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Childhood Antecedents of Avoidant Personality Disorder: A Retrospective Study

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Collaborative Longitudinal Personality Disorders Study. Study sites include Harvard Medical School and McLean Hospital (D.C.R., M.C.Z., M.A.C., J.G.G.), Brown University Department of Psychiatry and Human Behavior (S.Y., M.T.S.), Columbia University and New York State Psychiatric Institute (A.E.S.), Texas A&M University (L.C.M.), Vanderbilt University, and Yale University School of Medicine (C.M.G., T.H.M.). Dr. Rettew is now with the University of Vermont, College of Medicine.

Abstract

Objective—To explore potential risk factors and early manifestations of avoidant personality disorder (AVPD) by examining retrospective reports of social functioning and adverse childhood experiences.

Method—Early social functioning and pathological childhood experiences were assessed using the Childhood Experiences Questionnaire-Revised. The responses of 146 adults diagnosed with primary AVPD were compared with a group of 371 patients with other personality disorders as a primary diagnosis and a group of 83 patients with current major depression disorder and no personality disorders, using χ^2 analyses. Diagnoses were based on semistructured interviews by trained reliable clinicians.

Results—Adults with AVPD reported poorer child and adolescent athletic performance, less involvement in hobbies during adolescence, and less adolescent popularity than the depressed comparison group and the other personality disorder group. Reported rates of physical and emotional abuse were higher than the depressed group, but this result was influenced by comorbid diagnoses.

Conclusions—These results suggest that early manifestations of AVPD are present in childhood but that various forms of abuse are not specific to the disorder.

Keywords

avoidant personality disorder; abuse

Avoidant personality disorder (AVPD) is characterized by marked avoidance of social activities due to extreme feelings of inadequacy and fear of negative evaluation or ridicule (American Psychiatric Association, 1994). While feelings of shyness and social anxiety are exceedingly common with up to 90% of the general population rating themselves as shy at

one point in their lives (Zimbardo, 1977), AVPD itself has previously been reported to occur in approximately 1% to 2% of the population (Weissman et al., 1993). A recent study using a community sample in Norway, however, found AVPD to be the most common personality disorder (PD), with a prevalence of 5% (Torgersen et al., 2001).

Little is known about the etiology of AVPD or even the degree to which some of the core features of AVPD are present during childhood. Most models propose that PDs grow from temperamental characteristics that are present from childhood (Millon, 1981; Rutter, 1987). There is evidence that anxious traits are familial with heritabilities of approximately 50% (Carey and Dilalla, 1994; Jang et al., 1996; Livesly et al., 1993). Thus, one might expect that some of the core features of AVPD would be present in childhood, although not necessarily at severe enough levels to cause impairment and to constitute a disorder.

Retrospective reports show that approximately three fourths of patients with generalized social phobia report childhood shyness versus about half of controls (Beidel, 1998; Stemmerger et al., 1995). Generalized social phobia, a disorder that some hypothesize may be the same entity as AVPD (Schneier et al., 1991; Widiger, 1992), has a mean age of onset during adolescence (Davidson et al., 1993; Schneier et al., 1992). Important questions remain, however, as to the boundaries between generalized social phobia, AVPD, and general shyness (Rettew, 2000).

Thus, whether early manifestations of AVPD are also evident was a major aim of this exploratory study. Possible evidence of emerging AVPD, including fewer friends and less involvement in social activities, would support the claim of AVPD as an enduring condition with identifiable precursors.

A second goal of this study was to examine if individuals with AVPD report high rates of pathological experiences in childhood. Much has been written regarding the rates of traumatic experiences and abuse in other personality disorders (OPDs), especially in borderline PD (Gunderson and Sabo, 1993; Herman et al., 1989; Zanarini et al., 1997). Less is known about the role of traumatic experiences in AVPD, although a study by Johnson et al. (1999) showed that more AVPD criteria were met among children with a history of neglect, but not either physical or sexual abuse, compared with children without a history of abuse.

