Childhood Verbal Abuse and Risk for Personality Disorders During Adolescence and Early Adulthood

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Data from a community-based longitudinal study were used to investigate whether childhood verbal abuse increases risk for personality disorders (PDs) during adolescence and early adulthood. Psychiatric and psychosocial interviews were administered to a representative community sample of 793 mothers and their offspring from two New York State counties in 1975, 1983, 1985 to 1986, and 1991 to 1993, when the mean ages of the offspring were 5, 14, 16, and 22 years, respectively. Data regarding childhood abuse and neglect were obtained from the psychosocial interviews and from official New York State records. Offspring who experienced maternal verbal abuse during childhood were more than three times as likely as those who did not experience verbal abuse to have borderline, narcissistic, obsessive-compulsive, and paranoid PDs during adolescence or early adulthood. These associations remained significant after offspring temperament, childhood physical abuse, sexual abuse, neglect, physical punishment during childhood, parental education, parental psychopathology, and co-occurring psychiatric disorders were controlled statistically. In addition, youths who experienced childhood verbal abuse had elevated borderline, narcissistic, paranoid, schizoid, and schizotypal PD symptom levels during adolescence and early adulthood after the covariates were accounted for. These findings suggest that childhood verbal abuse may contribute to the development of some types of PDs, independent of offspring temperament, childhood physical abuse, sexual abuse, neglect, physical punishment during childhood, parental education, parental psychopathology, and co-occurring psychiatric disorders.

LITTLE IS CURRENTLY KNOWN about the long-term psychological consequences of childhood verbal abuse. Few studies have investigated childhood verbal abuse directly, although several studies have assessed verbal abuse as one aspect of emotional or psychological abuse.[1-3] Thus, many fundamental questions about childhood verbal abuse remain unanswered. Although attempts have been made to define childhood verbal abuse,[4-6] there is not yet a well-established operational definition of childhood verbal abuse, nor is there a consensus estimate regarding the prevalence of childhood verbal abuse in the general population.

Nonetheless, childhood verbal abuse is likely to have an adverse affect on the development of interpersonal relationships during childhood and adolescence. Because interpersonal difficulties are defining characteristics of personality disorders,[7,8] it is of particular interest to investigate the association between childhood verbal abuse and the development of personality disorders (PDs). Childhood verbal abuse may also increase risk for the development of PDs by increasing the likelihood that youths will experience profoundly maladaptive thoughts and feelings, such as mistrust, shame, doubt, guilt, inferiority, and identity diffusion during their most critical years of psychosocial development.[9,10]

Although numerous studies have investigated associations between childhood physical and sexual abuse and PDs,[11-13] our review of the literature indicates that only four previous studies have directly investigated the association between childhood verbal abuse and PDs. The findings of these studies indicated that 29% to 76% of patients with borderline PD and 23% to 62% of patients with other types of PDs reported histories of childhood verbal abuse.[14-17] These findings are consistent with the hypothesis that childhood verbal abuse increases risk for PDs during adolescence and adulthood. However, the data from all of these studies were based on retrospective reports by psychiatric patients, and it is problematic to infer that childhood verbal abuse increases risk for onset of PDs based on retrospective data alone.[18,19] Further,

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Supported by National Institutes of Mental Health Grant No. MH-36971 to P.C.

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0010-440X/01/4201-0011$10.00/0
doi:10.1053/comp.2001.19755

because reports of childhood verbal abuse frequently co-occur with reports of other types of childhood maltreatment,[10,16] it is important to control statistically for the effects of childhood physical abuse, sexual abuse, and neglect in order to identify the independent association of childhood verbal abuse with subsequent PDs. No prospective studies have investigated whether youths who experience childhood verbal abuse are at elevated risk for PDs, independent of childhood physical abuse, sexual abuse, neglect, physical punishment during childhood, and other risk factors. Thus, it has not been possible to determine whether childhood verbal abuse contributes to the development of some types of PDs.

We report findings from a community-based longitudinal study regarding the association between maternal verbal abuse during childhood and PD symptoms during adolescence and early adulthood. The effects of offspring age and gender, difficult offspring temperament, childhood physical abuse, sexual abuse, neglect, physical punishment during childhood, parental education, parental psychopathology, and co-occurring psychiatric disorders are controlled statistically.

