

AFFECTIVE PREDICTORS OF DISSOCIATION - I: THE CASE OF UNRESOLVED GRIEF

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ABSTRACT

Previous research supports the view that dissociative tendencies in adulthood are linked to a history of childhood trauma. Such trauma are known to have a persistent affective impact which is reflected symptomatically. Taking symptoms of unresolved grief as an example of the affective consequences of childhood trauma, this study sought to use grief symptoms as predictors of dissociative tendencies in a sample of Australian adults. In conjunction with the basic demographic factors of age and gender, a standardized inventory of grief symptoms accounted for more than half of the variance of dissociation scores. The efficacy of this regression analysis compares very favorably with analyses using childhood trauma as predictor variables. The data are interpreted as supportive of the value of measures of the affective outcomes of childhood trauma in the statistical prediction of dissociation in adulthood.

INTRODUCTION

Considerable research effort has been devoted to the investigation of etiological factors associated with dissociative tendencies in adulthood. Despite a dearth of longitudinal prospective studies there is a good deal of retrospective data to suggest that extraordinary childhood trauma contribute significantly to the development of dissociation as a coping mechanism. In particular, sexual abuse, physical abuse, and emotional abuse in childhood have been identified as correlates of the incidence of dissociative experiences in adulthood (e.g., Chu & Dill, 1990; Sanders, McRoberts & Tollefson, 1989). On such grounds many theorists (Albini & Pease, 1989; Braun & Sachs, 1985; Fink, 1988; Kluff, 1984a, 1984b; Putnam, 1985; Spiegel, 1986) have proposed that traumatic childhood experiences have a seminal impact on the propagation of dissociative tendencies.

Spiegel (1986) proceeds to give the following cogent and broadly endorsed account of the observed statistical association between childhood trauma and dissociation. At the time of the trauma the child uses a dissociative response as a defense against the associated pain and sense of extreme

vulnerability. In time, however, dissociation is increasingly relied upon as a defense mechanism and thus the individual's mental processes become habitually fragmented.

The incidence of extreme childhood trauma therefore constitutes an important predictor of dissociative disorders and of dissociative tendencies in general. Rather little quantitative investigation has been devoted to the identification of other predictors (but see Kluff [1984a]; Norton, Ross & Novotny, [1990]). To this end specific attention might usefully be given to what may be called the "psychic residues" of the childhood trauma, namely, the individual's memories of the event and emotions associated with it. To the degree that these residues are psychodynamically potent it is increasingly probable that they will become dissociated from other mental processes. Thus, the potency of psychic residues of the original trauma might well represent a possible indicator of the tendency to use dissociative defenses.

Implicit in this proposition, of course, is the assumption that the "psychodynamic potency of psychic residues" is an operational construct, that is, one accessible to quantitative specification and assessment. Such assessment may well be difficult to achieve, especially in relation to memories of the trauma. If dissociative tendencies are very strong the individual may be amnesic for many of the details of the childhood trauma, thereby impeding the assessment of the psychodynamic potency of these memories. Independent testimony to the occurrence of trauma in an individual's childhood may sometimes be available (e.g., from parents or siblings), but this probably would not be a viable approach with anything other than a small and unrepresentative sample of experimental participants, and in any event the testimony of other people would not directly index the nature of the representation of the trauma in the participants' own memories. At the same time some published research does serve to encourage further efforts to tap the psychodynamic potency of traumatic memories. One instance is the work of Nissen, Ross, Willingham, Mackenzie and Schacter (1988) on the explicit and implicit memory performance of people with multiple personality disorder.

