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EMOTIONAL, PHYSICAL, AND SEXUAL MALTREATMENT IN CHILDHOOD VERSUS ADOLESCENCE AND PERSONALITY DYSFUNCTION IN YOUNG ADULTHOOD

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The current study examined the unique relations of childhood and adolescent maltreatment (emotional, physical, and sexual) with DSM-III-R personality disorder (PD) dimensions in a sample of undergraduates. The results suggested that reported levels of childhood sexual maltreatment were uniquely related to six of the 11 PD dimensions examined. In contrast, reported levels of adolescent emotional maltreatment were uniquely related to only three PD dimensions and reported levels of adolescent physical maltreatment were uniquely related to only one PD dimension. Thus, whereas reported levels of adolescent emotional and physical maltreatment demonstrated some specificity to the various kinds of personality dysfunction, reported levels of childhood sexual maltreatment appeared to be related to more generalized personality dysfunction in young adulthood.

Although a number of studies have examined the relation between maltreatment and personality disorders (PDs), the majority have focused on the relation between childhood sexual maltreatment and Borderline PD (for a review, see Fossati, Madeddu, & Maffei, 1999). In comparison, there has been relatively little examination of the relations between physical, and especially emotional, maltreatment and any of the PDs. In addition, the majority of studies examining the correlates of maltreatment has focused specifically on childhood maltreatment and has not assessed the potential impact of maltreatment experienced in adolescence. Further, no studies of which we are aware have examined the *unique* relations of childhood versus adolescent maltreatment with the various PDs.

In the current study, therefore, we assessed the relations between childhood and adolescent emotional, physical, and sexual maltreatment and dimensional levels of the various *Diagnostic and Statistical Manual-Third Edition-Revised* (*DSM-III-R*; American Psychiatric Association, 1987) PDs

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among young adults. Specifically, among undergraduates, we examined the *unique* personality dysfunction correlates of childhood emotional, physical, and sexual maltreatment while statistically controlling for the influence of emotional, physical, and sexual maltreatment experienced in adolescence. Similarly, we examined the *unique* personality dysfunction correlates among young adults of adolescent maltreatment while statistically controlling for the influence of maltreatment experienced in childhood.

METHOD

PARTICIPANTS

Participants in this study were a subset of those selected for inclusion in the Temple-Wisconsin Cognitive Vulnerability to Depression (CVD) project (Alloy & Abramson, 1999). Participants for the CVD project were university freshmen scoring in the highest (most negative) or lowest (most positive) quartile on *both* the Cognitive Style Questionnaire (CSQ; Abramson, Metalsky, & Alloy, 2001) and a modified version of the Dysfunctional Attitudes Scale (DAS; Weissman & Beck, 1978) and who exhibited no current DSM-III-R or Research Diagnostic Criteria (RDC; Spitzer, Endicott, & Robins, 1978) Axis I disorders at the outset of the study (for more details, see Alloy & Abramson, 1999, and Alloy et al., 2000). Participants scoring in the highest and lowest quartile on the CSQ and DAS were designated at high (HR) and low (LR) cognitive risk for depression, respectively.

Only those students who remained in the study through the 2.5-year prospective follow-up and who completed the maltreatment and PD assessments were included in the current study ($N = 272$; HR = 132; LR = 140). Of our participants, 185 (68%) were women; 211 (78%) were Caucasian, 31 (11%) were African American, 11 (4%) were Asian, 6 (2%) were Hispanic, 5 (2%) were from other ethnic groups, and 8 (3%) did not report their ethnicity. The mean age of the participants upon entering the study was 18.92 years ($SD = 1.92$). The HR and LR groups did not differ significantly on gender, age, or ethnicity. In addition, the subsample of participants included in the current study is similar to the total CVD project sample in terms of cognitive style, age, ethnicity, and gender.

MEASURES

Cognitive Style. The Cognitive Style Questionnaire (CSQ; Abramson, Metalsky, & Alloy, 2001) and a modified version of the Dysfunctional Attitudes Scale (DAS; Weissman & Beck, 1978), in which 24 items were added to the original 40, were used to assess participants' cognitive vulnerability to depression as specified by the hopelessness theory (Abramson et al., 1989) and Beck's theory (1967, 1987) of depression, respectively. In the CVD project, the CSQ composite for negative events (stability + globality + consequences + self) and the expanded form of the DAS demonstrated good internal consistency, retest reliability over 1 year, and predictive validity for episodes of depression (Alloy et al., 2000).

