RESULTS OF THE DISSOCIATIVE EXPERIENCES SCALE IN A JAIL POPULATION

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ABSTRACT

The Dissociative Experiences Scale II (DES II) was administered to 305 inmates in a detention center (DC) in a suburban area of greater metropolitan Atlanta, Georgia. There were 229 male inmates and 69 female inmates who completed the study. Results show that 25% of the jail population scored 30 or higher on the DES II (24.4% of males, 27.5% of females). The mean score on the DES II for the entire population was 21.7 with 40% of the population scoring above 20. Findings suggest that dissociative disorders in a jail population may be prevalent. Further studies using the DES II are needed to determine the factors influencing dissociative states in a criminal population. Also, studies should be conducted to determine the extent to which dissociative states of inmates represent pathology as opposed to environmentally-induced defense mechanisms.

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In an article updating research using the Dissociative Experiences Scale (DES) with recommendations for the future use of the Dissociative Experiences Scale II (DES II), Carlson and Putnam (1993) targeted several promising populations for future use of the scale. One of the groups of particular interest was the criminal population. The literature has speculated for several years that highly dissociative males may be found in a jail or prison setting rather than in a mental health setting.

Surprisingly, a review of the literature indicates that there have not been systematic studies of the prevalence of dissociation in this population. Thus, the present study provides the first findings of the prevalence of dissociative experiences using the Dissociative Experiences Scale in a jail population.

Specifically, this paper presents the findings of a study designed to test for dissociative states in a jail population of more than 800 inmates. In addition to the DES II, a general questionnaire was given concerning the inmates' history of violence, drug abuse, hospitalization, self-reported dissociative states, crimes accused of, and history of child abuse.

METHOD

Participants

The study was conducted at a detention center (DC) in a suburban area of greater metropolitan Atlanta. The DC serves as a holding facility for detainees awaiting adjudication. Also, as with many such facilities, detainees are often housed on a temporary basis after sentencing due to space shortages in other facilities. The average population is more than 800 inmates with approximately 675 male inmates and 125 female inmates. The length of stay at DC can range from 14 days to one year, but is approximately six months on the average. Criminal charges range from misdemeanors to felonies.

Materials

The Dissociative Experiences Scale (DES II), the 1993 revised version (Carlson & Putnam, 1993) is a 28-item self-report measure of the frequency of dissociative experiences. The change in the DES II (Carlson & Putnam, 1993) is considered to "be so minor that we feel confident that the new version will yield results comparable to those of the old version" (p. 22). Reliability and validity of the DES have been well established in several studies (Carlson & Putnam, 1993; Carlson, et al., 1993; Dubester & Braun, 1995; van-IJzendoorn & Schuengel, 1996). The DES II is designed to be used as a screening instrument for dissociative disorders and to help determine the contribution of dissociation to psychiatric disorders. This study used the DES II with a minor change to

TABLE 1
Dissociative Experience Scale Scores by Age for Men and Women

	Men (N = 222)			Women (N = 65)		
Age (years)	**N**	**Mean**	**SD**	**N**	**Mean**	**SD**
under 18	2	34.08	12.92	1	13.22	—
18 - 29	95	26.47	20.49	34	22.66	18.56
30 - 39	88	19.60	17.05	23	19.38	14.59
40 - 49	25	13.07	10.48	6	30.44	21.18
50 - 59	11	12.25	5.68	—	—	—
60 - 69	1	8.51	—	1	8.12	—

the scale (with permission from Eve Bernstein Carlson, Ph.D.) prior to the administration of the test. The revised version of the DES II (1993) shows a continuum of percentages with the word "never" written under 0% and the word "always" written under 100%. For this study, the words "half of the time" were added under 50%.

Along with the DES II, the inmates were asked to complete a general questionnaire which examined several variables and demographics. There were questions concerning substance abuse, psychiatric hospitalization, diagnosis if known, self-reported dissociative states, the use of violence, occurrences of child abuse, and the crimes of which inmates were accused. The questionnaire had been used with a clinical population and some of the questions were taken from the Dissociative Disorder Interview Schedule (Ross, et al., 1989). The questionnaire was originally designed to uncover major clinical concerns for mental health counseling.

