CHILDHOOD TRAUMA, ADULT TRAUMA, AND DISSOCIATION

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ABSTRACT

This paper studies the relationship among childhood trauma, recent trauma, and dissociation. Literature has suggested that early trauma may lead to dissociation. It was hypothesized that dissociation, including symptoms associated with Dissociative Identity Disorder (DID), would be more prevalent in those survivors of childhood abuse who were later traumatized in adulthood. Seventy-five female subjects completed a survey protocol. Subjects who experienced both early and recent trauma were more dissociative and endorsed more symptoms consistent with DID.

TRAUMA AND DISSOCIATION

Dissociation is a structured separation of mental processes that are ordinarily integrated. It separates, segregates and isolates chunks of experience. It serves to compartmentalize threatening, destructive, or effectively negative material and prevent it from contaminating non-threatening material (Bloch, 1991). Dissociation is an immediate adaptive response that may diminish or block out awareness of the trauma and/or its impact.

Observations of a connection between traumatic events and dissociative symptoms date back at least to the writings of Janet, Freud, Prince, and James (Cardena & Spiegel, 1993). For Pierre Janet (1901 [cited in Sandberg & Lynn, 1992, p.717]), dissociation was "the crucial psychological process with which the organism reacts to overwhelming trauma." He postulated that split-off parts of the personality are capable of independent function.

The wartime amnesiac provides the best documentation of the connections between trauma and dissociative reactions. Combat veterans often report dissociative phenomena such as amnesia, profound detachment or depersonalized feelings during moments of extreme stress, out of body experiences, and dream-like recall of events (Putnam, 1989). In

peace time a similar relationship between traumatic events and dissociative reactions has been observed. Dissociative symptoms that spontaneously occur during traumatic experiences include stupor, derealization, depersonalization, numbing and amnesia for the event (e.g., Classen, Koopman & Spiegel, 1993).

SEXUAL ABUSE AND TRAUMA

With some notable exceptions, the literature has often appeared to overlook the development of dissociative symptoms following a traumatic event. Post-traumatic stress disorder is classified as an anxiety disorder in the *DSM-IV* (Classen et al., 1993). Steinberg, Cicchetti, Buchanan, Hall and Rounsaville (1993) suggest the neglect of dissociative symptoms and disorders is a result of reluctance to discuss issues related to child abuse and the concealed nature of the dissociative symptoms themselves. The after-effects of that abuse, including dissociative symptoms and disorders, must be studied and treated.

Several studies of incest and its consequences have documented the clinical observation that many survivors suffer from some degree of dissociative symptomatology. Finkelhor and Browne's (1986) review of the literature concluded that dissociation is a long-term consequence of incest. Briere (1984) reported that 41% of his sample experienced dissociation, 33% de-realization and 21% out-of-body experiences. Lundberg-Love, Crawford, and Geffner (1987) found 61% of survivors exhibited dissociative symptoms.

There is accumulating evidence that dissociation is activated as a defense in childhood against sexual trauma or physical abuse. It then continues to present itself as a symptom especially if new trauma occurs (Braun, 1986). Those abused in childhood may have acquired characteristic methods of coping with stressful experiences, such as emotional numbing, which may make them more susceptible to subsequent trauma (Bremner, Southwick, Johnson, Yehuda, & Charney (1993).

DISSOCIATIVE IDENTITY DISORDER

Dissociative Identity Disorder (DID) is a severe chronic dissociative response to overwhelming and usually traumat-

ic antecedents.

It has been found to result from childhood trauma and/or overwhelming experiences (Bernstein & Putnam 1986; Hacking 1991; Ross, 1989). The connection between trauma and dissociation (and DID) is not limited to childhood events. Recent work suggests that major stress and traumatic events are common antecedents of DID's becoming evident in adulthood (Spiegel & Cardena, 1991).

THE PRESENT STUDY

The present study was conducted to assess the interaction effects of old and recent trauma on the development of dissociation and symptoms associated with DID. Although old and recent trauma may cause dissociative responses in individuals, it is proposed that the interaction of both types of trauma might both increase dissociation and the development of symptoms of DID.

Hypotheses

- The major hypothesis of the present study was that old and recent traumas would interact, resulting in higher dissociative and dissociative identity scores on test measures. Other related hypotheses were:
- Trauma victims would score higher on a trauma scale than persons reporting no trauma.
- Participants who suffered abuse as children would score higher on measures of dissociation and Dissociative Identity Disorder than will those who were not abused as children.
- Persons experiencing recent trauma would score higher on measures of dissociation and Dissociative Identity Disorder than would persons reporting no trauma.

Method

This study had three sites. In Winnipeg and Nova Scotia private therapists referred participants who had suffered trauma. The third site was a University, where young women were drawn from the psychology department subject pool. Most, but not all, of the latter group reported neither old nor recent trauma.

