

## Childhood Origins of Self-Destructive Behavior

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**Objective:** Clinical reports suggest that many adults who engage in self-destructive behavior have childhood histories of trauma and disrupted parental care. This study explored the relations between childhood trauma, disrupted attachment, and self-destruction, using both historical and prospective data. **Method:** Seventy-four subjects with personality disorders or bipolar II disorder were followed for an average of 4 years and monitored for self-destructive behavior such as suicide attempts, self-injury, and eating disorders. These behaviors were then correlated with independently obtained self-reports of childhood trauma, disruptions of parental care, and dissociative phenomena. **Results:** Histories of childhood sexual and physical abuse were highly significant predictors of self-cutting and suicide attempts. During follow-up, the subjects with the most severe histories of separation and neglect and those with past sexual abuse continued being self-destructive. The nature of the trauma and the subjects' age at the time of the trauma affected the character and the severity of the self-destructive behavior. Cutting was also specifically related to dissociation. **Conclusions:** Childhood trauma contributes to the initiation of self-destructive behavior, but lack of secure attachments helps maintain it. Patients who repetitively attempt suicide or engage in chronic self-cutting are prone to react to current stresses as a return of childhood trauma, neglect, and abandonment. Experiences related to interpersonal safety, anger, and emotional needs may precipitate dissociative episodes and self-destructive behavior.

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It is thought that 7%–10% of psychiatric patients injure themselves deliberately (1), and about 5% of individuals with personality disorders end their lives by suicide (2). The literature has suggested that self-injurious behavior is quite distinct from suicide attempts in intent, lethality, age at onset, sex ratio, and interpersonal meaning (3–6). Deliberate self-harm typically starts in adolescence and involves numerous episodes and a variety of methods, including cutting, burning, slashing, banging, picking, and bone breaking (7, 8). In contrast with self-injury, suicide attempts are reported not to provide relief, to be repeated less frequently, and to have less communicative value (3).

Over the years, a rich clinical literature about self-injurious behavior has evolved that repeatedly mentions

childhood histories of physical or sexual abuse or repeated surgery (3–15). Two prospective studies of abused children recorded self-destructive acts. Green (16) found that 41% of a group of physically and sexually abused children engaged in head banging, biting, burning, and cutting. Rosenthal and Rosenthal (17) found suicidal behavior, self-destructive acts, and decreased sensitivity to pain in 16 children between 2 1/2 and 5 years of age who had been victims of abuse and neglect. Recently, the association between self-destructive behavior and trauma has been enhanced by reports about self-mutilation starting after rape (18) and war trauma (19).

Dissociation is a frequent concomitant of self-injury. Many patients report feeling numb and “dead” prior to harming themselves (3–13, 20). They often claim not to experience pain during self-injury and report a sense of relief afterward (1, 3–14). Episodes of self-mutilation often follow feelings of disappointment or abandonment (4–12).

Research on nonhuman primates has demonstrated that self-mutilation is a common reaction to extreme disruptions of parental caretaking in other mammalian species as well. For example, isolated young rhesus monkeys engage in self-biting and head slapping and banging (21). Analgesia is also common in self-destructive animals.

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Using both historical and prospective data, the present study examined how histories of childhood trauma and disruptions in parental caregiving are related to suicide, self-injurious behavior, eating disorders, and dissociation.

## METHOD

The subjects were initially chosen for an ongoing longitudinal study to validate the diagnosis of borderline personality disorder in comparison to antisocial personality disorder, schizotypal personality disorder, and bipolar type II affective disorder. This sample of young adults aged 18–39 years was gathered from clinical settings at Cambridge Hospital, from advertisements in local newspapers, and from the local probation department. Details of the method for subject selection and diagnosis have been reported elsewhere (22–26). Ninety-one subjects entered the study between 1980 and 1981; 33 more subjects were added during a second period, 1985–1986, for a total initial group of 124. Of these subjects, 86 (69%) consented to regular follow-up in the longitudinal study. Most of the initial diagnostic interviews were conducted by the principal investigator of the longitudinal study (J.C.P.). Information about lifetime history of self-destructive ideas and behavior was gathered at intake from all subjects by means of an impulse-anger checklist (23) administered by a research assistant blind to the diagnoses. This included a rating for suicidal ideation and a tabulation of the number of reported suicide attempts, episodes of skin cutting, other self-destructive behavior (such as banging and burning), risk-taking behavior, and eating disorders. Subjects were seen by the research staff approximately every 4–6 months for follow-up interviews. In 1983 a new follow-up measure was introduced that assessed these self-destructive behaviors and impulses on a weekly calendar basis.