Our hypotheses were that adults with AVPD would show evidence of social functioning impairment beginning early in childhood. We also predicted, based on studies indicating both genetic (Arbelle et al., 2003; Hudson and Rapee, 2000) and learning-based (Barrett et al., 1996; Beidel, 1998; Dadds et al., 1996; Rubin et al., 1990) transmission of social anxiety in families, that lower levels of social involvement and ability would be found in the avoidant patients' parents compared with parents of patients with major depression. With regards to early mistreatment and abuse, we predicted adults with AVPD would report high levels of neglect compared with levels reported by adults with OPDs.

METHOD

Participants

The present study stems from the Collaborative Longitudinal Personality Disorders Study (CLPS), the details of which are described elsewhere (Gunderson et al., 2000). Briefly, CLPS is a multicenter project that is prospectively following a large group ($N = 668$) of individuals with four descriptively and conceptually distinct PDs (avoidant, schizotypal, borderline, and obsessive-compulsive). In addition, a comparison group of patients with major depression disorder (MDD) without any PDs was also obtained. Subjects were

recruited from outpatient clinics (43%), inpatient units (12%), and other medical settings (5%), and 40% were self-referred. The self-referred subjects were recruited from postings (30%), media advertisements (6%), and other sources (4%). Inclusionary criteria were age of 18–45 years, a diagnosis of at least one of the four target PDs or MDD without a PD, and current or past psychiatric treatment. Exclusionary criteria included schizophrenia (past or present), active psychosis or substance intoxication or withdrawal, confusional states, or estimated IQ less than 85.

Diagnostic Assessment

Subjects were diagnosed using the Structured Clinical Interview for *DSM-IV* Axis I Disorders (SCID-I) (First et al., 1996) and the Diagnostic Interview for *DSM-IV* Personality Disorders (DIPD-IV) (Zanarini et al., 1996). Axis II diagnoses needed to have convergent support by either the Personality Assessment Form (PAF) (Shea et al., 1990) or the Schedule for Nonadaptive and Adaptive Personality (SNAP) (Clark, 1993). Interviews were performed by experienced and rigorously trained interviewers with master's or doctoral degrees. For Axis I disorders, the median interrater κ ranged between 0.57 and 1.0 (0.80 for major depression), whereas the test-retest κ ranged between 0.35 and 0.77 (0.61 for major depression). For Axis II disorders, the range of median interrater κ was between 0.58 and 1.0 (0.68 for AVPD), whereas the test-retest κ was between 0.39 and 1.0 (AVPD = 0.73; Zanarini et al., 2000).

Because many patients received more than one PD diagnosis, subjects were assigned to one of the four PD study groups (schizotypal, borderline, obsessive-compulsive, and avoidant) using a criteria-based algorithm (Gunderson, 1992; Widiger et al., 1988). Generally, schizotypal and borderline diagnoses took precedence over avoidant and obsessive-compulsive PD, according to previous work on the hierarchical structure of PDs (Herkov and Blashfield, 1995); however, consideration was also given to the number of identified criteria as well as the consistency of a diagnosis across instruments. AVPD could be the designated group status of a patient with a DIPD-IV diagnosis of borderline or schizotypal PD if the latter was not strongly confirmed on the PAF and/or the SNAP. Further detail of the grouping procedure is provided elsewhere (Gunderson et al., 2000). The convergence of results across instruments, as well as the hierarchy between PD diagnoses, was intended to increase the validity of the assignment of patients to primary diagnostic groups. For the purposes of this study, which focused on AVPD, the schizotypal, borderline, and obsessive-compulsive groups were collapsed into the single group of OPDs. In addition, the MDD comparison group consisted of patients who met criteria for current MDD based on the SCID-I but did not meet criteria for any PD diagnosis.

