

# Positive Childhood Experiences: Resilience and Recovery From Personality Disorder in Early Adulthood

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Objective: Recent follow-along studies of personality disorders have shown significant improvement in psychopathology over time. The purpose of this study was to prospectively investigate the association between positive childhood experiences related to resiliency and remission from personality disorder.

**Method:** Five hundred twenty patients with DSM-IV-based semistructured interview diagnoses of schizotypal, borderline, avoidant, or obsessive-compulsive personality disorders were evaluated 6 times over 4 years between September 1996 and June 2002. Positive childhood experiences, including achievements, positive interpersonal relationships with others, and caretaker competencies, were measured using the Childhood Experiences Questionnaire-Revised. The effects of positive childhood experiences on clinically significant remission from personality disorder were determined using survival and proportional hazard regression analyses.

**Results:** Positive achievement experiences and positive interpersonal relationships during childhood or adolescence were significantly associated with remission from avoidant and schizotypal personality disorders. The greater the number of positive experiences and the broader the developmental period they spanned, the better the prognosis of these personality disorders.

**Conclusions:** The prognosis of certain personality disorders is better in patients whose developmental histories include positive experiences. Early treatment designed to foster personal strengths and competencies and to develop interpersonal skills might benefit young patients diagnosed with personality disorders.

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onsiderable empirical research has focused on the pathogenic effects of negative childhood experiences, such as abuse and neglect, in the development of personality psychopathology. 1-3 Epidemiologic studies indicate, however, that, for many, childhood victimization has less direct impact on mental health outcomes later in life than might be expected.<sup>4,5</sup> Less attention has been paid to factors that might mitigate the deleterious effects of childhood maltreatment, protecting vulnerable children from developing personality disorders or promoting recovery.

Recently, there has been renewed interest in concepts such as "resiliency" and "benefit finding."6-11 These phenomena refer to individual differences or life experiences that help people to cope with adversity, make them better able to deal with stress in the future, and confer protection

## TAKE-HOME POINTS

- ◆ Young patients with personality psychopathology may show improvement over time.
- ◆ The prognosis of certain personality disorders is better in patients whose developmental histories include positive achievements and interpersonal relationships.
- ◆ Early treatment designed to foster personal strengths and competencies and to develop interpersonal skills could have a beneficial effect on young patients diagnosed with personality disorders.

from the development of mental disorders.<sup>12</sup> Adaptive individual traits include intelligence, optimism, self-confidence or self-efficacy, sociability, internal locus of control, and active style of coping.<sup>13–21</sup> Protective life experiences are often the product of strong "social support,"<sup>22</sup> both within the family<sup>15,19,23–27</sup> and in the outside community.<sup>14,28</sup>

The notion of recovery from personality disorder is relatively new, even though traditional studies of the course of personality disorders have shown that only about half of patients with personality disorders retained these diagnoses over follow-up periods ranging from 6 months to 15 years.<sup>29,30</sup> Newer follow-along studies of personality disorders with improved methodologies, however, have also shown significant rates of improvement in personality disorder psychopathology over time in patient,<sup>31–33</sup> non-patient,<sup>34</sup> and community<sup>35</sup> populations. Since personality psychopathology early in life may improve, it is expedient to determine potential mediators or predictors of change.

Therefore, it is germane to search for factors to distinguish adults whose personality disorders improve from those whose personality disorders persist. Academic achievement and competence in peer relations or other areas, such as work or activities, are some life experiences shown to be related to resilient personality traits and supportive environments that might contribute to change from maladaptive to more adaptive behavior in early adulthood, even in the context of significant adversity. 7,19,21,38

The Collaborative Longitudinal Personality Disorders Study (CLPS) is an ongoing follow-along investigation of the stability of personality psychopathology over time.<sup>39</sup> The original sample included 573 patients with 1 of 4 targeted personality disorders, many of whom have experienced significant maltreatment.<sup>3</sup> In addition, almost half of these patients had experienced a clinically significant remission within the first 2 years of follow-up.<sup>33</sup> The current study investigates the role of 3 types of positive childhood experiences related to resiliency—achievements, positive relationships with others, and caretaker competencies—on remission from personality disorder within the first 4 years of follow-up.