From 1986 to 1988 we attempted to contact all subjects in the longitudinal study for further interviews. We were able to trace 76 (88%) of the 86 subjects of the longitudinal study, of whom 74 consented to be interviewed. Two of us (B.A.vdK. and J.L.H.), who were blind to all other previously obtained information, then interviewed these subjects with the Traumatic Antecedents Questionnaire to obtain childhood histories of abuse and disruptions in parental care. The questionnaire is a 100-item semistructured interview that generally takes between 1 and 2 hours to administer. It includes detailed questions about primary caretakers and other important relationships in childhood and adolescence, family discipline and conflict resolution, family alcoholism, domestic violence, and physical and sexual abuse. Details of this questionnaire and of the scoring of childhood trauma have been published previously (25).

Disruptions in parental care were rated in the areas of physical neglect, emotional neglect, family chaos, and significant separations from primary caregivers. Subjects received a positive score for physical neglect if they reported

not having received the most elementary attention with respect to food, shelter, and clothing, such as having to procure their own food or not receiving medical attention for serious physical problems. Emotional neglect was scored on the basis of responses to such questions as “Who did you feel safe with growing up?” “Who was affectionate to you?” and “Who treated you as a special person?” Family chaos was scored on the basis of answers to the questions “Who made the rules and enforced discipline at home?” “What were the rules like?” and “How did your parents solve their disagreements?” The interviewers wrote down the subjects’ stories in response to these questions and then scored them by a consensus rating. Only the most glaring deviations from contemporary norms for parental care (incidents that by law would require reporting to the Department of Social Services) were scored as positive.

The protocols were scored for the occurrence of three types of trauma—physical abuse, sexual abuse, and witnessing domestic violence—and for the four types of disrupted parental care at each of three developmental stages—early childhood (0–6 years), latency (7–12 years), and adolescence (13–18 years). Subjects were also given the Dissociative Experiences Scale (27), which is a self-report measure of experiences with dissociative states.

Data analysis was conducted by means of cross-tabulation and Kendall’s tau computation for ordinal by categorical variables. We used a general linear models procedure for stepwise linear regression, with post hoc analysis for comparison of means for continuous variables. Spearman correlation coefficients were calculated for bivariate relationships. Rating total childhood trauma and disrupted parental care as a continuous variable allowed for correlating the severity of trauma, neglect, chaos, and separations with various forms of self-destructiveness.

## RESULTS

Seventy-four subjects, 39 women and 35 men, were given the Traumatic Antecedents Questionnaire. Of these, 24 (32%) met the *DSM-III* criteria for borderline personality disorder and had scores of 28 or higher on the Borderline Personality Disorder Scale (22, 23); 17 (23%) had borderline traits (defined as fulfilling four of the *DSM-III* criteria for borderline personality disorder and scoring higher than 23 but lower than 28 on the Borderline Personality Disorder Scale); 19 (26%) met the *DSM-III* criteria for antisocial personality disorder; 25 (34%) met the criteria for schizotypal personality disorder; and 44 (59%) met the criteria for bipolar II disorder. Because of the prevalence of multiple study diagnoses, these percentages exceed 100%.

### *Self-Destructiveness*

The self-destructiveness of the subjects is summarized in table 1. Intake data were available for only 70 of the

subjects because four subjects dropped out before completing cross-sectional measures but returned for follow-up interviews. Thus, a total of 74 subjects were available for the duration of the longitudinal study for interviews several times a year (mean=4 years, range=2–9 years). At intake 61 (87%) of the 70 subjects reported histories of some form of self-destructive behavior: 39 (56%) had made one or more serious suicide attempts, 20 (29%) reported five or more episodes of self-inflicted injuries, eight (11%) had cut themselves once or twice, and about half reported histories of binge eating and/or anorexia. During follow-up, some form of self-destructive behavior persisted in 17 (23%) of the 74 subjects: five (7%) made one or two serious suicide attempts, another five (7%) made more than three attempts, and six (8%) engaged in chronic cutting (five or more episodes), of whom three also made one or more serious suicide attempts.

*Self-destructiveness and diagnosis.* In keeping with the criteria set forth by *DSM-III* and the scores on the Borderline Personality Disorder Scale, borderline personality pathology was significantly associated with suicide attempts ( $r_s=0.28$ ,  $N=70$ ,  $p=0.02$ ), cutting ( $r_s=0.38$ ,  $N=70$ ,  $p<0.001$ ), and other self-injurious behavior ( $r_s=0.28$ ,  $N=70$ ,  $p=0.02$ ). Antisocial, schizotypal, and narcissistic personality disorders and bipolar II disorder were not significantly related to any of the self-destructive behavior.