Measures

The Childhood Experience Questionnaire-Revised (CEQ-R) (Zanarini et al., 1989) is a semistructured interview that asks about the occurrence of a number of positive and negative experiences that occurred during three childhood age periods (ages 0–5, 6–12, and 13–17 years). For an event to be categorized as positive, detailed information is required. The questionnaire also distinguishes events (e.g., physical abuse) perpetrated by maternal or paternal caretakers. Interrater reliability of the CEQ-R was assessed from 19 conjoint interviews, which paired a bachelor's level rater to one at the doctorate level. The median κ value for categorical variables was 1 (range 0.31–1.00), whereas the median intraclass correlation coefficient value for continuous variables was 0.88 (range 0.65–0.99).

The CEQ-R was administered at the baseline or 6-month follow-up to 600 (90%) of the original 668 subjects. There were no significant demographic differences between those who

did or did not receive the CEQ. The final numbers for the AVPD, OPD, and MDD groups were 146, 371, and 83, respectively.

Data Analysis

χ^2 analyses were used to test for between group differences in the distribution of reported events. For variables in which the omnibus χ^2 was significant at the $p < .05$ level, $2 \times 2 \chi^2$ comparisons were performed between groups. No Bonferroni corrections for multiple comparisons were applied; however, to reduce the number of comparisons, analyses were restricted to specific domains of childhood experiences and age groups based on the hypotheses of the study. These three domains were as follows: (1) childhood and adolescent achievement and functioning (especially social), (2) adverse family events and abuse, and (3) positive family relationships and caretaker social competence. Many items on the CEQ-R were condensed on a priori bases into larger categories similar to procedures used in previous investigations (Zanarini et al., 1989, 1997). For example, while the CEQ-R asks subjects about the occurrence of several types of prolonged separations (moves, hospitalizations, vacations) from different (male or female) caretakers and for each age period (0–5, 6–12, 13–17 years), this information was condensed into a single yes/no question as to whether any prolonged separation of any type occurred during childhood. Because our primary focus was to look for evidence of impairment in functioning and social relationships in childhood, these items were scrutinized with the most detail and analyzed within each age period as defined on the CEQ-R. Odds ratios were also calculated between the AVPD group and the depressed comparison group to provide a measure of relative risk.

RESULTS

The demographic characteristics of the three groups are outlined in Table 1. There were no significant differences found between groups with regards to gender, age, marital status, or employment. With regards to comorbid conditions, the OPD group, compared with the AVPD group, had higher lifetime rates of OCD and PTSD and the AVPD group had higher rates of social phobia. Differences were also found in comorbid Axis II diagnoses with the OPD group having higher levels of paranoid PD. Of note, there was insufficient sample size to perform statistical analyses of all variables. A full report of the comorbid Axis I and Axis II disorders is described elsewhere (McGlashan et al., 2000). There were also differences between groups with regards to the baseline Global Assessment of Functioning (GAF) Scale (American Psychiatric Association, 1994) with pairwise comparisons showing more impairment in the OPD group compared with the depressed comparison group. There were no differences in the GAF scores between the AVPD group and either the OPD or the psychiatric control group.

Achievement and Social Functioning

Table 2 summarizes patients' responses regarding childhood social functioning. Differences were found between the three groups in the areas of athletic achievement, involvement in extracurricular activities, leadership roles, and hobbies, as well as being popular with others.

Some of these differences were more specific to avoidant PD as determined through pairwise comparisons. The most striking differences were found in reported popularity in adolescence, where only 25% of the AVPD group endorsed this item compared with more than half in the depressed group. The AVPD group's response was significantly less than that of the OPD group, which in turn was significantly less than the depressed group. With regards to childhood and adolescent athletic achievement as well as hobby involvement in adolescence, the AVPD group reported less achievement than both the depressed group and the OPD group, whereas the OPD group and the depressed group did not statistically differ

from each other. The rates of reported involvement in extracurricular activities and leadership roles, by contrast, revealed nonspecific differences in both the AVPD and OPD groups compared with the comparison group. A similar pattern was found in the reported rates of childhood popularity.

Separation and Abuse

No differences were found between groups on variables of adverse childhood events that affected family structure, including experiences such as any reported prolonged caretaker separations, divorce, foster care, caretaker death, or frequent moves. Many differences were found regarding reported occurrences of abuse and mistreatment; however, they tended to be less specific for AVPD compared with the achievement variables.