## **METHOD**

Detailed description of the CLPS rationale, recruitment, subject demographics, diagnostic assessments, and measurement reliability are available elsewhere. Axis I and Axis II comorbidity typical of patients with personality disorders was present.

## **Subjects**

Participants 18 to 45 years of age came primarily from clinical services affiliated with each of the 4 recruitment sites of the CLPS. Additional subjects were recruited via postings or advertising. All were previously or currently in mental health treatment. All articipants were prescreened to determine age eligibility and treatment status and to exclude those with active psychosis; acute substance intoxication or withdrawal, or other confusional states; or a history of schizophrenia, schizophreniform disorder, or schizoaffective disorder. All participants signed written informed consent after the study procedures had been fully explained. Institutional review board approvals were obtained for each site of the study.

The current report is based on 520 (91%) of the original 573 personality disorder patients whose complete data on childhood experiences were available. There were no significant demographic differences between those with and without complete childhood experiences data. The majority of patients were women (64%), white (78%), and from Hollingshead and Redlich social classes II or III (63%). They were roughly equally distributed across the age range included in the study (mean age, 32.6 years, SD = 8.1). Eighty-five patients met DSM-IV criteria for schizotypal personality disorder, 212 for borderline personality disorder, 300 for avoidant personality disorder, and 243 for obsessive-compulsive personality disorder. Data were collected between September 1996 and June 2002.

#### Assessment

All patients were interviewed at intake by experienced clinicians using the Structured Clinical Interview for DSM-IV Axis I Disorders-Patient Edition (SCID-I/P)<sup>44</sup> and the Diagnostic Interview for DSM-IV Personality

Disorders (DIPD-IV).<sup>45</sup> Raters were trained by means of live or videotaped interviews, reviewed under the supervision of the senior author of the DIPD-IV (M.C.Z.). The 4 personality disorder diagnoses had good interrater and test-retest reliabilities, respectively (schizotypal personality disorder: 100% agreement [N insufficient to calculate  $\kappa$  for interrater reliability] and  $\kappa=0.64$ ; borderline personality disorder:  $\kappa=0.68$  and 0.69; avoidant personality disorder:  $\kappa=0.68$  and 0.73; obsessive-compulsive personality disorder:  $\kappa=0.71$  and 0.74).<sup>41</sup>

Patients were reinterviewed at 6, 12, 24, 36, and 48 months following the baseline assessment. The course of the 4 personality disorders was assessed using a modification of the DIPD-IV, the Diagnostic Interview for DSM-IV Personality Disorders Follow-Along Version (DIPD-FAV), to record traits or behaviors indicative of each criterion for the personality disorders for each month of the follow-up period. Reliability for the retrospective reporting on the DIPD-FAV was tested and found to be good (schizotypal personality disorder,  $\kappa = 0.78$ ; borderline personality disorder,  $\kappa = 0.73$ ; obsessive-compulsive personality disorder,  $\kappa = 0.68$ ) for month 6 of follow-up, assessed at both the 6-month and 12-month interviews.

To assess positive childhood experiences, interviewers administered the Childhood Experiences Questionnaire-Revised (CEQ-R)<sup>46</sup> either at baseline or at the 6-month follow-up interview. The CEQ-R is a semistructured interview that asks about the occurrence of positive and negative experiences that may have occurred during 3 age periods: 0 to 5, 6 to 12, and 13 to 17 years. For this study, the 0-to-5 and 6-to-12 year intervals were combined (due to the infrequency with which a number of experiences were reported from 0 to 5 years) to create a single "childhood" period to compare with the 13-to-17 year "adolescent" period. The CEQ-R has demonstrated reliability: interrater reliability κ values for individual experiences by the developer ranged from 0.64 to 1.0, with a median  $\kappa$  of 0.88.<sup>46</sup> For the CLPS study, interrater reliability  $\kappa$  values for 19 conjoint interviews ranged from 0.31 to 1.0 with a median of 1.0.47