*Self-destructiveness and childhood trauma.* Of the 39 subjects who had made suicide attempts, 30 (77%) reported histories of major childhood trauma and 28 (72%) reported disruptions in parental care; five (13%) denied childhood trauma or disruptions in parental care. Of the 28 subjects who reported self-cutting at entry into the study, 22 (79%) gave histories of significant childhood trauma and 25 (89%) reported major disruptions in parental care; only one did not give a history of either childhood trauma or disrupted care. Table 2 displays the Spearman correlations between the magnitude of various childhood trauma scores and quantitative assessment of suicide attempts and self-injurious behavior at intake. Childhood trauma scores were not related to suicidal ideation but predicted suicide attempts, cutting, other self-injurious behavior, and anorexia. Of the three types of trauma, sexual abuse was most strongly related to all forms of self-destructive behavior. Witnessing domestic violence was associated with suicide attempts but not with self-cutting or other self-injurious behavior.

Table 3 shows that the age at which trauma occurs plays a role in both the severity and expression of self-destructive behavior: the earlier the trauma, the more cutting. Abuse during early childhood and latency was strongly correlated with suicide attempts and total self-injurious behavior, while abuse in adolescence was significantly associated only with suicide attempts and anorexia.

Data on self-destructive behavior over the course of the study are summarized in table 4. Histories of sexual abuse, in particular, predicted continued suicide at-

**TABLE 1. Self-Destructiveness in Subjects With Personality Disorders or Bipolar II Disorder**

Self-Destructive Behavior	Intake (N=70)		Follow-Up (N=74)	
	N	%	N	%
Suicide attempts	39	56	12	16
Cutting	28	40	9	12
Other self-injurious behavior (head banging, picking, or burning)	27	39	12	16
Suicide attempts plus self- mutilation	21	30	10	14
Binge eating	34	49	37	50
Anorexia	32	46	21	28
Risk taking	63	90	34	46

tempts and cutting but not other self-injurious behavior. Chronic cutting during follow-up was associated with trauma at any age (early childhood,  $r_s=0.32$ ,  $N=74$ ,  $p<0.001$ ; latency,  $r_s=0.25$ ,  $N=74$ ,  $p<0.05$ ; adolescence,  $r_s=0.24$ ,  $N=74$ ,  $p<0.05$ ).

#### *Neglect, Separation, and Chaos*

We next compared the subjects' reports of separations from parents, environmental chaos, and physical and emotional neglect with self-destructive behavior. These disruptions of attachment were significantly associated with cutting but not with suicide attempts or other self-injurious behavior. Tables 2 and 3 show that both parental neglect and intrafamilial chaos were associated with histories of self-cutting at intake. Table 4 shows the associations between childhood physical and emotional neglect and various forms of self-destructive behavior over the course of the follow-up. Total neglect scores predicted continued suicide attempts, cutting, and other self-injurious behavior. Prolonged separation from caregivers was also related to continued cutting as well as to other forms of self-injurious behavior.

#### *Dissociation*

Familiarity with dissociative experiences, as measured by the Dissociative Experiences Scale, was highly correlated with histories of trauma ( $r_s=0.38$ ,  $N=74$ ,  $p<0.001$ ) and histories of neglect ( $r_s=0.43$ ,  $N=74$ ,  $p<0.0001$ ). The dissociation score was also significantly associated with intake histories of cutting ( $r_s=0.28$ ,  $N=70$ ,  $p=0.02$ ) and anorexia ( $r_s=0.24$ ,  $N=70$ ,  $p<0.05$ ), and there was a trend toward a correlation with suicide attempts ( $r_s=0.22$ ,  $N=70$ ,  $p<0.10$ ). During follow-up, the Dissociative Experiences Scale score continued to predict cutting ( $r_s=0.35$ ,  $N=74$ ,  $p=0.003$ ) and suicide attempts ( $r_s=0.25$ ,  $N=74$ ,  $p<0.05$ ).