METHOD

Participants and Procedure

Participants were 793 mothers and their offspring (390 females and 403 males), randomly sampled from two counties in upstate New York who were interviewed in 1975 (mean age, 5.5 years; SD 2.8), and reinterviewed during at least two follow-up assessments that were conducted in 1983 (mean age, 13.7 years; SD 2.7; n = 749), 1985 to 1986 (mean age, 16.3 years; SD 2.8; n = 733), and 1991 to 1993 (mean age, 22.1 years; SD 2.7; n = 717). The 793 families in the present study were a subsample of 976 families that were originally interviewed in 1975. The 183 families from the original sample who did not remain in the study did not differ from the rest of the sample with regard to income, urbanicity, or ethnicity, but there was a higher proportion of male offspring and the mothers were less well educated than in the present sample. Prior to each interview, written informed consent was obtained from all participants after study procedures were fully explained. Interviews were conducted by extensively trained and supervised lay interviewers. The sample was representative of the regional population regarding a range of demographic variables, according to US Census data.[20] Further information regarding the study methodology is available from previous reports.[20,21]

Assessment of Childhood Verbal Abuse

Interview items used to assess verbal abuse were drawn from the maternal interviews conducted in 1975, 1983, and 1985 to 1986. On all three occasions, the mothers were asked the following questions: (1) Did you scream at your child during the past month?; and (2) Did you say things like "I'll send you away" or "I don't love you" to your child during the past month? The response format was "yes" or "no." In 1983 and 1985 to 1986, the mothers were asked to respond to the following statement: "I tell my child I will hit or smack (him/her) if (he/she) does something I do not like." The response format was (a) Never; (b) Hardly Ever; (c) Sometimes; (d) Fairly Often; or (e) Very Often. Childhood verbal abuse was considered present only when *both* of the following conditions were met: (1) the mother reported, in at least one of the maternal interviews, that she had screamed at her child during the past month; *and* (2) the mother reported that she had said "I'll send you away" or "I don't love you" or had made similar statements to her child during the past month, or that she had often told her child that she would hit or smack her child if her child did something that she did not like. Seventy-eight youths (9.8% of the sample) were thereby identified as having been victims of childhood verbal abuse. All of the items that were used to assess verbal abuse in the present study are isomorphic with items that have been used in previous studies to assess childhood verbal abuse.[14,22] The interitem reliability of the items used to assess childhood verbal abuse (Cronbach's alpha) was acceptable (α = .52). The test-retest reliability of the items used to assess childhood verbal abuse in 1983 and 1986 was also acceptable (r = .51; $P < .001$), given that there was nearly a 3-year interval between the two assessments. Support for the concurrent validity of the measure used to assess verbal abuse is provided by findings from the present sample indicting that there was a highly significant association between a measure of maternal use of guilt to control children[23] and the present measure of childhood verbal abuse (χ^2 = 58.49; $P < .00001$).

Assessment of Axis I Disorders

The parent and youth versions of the Diagnostic Interview Schedule for Children (DISC-I)[24] were administered in 1983, 1985 to 1986, and 1991 to 1993 to assess anxiety (generalized anxiety disorder, obsessive-compulsive disorder, overanxious disorder, panic disorder, separation anxiety disorder, and social phobia), disruptive (attention deficit disorder, conduct disorder, and oppositional defiant disorder), eating (bulimia nervosa), mood (bipolar disorder, dysthymia, and major depressive disorder), and substance use (alcohol abuse and dependence, drug abuse and dependence) disorders. Previous research has supported the reliability and validity of the DISC-I and the DISC-I as employed in the present study has provided evidence of reliability and validity comparable to that of other structured interviews.[20]

Assessment of Personality Disorders

Interview items used to assess PDs were drawn from the parent and youth versions of the DISC-I,[24] the Personality Diagnostic Questionnaire[25] and the Disorganizing Poverty Interview (DPI).[21] Items were originally selected by consensus among one psychiatrist and two clinical psychologists based on correspondence with DSM-III-R diagnostic criteria.[26] Following publication of DSM-IV, items from the study protocol were

added or deleted to correspond with DSM-IV diagnostic criteria. An example illustrating the items and algorithms that were used to assess PDs is DSM-IV Paranoid PD Criterion #A2 ("Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates."). Two items were available to assess this diagnostic criterion: (1) "He/she often doesn't trust other people" (parent item); and (2) "I often wonder if the people I know can really be trusted" (youth item). Diagnostic criterion #A2 was considered present if an affirmative answer was given to either of these two items. Antisocial PD was only assessed in the period 1991 to 1993, because most participants were less than 18 years old in the period 1985 to 1986. The Cronbach's alpha interitem reliability coefficients for Cluster A, B, and C PD symptoms were $\alpha = .66$, $\alpha = .72$, and $\alpha = .68$, respectively; and for overall PD symptoms, $\alpha = .87$.