In the positive experiences domain, the CEQ-R includes 8 questions about the youth's achievements: academic, athletic, other extracurricular activity, leadership, work, hobby, household responsibilities, and popularity. Ten questions about positive interpersonal relations with others are included: mother, father, other adult female relative, other adult male relative, other adult female sibling, male sibling, female friend, and male friend. Finally, there are 10 questions about perceived caretaker competencies: female work, male work, female social ability, male social ability, female interests, male interests, female close friendships, male close friendships, female good family relationships, and male good family relationships. If a patient answered affirmatively

to having achievements, positive relationships, or caretakers who were competent, the interviewers probed to determine the specific positive nature of the achievement, relationship, or competence. The CEQ-R also includes questions about 5 types of abuse (emotional, verbal, physical, caretaker sexual abuse, and noncaretaker sexual abuse) and 7 types of neglect (physical neglect, emotional withdrawal, inconsistent treatment, denial of feelings, lack of real relationship, parentification, and failure to protect).

## **Analyses**

Remission from the index personality disorder was defined as 12 consecutive months with 2 or fewer criteria rated as present on the DIPD-FAV at some point during the first 4 years of follow-up.<sup>33</sup> A patient was eligible for a remission at the start of the first follow-up month of the study, and the first available time for a remission to occur was at the 12-month follow-up. Survival analyses (PROC LIFETEST) were conducted to determine the effects of positive experiences on overall remission rates, and for males and females separately, for each of the 4 targeted personality disorders and to assess the significance of positive experiences occurring during childhood (0–12 years) compared with those occurring during adolescence (13-17 years). Data were used from all cases to the point at which they might become missing (e.g., study dropouts), at which point they were censored. Wilcoxon tests were used to determine significance.

Proportional hazard regression analyses were conducted to assess the effects of the total number of positive experiences in each of the 3 CEQ-R domains for any individual experience that significantly predicted remission. A final set of proportional hazard regression analyses was conducted to determine the effects of total positive achievement and positive relationship experiences with any physical, sexual, or verbal abuse and any type of neglect in the model. All regression analyses controlled for gender, age, ethnicity, and number of comorbid Axis I and Axis II disorders. Analyses were performed using SAS version 8.2.48 Given the descriptive and exploratory nature of the analyses, all tests were reported with significance values greater than 95% (p < .05), 2-tailed. Because of the number of significance tests conducted, however, caution should be used in interpreting results of only modest significance, as some of them may represent chance associations.

## **RESULTS**

Overall remission rates (12 consecutive months at 2 or fewer criteria) for DIPD-IV diagnoses of the 4 personality disorders were as follows: schizotypal personality disorder = 45.5%, borderline personality disorder = 53.6%, avoidant personality disorder = 55.1%, and

Table 1. Positive Childhood Experiences and Gender in Relation to Remission From Personality Disorders in 520 Patients

					Gender Difference <sup>a</sup>		
Positive Childhood Experience	Personality Disorder	$\chi^2$	df	p	Male	Female	
Extracurricular activities	Avoidant	10.18	1,300	.0014		*	
Leadership	Avoidant	8.05	1,300	.0046		*	
Work	Avoidant	7.73	1,300	.0054	=	=	
Popularity	Avoidant	13.87	1,300	.0002		*	
	Schizotypal	12.03	1,85	.0005		*	
Positive relations with female friends	Avoidant	10.69	1,300	.0011		*	
Positive relations with female relatives	Avoidant	7.63	1,300	.0058	*		
	Schizotypal	7.72	1,85	.0055	=	=	
Positive relations with male friends	Borderline	4.32	1,212	.0378	*		
Positive relations with mother	Schizotypal	7.92	1,85	.0049		*	
Positive relations with male siblings	Schizotypal	7.66	1,85	.0057		*	
Positive relations with female siblings	Schizotypal	5.49	1,85	.0191		*	
Female caretaker having close friends	Avoidant	6.14	1,300	.0132		*	

aux "Indicates the effect is stronger for specified gender. " = "Indicates the effect is similar for both females and males.

obsessive-compulsive personality disorder = 67.0%. Results of significant associations between remission and positive childhood experiences will be presented by type of experience. Significant findings are summarized in Table 1.