In the AVPD group, the rate of sexual abuse (25%) and physical neglect (14%) was not statistically different from the comparison group and less than that reported by the OPD group. The rate of reported physical abuse (36%) and emotional abuse (61%) was significantly higher than that reported by the depressed group but not different from that reported by the OPD group. Differences were also found between the AVPD and depressed group on the variables of caretaker emotional denial and being a witness to violence. On these two variables, the OPD group also differed from the depressed group while not being significantly different from the AVPD group.

To further understand the relationship between AVPD and reported abuse, multiple logistic regression procedures were performed to determine whether the association between AVPD and various forms of abuse existed independently of any associations between PTSD and borderline PD. For each regression, each abuse variable found to be significant was the dependent variable with AVPD, BPD, and PTSD diagnoses entered simultaneously as possible predictors. The results of these analyses revealed that with each type of abuse that had significant group differences, the association between it and AVPD was mitigated by a diagnosis of BPD, PTSD, or both. There were no cases in which AVPD was significantly associated with abuse once the effect of PTSD and BPD was taken into account.

Family Relationships and Social Competence

The third domain of interest was positive family relationships and perceived social ability of caretakers. Here, significant differences between the three groups was found in the area of having a positive relationship with the patient's mother, father, another adult, and friends, as well as evaluating caretakers as having good social ability and having close friends.

Analyses using pairwise comparisons showed that on most of these items, both the AVPD and OPD group differed significantly from the comparison group but not from each other. Two findings, however, were found to be more specific to the AVPD group. Patients in the AVPD group, but not the OPD group, reported fewer positive relationships with other adults and poorer parental social ability compared with the depressed group.

Analyses Excluding OPD Group Subjects With Comorbid AVPD

As shown in Table 1, many subjects with primary borderline, schizotypal, and obsessive-compulsive disorder did meet criteria for AVPD. To eliminate this potentially confounding effect, the previous analyses were rerun excluding those subjects in the OPD group who met criteria for AVPD ($n = 152$). In general, despite the reduction in statistical power, this procedure tended to strengthen the associations found previously.

With regards to the achievement and participation variables (Table 2), the rates of several items in the OPD group increased to the point where they now were significantly higher than

the AVPD group, including childhood extracurricular involvement (43%) and popularity (26%). Using this sample, the only variables in which the OPD group remained significantly lower than the control group were childhood leadership and popularity and adolescent popularity (the latter two of which were still significantly higher than the AVPD group).

On the adverse experiences variables (Table 3), the rate of reported inconsistent treatment (45%) and physical neglect (20%) no longer differed from controls. The item of failure to protect (34%) no longer was higher than the AVPD group but remained higher than controls. With caretaker relationships and qualities (Table 4), the rate of a positive relationship to the subject's father (41%) no longer was significantly lower than controls while the rate of a positive relationship to another adult rose to 78%, which was significantly higher than the AVPD group.

DISCUSSION

This study is one of the first to examine possible childhood antecedents and risk factors of avoidant PD in a large sample of patients. Perhaps the most important finding is that adults with AVPD as well as OPD report dysfunction beginning as early as grade school.

Some of the present findings appear more specific to AVPD, whereas others may be characteristic of many PDs at least in comparison with depressed adults. Among the achievement and participation variable, the items that distinguished the AVPD group from both the control group and the OPD group were less child and adolescent athletic achievement, less adolescent popularity, and less involvement during adolescence in hobbies. In analyses excluding OPD subjects with comorbid AVPD, this finding was also true for childhood extracurricular activities and popularity. There were no items of this category in which the OPD group reported less achievement than the AVPD group, with the only items different from controls being less childhood leadership roles and less child and adolescent popularity. These results do not appear to be simply the result of the AVPD group being more globally impaired. On the contrary, it was the OPD group that had significantly lower GAF scores compared with adults with major depression. Thus, it is in this domain of participation in organized social activities during childhood and adolescence that differences specific to AVPD are seen.