PD diagnoses were assigned to individuals who met DSM-IV diagnostic criteria as reported by the youth or mother. Use of multiple informants has been found to increase the reliability and validity of psychiatric diagnoses.[27,28] PD prevalence rates obtained using these procedures are comparable with those obtained in other community samples of similar age composition. Study findings have provided evidence supporting the reliability and validity of the items and algorithms used to assess PD symptoms.[26,29] The stability of PD symptoms during adolescence was similar to findings regarding the stability of PD symptoms among adults in the community.[26,30] In addition, adolescent PD symptoms predicted early adulthood axis I disorders and suicidality after axis I disorders and suicidality during adolescence were controlled statistically.[29] Further, adolescent PD symptoms predicted subsequent violence and criminal behavior after violence and criminal behavior during adolescence were controlled statistically.[31]

Assessment of Childhood Physical Abuse, Sexual Abuse, and Neglect

Official data regarding childhood maltreatment was obtained from the New York State Central Registry for Child Abuse and Neglect (NYSCR). Cases referred to state agencies, investigated by Childhood Protective Services, and confirmed as verified cases of abuse or neglect are retained in the NYSCR. Verification of physical abuse required evidence of injury. Verification of sexual abuse required evidence of sexual penetration or a judgement that the youth experienced unwanted sexual contact. Verification of neglect required evidence of educational, emotional, physical, or supervision neglect. NYSCR staff ascertained whether confirmed cases of childhood maltreatment were present. Self-reports of childhood maltreatment were obtained from the offspring in the period from 1991 to 1993. Participants were asked whether, before age 18: (1) Anyone they lived with ever hurt them physically so that they were still injured or bruised the next day, could not go to school as a result, or needed medical attention; (2) They had been left overnight without an adult caretaker before age 10; and (3) Any older person who was not a boy/girlfriend ever touched them sexually or forced them to touch the older person sexually. Seven percent of the youths experienced childhood physical abuse, 3% experienced childhood sexual abuse, and 6% experienced childhood neglect.

Assessment of Parental Education and Parental Psychopathology

Maternal and paternal education was assessed during the maternal interviews in 1975, 1983, and 1985 to 1986. Low parental education (i.e., mean education <12 years) was identified in 222 (28%) families. Interview items used to assess maternal psychiatric disorders in 1975, 1983, and 1986 were obtained from the DPI,[21] subscales from the California Psychological Inventory,[32] the Hopkins Symptom Checklist (SCL-90),[33] and instruments that assessed maternal alienation,[34] rebelliousness,[35] sensation-seeking,[36] and internal versus external locus of control.[37] All of the items in the protocol were administered using an interview format. DSM-IV–based diagnostic algorithms were computed using items that assessed DSM-IV diagnostic criteria for maternal anxiety, depressive, disruptive, personality, and substance use disorders. Paternal alcohol abuse, drug abuse, and antisocial behavior were assessed during the 1975, 1983, and 1986 maternal interviews using the DPI. Lifetime histories of maternal and paternal anxiety, depressive, disruptive, personality, and substance use disorders were assessed during the 1992 maternal interview using items based on the New York High Risk Study Family Interview.[38] Data regarding the incidence of maternal and paternal disorders permitted identification of psychiatric disorders that were evident by 1986. Using these assessment procedures, the prevalence of psychiatric disorders among the parents in this sample across the four assessments was 39%. Prevalence rates of maternal and paternal psychiatric disorders are similar to those reported obtained from major epidemiological studies.[39]

Assessment of Offspring Temperament

Ten dimensions of offspring temperament were assessed during the 1975 maternal interviews: (1) clumsiness-distractibility; (2) nonpersistence-noncompliance; (3) anger; (4) aggression to peers; (5) problem behavior; (6) temper tantrums; (7) hyperactivity; (8) crying-demanding; (9) fearful withdrawal; and (10) moodiness.[20] Eleven percent of the offspring experienced severe problems in one or more of these domains, and were identified as having a difficult temperament. Difficult offspring temperament has been found, in this sample, to predict adolescent behavior problems,[40] PDs,[41] axis I disorders,[42] and drug use during early adulthood.[43]

Assessment of Physical Punishment

In 1975, 1983, and 1985 to 1986, mothers were asked: "During the last month, did you spank or slap your child?" The response format to this question was "yes" or "no." To indicate the extent to which physical punishment was administered to the study offspring, a variable was created with a range of 0 (no physical punishment during the past month in 1975, 1983, or 1985 to 1986) to 3 (physical punishment administered during the past month in 1975, 1983, and 1985 to 1986). Fifty-five percent of the mothers did not report that they had hit or slapped their child during the past month in any interviews, while 13% reported in all three interviews that they had hit or slapped their child during the past month.