Design and Procedure

Any opportunities for participation in the study was presented to all of the inmates in all of the units or pods, which house 65 to 75 inmates at a time. The purpose of the study was explained to the inmates, and they were asked to volunteer. They were seated in a general area in the pod with both an officer and a proctor in the area. Inmates not taking the test were either in their rooms or outside in the smoking area. The inmates were allowed to ask questions of the proctor during testing. Ethical approval for the study was obtained from Georgia State University Institutional Review Board and from the undersheriff of the detention center.

Scoring

The Dissociative Experiences Scale (DES II) was scored as instructed by Carlson and Putnam (1993). Codes were established for demographic data and other factors such as crimes accused, histories of abuse, participation in acts of violence, drug related incarceration, and self-reported dissociative states. Descriptive analyses were conducted with frequency distributions of responses for males and females, along with mean values and standard deviations for all scale items. A comparison was made for men and women on response differences by age.

RESULTS

General

The sample consisted of 229 male inmates and 69 female inmates. Of the 305 inmates completing the instruments, there were 298 usable products. The mean age and standard deviation (sd) of the women were 30.6(sd 8.4) years and of the men 31.7(sd 9.2) years. The mean age for the entire sample was 31.13(sd 9.4) years; the median age was 30.

The races of the respondents of the male sample were 69% (N=156) Caucasian, 27% (N=63) African-American, 1% (N=1) Native American, 2% (N=4) Asian, and 1% (N=1) Hispanic. The races of the respondents of the female sample were 57% (N=39) Caucasian, 40% (N=27) African-American, 3% (N=2) Hispanic. In the male population 50% (N=117) were drug-related incarcerations and in the female population 58% (N=39). Sixty-six percent (66%) (N=155)male respondents and 52% (N=35)female respon-

TABLE 2
Frequency Distribution of Dissociative Experiences Scale
Total Scores for Men and Women

	Men		Women		Total Men & Women	
Score	**N-229**	**%**	**N-69**	**%**	**N**	**%**
0 - 4	29	12.8	12	17.4	41	13.8
5 - 9	40	17.8	6	8.7	46	15.4
10 - 14	37	16.4	12	17.4	49	16.4
15 - 19	27	12.0	7	10.1	34	11.4
20 - 24	26	11.6	4	5.8	30	9.8
25 - 29	10	4.4	5	7.2	16	5.0
30 - 34	13	5.8	5	7.2	18	6.0
35 - 39	9	4.0	3	4.3	12	4.0
40 - 44	5	2.2	2	2.9	7	2.3
45 - 49	7	3.0	4	5.8	11	3.6
50 or >	22	8.3	5	7.1	27	9.6
Missing	4	1.7	4	5.8	8	2.7

dents reported past incarcerations at DC. For both the female and male population 15% reported previous psychiatric hospitalizations.

Dissociative Experiences

The mean score for the males on the DES II was 21.61 (sd 19.24), with a median score of 15.9, and for the females the mean score was 21.85 (sd 17.56), with a median 16.3. The mean score for the entire population was 21.66 (sd 18.07) and the median score was 16.

Table One shows the mean scores on the DES II for both sexes at different ages. The mean score of 30.44 (sd 21.18) for 10% (N=6) of the women who were 40-49 years of age from the mean score of 13.07 (sd 10.48) for 10% (N=24) of the men in the same age grouping was significant (t=2.95, p=.0063). Otherwise there were no significant differences in the means according to age groups for males and females.

Table Two presents the frequency distribution of the DES II for men and women. For the males 24.1% (N=57) and for the females 27.5% (N=19) scored 30 or higher. Carlson (1993) stated that "it is quite possible that those scoring 30 or over are not actually MPD" (p.21). However, the research indicates that many scoring 30 or higher will be experiencing PTSD or dissociative disorders other than dissociative identity disorder (DID) (previously named multiple personality disorder). Considering the cutoff score of >40 as a possible indicator of DID (Carlson, 1993), the male population had 15% (N=35) and the female population 16% (N=11) in this range.