Childhood and Adolescent Maltreatment. The Life Experiences Questionnaire (LEQ; Rose, Abramson, & Kaupie, 2001) is a 92-item self-report mea-

sure that assesses a history of emotional, physical, and sexual maltreatment committed by both peers and adults. Consistent with the suggestions made by Brewin, Andrews, and Gotlib (1993), the LEQ assesses a broad range of *specific* events rather than asking individuals for global estimates of maltreatment. Levels of emotional, physical, and sexual maltreatment were determined by summing the number of different forms of maltreatment endorsed for each of the three categories (emotional, physical, and sexual). Forms of emotional maltreatment assessed included humiliation, rejection, extortion, and teasing. Forms of physical maltreatment assessed included being hit either with a fist or object, being choked, and being the victim of deliberate physical pain. Forms of sexual maltreatment assessed included unwanted exposure to pornography and exhibitionism, as well as fondling and attempted and completed rape. For the current study, childhood maltreatment was defined as maltreatment occurring before age 15. Adolescent maltreatment was defined as maltreatment occurring between the ages of 15 and 18. The maltreatment subscales of the LEQ (emotional, physical, and sexual) have been shown to correlate highly with levels of emotional, physical, and sexual maltreatment reported in structured clinical interviews (*r*s = .78, .79, and .87, respectively; Kaupie & Abramson, 1999). In the current study, the LEQ subscales exhibited good internal consistency (subscale *d*s = .64 to .85; mean = .75).

Personality Disorder Dimensions. The Personality Disorder Examination (PDE; Loranger, 1988), is a semi-structured diagnostic interview designed to assess the various DSM-III-R personality disorders. Studies have supported the reliability and validity of the PDE (e.g., Loranger, et al., 1991; Loranger, Susman, Oldham, & Russakoff, 1987). Although both dimensional and criterial scores may be obtained for each PD, dimensional scores were used for all analyses in the current study.

PROCEDURE

Participants who were hypothesized to be at high versus low cognitive risk for depression, based on their responses to the CSQ and DAS, were chosen for inclusion in the study. Participants agreeing to continue in the prospective phase of the study were followed longitudinally for 2.5 years. At the beginning of the follow-up phase, participants were administered the PDE. At the end of the second year of follow-up, participants completed the LEQ. All participants were paid for their time.

RESULTS

As a preliminary step in our analyses, a series of ANOVAs were used to test for gender differences in levels of maltreatment and PD dimensions. In our sample, men reported higher levels of childhood physical maltreatment, $t(270) = 3.49$, $p < .001$, $r_{\text{effect size}} = .22$, and lower levels of adolescent sexual maltreatment, $t(270) = -3.71$, $p < .001$, $r_{\text{effect size}} = .24$, than did women. In addition, men exhibited higher levels of Antisocial, $t(270) = 4.32$, $p < .001$, r_{effect}

$_{size}$ = .27, and lower levels of Dependent, $t(270) = -2.55$, $p = .01$, $r_{effect\ size} = .16$, PD characteristics than did women.

In examining the relations between maltreatment and PD dimensions, a series of hierarchical regression analyses were conducted. Given the significant relation between participant gender and the PD dimensional scores, gender was statistically controlled in all analyses. In addition, given that participants' cognitive risk group status was not of interest in the current study, it was statistically controlled in all analyses. Thus, participants' gender and cognitive risk status were entered in the first step of all hierarchical regression analyses. In the second step, reported levels of childhood and adolescent emotional, physical, and sexual maltreatment were entered, thereby statistically controlling for the overlap among them. To control for the possibility that any obtained results were due simply to the high correlation between predictor variables (suppression effects), relations between maltreatment and personality dysfunction were considered significant only if the effects were significant in zero-order correlations and in the regression analyses. Due to the number of statistical tests involved in examining the relations between maltreatment and each of the DSM-III-R PD dimensions, critical α levels were adjusted ($p_{crit} = .017$ for Cluster A PDs and $p_{crit} = .013$ for Clusters B and C PDs). The results of the analyses are summarized in Table 1.

Focusing first on the Cluster A PDs, analyses revealed that Paranoid PD dimensional scores were uniquely and positively related to reported levels of childhood sexual maltreatment, $t(263) = 5.46$, $p < .001$, $\beta = .33$. In addition, Schizotypal PD dimensional scores were uniquely and positively related to reported levels of adolescent emotional maltreatment, $t(263) = 3.38$, $p < .001$, $\beta = .43$. Schizoid PD dimensional scores, however, were not related to any of the forms of childhood or adolescent maltreatment.