A positive achievement record during childhood or adolescence was significantly related to the probability of remission of avoidant personality disorder over 4 years of follow-up. Specifically, a report of achievement in extracurricular activities (60.6% remitted with achievement vs. 48.1% remitted without achievement), leadership (63.9% vs. 51.3%), work (61.2% vs. 50.1%), and popularity (69.5% vs. 48.2%) predicted avoidant personality disorder remission. These relationships were slightly stronger among female patients with avoidant personality disorder than among male patients with avoidant personality disorder, except for achievement in work, in which the relationships were nearly identical. Popularity also predicted schizotypal personality disorder remission (73.7% vs. 35.4%), with a much stronger relationship in women (88.9%) than in men (62.8%). Achievement experiences were more often significantly related to personality disorder remission if they occurred in adolescence than in childhood, although some experiences (e.g., work) were infrequently reported in childhood.

Positive relationships with female friends (62.6% remitted with vs. 43.7% remitted without) and with female relatives (62.7% vs. 48.5%) were also significantly related to avoidant personality disorder remission. The relationship for female friends was stronger among women with avoidant personality disorder (63.1%) than men (60.8%), and the relationship for female relatives was stronger among men with avoidant personality disorder (69.4%) than women (59.8%). Positive relationships with male friends predicted borderline personality disorder remission (61.7% vs. 48.2%). This relationship was slightly stronger in men with borderline personality disorder than

in women. Positive relationships with mother (61.5% vs. 30.9%), female relative (64.0% vs. 34.1%), male sibling (63.6% vs. 38.9%), and female sibling (63.3% vs. 39.6%) predicted schizotypal personality disorder remission. The relationships for mother (56.8% vs. 68.8%), male sibling (58.3% vs. 70%), and female sibling (55.9% vs. 75%) were significantly weaker in men with schizotypal personality disorder than women with schizotypal personality disorder. In contrast to achievement experiences, positive relationships during both childhood and adolescence were related to personality disorder remission.

Caretaker competence as exhibited by a female caretaker having close friends was associated with remission of avoidant personality disorder (60.0% remitted, vs. 43.7% remitted). This effect was stronger in female patients (61.2%) with avoidant personality disorder than males (57.9%). No other caretaker competency variables were associated with remission from personality disorder.

Table 2 presents the effects of the total number of positive experiences in each of the 3 domains for each of the 3 personality disorders for which any individual experience was significant (i.e., avoidant personality disorder, schizotypal personality disorder, and borderline personality disorder; no individual experience predicted obsessivecompulsive personality disorder remission) controlling for gender, age, ethnicity, and number of comorbid Axis I and Axis II disorders. The total numbers of positive achievement experiences and of positive relationships were related to remission from avoidant personality disorder, and the total number of positive relationships was related to remission from schizotypal personality disorder. There were no significant relationships between total number of any type of positive childhood experience and remission from borderline personality disorder. The hazard ratios reveal that for every additional type of positive achievement experience, the potential for remission from avoidant personality disorder increased by 17% and for

Table 2. Effect of Total Number of Positive Achievement, Positive Relationship, and Caretaker Competence Experiences on Remission From Personality Disorders Over 4 Years

		Diagnostic Group														
	Av	Avoidant Personality Disorder					Schizotypal Personality Disorder					Borderline Personality Disorder				
					Hazard					Hazard					Hazard	
Positive Experience	В	SE	$\chi^2$	p	Ratio	В	SE	$\chi^2$	p	Ratio	В	SE	$\chi^2$	p	Ratio	
Total achievements	0.16	0.04	12.03	.0005	1.17	0.08	0.08	0.84	.359	1.08	-0.03	0.05	0.29	.592	0.97	
Total relationships	0.11	0.04	10.11	.0015	1.12	0.18	0.06	8.19	.004	1.19	0.00	0.05	0.01	.931	1.00	
Total caretaker competencies	0.03	0.03	0.69	.407	1.03	0.06	0.06	0.95	.330	1.06	-0.01	0.04	0.10	.752	0.99	

Table 3. Effects of Positive Childhood Experiences, Abuse, and Neglect on Remission From Personality Disorders Over 4 Years