Table Three presents the frequency of the sample scoring >30 for subscales, as is commonly presented by studies (Carlson et al., 1991; Ross, Ellason, & Anderson, 1995; Schwartz & Frischoltz, 1991), on individual items on the DES II for both males and females. There are significant differences by gender on items 2, 15, 19, and 23. On item 2 "Missing part of a conversation," the mean 41.40 (sd 23.0) for women was significantly higher than the mean 33.41 (sd 22.53) for men (t=2.60, p=.01). On item 15, "Not sure if something really happened or a dream," the mean 27.32 (sd 25.74) for women was significantly higher than the mean of 19.81 (sd

TABLE 3
Percentages of Population Scoring Over 30 on Subscale Items

AMNESTIC SUBSCALE	% SCORING OVER 30	
DES II Items*	**M**	**F**
3. Unaware of how you got to a new location	12	10
4. Dressed in clothes can't remember putting on	4	6
5. Unfamiliar things in your belongings	13	16
6. Strangers know you, call you by another name	34	41
8. Told you do not recognize friends or family	12	13
10. Accused of lying, don't think you did	41	46
25. Find evidence of doing something, can't remember	30	35
26. Found writing, drawings, can't remember doing them	21	20

DEPERSONALIZATION & DEREALIZATION SUBSCALE		
DES II Items*	**M**	**F**
7. Out of body experience	18	20
11. Not recognizing self in mirror	11	14
12. Other people, persons, objects not real	14	12
13. Body does not belong to you	9	17
27. Hear voices inside your head	24	23
28. Looking at the world through a fog	16	22

ABSORPTION AND IMAGINATIVE SUBSCALE	% SCORING OVER 30	
DES II Items*	**M**	**F**
2. Missing part of a conversation	59	73
14. Remembering past so vividly you relive it	45	49
15. Not sure if something really happened or a dream	29	48
16. Familiar place is strange and unfamiliar	25	35
17. Absorption in television or a movie	38	26
18. So involved in fantasy it seems real	31	36
20. Staring into space, unaware of time	33	40
22. Act differently, almost like two different people	27	36
23. Amazing ease and spontaneity in some situations	57	48

23.8) for men (t=2.28, p=.02). On item 19, "Able to ignore pain," the mean 31.92(sd 30.24) for men was significantly higher than the mean of 23.8(sd 29.0) for women (t=1.99, p=.04). On item 23, "Amazing ease and spontaneity in some situations," the mean 37.63(sd 29.5) for men was significantly higher than the mean of 28.4(sd 24.4) for women (t=2.38, p=.017). The absorption and imaginative subscale have the highest mean and have the highest percentages of respondents scoring over 30.

DISCUSSION

The data from this study provide valuable descriptive information on reported dissociative experiences in a jail population. The literature has speculated that males who experience dissociative disorders may be more prevalent in a criminal population than in mental health settings (Carlson, 1993). Even though there were significantly more men in this study than women, dissociative experiences for males do not generally appear to be different from females in this setting. The findings of this study indicate that dissociative experiences are much higher in a jail population than in a general population (Ross, Joshi, & Currie, 1990) with 40% scoring over 20 and 25% scoring over 30.

As suspected, the findings of this study have raised myriad questions. Some of the important questions that need to be answered are whether or not inmates scoring above 30 have a history of highly dissociative states, or do dissociative experiences increase considerably in a jail environment? For inmates with scores above 40, are these scores indicative of dissociative identity disorder and/or what is the influence of the jail environment on these scores? For scores above 20, which includes 40% of the population, are these scores indicative of the stress associated with a jail environment or does this indicate that the jail popu-

TABLE 3
Percentages of Population Scoring Over 30 on Subscale Items
(Continued)

OTHER ITEMS NOT INCLUDED IN SUBSCALES

DES II Items*	M	F
1. Forgetting part of a car trip	26	29
9. No memory of important events	18	23
19. Able to ignore pain	49	39
21. Talking out loud to self while alone	33	46
24. Not sure you did something, can't remember	37	44

** Summarized wording by Ross, Ryan, Anderson, Ross, & Hardy (1989).*

lation consists of a higher percentage of persons suffering from post-traumatic stress disorders?

Further research is needed to determine if these findings would be replicated in a more secure prison population. Since the crimes reported in this study population tend to be more in the area of misdemeanors rather than more serious felonies, further research determining the relationship of types of crimes committed to dissociative phenomena would be of importance.