#### *Interrelations*

To determine which childhood variables (trauma, neglect, chaos, and separations) were the most powerful predictors of suicide attempts, cutting, and other self-

**TABLE 2. Spearman Correlation Coefficients Between Childhood Trauma/Disruption in Care and Self-Destructive Behavior at Intake for 70 Subjects With Personality Disorders or Bipolar II Disorder**

Trauma/Disruption	Suicidal Ideation	Suicide Attempts	Cutting	Other Self-Injurious Behavior	Total Self-Injurious Behavior	Binge Eating	Anorexia
Physical abuse	0.07	0.31 <sup>a</sup>	0.30 <sup>a</sup>	0.25 <sup>b</sup>	0.32 <sup>a</sup>	0.19	0.21 <sup>c</sup>
Sexual abuse	-0.01	0.41 <sup>d</sup>	0.49 <sup>e</sup>	0.16	0.36 <sup>a</sup>	-0.01	0.32 <sup>a</sup>
Witnessing violence	0.04	0.26 <sup>b</sup>	0.07	0.08	0.10	0.21 <sup>c</sup>	0.04
Neglect	0.12	0.19	0.36 <sup>a</sup>	0.08	0.27 <sup>a</sup>	0.01	0.16
Chaos	0.04	0.03	0.27 <sup>b</sup>	0.18	0.34 <sup>a</sup>	-0.01	0.21
Separations	0.07	0.07	0.20	0.06	0.15	-0.01	0.06

<sup>a</sup>p<0.01.  
<sup>b</sup>p<0.05.  
<sup>c</sup>p<0.10.  
<sup>d</sup>p<0.001.  
<sup>e</sup>p<0.0001.

**TABLE 3. Spearman Correlation Coefficients Between Age at Childhood Trauma/Disruption in Care and Self-Destructive Behavior at Intake for 70 Subjects With Personality Disorders or Bipolar II Disorder**

Age at Trauma/Disruption	Suicidal Ideation	Suicide Attempts	Cutting	Other Self-Injurious Behavior	Total Self-Injurious Behavior	Binge Eating	Anorexia
Trauma							
Early childhood	0.13	0.37 <sup>a</sup>	0.41 <sup>b</sup>	0.16	0.31 <sup>a</sup>	0.21 <sup>c</sup>	0.14
Latency	0.01	0.41 <sup>b</sup>	0.35 <sup>a</sup>	0.13	0.29 <sup>a</sup>	0.02	0.18
Adolescence	0.02	0.33 <sup>a</sup>	0.21 <sup>c</sup>	0.11	0.17	0.12	0.23 <sup>d</sup>
Disrupted care							
Early childhood	0.14	0.16	0.36 <sup>a</sup>	0.06	0.24 <sup>d</sup>	-0.01	0.18
Latency	0.07	0.09	0.41 <sup>b</sup>	0.17	0.34 <sup>a</sup>	-0.10	0.14
Adolescence	0.16	0.10	0.31 <sup>a</sup>	0.20 <sup>c</sup>	0.34 <sup>a</sup>	-0.06	0.18

<sup>a</sup>p<0.01.  
<sup>b</sup>p<0.001.  
<sup>c</sup>p<0.10.  
<sup>d</sup>p<0.05.

**TABLE 4. Spearman Correlation Coefficients Between Childhood Trauma/Disruption in Care and Continued Self-Destructive Behavior During Follow-Up for 74 Subjects With Personality Disorders or Bipolar II Disorder**

Trauma/Disruption	Suicide Attempts	Cutting	Other Self-Injurious Behavior	Total Self-Injurious Behavior	Binge Eating	Anorexia
Physical abuse	0.06	0.20 <sup>a</sup>	0.07	0.18	0.24 <sup>b</sup>	0.05
Sexual abuse	0.31 <sup>c</sup>	0.30 <sup>c</sup>	0.19	0.26 <sup>b</sup>	0.01	0.02
Witnessing violence	0.14	0.17	0.14	0.12	0.08	0.08
Neglect	0.33 <sup>c</sup>	0.40 <sup>d</sup>	0.35 <sup>c</sup>	0.40 <sup>d</sup>	0.04	0.19
Chaos	0.11	0.22 <sup>a</sup>	0.02	0.14	0.14	0.10
Separations	0.14	0.23 <sup>b</sup>	0.33 <sup>c</sup>	0.35 <sup>c</sup>	-0.03	0.02

<sup>a</sup>p<0.10.  
<sup>b</sup>p<0.05.  
<sup>c</sup>p<0.01.  
<sup>d</sup>p<0.001.

injurious behavior, we conducted a series of six step-wise regression analyses (table 5). Lifetime history data obtained at intake were examined separately from data obtained during the course of follow-up, which reflect prospectively observed behaviors. Childhood neglect and trauma together significantly predicted cutting at intake for a total of 20.8% of the variance reported. Childhood trauma predicted 19.2% of the variance for suicide attempts at intake and 4.5% of the variance for other self-destructive behavior. The follow-up data re-

vealed that childhood neglect predicted 12.3% of the variance for suicide attempts, childhood neglect and separations predicted 18.4% of the variance for cutting, and separations and neglect predicted 24.1% of the variance for other self-destructive behavior.