Statistical Analyses

Contingency tables were analyzed to investigate whether childhood verbal abuse was associated with increased risk for PDs during adolescence and early adulthood. PDs were considered present if diagnosed in 1985 to 1986 or 1991 to 1993. Statistical analyses were conducted regarding PDs during adolescence and early adulthood because there were not enough cases to permit analyses regarding specific PDs in either 1985 to 1986 or 1991 to 1993. An alpha level of .01 was adopted for all univariate analyses to reduce the probability of type I errors. Logistic regression analyses were conducted to investigate whether childhood verbal abuse was associated with increased risk for PDs during adolescence and early adulthood after controlling statistically for: (1) offspring age, sex, and parental education; (2) childhood physical abuse; (3) childhood sexual abuse; (4) childhood neglect; (5) offspring temperament; (6) frequency of physical punishment; (7) a dichotomous index of parental psychopathology; and (8) co-occurring axis I disorders. It should be noted that, because retrospective data regarding childhood physical abuse, sexual abuse, and neglect were obtained in 1993, controlling for these three kinds of childhood maltreatment may have increased the probability of type II errors. To reduce the probability of type II errors, the analyses conducted to control for the effects of covariates were conducted sequentially, using an alpha level of .05, with four sets of covariates (see Tables 1 and 2). Analyses of covariance (ANCOVAs) were conducted to investigate whether childhood verbal abuse was associated with the aggregate mean number of PD diagnostic criteria met (i.e., "personality disorder symptoms") during adolescence and early adulthood after the covariates were controlled. Aggregate means have been shown to yield estimates that are more reliable than those obtained when variables are measured on only a single occasion.[44] ANCOVAs were also conducted to investigate whether the interaction of childhood verbal abuse with physical abuse, physical punishment, sexual abuse, and/or neglect was associated with PD symptoms during adolescence and early adulthood. These interactions were tested because previous research has indicated that different types of childhood maltreatment typically co-occur. Interactions between childhood verbal abuse and other covariates were not routinely investigated, because the number of covariates was prohibitive and would have increased excessively the likelihood of type I errors.

RESULTS

Childhood verbal abuse was associated with increased risk for borderline, narcissistic, obsessive-compulsive, and paranoid PDs during adolescence and early adulthood after controlling statistically for the covariates (Table 1). Childhood verbal abuse did not interact with childhood physical abuse, sexual abuse, or neglect or with physical punishment during childhood to predict PDs during adolescence or early adulthood. Supplemental analyses indicated that childhood verbal abuse was not associated with increased risk for antisocial PD during early adulthood. Supplemental analyses

Table 1. Childhood Verbal Abuse and Personality Disorders During Adolescence and Early Adulthood

	PD Prevalence Among Individuals Who			
Personality Disorder	Did Not Experience Childhood Verbal Abuse (n = 715)	Experienced Childhood Verbal Abuse (n = 78)	Odds Ratio	95% Confidence Interval
Paranoid PD	3.3% (19/715)	9.0% (7/78)	3.26*†‡§	1.34-7.93
Schizoid PD	1.3% (9/715)	5.1% (4/78)	4.24	1.27-14.10
Schizotypal PD	3.4% (24/715)	7.7% (6/78)	2.40	0.95-6.06
Any Cluster A PD	7.3% (52/715)	21.8% (17/78)	3.55*†‡§	1.94-6.52
Borderline PD	1.8% (13/715)	7.7% (6/78)	4.50*†‡§	1.66-12.20
Histrionic PD	2.8% (20/715)	3.8% (3/78)	1.39	0.40-4.79
Narcissistic PD	3.5% (25/715)	11.5% (9/78)	3.60*†‡§	1.62-8.02
Any Cluster B PD	8.5% (61/715)	14.1% (11/78)	1.76	0.88-3.51
Avoidant PD	2.7% (19/715)	3.8% (3/78)	1.47	0.42-5.07
Dependent PD	3.1% (22/715)	2.6% (2/78)	0.83	0.19-3.59
Obsessive-compulsive PD	0.3% (2/715)	3.8% (3/78)	14.26*†‡§	2.35-86.70
Any Cluster C PD	6.0% (43/715)	10.3% (8/78)	1.79	0.81-3.95
Depressive PD	1.0% (7/715)	1.3% (1/78)	1.31	0.15-10.82
Passive-aggressive PD	3.5% (25/715)	6.4% (5/78)	1.89	0.70-5.09
Any PD	21.4% (153/715)	28.2% (22/78)	1.44	0.85-2.44

* Significant after controlling for offspring age, sex, and difficult childhood temperament.