Although the environment at DC is much less threatening and much more predictable for the inmates than other jail environments,the authors believe that the process of incarceration has to have some effect on the dissociative phenomena experienced by the inmates. Determining the levels of dissociation in different types of forensic environments might help answer questions about several factors involved with incarceration in general. Administering the DES at the time of entry into the jail system with a follow-up administration after a specific length of a stay would also help to tease out dissociation that is tied to the jail or prison environment.

There are some methodological limitations of the study that need to be considered before generalizing beyond the present sample. First, the sample represents less than half of the available population. This was due to scheduling problems and lack of volunteer participation. Second, the study is entirely based on self-report, with no adjunctive clinical observations to confirm their validity. While there were few direct incentives for faking, and inmates would gain nothing from appearing dissociative, further research will be required to determine the validity of these seemingly elevated scores. Third, elevated dissociation may be an adaptive response inside this context and may represent a state variable rather than a trait variable. As stated above, longitudinal research on those concerns would be an important addition to the field.

For over a year, one of the authors worked clinically with the inmates in DC. In order to see a counselor, the inmates had to request this service. Of the inmates requesting service, the author saw seven inmates who had been diagnosed as having DID by the state-operated psychiatric hospital, at which prisoners were assessed. Other clinicians saw approximately five inmates with the diagnosis of DID. Clearly, there are inmates among this population who suffer DID. Future research of this population at DC will include administering the Dissociative Disorders Interview Schedule (Ross et al., 1989) to inmates who have scored high on the DES II. Also inmates who have been diagnosed as DID will be given the DES II. Since dissociative experiences appear to be prevalent in this population, future work with inmates should take into consideration their need for treatment for dissociative disorders and the dissociative aspects of other conditions. Further research could include using the DES to determine the outcome of treatment with this population (Choe & Kluft, 1995). ■

REFERENCES

Carlson, E.B., & Putnam, F.W. (1993). An update on the Dissociative Experiences Scale. *DISSOCIATION, 6,* 16-27.

Carlson, E.B., Putnam, F.W., Ross, C.A., Anderson, G., Clark, P., Torem, M., Coons, P., Bowman, E., Chu, J.A., Dill, D., Lowenstein, R.J., & Braun, B.G. (1991). Factor analysis of the Dissociative Experiences Scale: A multicenter study. In B.G. Braun & E.B. Carlson (Eds.), *Proceedings of the Eighth International Conference on Multiple Personality and Dissociative States.* Chicago: Rush.

Carlson, E. B., Putnam, F. W., Ross, C.A., Torem, M., Coons, P., Dill, D.L., Loewenstein, 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.

Choe, B.M., & Kluft, R.P. (1995). The use of the DES in studying treatment outcome with dissociative identity disorder: A pilot study. *DISSOCIATION, 8,* 160-164.

Dubester, K. A., & Braun, B. G. (1995). Psychometric properties of the Dissociative Experiences Scale. *The Journal of Nervous and Mental Disease, 183,* 231-235.

Ross, C.A., Ellason, J.W., & Anderson, G. (1995). A factor analysis of the Dissociative Experiences Scale (DES) in dissociative identity disorder. *DISSOCIATION, 8,* 229-235

Ross, C.A., Heber, S., Norton, G. R., Anderson, D., Anderson, G., & Barchet, P. (1989). The Dissociative Disorders Interview Schedule: A structured interview. *DISSOCIATION, 2,* 3 169-189.

Ross, C.A., Joshi, S., & Currie, R. (1990). Dissociative Experiences in the general population. *American Journal of Psychiatry, 147,* 1547-1552.

Ross, C.A., Ryan, L., Anderson, G., Ross, D., & Hardy, L. (1989). Dissociative experiences in adolescents and college students. *DISSOCIATION, 2,* 4 239-242.

Schwartz, D., & Frischholz, E.J. (1991). Confirmatory factor analysis of the Dissociative Experiences Scale. In B.G. Braun & E.B. Carlson (Eds.), *Proceedings of the Eighth International Conference on Multiple Personality and Dissociative States.* Chicago: Rush.

van IJzendoorn, M.H., & Schuengel, C. (1996). The measurement of dissociation in normal and clinical populations: Meta-analytic validation of the Dissociative Experiences Scale. *Clinical Psychology Review, 16,* 365-382.