To test the hypothesis that dissociation, as measured by the Dissociative Experiences Scale, adds to the capacity to predict self-injurious behavior (after controlling for empirically related childhood variables), we repeated the analyses in table 5 using hierarchical regressions. The

**TABLE 5. Stepwise Regression Analyses of Childhood Variables Predicting Adult Suicidal and Self-Injurious Behavior**

Outcome Variable	Childhood Variable	F	df	p	R <sup>2</sup>	Total R <sup>2</sup>
History at intake	1. Suicide attempts	16.12	1, 68	0.002	0.192	0.208
	2. Cutting	12.69	2, 67	0.007	0.157	
		4.33	2, 67	0.04	0.051	
	3. Other self-injurious behavior	3.23	1, 68	0.08	0.045	
Behavior during follow-up	1. Suicide attempts	10.09	1, 72	0.002	0.123	0.184
	2. Cutting	12.39	2, 71	0.0008	0.147	
		3.19	2, 71	0.08	0.037	
		16.53	1, 72	0.0001	0.187	
	3. Other self-injurious behavior	5.05	1, 72	0.03	0.54	

**TABLE 6. Hierarchical Regression Models Testing the Effect of Adding Dissociation to Childhood Variables Predicting Cutting and Other Self-Injurious Behavior**

Factor	Independent Variable	F	df	p	Total R <sup>2</sup>
History of cutting at intake	Neglect	13.07	3, 64	0.0006	0.241
	Trauma	4.48	3, 64	0.04	
	Dissociation	2.79	3, 64	0.10	
Cutting during follow-up	Neglect	12.92	3, 68	0.0006	0.242
	Separations	3.30	3, 68	0.07	
	Dissociation	5.51	3, 68	0.02	
History of other self-injurious behavior at intake	Trauma	3.48	2, 67	0.07	0.059
	Dissociation	0.64	2, 67	0.43	
Other self-injurious behavior during follow-up	Separation	16.32	3, 68	0.0001	0.238
	Neglect	4.82	3, 68	0.03	
	Dissociation	0.05	3, 68	0.82	

childhood variables with alphas less than 0.10 were entered in order, and the Dissociative Experiences Scale score was entered last. The Dissociative Experiences Scale score added no significant variance in predicting suicide attempts at intake or at follow-up (data not shown). However, table 6 shows that dissociation contributed to prediction of cutting but not of other self-injurious behavior. For the intake data, adding the Dissociative Experiences Scale score after neglect and trauma yielded a nearly significant trend toward predicting 24.1% of the variance. For the follow-up data, adding the Dissociative Experiences Scale score after neglect and separations significantly improved the model, predicting 24.2% of the cutting but not other self-destructive behavior observed during follow-up.

## DISCUSSION

These findings demonstrate that histories of childhood physical and sexual abuse, as well as parental neglect and separations, are strongly correlated with a variety of self-destructive behavior in adulthood, including suicide attempts and cutting. Unlike previous reports, we found only a moderate association with eating disorders, which may be a function of the pervasiveness of binge eating and anorexia in our total sample and of the narrow definitions of trauma and neglect used in this study. Suicidal ideation was not related to either trauma or neglect.

During the follow-up phase of the study, our subjects were regularly seen by the study staff. In addition, approximately half of them were in therapy most of the time and the rest a substantial proportion of the time. During this period, only the subjects who reported histories of sexual abuse and those with the most severe histories of separation and neglect tenaciously continued to engage in self-destructive activities. At intake, histories of parental neglect had predicted cutting but not suicide attempts; however, during the course of the study, neglect became the most powerful predictor of self-destructive behavior. This implies that although childhood trauma contributes heavily to the initiation of self-destructive behavior, lack of secure attachments maintains it. The subjects who had experienced prolonged separations from their primary caregivers, and those who could not remember feeling special or loved by anyone as children, were least able to utilize interpersonal resources during the course of the study to control their self-destructive behavior.