In general, the findings in this area were consistent with the hypotheses that potential early manifestations specific to AVPD would be related to peer relationships and social involvement. Items such as school performance or work would not necessarily involve more social participation and were not found to be lower in the AVPD group. The equivocal finding with regards to hobbies (specifically lower for adolescent but not childhood AVPD) could reflect the fact that hobbies may or may not be social activities. Lack of clear findings with regards to extracurricular activities or leadership roles is somewhat unexpected; however, removing OPD patients comorbid with AVPD did result in more specific AVPD differences in childhood and adolescent extracurricular activities and adolescent participation in leadership roles.

While the CEQ-R cannot provide evidence that the onset of AVPD was often in childhood, it does indicate that for some who later developed AVPD, the divergent path away from social involvement and engagement begins early. It should be noted, however, that while children who are less popular and less involved in certain activities may be at risk for AVPD, it remains unclear as to what proportion of such children will go on to develop this disorder.

In contrast to the childhood achievement and participation items, questions about childhood adverse events including abuse generally revealed a pattern much less specific to AVPD.

The rates of reported emotional and physical abuse, which were 61% and 36%, respectively, were higher than that reported by the depressed group and not statistically different from the group with OPDs. The reported rate of physical neglect and sexual abuse in the AVPD group, by contrast, was found to be lower than that reported by the OPD group and not statistically different from the comparison group. Furthermore, logistic regression analyses revealed that much of the relationship between AVPD and abuse was accounted by comorbid PTSD and borderline PD, which limits the conclusions one can draw with regards to AVPD alone and past abuse. These findings are somewhat different from those reported by Johnson et al. (1999), in which a strong relationship was found between neglect and avoidant traits; however, another report from the same authors (Johnson et al., 2000) refined the association of AVPD specifically to emotional neglect. While the CEQ-R does not subdivide the item of neglect, the concept of emotional neglect may have been better captured by the CEQ-R item of emotional denial, which was reported more frequently in the childhoods of the AVPD group, compared with the depressed group. In summary, although trauma may have a role in the development of AVPD, this pathway is also closely linked with OPDs as well as with PTSD.

With regards to positive relationships with caretakers and their social competence, subjects in the AVPD group, but not in the OPDs group, report fewer positive relationships with other adults and rate their parents or caretakers as less skilled with regards to social ability. This result lends preliminary credence both to a genetic transmission of some AVPD features as well as the hypothesized role of modeling. Studies of twins or of adopted children may be required to further test these possibilities. Another more specific association with AVPD was the lack of a reported good relationship with a non-caretaking adult. In conjunction with the findings related to sports performance and participation in hobbies and perhaps extracurricular activities, this may reflect fewer relationships with people like coaches or adult activity leaders. Being less likely to report a positive maternal or paternal relationship, however, appears to be more globally related to many PDs relative to controls.

In terms of the comparison between AVPD and generalized social phobia, these data offer tentative support that adults who suffer from either diagnosis have phenotypic similarities in childhood. More recent research on social phobia has shown evidence of dysfunction, and perhaps full-fledged onset, occurring prior to adolescence (Beidel and Turner, 1998). Important questions in this interesting area remain, including whether the poorer social functioning that was reported represents a true risk factor for AVPD versus the presence of the disorder itself perhaps in a subsyndromal form.

Limitations

The principal limitation of the present study is the retrospective method of data collection. Previous studies have demonstrated that recall of both traumatic and nontraumatic childhood events is subject to inaccuracies (Mannuzza et al., 2002; Williams, 1995; Yarrow et al., 1970). While some researchers have found that reliable histories of past adverse experiences can be obtained in patients with severe mental illness (Goodman et al., 1999), both underestimation of past events (Della Femina et al., 1990) and bias based on an individual's present level of functioning (Schraedley et al., 2002) have been reported. As such, it is possible that those with AVPD recollected their childhood in a way that was consistent with their present symptom content. Although this effect is always of some concern, social impairment is also characteristic of both the group with OPDs and the depressed group. As such, one might expect a similar bias to occur among all three groups and not only in the AVPD group. Nevertheless, the use of multiple informants and, ideally, prospective data would help minimize potential bias.