Participants

Participants, all of whom were female, were asked to complete a survey package. Of the 75 participants completing the test packages, 14 (18.7%) had suffered old and recent trauma, 11 (14.7%) had suffered only old trauma, 29 (38.7%) had suffered only recent trauma, and 21 (32%) reported that they had not suffered any trauma. Their average age was 24.5 years (SD 9.2). The mean age for each group

TABLE 1 Mean Age for Each Group

		Old Trauma	
		Yes	No
Recent			
Trauma	Yes	34.8	20.6
		n = 14	n = 29
	No	31.3	18.6
		n = 11	n = 21

participating in the study is shown in Table 1. The average age of participants in this study was slightly lower than other studies in this area. For example, the average age of participants in Gold's (1986) study was 30.4 years, and was 32.7 years in Anderson, Yasenik and Ross' (1993) study. It is notable that those subjects in the present study who reported either no trauma at all or only recent trauma were significantly younger than other participants in the study. It is possible to hypothesize that if the women in the no trauma group were older (average age 18.6) one could see a decrease in the no trauma response due to further life experience and possible exposure to traumatic events.

Procedure

Three measures were used for assessing trauma, dissociation and symptoms of Dissociative Identity Disorder. A therapist-referred participant received a survey package from the therapist. She was asked to sign a consent form, designed by Ross (1989) for use with the population and to complete a copy of the instruments. Participants sealed questionnaires and mailed them back to the researcher. Signed consent forms were kept apart from the other forms.

In the case of the University group, students were volunteers from a psychology department subject pool. They were given the same assurances, signed the same consent form, and completed the same measures.

Instruments

The test instruments for the study consisted of a Trauma History question, the subscale for MPD of the Dissociative Disorders Interview Schedule, the Dissociative Experience Scale, the Traumatic Experience Questionnaire, an study instruction sheet and a debriefing form.

MPD sub-section of the Dissociative Disorders Interview Schedule (Ross, 1989): This scale is administered in approximately ten minutes. The test is a 16-item self-report interview which screens for features associated with DID. Ross (1989) claims

TABLE 2
Mean Group Scores on the TEQ

	maga ThiO	Old Trauma	
D	101	Yes	No
Recent Trauma	Yes	.5714	.2759
	No	.4545	.1429

TABLE 3
Group Means on the DES

	Old Trauma		
		Yes	No
auma	Yes	38.3	9.58
		16.72	

TABLE 4
Group Means on the DDIS for Positive
DID Diagnostic Items

eletribusers		Old Trauma		
	Sirve on it of the Africant of the Control	Yes	No	
Recent Trauma	Yes	7.3	.759	
	No	2.64	.524	

that the DDIS has been administered to over 300 persons without a confirmed false positive diagnosis of DID. The overall inter-rater reliability is 0.76 and inter-rater reliability for diagnosis of DID is 0.78.

The Dissociative Experiences Scale (Bernstein & Putnam, 1986): The DES is a 28-item self-report instrument that can be used as a screening instrument for Dissociative Disorders: it can be completed in approximately ten minutes. The DES

contains a variety of dissociative experiences, many of which are normal experiences. Following the question there is a percent line and the subject circles a value ranging between 0-100 to show how often she has had the experience. The DES is a screening instrument rather than a diagnostic instrument. High scores on the DES suggest that clinical assessment for dissociation is warranted (Ross, 1989) but do not lead to a diagnosis. The DES is reported to have 0.85 test-retest reliability and 0.99 inter-rater reliability (Carlson & Putnam, 1993).

The Traumatic Experience Questionnaire (Genest, Swanson, Ramsden, & Genest, 1991): This test looks at symptoms that may occur after someone experiences a traumatic event. The test is based on the DSM-III-R criteria for Post-Traumatic Stress Disorder. The TEQ provides both yes/no answers indicating whether the respondents meet the criteria for PTSD, and intensity-of-symptom scores. The latter were used in the present study. To date no psychometric data concerning the scale are available, although it is sufficiently tied to the DSM criteria that one can infer that research on the trauma construct done in connection with the DSM would support the validity of the scale.

RESULTS

The Traumatic Experience Questionnaire (TEQ): Twenty-four participants (32%) met the DSM III-R criteria for PTSD, based on the Traumatic Experience Questionnaire (TEQ). Mean scores on the TEQ are represented in Table 2.

A 2x2 analysis of variance indicated that there was a significant main effect on the TEQ for those participants who had suffered old trauma, $\underline{F}(1,71)=7.457$, $\underline{p}<.01$. There was no significant main effect for those participants who suffered recent trauma, nor was there an interaction for old and recent trauma.

The Dissociative Experience Scale (DES): Research suggests that most adults with DES scores over 30 have DID or post-traumatic stress disorder (Ross, 1989). Because the DES is used for screening and not diagnosis, a score above 30 indicates high levels of dissociation and the need for further testing for dissociative disorders. Eleven women in the sample scored above 30 on the DES.