The analysis of the role of dissociation in self-destructive behavior suggests that cutting differs from other methods of self-injury and from suicide attempts. Our findings indicate that ongoing dissociation is directly associated with cutting. As previously described (4-8, 12, 20, 28, 29), although dissociation provides protective detachment from overwhelming affects, it also results in a subjective sense of deadness, of disconnection from others, and of internal disintegration. While many persons who cut themselves report that self-mutilation

allows them to terminate this dysphoric state of mind, for a minority self-injury is not accompanied by depersonalization or analgesia (8, 30, 31).

Suicide attempts, cutting, and other self-injurious behavior may serve different functions in regulating affective states. They may be active attempts to kill, injure, or quiet menacing hallucinations, as well as ways to manage unbearable affects by altering interpersonal conditions and the biological homeostasis (32–34). Our findings that suicide attempts were most strongly associated with childhood trauma, cutting with neglect, and other self-injurious behavior with separations need to be replicated in larger samples to define more clearly the meaning, function, and effects of these various self-destructive actions. Our data suggest that trauma-related interpersonal communications play a significant role in suicide attempts, while cutting primarily serves to regulate internal affective states.

Clinically, patients and therapists attribute a variety of meanings to these behaviors, which is understandable in light of the range of early emotional injuries related to physical self-destructiveness. Thus, they may be experienced subjectively as self-punishment, as a way of punishing others, or as a cry for help after feeling abandoned.

The fact that both the severity of the trauma and the age at which it occurred affected the particular ways in which our subjects were self-destructive suggests that both psychological and biological maturity play a role in how experiences of abuse and neglect are managed. Recent studies indicate that disruptions in early caregiving may have long-term consequences for biological self-regulating systems. Thus, abuse and neglect may impair both the capacity for self-regulation of affective states and the ability to utilize interpersonal relations for affect regulation (33–35).

In a 1974 study of self-mutilation among violent male prisoners, Bach-y-Rita (13) concluded, "The syndrome of withdrawal, hyperarousal, depression, impaired pain perception and violent aggressive reactions against self and others is so consistent, that it is most likely biologically based, and the consequence of having been reared under conditions of social deprivation or repeated terror. This constellation of symptoms is commonly seen amongst socially deprived young animals as well." Since then, research on nonhuman primates has amply demonstrated that self-mutilation is a common reaction to social isolation and fear (36, 37). In animals, environmental cues associated with previous exposure to noxious stimuli continue to precipitate conditioned biological emergency responses over time, resulting in freeze, fight, or flight reactions. Immature animals are particularly vulnerable to developing such conditioned emergency responses to repeated stress and to previously neutral events associated with the noxious stimulus (38, 39).

Survivors of severe trauma have repeatedly been described as continuing to react with extremes of under- and overarousal to even minor emotional stressors. They seem to keep responding to stimuli reminiscent of

the trauma with conditioned psychological and biological stress responses that do not extinguish over time (12, 33, 40, 41). Many self-destructive people follow these patterns; they may experience intense physiological disorganization in the face of minor stress, giving rise either to impulsive and aggressive actions or to the triad of dissociative reactions, psychic numbing, and physical analgesia (5–13, 20, 28). It is likely that the immaturity of the CNS of children makes them more vulnerable than adults to developing lasting biological changes in response to trauma and neglect. However, we recently demonstrated that even adults with post-traumatic stress disorder develop significant opioid-mediated, stress-induced analgesia when exposed, nearly two decades later, to a trauma-related stimulus (28, 42). There is mounting evidence that the stress hormones which are released when traumatized individuals are reexposed to stimuli reminiscent of earlier traumas play a role in altering their state of consciousness (20, 33, 43). Dissociation, self-destructiveness, and impulsive behavior may all prove to be hormonally mediated responses that are triggered by reminders of earlier trauma and abandonment.

## CONCLUSIONS

The findings of this study suggest that therapists treating patients who repetitively attempt suicide or engage in chronic self-injurious behavior need to be prepared to deal with issues of childhood trauma, neglect, and abandonment, both in the past and as reexperienced in current relationships. Our previous work has shown that self-destructive behavior was highly correlated with two psychological conflicts, one centering on separation-abandonment and the other on experiencing and expressing anger and emotional needs (23). When treating self-destructive patients, the therapist must anticipate that painful affects related to interpersonal safety, anger, and emotional needs may give rise to dissociative episodes and impulsive behavior which may be accompanied by increased self-destructiveness. The work of therapy must clarify how current stresses are experienced as a return of past traumas and small disruptions in present relationships as repetitions of prior abandonment. We have written elsewhere (44, 45) about the importance of validation, support, and avoidance of participation in reenactment of the trauma as features of this treatment.

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