The high degree of comorbid diagnoses in the AVPD and other groups also raises the issue of specificity in the findings that are reported. Clearly, comorbidity in AVPD and OPDs between Axis I and other Axis II disorders is the rule rather than the exception (Rettew, 2000; Stuart et al., 1998; Zanarini et al., 1987). A less naturalistic design, however, in which subjects with AVPD had few or no other diagnoses, could help confirm that these reported precursors are truly specific to AVPD.

Clinical Implications

This study begins to delineate the development of AVPD as a disorder with early manifestations that may be recognizable in childhood and distinguishable from the early course of OPDs. As such, clinicians should consider the emerging of AVPD in their evaluation of children who appear less engaged with peer relationships and activities. For at least these AVPD adults in the study, the lack of involvement with others and in structured activities was not merely a “phase” that they later outgrew. Clinicians considering the encouragement of greater exposure to social activities, however, should keep in mind that the caretakers of these children often themselves have significant social difficulties, which could present a barrier to treatment goals. How early these antecedents can be identified, precisely what form they take, and to what extent they are amenable to intervention remain important questions for future research.

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TABLE 1

Demographic Characteristics of Final Sample ($N = 600$)

	AVPD ($N = 146$)	Other PD ($N = 371$)	Depressed Controls ($N = 83$)	Statistic ($df = 2$)
Gender: n (%)				$\chi^2 = 1.03, p = \text{NS}$
Male	50 (34.2)	135 (36.4)	34 (41.0)	
Female	96 (65.8)	236 (63.6)	49 (59.0)	
Age, yr: mean (SD)	32.3 (8.1)	32.7 (8.1)	32.7 (8.2)	$F = 0.11, p = \text{NS}$
Race: n (%)				$\chi^2 = \text{NA}^*$
White	123 (84)	280 (75)	61 (73)	
African American	10 (7)	45 (12)	13 (16)	
Latino	10 (7)	36 (9)	6 (7)	
Other	3 (2)	10 (3)	3 (4)	
Married: n (%)	33 (23)	66 (18)	17 (20)	$\chi^2 = 1.64, p = \text{NS}$
Education (highest level completed): n (%)				$\chi^2 = \text{NA}^*$
Less than high school	10 (7)	26 (7)	2 (2)	
High school	77 (53)	210 (57)	46 (55)	
College	42 (29)	102 (27)	25 (30)	
Graduate or professional	17 (12)	33 (9)	10 (12)	
Full-time employment: n (%)	41 (28)	90 (24)	27 (33)	$\chi^2 = 2.70, p = \text{NS}$
Global Assessment of Functioning for prior month: mean (SD)	59.11 (10.53)	57.08 (11.58)	61.27 (9.72)	$F = 5.55, p < .01$
Axis I SCID-I psychiatric disorders lifetime: n (%)				AVPD vs. OPD ($df = 1$)
Major depression	116 (80)	267 (72)	83 (100)	$\chi^2 = 3.52, p = \text{NS}$
Dysthymia	33 (23)	63 (17)	6 (7)	$\chi^2 = 2.30, p = \text{NS}$
Bipolar I	9 (6)	34 (9)	0 (0)	$\chi^2 = \text{NA}^*$
Bipolar II	4 (3)	18 (5)	0 (0)	$\chi^2 = \text{NA}^*$
Panic disorder	34 (23)	101 (27)	17 (20.5)	$\chi^2 = 0.77, p = \text{NS}$
Agoraphobia	6 (4)	7 (2)	2 (2)	$\chi^2 = \text{NA}^*$
Social phobia	55 (38)	83 (22)	6 (7)	$\chi^2 = 12.88, p < .001$