† Significant after controlling for childhood physical abuse, sexual abuse, and neglect.

‡ Significant after controlling for parental education, parental psychopathology, and frequency of physical punishment during childhood.

§ Significant after controlling for co-occurring psychiatric disorders.

Table 2. Childhood Verbal Abuse and Personality Disorder Symptoms in Adolescence and Early Adulthood

	PD Symptoms Among Individuals Who			
Personality Disorder (PD)	Did Not Experience Childhood Verbal Abuse (n = 715) Mean (SD)	Experienced Childhood Verbal Abuse (n = 78) Mean (SD)	% Elevation in PD Symptoms	*F*
Paranoid PD	0.85 (0.85)	1.43 (1.18)	68%	29.32*†‡§
Schizoid PD	0.89 (0.83)	1.42 (0.96)	60%	28.11*†‡§
Schizotypal PD	1.71 (0.95)	2.12 (1.05)	23%	12.28*†‡§
Any Cluster A PD	3.46 (2.03)	4.96 (2.59)	41%	36.60*†‡§
Borderline PD	1.08 (1.04)	1.62 (1.21)	50%	18.90*†‡§
Histrionic PD	1.57 (1.05)	1.83 (1.17)	17%	4.16
Narcissistic PD	1.39 (1.18)	1.90 (1.35)	33%	12.95*†‡§
Any Cluster B PD	4.04 (2.60)	5.35 (3.12)	28%	17.27*†‡§
Avoidant PD	0.79 (0.85)	1.03 (0.96)	25%	5.47
Dependent PD	1.11 (0.99)	1.46 (1.32)	26%	7.90
Obsessive-compulsive PD	0.77 (0.71)	1.01 (0.83)	27%	7.04
Any Cluster C PD	2.67 (1.95)	3.49 (2.46)	26%	11.52*†‡§
Depressive PD	0.71 (0.86)	0.89 (1.10)	20%	2.87
Passive-aggressive PD	0.85 (0.93)	1.15 (0.99)	31%	7.01
Any PD	11.73 (6.46)	15.85 (8.35)	31%	26.77*†‡§

* Significant after controlling for offspring age, sex, and difficult childhood temperament.

† Significant after controlling for childhood physical abuse, sexual abuse, and neglect.

‡ Significant after controlling for parental education, parental psychopathology, and frequency of physical punishment during childhood.

§ Significant after controlling for co-occurring psychiatric disorders.

also indicated that childhood verbal abuse was associated with increased risk for disruptive disorders during late adolescence or early adulthood (odds ratio, 3.36; 95% confidence interval, 1.81 to 6.24), but was not associated with increased risk for anxiety, depressive, or substance use disorders during late adolescence or early adulthood.

As Table 2 indicates, childhood verbal abuse was associated with elevated borderline, narcissistic, paranoid, schizoid, and schizotypal PD symptom levels during adolescence and early adulthood after the covariates were controlled statistically. Cluster A, B, and C PD symptom levels and overall PD symptom levels were significantly elevated during adolescence and early adulthood among youths who experienced childhood verbal abuse, after the covariates were accounted for. Childhood verbal abuse was not associated with elevated antisocial PD symptom levels during early adulthood. Childhood verbal abuse did not interact with childhood physical abuse, sexual abuse, or neglect to predict PD symptom levels during adolescence or early adulthood. However, the interaction of childhood verbal abuse with frequent physical punishment during childhood predicted elevated schizoid, narcissistic, passive-aggressive, and total PD symptom levels during adolescence and early adulthood. Youths who experienced maternal verbal abuse and frequent physical punishment during childhood had higher PD symptom levels than youths who did not experience verbal abuse and frequent physical punishment during childhood.