Quantitative specification of the psychodynamic potency of dissociated traumatic memories nevertheless is not a simple empirical task. A rather more productive approach might be to pursue an assessment of the potency of emotions associated with the original trauma. Traumatic memories may be difficult to tap, but associated emotions may be relatively more accessible to observation. The long-term impact of childhood trauma may be reflected in the indi-

vidual's level of depression or general anxiety, for example. Indeed, there are reports of correlations between dissociation and both depression and anxiety level (e.g., Norton, Ross & Novotny, 1990; Putnam, Guroff, Silberman, Barban & Post, 1986), supporting the notion that the emotional residues of a trauma could be used to predict the degree of reliance on a dissociative coping mechanism. On the other hand, depression and anxiety may be deemed to be relatively unspecific associations of childhood trauma. That is, a rather more specific emotional association might be preferable for present purposes.

The literature suggests a few possibilities in this regard. Feelings of betrayal, stigmatization, powerlessness, and anger are among the unresolved emotions commonly held to play an important role in the psychodynamics of the person traumatized during childhood (Finkelhor & Browne, 1985; Wilbur, 1985; Winer, 1978). But the affective dimension chosen for scrutiny in the present investigation was that of grief.

Childhood loss or bereavement is widely recognized for its long-term implications for adult psychological functioning (Bowlby, 1980; Krupnick & Solomon, 1987). In the present context, however, my attention was drawn to this dimension by the results of my earlier study (Irwin, 1994) of the relationship between dissociation and various traumatic childhood experiences. The particular trauma I found to be most strongly predictive of dissociative tendencies was that of a loss in the family during childhood. This category of traumatic experience encompasses such events as injury, accident, hospitalization, or death of a parent or other close family member which separated the child from the family member. Indeed, in my previous study the factor of childhood loss accounted for more of the variance in dissociation scores than the combination of the two next best predictors, intrafamilial and extrafamilial sexual abuse. This finding signals the potential significance of grief to a wide range of childhood trauma. In the case of incestual abuse, for example, the child may well experience the loss of a sense of his or her normalcy, the loss of an idealized parental image, the loss of a belief in the family's and society's provision of protection, the loss of innocence, and eventually a perceived loss of childhood itself. The emotional impact of other specific trauma in childhood has been construed in similar terms (Trolley, 1994; Weenolsen, 1988). It is proposed, therefore, that unresolved feelings of loss can be a fundamental outcome of childhood trauma and that the potency of these feelings is intimately linked to the person's inclination to rely upon dissociation as a coping strategy.

The feasibility of investigating this proposal stems primarily from the fact that unresolved grief is expressed symptomatically. Profound feelings of loss that are dissociated or otherwise not addressed and assimilated by the individual are held to be reflected almost inevitably as psychological, behavioral and physical symptoms (Rando, 1993). The presence of these symptoms in turn can be used as an indicator of the intensity of unresolved grief.

The empirical objective of this study, therefore, was to investigate the relationship between dissociation and symptoms of unresolved grief. More specifically, the study sought

to examine the utility of dimensions of unresolved grief as predictors of dissociative tendencies.

METHOD

Participants

The study was conducted with the same participants as in the previous investigation (Irwin, 1994). The participants were 121 adults enrolled in an off-campus Introductory Psychology course taught through the University of New England, Australia. Students in this course generally are of mature age; most are in paid employment, some are homemakers. The sample comprised 32 men and 89 women, ranging in age from 19 to 72 years (mean = 37.1, median = 36). Although the sample was non-clinical, Irwin (1994) found a substantial incidence of a wide range of traumatic childhood experiences reported by these participants, making the sample most suitable for the present follow-up study.

Materials

The participants completed three questionnaires. One was a brief form asking for details of gender and age. The other two questionnaires related to dissociation and to grief symptoms.

The measure of proneness to dissociation was Riley's (1988) Questionnaire of Experiences of Dissociation or QED. The QED comprises 26 dichotomous (True/False) items surveying experiences of dissociative phenomena. Scores thus may range from 0 to 26, with higher scores signifying a greater range of dissociative experiences acknowledged by the respondent. The QED has been standardized on nonclinical samples. The reliability of the QED is satisfactory (Cronbach's $\alpha = .77$; Riley, 1988), and the scale has been validated both through application to clinical samples with dissociative disorders (Dunn, Ryan, Paolo, & Miller, 1993) and by comparison with other similar measures (Gilbertson, Torem, Cohen, Newman, Radojicic, & Patel, 1992; Ray, June, Turaj, & Lundy, 1992).