	AVPD (N = 146)		Other PD (N = 371)		Depressed Controls (N = 83)		Statistic (df = 2)
OCD	13	(9)	71	(19)	8	(10)	$\chi^2 = 7.91, p < .01$
PTSD	19	(13)	100	(27)	7	(8)	$\chi^2 = 11.27, p < .01$
GAD	33	(23)	90	(24)	8	(10)	$\chi^2 = 0.13, p = NS$
Alcohol abuse/dependence	66	(45)	157	(42)	23	(28)	$\chi^2 = 0.43, p = NS$
Drug abuse/dependence	47	(32)	151	(41)	27	(32)	$\chi^2 = 3.10, p = NS$
Anorexia nervosa	10	(7)	24	(6)	2	(2)	$\chi^2 = NA^*$
Bulimia nervosa	13	(9)	34	(9)	4	(5)	$\chi^2 = NA^*$
Psychosis NOS	1	(1)	19	(5)	1	(1)	$\chi^2 = NA^*$
Axis II DIPD-IV personality disorders current: n (%)							
Schizotypal	1	(1)	83	(22)		NA	NA
Schizoid	6	(4)	12	(3)		NA	$\chi^2 = 0.25, p = NS$
Paranoid	14	(10)	62	(17)		NA	$\chi^2 = 4.13, p < .05$
Antisocial	7	(5)	36	(10)		NA	$\chi^2 = 3.18, p = NS$
Narcissistic	2	(1)	32	(9)		NA	$\chi^2 = NA^*$
Histrionic	0	(0)	13	(3)		NA	$\chi^2 = NA^*$
Borderline	25	(17)	189	(51)		NA	NA
Obsessive-compulsive	32	(22)	210	(57)		NA	NA
Avoidant	146	(100)	152	(41)		NA	NA

Note: AVPD = avoidant personality disorder; Other PD = other personality disorders; SCID-I = Structured Clinical Interview for DSM-IV Axis I Disorders; DIPD-IV = Diagnostic Interview for DSM-IV Personality Disorders; NS = not significant; NA = not applicable; NOS = not otherwise specified.

* Too few observations for statistic.

TABLE 2

Childhood Achievements and Participation by Diagnostic Group

Achievement (Age Range)	AVPD (<i>n</i> = 146) (%)	Other PDs (<i>n</i> = 371) (%)	Depressed Controls (<i>n</i> = 83) (%)	χ^2 (<i>df</i> = 2)	<i>p</i>	OR (95% CI) (AVPD vs. Controls)
Did well in school						
(6–12)	64	63	73	3.30	NS	0.74 (0.50, 1.11)
(13–17)	60	58	72	5.44	NS	0.70 (0.47, 1.04)
Played any sports well						
(6–12)	23 ^a	33 ^b	39 ^b	7.48	<.05	0.63 (0.45, 0.88)
(13–17)	28 ^a	43 ^b	53 ^b	15.41	<.001	0.52 (0.37, 0.73)
Extracurricular activities						
(6–12)	32 ^a	37 ^a	53 ^b	10.21	<.01	0.58 (0.41, 0.82)
(13–17)	55 ^a	54 ^a	70 ^b	6.73	<.05	0.67 (0.45, 0.98)
Leadership roles						
(6–12)	10 ^a	12 ^a	24 ^b	9.97	<.01	0.57 (0.40, 0.81)
(13–17)	31 ^a	33 ^a	49 ^b	9.43	<.01	0.62 (0.44, 0.86)
Steady work record						
(13–17)	60	64	66	1.23	NS	0.83 (0.57, 1.20)
Hobby involvement						
(6–12)	45	51	58	3.42	NS	0.72 (0.51, 1.03)
(13–17)	53 ^a	67 ^b	67 ^b	8.47	<.05	0.68 (0.47, 0.99)
Popular with others						
(6–12)	16 ^a	23 ^a	42 ^b	20.60	<.001	0.46 (0.34, 0.64)
(13–17)	25 ^a	37 ^b	57 ^c	23.32	<.001	0.43 (0.31, 0.61)

Note: AVPD = avoidant personality disorder; Other PD = other personality disorders; OR = odds ratio; CI = confidence interval; NS = not significant. Group means with different superscript letters are significantly different at $p < .05$ ($2 \times 2 \chi^2$ test).