The mean score on the DES for all subjects was 15.57 (SD 17.531). Again it was hypothesized that old and recent traumas would interact, resulting in higher dissociative scores on the DES. As indicated in Table 3, participants who suffered both old and recent trauma scored higher on this test than other participants. Those suffering only old trauma scored higher on this test than participants who had not suffered any trauma.

A 2x2 analysis of variance showed a significant main effect for old trauma on the DES, $\underline{F}(1,71)$ =35.424, \underline{p} <.001, a significant main effect for recent trauma, $\underline{F}(1,71)$ =6.545, \underline{p} <.05 and a significant interaction between old and recent trau-

ma, F (1,71)=8.806, p<.01.

Post hoc comparisons were computed using the Tukey/ Krammer method. Those who suffered both old and recent trauma differed significantly from all other participants on the DES, q>2.82, p<.05. No other significant group differences were found.

The Dissociative Disorders Interview Schedule (DDIS): Participants completed the multiple personality disorder subsection of the DDIS. Most adults with DID have on average 8.3 positive features associated with the disorder (Ross, 1989). Six women scored above the 8.3 criterion for the diagnosis of DID: five in the group that suffered both types of trauma and one in the old trauma group. The mean score was 2.173 (SD 3.33). It was hypothesized that old and recent trauma would interact, resulting in higher scores on the DDIS. As indicated in Table 4, those who suffered both old and recent trauma scored higher on this test than other participants.

A 2x2 analysis of variance indicated that there was a significant main effect for old trauma on the DDIS, \underline{F} (1,71)=75.951, \underline{p} <.001; a significant main effect for recent trauma, \underline{F} (1,71)=11.182, \underline{p} <.001 and a significant interaction effect between old and recent trauma, \underline{F} (1,71)=17.191, \underline{p} <.001.

Post hoc comparisons, using the Tukey/Krammer method indicated that those who suffered both old and recent trauma differed significantly from all other groups on the DDIS, [q>2.82], p<.05. Also those who suffered only old trauma scored significantly higher than those who suffered only recent trauma or no trauma.

DISCUSSION

The results of this study support the suggestion that old and recent trauma interact, resulting in higher dissociative and Dissociative Identity Disorder item scores on test measures. In addition to this interaction, there were significant main effects for old and recent trauma on both of these tests. The presence of childhood abuse or a recent traumatic event, or both, tend to increase dissociation and produce symptoms associated with Dissociative Identity Disorder.

Women who suffered old trauma not only had elevated dissociation measures but also had higher trauma scores. This lends support to the idea that Dissociative Identity Disorder has its roots in early traumatic experience include (Classen et al., 1993; Spiegel & Cardena, 1991; Janoff-Bulman, 1992). The results may also support Ross's notion that DID should be re-classified as a trauma disorder.

An interesting finding was that old, but not recent trauma, predicted scores on the trauma scale. One would have expected recent trauma to have had an effect. There are several possible reasons for this outcome. First, generality when assessing whether an individual had suffered a recent traumatic event may have affected test results. The question was open-ended, and asked if the individual had experienced a

traumatic event within the last year. Typical responses included death of a loved one or loss of a relationship. The events that were more distressing yielded higher scores on the TEQ, while more common events yielded lower scores. The results might be reflecting responses to events that are merely upsetting as opposed to more traumatic events, which were tapped more re: early trauma.

IMPLICATIONS AND ISSUES

The present study is correlational in nature, and causal implications must be treated cautiously. Nevertheless the finding that old and recent trauma interact to produce dissociative tendencies would be important for treatment. It demonstrates the importance of screening for and treating dissociative symptoms when working with trauma survivors. There are several issues in relation to the first finding. First, it is paramount to educate mental health workers about dissociation. Clinicians should begin to screen for dissociative symptoms when working with trauma survivors. Results of this study suggest that this is especially important when working with survivors who have been traumatized both in childhood and adulthood. If proper screening does not occur, effective treatment may not result. The result of improper screening and delayed diagnosis is that the client may continue to suffer dissociative tendencies.

Screening with appropriate instruments (e.g., DES, DDIS, SCID-D [Steinberg et al., 1993]) is advisable, because patients may spend up to 6.8 years (Kluft, 1987; Putnam, 1989) in the mental health system before receiving an accurate diagnosis. Early diagnosis of dissociative disorders may lead to timely and effective treatment for those suffering from DID and the dissociative disorders.

Effective treatment is a third issue that needs consideration. It appears from this study that trauma often does lead to dissociative consequences. If dissociation is not effectively treated, increased dissociative responses or the emergence of overt symptoms of DID may result if an individual suffers additional traumatic events. It is in the best interest of the client to be screened for dissociative tendencies, and to treat them as early as possible.

In conclusion, this study adds to our understanding of the long-term effects of childhood abuse and the interaction effects of old and recent trauma. It illustrates the need to focus attention on dissociation, to develop more effective diagnostic tools to diagnose dissociation, and highlights areas of treatment which need to be addressed in order to benefit the survivor.

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