Symptoms of unresolved grief were indexed by Form B of Sanders' Grief Experience Inventory or GEI (Sanders, Mauer & Strong, 1985). This version of the GEI comprises 104 dichotomous (True/False) items distributed over 12 scales. The GEI items tap symptoms of grief associated with any context of loss, including those that do not involve a person's death. The 12 scales of the inventory are as follows. "Despair" measures the most pervasive psychological expression of grief; it relates to a pessimistic outlook on life, feelings of hopelessness or worthlessness, slowing of thought or action, and low self-esteem. The "Anger" scale surveys the respondent's level of generalized irritation, anger, and feelings of injustice. "Social Isolation" concerns the inclination to withdraw from social contacts and responsibilities, as well as feelings of being isolated by others. The "Loss of Control" scale samples respondents' inability to control their overt emotional experiences; most of the items deal with crying. "Somatization" measures the incidence of somatic problems that largely are caused by stress. "Death Anxiety" relates to the intensity of personal death awareness. The "Sleep Disturbances" scale

addresses difficulties in getting to sleep or in staying asleep. "Loss of Appetite" measures the person's loss of desire for food. "Loss of Vigor" concerns the respondent's perception of their physical strength. The "Physical Symptoms" scale deals with worries and preoccupations with bodily symptoms. "Optimism/Despair" gauges the degree of despair and lack of meaning felt by the respondent. "Dependency" concerns the tendency to be dependent on others. Additionally, the GEI includes 3 validity scales designed to tap test taking attitudes. The "Denial" scale indexes a hesitancy to admit to common yet socially undesirable weaknesses and feelings. The "Atypical Responses" scale is designed to detect a tendency to endorse unusual response options; for example, some respondents may be motivated to depict themselves as experiencing extreme symptoms of grief for reasons of secondary gain. "Social Desirability" reflects a tendency to respond to test items in a socially desirable or acceptable manner.

In most instances the reliability of the individual GEI scales is satisfactory (Sanders, Mauger & Strong, 1985). This

form of the GEI also has been validated on samples of people who had experienced one of a variety of losses in non-death contexts. In this context it nevertheless is pertinent to note that a depressed person who has not encountered a loss might well score highly on some of the GEI scales; the GEI therefore is diagnostic of a grief reaction when there are anomalous scores across a wide range of these scales (Sanders, Mauger, & Strong, 1985).

Procedure

A "plain language" informed consent form was attached to the front of the set of questionnaires mailed to the participants. This sheet explained the objective of the study and stressed that participation was voluntary and confidential. An appeal also was made to participants to respond as spontaneously and openly as possible. The QED and the items on gender and age were used in the original investigation of this sample by Irwin (1994). The additional data on the GEI were solicited in this follow-up study.

Participants returned their completed questionnaires

TABLE 1
Descriptive Statistics for Each Experimental Variable and
Pearson Correlations between Dissociation (QED) and Grief Symptoms (GEI Scales).

Variables	\bar{x}	s	r
QED	9.07	4.58	
Despair	4.11	4.19	.56**
Anger	3.20	2.07	.41**
Social Isolation	2.57	1.88	.50**
Loss of Control	3.33	1.58	.41**
Somatization	4.23	3.05	.38**
Death Anxiety	4.92	2.33	.27*
Sleep Disturbances	2.14	2.10	.25*
Loss of Appetite	0.34	0.63	.18
Loss of Vigor	1.93	1.82	.49**
Physical Symptoms	2.09	1.77	.41**
Optimism/Despair	0.53	0.89	.31**
Dependency	2.26	1.23	.24*
Denial	2.57	1.89	-.07
Atypical Responses	4.46	2.65	.28*
Social Desirability	3.55	1.20	-.11

Layered Bonferroni levels of significance:

* $p < .05$; ** $p < .01$

in a stamped envelope supplied by the researcher.