Examining the Cluster B PDs, Antisocial PD dimensional scores were uniquely and positively related to reported levels of adolescent physical maltreatment, $t(263) = 2.93$, $p < .01$, $\beta = .22$. Borderline PD dimensional scores were uniquely and positively related to reported levels of childhood sexual maltreatment, $t(263) = 5.43$, $p < .001$, $\beta = .31$, and reported levels of adolescent emotional maltreatment, $t(263) = 4.52$, $p < .001$, $\beta = .51$. Histrionic PD dimensional scores were uniquely and positively related to reported levels of childhood sexual maltreatment, $t(263) = 2.60$, $p < .01$, $\beta = .16$. Similarly, Narcissistic PD dimensional scores were uniquely and positively related to reported levels of childhood sexual maltreatment, $t(263) = 4.56$, $p < .001$, $\beta = .28$.

Examining the Cluster C PDs, Avoidant PD dimensional scores were uniquely and positively related to reported levels of adolescent emotional maltreatment, $t(263) = 2.78$, $p < .01$, $\beta = .34$. In addition, Dependent PD dimensional scores were uniquely and positively related to reported levels of childhood sexual maltreatment, $t(263) = 2.57$, $p = .01$, $\beta = .15$. Similarly, Passive-Aggressive PD dimensional scores were uniquely and positively related to reported levels of childhood sexual maltreatment, $t(263) = 3.85$, $p < .001$, $\beta = .24$. In contrast, Obsessive-Compulsive PD dimensional scores were not related to any of the forms of childhood or adolescent maltreatment.

TABLE 1. Relations Between Maltreatment and DSM-III-R Personality Disorders

Personality Disorder	CEM	CPM	CSM	AEM	APM	ASM
Cluster A						
Paranoid			*			
Schizoid						
Schizotypal				*		
Cluster B						
Antisocial					*	
Borderline			*	*		
Histrionic			*			
Narcissistic			*			
Cluster C						
Avoidant				*		
Dependent			*			
Obsessive-compulsive						
Passive-aggressive			*			

Note. CEM = Childhood emotional maltreatment. CPM = Childhood physical maltreatment. CSM = Childhood sexual maltreatment. AEM = Adolescent emotional maltreatment. APM = Adolescent physical maltreatment. ASM = adolescent sexual maltreatment. Significant relations are denoted by an asterisk (*).

DISCUSSION

This study is the first of which we are aware to examine the *unique* relations of childhood and adolescent emotional, physical, and sexual maltreatment with personality dysfunction exhibited by young adults. As such, it provides an important contribution to the existing literature. The current results suggest that reported levels of childhood sexual maltreatment were directly related to elevated Paranoid, Borderline, Histrionic, Narcissistic, Dependent, and Passive-Aggressive PD dimensional scores. In addition, reported levels of adolescent emotional maltreatment were directly related to elevated Schizotypal, Borderline, and Avoidant PD dimensional scores. Further, reported levels of adolescent physical maltreatment were directly related to elevated Antisocial PD dimensional scores. In contrast, reported levels of childhood emotional and physical maltreatment, as well as adolescent sexual maltreatment, were not uniquely related to any of the PD dimensional scores examined.

Thus, the current results suggest that the young adulthood personality dysfunction correlates of childhood sexual maltreatment were relatively nonspecific. That is, childhood sexual maltreatment was significantly related to 6 of the 11 PDs examined. In contrast, the correlates of adolescent emotional and physical maltreatment evidenced relatively greater specificity. That is, they were significantly related to three and one of the PDs, respectively. Thus, whereas a reported history of childhood sexual maltreatment may be related to generalized personality dysfunction in young adulthood, reported levels of adolescent emotional and physical maltreatment may be related uniquely to specific PD dysfunction in young adulthood. Future studies should continue to explore this possibility.

Despite the strengths of the current study, its limitations should also be noted. First, participants in this study were selected based on the presence

versus absence of a cognitive vulnerability to depression. Although participants' cognitive risk group status was statistically controlled in all analyses, future studies should seek to replicate the current findings with more representative samples. Second, participants in our study evidenced relatively minor levels of personality dysfunction (only five participants met criteria for a PD), which may limit the generalizability of the current findings. Third, levels of childhood and adolescent maltreatment were assessed with a retrospective self-report questionnaire, which could have been influenced by recall bias. However, studies have suggested that participants' recall of specific childhood experiences such as maltreatment are relatively accurate (for a review, see Brewin et al., 1993). In addition, because levels of maltreatment were calculated by summing the number of experiences endorsed, without considering the severity of the maltreatment, events of varying levels of severity were given equal weight. Finally, given the retrospective design of the current study, levels of maltreatment could not be used to predict prospectively the onset of personality dysfunction, leaving questions of causality unanswered. Although it is hypothesized that maltreatment contributes to the development of personality dysfunction, the current results are also consistent with the hypothesis that personality dysfunction contributes to the occurrence (or at least recall) of maltreatment (see Bailey & Shriver, 1999). Future studies should seek to untangle the temporal/causal connection between maltreatment and personality dysfunction.

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