

Personalities of Adults With Traumatic Childhood Separations

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Objectives: This study examined personality characteristics and identified personality subtypes of adults with childhood histories of traumatic separations from a parent. Previous work from attachment theory and developmental psychopathology suggests that distinct developmental trajectories might lead to different styles of personality adaptation after an attachment disruption. **Design:** Randomly selected psychologists and psychiatrists provided data on 203 adults with histories of traumatic separations using a personality pathology instrument designed for use by clinically experienced observers, the Shedler-Westen Assessment Procedure (SWAP-II). **Results:** Using a Q-factor analysis, 5 distinct personality subtypes were identified: *internalizing/avoidant*, *psychopathic*, *emotionally dysregulated*, *hostile/paranoid*, and *resilient*. Initial support for the validity of the subtypes was established, based on Axis I and Axis II pathology, adaptive functioning, developmental history, and family history variables. **Conclusions:** Both therapeutic interventions and case formulation might be strengthened by considering an individual's personality features and match to one of the identified subtypes. © 2011 Wiley Periodicals, Inc. *J Clin Psychol* 67:1–24, 2011.

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The traumatic separation of a child from his or her attachment figure (i.e., primary caregiver) might elicit a range of emotions, including fear, helplessness, dysphoria, and rage, and also coincide with the removal of needed emotional and physical resources (Bowlby, 1973). Such separations, or attachment disruptions, have received most attention during periods of pervasive societal crisis. For example, during World War II, Anna Freud and Dorothy Burlingham documented the “despair” of children separated from their parents (Freud & Burlingham, 1943, 1974). Later in the 20th and the 21st century, researchers began studying the developmental trajectories of children placed in Romanian orphanages under the Ceausescu regime (O'Connor, Bredenkamp, Rutter, & The English and Romanian Adoptees Study Team, 1999; Zeanah, Smyke, Koga, & Carlson, 2005). Concurrently, research has focused on children growing up in the American foster care system with regards to biopsychosocial functioning (Dozier, Lindhiem, & Ackerman, 2005; Dozier et al., 2006; Stovall & Dozier, 1998). Within this study, we use a clinical sample to identify personality subtypes of adults who experienced traumatic separations during their development. This study is unique because participants were not selected due to their connection to specific a social phenomenon, and, therefore, the results might be more generalizable to patients seen in clinical settings.

Findings across extant studies of traumatic separations reveal a diversity of outcomes. Research suggests that the attachment disruption itself leads to a set of changes that might be independent or interrelated at different levels, including changes in the hypothalamic-pituitary-adrenal (HPA) axis, a neuroendocrine system related to stress and regulation of biological and emotional functioning (Dozier et al., 2006; Meinlschmidt & Heim, 2005), internalizing pathology (Heim & Nemeroff, 1999; Heim & Nemeroff, 2001; Vorria, Rutter,

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& Pickles, 1998a), externalizing pathology (Kendler et al., 1996; Kendler, Sheth, Gardner, & Prescott, 2002; Vorria et al., 1998a), and dissociative symptomatology (Kobak, Little, Race, & Acosta, 2001). In addition, attachment disruptions are associated with indiscriminate affiliation in children and insecure and disorganized forms of attachment (Chisholm, 1998; Chisholm, Carter, Ames, & Morison, 1995; O'Connor, Rutter, & The English and Romanian Adoptees Study Team, 2000; O'Connor et al., 1999; Scharf, 2001; Zeanah, Smyke, & Dumitrescu, 2002; Zeanah et al., 2005).

Attachment theory and research provide an overarching framework for understanding the significance of traumatic separation for personality development. Bowlby (1973) indicated that although environmental and constitutional factors help maintain an expected developmental pathway in the presence of minor disruptions, lengthy or recurring periods of separation might not only temporarily divert personality development from an optimal path but also lead to an entirely different path of development. Therefore, Bowlby conceptualized traumatic separations as influencing not only persistent relational schemas (i.e., internal working models [IWMs]) but also having additional consequences for personality as a whole. He even hypothesized that certain attachment strategies in early childhood would relate to certain personality styles later in life. Specifically, the anxious-ambivalent attachment strategy would relate to a personality style that was clingy, anxious, and demanding, while the anxious-avoidant attachment strategy was hypothesized to relate to a personality style that lacked warmth and connectedness within interpersonal relationships. Research studying attachment and personality has largely borne out these hypotheses (Crawford et al., 2006; Kobak & Sceery, 1988; Nakash-Eisikovits, Dutra, & Westen, 2002; Westen, Nakash, Cannon, & Bradley, 2006).