RESULTS

Descriptive statistics (mean and standard deviation) on each of the research measures are given in Table 1.

Pearson correlation coefficients were computed between the QED and the scales of the GEI. To take account of the multiplicity of tests, layered Bonferroni levels of significance were determined (Darlington, 1990); under this procedure, a set of n statistics is arranged in order of significance level and the uncorrected p value of the i^{th} most significant result is multiplied by $(n + 1 - i)$ to yield the corrected level of significance. The correlations and their corrected levels of significance are presented in Table 1. These data reveal a significant positive relationship between dissociation and every surveyed dimension of grief symptomatology except loss of appetite. The evident relationship between dissociation and

so many diverse indices of grief provides strong support for the view that symptoms of unresolved grief are predictive of dissociative tendencies. The breadth of the data suggests that the underlying predictive affective dimension may indeed be construed as grief rather than as merely some more limited correlate of grief (e.g., depression). This support must be qualified, however, in light of the data for the validity scales of the GEI. As shown in Table 1, there was a significant positive relationship between the QED and the Atypical Responses validity scale. On this basis it might be argued that the observed correlations between dissociation and the grief scales are a mere artifact of some participants' tendency, for reasons of secondary gain, to depict themselves as having numerous dissociative experiences and also numerous grief symptoms.

Regression analysis provides a means both to address this possible confound and to gauge with greater statistical validity the efficacy of using grief symptomatology to pre-

TABLE 2
Standard Multiple Regression of Grief Symptoms (GEI), Gender, and Age on Dissociative Experiences (QED)

Variables	B	b	p	sr^2 (unique)
Despair	0.268	0.25	.186	
Anger	0.218	0.10	.276	
Social Isolation	0.713	0.29	.001	.043
Loss of Control	0.901	0.31	.000	.059
Somatization	-0.100	-0.07	.714	
Death Anxiety	0.105	0.05	.465	
Sleep Disturbances	-0.040	-0.02	.833	
Loss of Appetite	1.003	0.14	.100	
Loss of Vigor	0.514	0.20	.120	
Physical Symptoms	0.679	0.26	.045	.016
Optimism/Despair	-0.813	-0.16	.140	
Dependency	0.812	0.22	.002	.038
Denial	0.034	0.01	.849	
Atypical Responses	-0.808	-0.47	.000	.059
Social Desirability	-0.606	-0.16	.049	.015
Gender	2.626	0.25	.001	.050
Age	-0.006	-0.01	.851	
Intercept =	0.868			

$R^2 = .60$ Adjusted $R^2 = .54$ $R = .78$, $p < .001$

dict dissociative tendencies. A standard multiple regression was performed between the QED as the dependent variable and the GEI scales, gender, and age as independent variables. In a standard multiple regression all independent variables are entered into the regression equation simultaneously; this is the recommended method when there are insufficient theoretical grounds for controlling the order of entry of variables (Tabachnick & Fidell, 1989). Table 2 presents the unstandardized regression coefficients (B) and intercept, the standardized regression coefficients (b), the semipartial correlations (sr^2), and R , R^2 and adjusted R^2 ; a semipartial correlation represents the contribution of an independent variable to R^2 when the contribution of the other independent variables is taken out of both the dependent variable and the particular independent variable.

The multiple correlation R for the regression was significantly different from zero [$F(17,103) = 9.116, p < .01$]. Seven of the independent variables contributed significantly to the prediction of QED scores. The effective predictors were gender ($sr^2 = .050$), the GEI scales relating to symptoms of social isolation ($sr^2 = .043$), loss of control ($sr^2 = .059$), physical symptoms ($sr^2 = .016$), and dependency ($sr^2 = .038$), and two GEI validity scales for atypical responses ($sr^2 = .059$) and social desirability ($sr^2 = .015$). Altogether, 60% (or 54% adjusted) of the variability in QED performance was predicted by scores on the 15 GEI scales, gender, and age.

