

Predictors of Nonpathological Dissociation in Northern Ireland: The Affects of Trauma and Exposure to Political Violence

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Recent work has identified an empirical distinction between pathological and nonpathological dissociation. This study examined the correlates of nonpathological dissociation in a Northern Irish sample. The Dissociative Experiences Scale, the Traumatic Experiences Checklist, the Guilt Inventory, and the General Health Questionnaire, as well as two open-ended questions assessing exposure to political violence were completed by 119 participants. Nonpathological dissociation was predicted by age, perceived impact of traumatic events, and adherence to moral standards. Moreover, dissociation was found to be significantly higher in those exposed directly to political violence and those experiencing childhood emotional abuse. Results are consistent with previous theoretical and empirical work and it is proposed that nonpathological dissociation is related to traumatic experience in Northern Ireland.

KEY WORDS: nonpathological dissociation; trauma; political violence; Northern Ireland.

Contemporary understanding proposes a qualitative and quantitative difference between pathological and non-pathological forms of dissociation (Waller, Putnam, & Carlson, 1996). Eight items from the 28-item Dissociative Experiences Scale (DES; Carlson & Putnam, 1993) may provide insight into the pathological dissociative profile (Waller & Ross, 1997). These items are believed to tap nonnormative dissociation, such as episodes of amnesia and depersonalisation (Waller et al., 1996) and have been collectively called the Dissociative Experiences Scale-Taxon (DES-T; Waller et al., 1996).

Nonpathological dissociation is experienced as more mundane and benign occurrences, generally represented by the constructs of imaginative involvement and absorption (e.g., Ross, Joshi, & Currie, 1991). They are believed to be innate tendencies of the human psychological repertoire (Ludwig, 1983). Yet, developmental variables, such as traumatic experiences can lead to maladaptive dissociative functioning (Irwin, 1998), which, at its most severe, is experienced as pathological dissociative symptoms. Waller and Ross (1997) found that 3.3% of the general (nonclinical) population belong to the pathological dissociation taxon.

Research in the nonclinical population has revealed a number of correlates of dissociation. These include irrational thinking patterns (Bauer & Power, 1995), poorer mental health (Ross, Ryan, Voigt, & Eide, 1991), traumatic childhood experiences (e.g., Sanders, McRoberts, & Tollefson, 1989), and affective states, often experienced as a byproduct of aversive overwhelming events, such as anger and anxiety (Norton, Ross, & Novotny, 1990), shame (Irwin, 1998), guilt (Dorahy & Schumaker, 1997) and unresolved grief (Irwin, 1994b). These findings

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are consistent with clinical samples that exhibit high dissociative tendencies (e.g., Putnam, 1989).

However, few nonclinical studies have controlled for the influence of pathological dissociation when examining traumatic experience and its correlates. Although Irwin (1999) found that childhood trauma was related to DES-T scores but not absorption in a nonclinical sample.

This study partialled out pathological dissociators and employed a Northern Irish sample. The political and social turmoil which has characterized Northern Ireland over the last 35 years offers a naturalistic setting for better understanding both individual and social responses to traumatic episodes (Cairns & Darby, 1998). Currently, dissociation has not attracted the attention of researchers in Northern Ireland (Dorahy & Lewis, 1998). Much of the work has concentrated on individual coping strategies that manifest at a societal level, such as denial and distancing (e.g., Wilson & Cairns, 1996).

The aim of this study was three-fold. First, specific developmental, affective, and mental health correlates were examined in nonpathological dissociators. Second, initial data on dissociation in a Northern Irish sample were presented. Finally, attempts were made to assess the effects of exposure to political violence on dissociation in Northern Ireland.

Method

Participants

Participants were 119 students from the University of Ulster, Londonderry, Northern Ireland. Ninety-three were females, 19 were males, and 7 did not volunteer their gender. The sample had a mean age of 27.20 years ($SD = 8.49$). Participation was voluntary with no course credit or other incentives given.

Instruments

The questionnaire battery contained four published instruments and two open-ended questions.

The DES (Carlson & Putnam, 1993) is a 28-item self-report measure tapping normal and clinical dissociative episodes. The measurement properties of the DES are well attested in both clinical and nonclinical samples.