DISCUSSION

The major findings of the present study are that maternal verbal abuse during childhood was associated with increased risk for borderline, narcissistic, obsessive-compulsive, and paranoid PDs and with elevated borderline, narcissistic, paranoid, schizoid, and schizotypal PD symptom levels during adolescence and early adulthood. These findings are of particular interest because childhood verbal abuse predicted subsequent PDs and PD symptoms after offspring age, sex, and temperament, childhood physical abuse, sexual abuse, neglect, physical punishment, parental education, parental psychopathology and co-occurring psychiatric disorders were controlled statistically. The present findings suggest that childhood verbal abuse may contribute to the development of some types of PDs, independent of the effects of other types of childhood maltreatment. It will be of in-

terest for future research to investigate whether the chronicity and relative frequency of childhood verbal abuse accounts in part for the unique increase in risk that is associated with this type of abuse. Alternatively, it has been hypothesized that childhood verbal abuse leaves deeper scars than other types of abuse because children tend to identify with their parents and therefore tend to internalize and self-inflict verbally abusive statements against themselves throughout their lives.[10]

These are the first findings from a prospective longitudinal study to indicate that childhood verbal abuse increases risk for PDs during early adulthood. However, our findings are consistent with prior findings indicating that patients with PDs frequently report histories of childhood verbal abuse.[14-17] Because maternally reported childhood verbal abuse was assessed prospectively in the present study, our findings suggest that the tendency of many patients with PDs to report histories of childhood verbal abuse is not likely to be attributable to biased memory or reporting. This is of importance because some researchers have raised the concern that, in retrospective research, the presence of psychiatric symptoms may be associated with biased memory or reporting with regard to traumatic life events.[18,19]

The present findings may have important implications for clinicians who work with youths and their families, and with adults who have experienced childhood verbal abuse. It is important to assess whether verbal abuse is currently taking place within a family, and if so, to implement appropriate interventions, such as teaching parents more effective ways of communicating with their children, to reduce the frequency and severity of verbal abuse. Such interventions may help to prevent the development of PDs during adolescence. In addition, histories of childhood verbal abuse and other forms of childhood maltreatment should be routinely assessed among patients of all ages who seek treatment for psychiatric disorders. It may be of pivotal importance to assist patients in recognizing maladaptive thoughts, feelings, and patterns of interpersonal behavior that may have originated, in part, as a consequence of childhood verbal abuse.[10] It will be of considerable interest for future research to investigate whether improved recognition and treatment of the consequences of childhood verbal abuse can increase the efficacy of therapeutic interventions among individuals with a history of childhood verbal abuse. It will also be important for longitudinal research to investigate associations between childhood verbal abuse and other types of psychiatric disorders.

Several methodological issues, including limitations of the present study, merit discussion. Verbal abuse was assessed using a scale that was constructed from items administered during three maternal interviews. Although the availability of this prospective longitudinal data is an important methodological strength, only three interview items were available to assess verbal abuse during each of the interview. Some types of abusive statements assessed in previous studies[1-3] were not assessed in the present study, and some mothers may have under-reported verbally abusive statements toward their children. Nevertheless, the instrument used in the present study to assess childhood verbal abuse predicted increased risk for PDs and elevated PD symptom levels during adolescence and early adulthood, and these associations remained significant after nine different covariates were controlled statistically. Thus, the present findings provide support for the predictive validity of this scale. In addition, findings reported above provide support the internal reliability, test-retest reliability, and concurrent validity of this instrument.

Because there were few cases of depressive, obsessive-compulsive, and schizoid PDs, there was reduced statistical power for some analyses involving these PD diagnoses. Out of concern for this issue, we investigated the association between childhood verbal abuse and PD symptoms during adolescence and early adulthood. Our findings regarding these associations are less likely to be adversely affected by low statistical power. In addition, although several studies have supported the reliability and validity of the instrument used in the present study to assess PDs,[26,29-31] the validity of the present findings might have been augmented if an instrument such as the Structured Clinical Interview for DSM-IV Personality Disorders[45] had also been administered. It should also be noted that, to the extent that the present findings differ from the findings of previous studies, such differences are likely to be due in part to the fact that the

present findings were obtained from a community-based sample.

Despite these limitations, the present study has numerous methodological strengths, including a representative, community-based sample, a prospective longitudinal design, assessment of DSM-IV PDs and childhood verbal abuse using data from a series of interviews administered to the youths and their mothers, and statistical controls for offspring age and gender, difficult offspring temperament, childhood physical abuse, sexual abuse, neglect, frequency of physical punishment, parental education, and parental psychopathology. Thus, the present findings increase our understanding of the association between childhood verbal abuse and PDs during adolescence and early adulthood.

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