	Diagnostic Group														
	Avoidant Personality Disorder					Schizotypal Personality Disorder					Borderline Personality Disorder				
Variable	В	SE	$\chi^2$	р	Hazard Ratio	В	SE	$\chi^2$	р	Hazard Ratio	В	SE	$\chi^2$	p	Hazard Ratio
Total achievement experiences	0.13	0.05	6.34	.011	1.14	-0.07	0.12	0.35	.553	0.93	-0.01	0.06	0.04	.834	0.99
Total positive relationships	0.09	0.04	5.19	.022	1.10	0.23	0.10	5.87	.015	1.27	0.02	0.05	0.10	.753	1.02
Total caretaker competencies	-0.05	0.04	1.46	.227	0.96	-0.03	0.07	0.13	.714	0.97	-0.04	0.04	0.86	.352	0.96
Gender	0.09	0.18	0.23	.633	1.09	0.36	0.35	0.74	.389	1.35	-0.45	0.23	3.89	.049	0.64
Age	-0.02	0.01	3.48	.062	0.98	-0.05	0.02	5.21	.022	0.95	-0.01	0.01	0.71	.399	0.99
Ethnicity	-0.01	0.11	0.01	.926	0.99	-0.03	0.30	0.01	.933	0.98	-0.29	0.12	5.23	.022	0.75
No. of comorbid Axis I disorders	-0.07	0.05	1.69	.194	0.93	0.02	0.11	0.02	.881	1.02	0.08	0.06	1.84	.175	1.09
No. of comorbid Axis II disorders	-0.07	0.06	1.45	.228	0.93	-0.01	0.09	0.02	.884	0.99	-0.17	0.06	7.75	.005	0.84
Verbal abuse	0.21	0.19	1.23	.267	1.24	-0.63	0.49	1.69	.193	0.53	-0.13	0.25	0.28	.596	0.88
Physical abuse	-0.63	0.20	10.02	.002	0.53	0.10	0.46	0.04	.834	1.10	-0.27	0.24	1.24	.266	0.77
Sexual abuse	0.08	0.18	0.22	.640	1.09	-0.28	0.41	0.47	.491	0.76	-0.02	0.21	0.01	.926	0.98
Neglect	0.06	0.25	0.06	.813	1.06	0.72	0.55	1.73	.189	2.05	-0.25	0.33	0.58	.447	0.78

every additional type of positive relationship, the potential for remission from avoidant personality disorder increased by 12%. For every type of positive relationship, the potential for remission from schizotypal personality disorder increased by 19%.

Regression analyses (see Table 3) showed that total positive childhood experiences in the achievement and relationship domains predicted remission from avoidant personality disorder over and above other variables, including physical, sexual, and verbal abuse and neglect. Physical abuse was a significant predictor of not remitting, i.e., personality disorder persistence or stability. Total number of positive relationship experiences also continued to predict remission from schizotypal personality disorder. Younger age also predicted remission from schizotypal personality disorder. No positive childhood experiences or abuse or neglect variables significantly predicted borderline personality disorder remission. Male gender, white ethnicity, and fewer comorbid Axis II disorders, however, were associated with remission from borderline personality disorder.

# DISCUSSION

This study investigated the impact of positive achievement experiences, positive interpersonal relationships,

and caretaker competencies during childhood and adolescence on adult remission from 4 different personality disorders. Positive achievement experiences demonstrated a significant relationship to remission from avoidant personality disorder and schizotypal personality disorder. Achievement motivation has long been recognized as a key ingredient of resiliency in young people. 49 A variety of positive interpersonal relationships with others were also associated with remission from avoidant personality disorder, schizotypal personality disorder, and borderline personality disorder. There were no significant predictors of remission from obsessive-compulsive personality disorder, perhaps because of the generally higher functioning of this group. 50

Interestingly, achievements in activities that might be expected in an outgoing, extroverted, or sociable personality, i.e., leadership, extracurricular activities, and popularity, and positive interpersonal relationships were associated with remission from the 2 personality disorders most characterized by social inhibition or withdrawal—avoidant personality disorder and schizotypal personality disorder. These findings are particularly striking for patients with avoidant personality disorder, for whom we have previously found lower rates of popularity in adolescence than in patients with other personality disorders, and less involvement in extracurricular activities and

leadership roles than in patients with major depressive disorder.<sup>47</sup> Self-confidence and interpersonal competencies are often mentioned as aspects of resiliency and positive youth development.<sup>13,18,21,51,52</sup> In our sample, these effects were generally stronger in females than in males, consistent with the belief that females are by nature more sociable than males<sup>53</sup> and may rely on more interpersonal types of coping.