The Traumatic Experiences Checklist (TEC; Nijenhuis, van der Hart, & Vanderlinden, 1996) is a 25-item measure chronicling traumatic experiences across the life span. The scale is divided into six subscales, emotional neglect, emotional abuse, physical abuse, sexual harass-

ment, sexual abuse, and miscellaneous traumatic episodes. Age when the event occurred and its perceived psychological impact are assessed, as is level of support following traumatic events and relationship to abuser in cases of maltreatment (see Nijenhuis, 1999).

The Guilt Inventory (Kugler & Jones, 1992a) is a 45-item scale measuring trait guilt, state guilt, and moral standards. The three subscales have shown acceptable psychometric properties (Kugler & Jones, 1992b).

The General Health Questionnaire-12 (GHQ; Goldberg & Williams, 1991) is a 12-item measure of current psychological state based on symptoms believed to signify mental health status. The GHQ-12 has good psychometric properties and has been used effectively in clinical and nonclinical samples (Goldberg & Williams, 1991).

The authors are currently unaware of any inventory assessing exposure to political violence and therefore employed two simple open-ended questions: (1a) Briefly describe your experience/exposure to political violence, and (1b) When did these occur? (i.e., what year and month).

Responses were assessed primarily on whether individuals had direct (personal) exposure to political violence (e.g., family member killed in paramilitary attack) or indirect experience (e.g., watching the aftermath of a bomb blast on television). Responses were categorised as direct or indirect by two independent assessors.

Procedure

Along with a return addressed envelope, 225 questionnaire batteries were distributed to undergraduate students. A list of support services and counselling agencies was attached to the battery.

Results

Of the 225 surveys distributed 119 were returned for a response rate of 52.8%. Taxometric analysis was performed on the DES to identify participants experiencing pathological dissociation (Waller & Ross, 1997). Using Waller and Ross' parameters, a .90 cut-off was adopted for Bayesian inclusion into the dissociative taxon (Waller & Ross, 1997). Five participants were found to be pathological dissociators. Two participants completed approximately half of the DES and were removed from the analysis ($N = 112$) leaving the total pathological dissociation rate for this sample at 4.27%. Of the 112 nonpathological dissociator surveys, 90 were returned fully completed. Agreement between assessors for direct and indirect exposure to political violence was found in 87% of cases.

Table 1. Means and Standard Deviations of Psychological Measures for Nonpathological Dissociators in Northern Ireland ($N = 90$)

Scales	<i>M</i>	<i>SD</i>
Dissociative Experiences Scale	13.10	9.96
Traumatic Experiences Checklist	4.91	3.48
Trait guilt	55.23	13.14
State guilt	25.87	7.14
Moral standards	47.11	8.00
General Health Questionnaire	11.20	5.79

With the removal of pathological dissociators, Table 1 displays the mean and standard deviation for each variable. Table 2 shows the Pearson's correlation coefficient relationships between dissociation and the other variables. To determine the variables having the greatest impact on nonpathological dissociation a regression analysis was conducted using DES scores as the criterion variable. Age, TEC, trait guilt, state guilt, moral standards, GHQ, and total perceived impact of traumatic events were entered into the regression model as predictor variables. Overall these variables accounted for a significant 27% of the total variance in DES scores, $F(7, 81) = 3.75$, $p < .01$. Table 2 shows the individual regression coefficients (B), the standard regression coefficients (β), and the semipartial correlations (sr^2). Semipartial correlations represent the unique variance accounted for in the dependent (criterion) variable by a specified predictor variable with all other predictor variables partialled (Howell, 1992). Age, moral standards, and perceived impact of trauma were all significant predictors of nonpathological dissociation.

To explore the effects of childhood emotional abuse, emotional neglect, physical abuse, and sexual abuse on dissociation in Northern Ireland, each of these TEC subscales was divided into participants clearly reporting, and those not reporting experiences of abuse or neglect before their 13th birthday. Bonferroni controlled independent samples t tests showed that emotional abuse was the

only subscale to statistically differ, with the cohort affirming abuse ($n = 30$, $DES = 15.71$) having significantly higher dissociation scores, $t(39) = -2.73$, $p < .01$, than those reporting no abuse ($n = 65$, $DES = 9.92$).