TABLE 3

Adverse Childhood Experiences by Diagnostic Group

Childhood Experience (Age Range)	AVPD (<i>n</i> = 146) (%)	Other PDs (<i>n</i> = 371) (%)	Depressed Controls (<i>n</i> = 83) (%)	χ^2 (<i>df</i> = 2)	<i>p</i>	OR (95% CI) (AVPD vs. Controls)
Physical neglect (0–17)	14 ^a	24 ^b	14 ^a	8.85	<.05	1.00 (0.60, 1.66)
Emotional withdrawal (0–17)	54	58	49	2.45	NS	1.13 (0.79, 1.61)
Inconsistent treatment (0–17)	39 ^{ab}	47 ^a	33 ^b	6.73	<.05	1.18 (0.80, 1.73)
Emotional denial (0–17)	54 ^a	62 ^a	35 ^b	19.50	<.001	1.64 (1.12, 2.39)
Failure to protect (0–17)	25 ^a	38 ^b	21 ^a	11.87	<.01	1.16 (0.75, 1.80)
Lack of real relationship (0–17)	52	52	38	5.28	NS	1.44 (0.99, 2.09)
Parentification of patient (0–17)	32	40	37	2.92	NS	0.87 (0.60, 1.25)
Witness to violence (0–17)	69 ^a	70 ^a	49 ^b	13.23	<.01	1.67 (1.19, 2.34)
Emotional/verbal abuse (0–17)	61 ^a	66 ^a	47 ^b	10.78	<.01	1.44 (1.01, 2.06)
Physical abuse (0–17)	36 ^a	39 ^a	21 ^b	8.44	<.05	1.62 (1.03, 2.56)
Sexual abuse (0–17)	25 ^a	39 ^b	18 ^a	18.14	<.001	1.37 (0.84, 2.22)

Note: AVPD = avoidant personality disorder; Other PD = other personality disorders; OR = odds ratio; CI = confidence interval; NS = not significant. Group means with different superscript letters are significantly different at $p < .05$ ($2 \times 2 \chi^2$ test).

TABLE 4

Positive Relationships and Caretaker Qualities by Diagnostic Group

Relationship or Quality (Age Range)	AVPD (<i>n</i> = 146) (%)	Other PDs (<i>n</i> = 371) (%)	Depressed Controls (<i>n</i> = 83) (%)	χ^2 (<i>df</i> = 2)	<i>p</i>	OR (95% CI) (AVPD vs. Controls)
Positive relationship with mother (0–17)	49 ^a	50 ^a	66 ^b	7.78	<.05	0.63 (0.43, 0.91)
With father (0–17)	37 ^a	39 ^a	53 ^b	6.25	<.05	0.67 (0.47, 0.95)
With other adult (0–17)	65 ^a	74 ^{ab}	80 ^b	6.28	<.05	0.61 (0.39, 0.96)
With siblings (0–17)	55	53	61	1.77	NS	0.84 (0.59, 1.20)
With friends (0–17)	77 ^a	74 ^a	89 ^b	8.61	<.05	0.53 (0.29, 0.97)
Caretaker with good social ability (0–17)	68 ^a	74 ^{ab}	84 ^b	6.63	<.05	0.54 (0.32, 0.90)
With outside interests (0–17)	57	56	68	3.84	NS	0.73 (0.50, 1.07)
With close friends (0–17)	77 ^a	80 ^a	92 ^b	7.31	<.05	0.44 (0.22, 0.88)
With good family relations (0–17)	81	76	87	5.41	NS	0.75 (0.44, 1.27)

Note: AVPD = avoidant personality disorder; Other PD = other personality disorders; OR = odds ratio; CI = confidence interval; NS = not significant. Group means with different letters are significantly different at $p < .05$ ($2 \times 2 \chi^2$ test).