DISCUSSION

The significant contribution made to the regression by the two validity scales warrants immediate comment. It must be emphasized that this contribution does not imply the data themselves are in any sense "invalid." The regression coefficients for the variables Atypical Responses and Social Desirability are *negative*. That is, higher dissociation scores are predicted in part by lower scores on the validity scales. In essence, therefore, the prediction of dissociative tendencies is effective to the extent that respondents are prepared to respond to test items in a frank and open fashion as distinct from trying to depict themselves either in a favorable light or as deserving of others' attention. Whether or not respondents appreciate that the GEI items relate specifically to grief, the prediction of dissociation from grief symptoms evidently is more accurate if the individual is willing to describe his or her experiences and symptoms in an objective or relatively undistorted way. If the latter is not the case the prediction has to be adjusted by taking account of performance on validity scales.

Given this adjustment and allowing for the contribution of gender differences, the twelve grief scales of the GEI perform most creditably in the prediction of dissociative tendencies. A third of the grief scales contribute significantly to the regression in their own right. This should not be taken to demonstrate that the other two-thirds of the grief scales have no bearing on dissociation. All twelve grief scales correlate positively with the QED (Table 1), but the intercorrelations among the grief scales must be of such a size that most of the common variance between the dependent and

independent measures can be predicted from just a third of the grief scales. At the same time, when considered in conjunction with the results of the multiple regression, the fact that the QED was found to correlate significantly with all but one of the GEI scales suggests the underlying relationship most probably entails the phenomenon of grief rather than some more limited factor such as depression.

The utility of these findings for predictive purposes, however, needs to be considered in the wider context, specifically in relation to the use of predisposing factors as predictors of dissociative tendencies. According to Braun and Sachs (1985) a major etiological factor underlying dissociation in adulthood is the individual's inborn capacity to dissociate. I am unaware of any data on the extent of the contribution of this factor to the statistical prediction of dissociative experiences in adulthood. Given the tendency for dissociation levels to decline substantially during most people's adolescence (Ross, 1989; Ross, Joshi, & Currie, 1990) the inborn capacity to dissociate nevertheless would not be expected to be a strong statistical predictor of adult dissociative tendencies, notwithstanding its etiological role. Some data are available to testify to the contribution of the other generally acknowledged predisposing variable, the incidence of childhood trauma. But my previous study (Irwin, 1994), which surveyed a much wider range of childhood traumas than any earlier investigation, found childhood traumas (with gender and age) collectively accounted for only 26% (or 16% adjusted) of the common variance with dissociation.

The figure of 60% (or 54% adjusted) observed for R^2 with the GEI factors therefore is most impressive. The data certainly provide grounds for further empirical and theoretical scrutiny of affective dimensions in relation to dissociation; this topic has been relatively neglected by researchers until now. The author acknowledges that measures of psychological distress do tend to be intercorrelated, and thus further research is warranted in order to gauge the utility of the present findings. Study with clinical samples currently is being planned. Subject to such confirmation, clinical applications of the findings might eventually be countenanced. For example, a measure of unresolved grief might prove to be of value in the estimation of the likelihood of childhood trauma with a dissociatively disordered client who initially has no conscious recollection of such events. Additionally, the data might be seen to reaffirm the pertinence of attending to issues of loss and grief in counseling the victims of childhood trauma.

The study should not be interpreted to imply that the role of childhood trauma in dissociation can be discounted. The evidence for the etiological contribution of trauma is substantial. At the same time, even if this factor ranks as a necessary condition for dissociative tendencies in adulthood, it surely is not a sufficient condition: traumatised children who receive adequate psychological support might not need to develop dissociative responses as a coping mechanism (Kluft, 1984a; Nash, Hulsey, Sexton, Harralson, & Lambert, 1993). Perhaps dissociative defense mechanisms develop predominantly in a context of *unresolved* emotion-

al issues associated with childhood trauma. Models of the etiology of dissociative tendencies therefore might profitably give closer attention to the interrelationships between trauma and unresolved emotional reactions. ■

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