A one-way ANCOVA was conducted on DES scores for those individuals directly exposed to political violence versus those reporting indirect exposure. Overall traumatic experience (i.e., TEC) was controlled as a covariate. With the removal of one extreme outlier the indirect group had a mean DES score of 9.70 ($SD = 6.96$). This was significantly lower than the 14.79 ($SD = 10.13$) DES mean for those reporting direct exposure to political violence, $F(1, 42) = 4.96$, $p < .05$. Interestingly the slight majority of participants ($n = 51$) did not reply to the political violence section, with most responding N/A.

Discussion

Variables significantly related to nonclinical dissociation in previous studies, such as trauma (e.g., Irwin, 1994a), guilt (Dorahy & Schumaker, 1997), and reduced mental health (Ross et al., 1991), were not related to dissociation in this sample. However, age, moral standards, and perceived impact of trauma were significant predictors of dissociation. Furthermore, with other traumatic experiences held constant, direct exposure to political violence was found to be related to higher dissociation scores, as was childhood emotional abuse.

Even though there was a very high relationship between traumatic experience as measured by the TEC and the perceived impact of these events ($r = .95$), the perceived impact significantly predicted dissociation scores, but the TEC did not. This supports the belief that the perception of traumatic events is more related to dissociation than the traumatic events themselves (e.g., Bremner & Brett, 1997). Thus, at a nonpathological level, perception of events as traumatic may be an important cognitive-developmental variable for a dissociative coping or dissociative defence style, which may lead to more pathological dissociative tendencies if accompanied by other necessary conditions (Irwin, 1998).

The moral standards subscale of the guilt inventory, which measures the tendency towards living life through rigid moral guidelines (Kugler & Jones, 1992b), was negatively related to nonpathological dissociation. This may suggest that a heightened tendency towards rigid moral guidelines may act as a buffer against nonpathological dissociation. Alternatively, those more prone to nonpathological dissociation may be less reliant on rigid belief systems and engage in more flexible thinking strategies. This interpretation holds some credence if nonpathological

Table 2. Multiple Regression Analysis to Predict Nonpathological Dissociation Among Students in Northern Ireland ($N = 90$)

Predictor variables	<i>B</i>	β	sr^2	<i>r</i>
Age	-0.39	-.33	.09**	-.23
TEC	-1.23	-.43	.02	.19
Trait guilt	1.53	.02	.00	.16
State guilt	-1.14	-.01	.00	.14
Moral standards	-0.30	-.24	.04*	-.27
GHQ	0.16	.09	.01	.14
Perceived impact	0.57	.75	.05*	.26

Note. TEC, Traumatic Experiences Checklist. GHQ, General Health Questionnaire.

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

dissociation is viewed as adaptive and pathological dissociation is viewed as maladaptive. Several clinicians have noted that pathological dissociation is characterized by a rigid adherence to preordained beliefs and an inept ability to engage in flexible thinking (e.g., Fine, 1988). Thus it may be that higher levels of nonpathological dissociation fosters flexible thinking strategies whereas pathological dissociation inhibits flexible thinking strategies. Finally, it remains possible that the negative relationship between moral standards and dissociation is brought about by those with high moral standards having a reduced propensity to exaggerate experiences of dissociation.

Consistent with previous research, the current results suggest that dissociation decreases with age (e.g., Goldberg, 1999). Yet, unlike previous work, physical and sexual abuse did not have significant effects on dissociation (e.g., Irwin, 1994a). This may reflect differing methodologies, the effect of examining nonpathological dissociation in isolation or something specific to this Northern Irish sample. The current results underscore the potential importance of emotional abuse to dissociative functioning. Childhood emotional abuse may negatively impact on attachment relations, the quality of which has important implications for the development of adaptive and maladaptive dissociation (e.g., Ogawa, Sroufe, Weinfield, Carlson, & Egeland, 1997).

It has been suggested that many people in Northern Ireland are psychologically affected by the violence of the last 30 years (e.g., Cairns, Wilson, Gallagher, & Trew, 1995). The current study suggests that dissociation is related to political violence exposure with participants reporting direct experience having significantly higher levels of dissociation than those reporting indirect experience.

The overall response rate (52.8%), political violence exposure response rate (45.5%), the use of students, and the predominance of women might compromise the representativeness of the sample and therefore may affect results. With these limitations in mind, future work is encouraged to replicate this study in Northern Irish samples and investigate the existence, prevalence, aetiology, and correlates of pathological dissociation in the Province.

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