DES distinguished clinical groups from controls at high levels of significance in these two studies.

Our findings demonstrate that high DES scores in adolescents must be interpreted with caution, and do not necessarily indicate psychopathology because high scores are the norm in this age group. It appears that in normal development there is a decline in the amount of dissociative experience. A given dissociative experience night be developmentally normal at age 10, but an indicator of psychopathology at age 25. Further studies with clinical populations will be required to explore such possibilities.

The fact that all items in the DES correlate with the overall DES score at p <.001, in both groups, does not conclusively prove the construct validity of the instrument, but is evidence in favour of it.

In sumrnacy, the data indicate that there is a decline in dissociation with age, which occurs on a curve similar to that for hypnotizability. Dissociative experiences are as common in normal adolescents as in adults with certain psychiatric illnesses. Endorsement of dissociative experiences on the DES in an adolescent should be interpreted with caution, and should not be viewed as necessarily an indicator of psychopathology. The differentiation of developmentally normal from pathological dissociation in adolescents will require finther study, as will the validity and meaning of responses ofvoung adolescents to DES questions. From such work an adolescent form of the instrument might eventually be developed. ■

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