Although competent parenting <sup>15,24–27</sup> and positive role models <sup>54,55</sup> are often said to be associated with resiliency, the perceived caretaker competency variables measured in this study showed only 1 significant relationship with remission: female caretaker's close friends associated with remission from avoidant personality disorder.

The greater the number of positive childhood experiences and the broader the development period they spanned, the better the prognosis of personality disorders was in our study. We did not attempt to date specific abuse or neglect experiences. Yet, the fact that patients with avoidant personality disorder who had positive childhood achievement and interpersonal experiences and patients with schizotypal personality disorder who had positive relationship experiences were more likely to remit, even in the presence of abuse experiences that predicted nonremission, suggests that these positive experiences reflect personal characteristics of resiliency, the capacity to do well even in the face of adversity. Interestingly, although childhood abuse and neglect are frequently reported in the histories of patients with borderline personality disorder (e.g., see Battle et al.<sup>3</sup>), neither abuse nor neglect were related to the stability (i.e., nonremission) of borderline personality disorder psychopathology. In a previous report,<sup>56</sup> we showed that childhood abuse predicted poor outcome for patients with borderline personality disorder based on level of functioning, measured by the Global Assessment of Functioning scale, but not based on level of borderline personality disorder psychopathology, measured by a count of diagnostic criteria at 2-year follow-up. Those results are consistent with the results of this study.

Consistent also with earlier reports from the CLPS31,33 and other studies, 32,34,35 we found that personality disorder psychopathology continued to improve with increasing length of follow-up. By 4 years, over half of patients receiving intake diagnoses of borderline, avoidant, or obsessive-compulsive personality disorders had had at least 12 consecutive months during which they fulfilled only 2 or fewer criteria for their original disorder. This represents substantial and clinically significant improvement. Although it is too early to say whether the improvement will be sustained and for how long, or whether substantial numbers of patients will relapse to again having a diagnosable disorder, the unexpected improvement compels searching further for protective factors associated with a more benign prognosis in patients diagnosed with personality disorders. Future work might also address the relationship between positive experiences and learning mechanisms, such as reward, fear conditioning, and extinction, to forge the link between these developmental and social experiences and resiliency in neurobiological development that might later mediate remission from psychopathology.

Younger age significantly predicted remission from avoidant personality disorder (trend) and schizotypal personality disorder. This finding is consistent with the notion that some personality disorder diagnoses among younger patients may be developmental phases that at least those with adaptive personality strengths may outgrow.<sup>38</sup> The literature on traits of general personality functioning indicates that traits may not become stable until the fourth decade.<sup>57,58</sup>

A strength of the study is its prospective design, in which reports of childhood experiences taken during the first 6 months of the study predicted the future course of personality psychopathology. Since these experiences were reported retrospectively by the study participants themselves, it is possible that better prognoses for participants reporting positive experiences reflect cognitive phenomena (e.g., IQ) or personality characteristics (e.g., optimism) rather than the positive experiences per se.

The results of this study have significance for treatment and prevention. Early intervention with treatments designed to foster personal strengths and competencies and to develop interpersonal skills could have a beneficial effect on young patients diagnosed with personality disorders. Furthermore, youth programs promoting social, emotional, cognitive, behavioral, and moral competencies may help prevent the development of personality psychopathology in vulnerable youth. <sup>59</sup>

Disclosure of off-label usage: The authors have determined that, to the best of their knowledge, no investigational information about pharmaceutical agents that is outside U.S. Food and Drug Administration–approved labeling has been presented in this article.

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