There is yet to be a study identifying personality subtypes of individuals exposed to traumatic separations. The minimal amount of research assessing personality in this population suggests that traumatic separations are associated with borderline and avoidant personality disorders (PDs; Arbel & Stravynski, 1991; Bradley, 1979; Reich & Zanarini, 2001). Each of these studies considered just one PD, and thus did not account for the range of personality profiles that might be associated with, in part, the experience of the traumatic separation. In addition, research suggests that the PDs currently found in the *Diagnostic and Statistical Manual of Mental Disorders Fourth Edition (DSM-IV; American Psychiatric Association, 2000)* might not adequately represent a full range of personality pathology (i.e., disordered personality; Morey et al., 2007; Westen & Arkowitz-Westen, 1998; Widiger & Trull, 2007).

Given the wide range of outcomes associated with traumatic childhood separations from attachment figures, the present study sought to identify personality subtypes, including, if present, both normal and pathological variants, of adult patients who experienced traumatic separations in childhood. Knowledge of personality subtypes might be crucial in addressing the specific needs and experiences of such individuals within clinical setting. Although the extant research suggests there is heterogeneity in the way people's personality is affected by disrupted attachment, that heterogeneity is likely to be patterned, not random, because there are going to be some characteristic ways (e.g., turning into a psychopath, becoming self-loathing and depressed, or managing to be resilient) that are common to different groups of patients. The heterogeneous presentation of such individuals is evidenced in a number of ways, as outlined here.

First, there is research identifying personality typologies for individuals exposed to other forms of trauma. For example, a number of studies have identified personality typologies of posttraumatic stress disorder (PTSD), finding evidence for internalizing (characterized by high negative emotionality and low positive emotionality), externalizing (characterized by high negative emotionality and low constraint), and low pathology subtypes in samples of both veterans (Flood et al., 2010; Miller, Kaloupek, Dillon, & Keane, 2004) and women exposed to sexual assault (Miller & Resick, 2007). Bradley, Heim, and Westen (2005) identified four personality subtypes of individuals exposed to childhood sexual abuse: *internalizing dysregulated, high-functioning internalizing, externalizing dysregulated, and dependent*. It is argued that empirically derived subtypes of personality might provide more guidance for understanding and treating individuals with past trauma rather than simply relying on the PDs outlined in the DSM-IV.

Next, attachment disruptions are associated with a wide range of Axis I and Axis II psychopathology, as well as dysregulation of the HPA axis. These outcomes do not represent a single profile that can easily be recognized and treated within clinical settings. A person-centered assessment of personality profiles identifies whether this wide range of clinical phenomena, which currently provides a nondescript conglomerate of symptoms and features, might actually be better understood as prototypes of individuals who share the experience of a traumatic separation and yet differ on variables of Axis I and II psychopathology, developmental history variables, and even family history variables. The Q-sort analysis provides opportunity for a person-centered approach because it identifies different subgroups of people that have similar personality profiles, while a traditional factor analysis, a variable-centered approach, would identify groups of items that are indicative of certain factors. Person-centered analyses attempt to study individuals as indivisible units, rather than separating variables and studying them without regard to their original context (Bergman, van Eye, & Magnusson, 2006).

Finally, the significance of identifying personality subtypes is consistent with the concept of multifinality, which is central to the study of developmental psychopathology (Pickles & Hill, 2006; Sroufe, 1997). In this case, multifinality suggests the possibility that the experience of a traumatic separation from a caregiver can lead to a number of different developmental trajectories, based on the individual's biological, psychological, and social resources. In addition, it is consistent with attachment research, which has identified different types of attachment strategies that a child can adopt in the face of a disruption in the parent child relationship (Ainsworth, Blehar, Waters, & Wall, 1978; Zeanah et al., 2005). Therefore, both attachment theory and developmental psychopathology frameworks support this approach (Judd & McGlashan, 2003; Sroufe, Egeland, & Carlson, 2005).

Aims of The Current Study

The goals of this research were threefold. First was to provide a comprehensive portrait of the personality characteristics (pathological and nonpathological) of adults with histories of traumatic separations from childhood attachment figures, including patterns of Axis II psychopathology. Second was to discover whether clinically and empirically meaningful subtypes of these individuals could be identified. Given that attachment disruptions or traumatic separations from caregivers are associated with a range of outcomes in the areas of biological, psychological, and social functioning, the current study sought to organize these outcomes according to personality subtypes using a personality pathology Q-sort and a cluster-analytic procedure widely used with Q-sort data, Q-factor analysis.

The third goal was to provide initial validity data for the subtypes, using criteria such as those outlined by Robins and Guze (1970), to assess the validity of any taxonomic distinctions. Specific hypotheses regarding DSM-IV psychopathology as well as developmental and family histories related to each subtype were developed based on theoretical and empirical literature. These hypotheses were developed after the identification of the subtypes but before the examination of their external correlates. Thus, the subtypes were identified through exploratory analyses, but the hypotheses were generated blind to the data associating subtypes and criterion variables.

Method

Participants

The study used data from an the National Institute of Mental Health-funded project on the nature and classification of adult personality pathology. Participants were a random national sample of psychologists and psychiatrists with over 5 years experience postlicensure or residency, whose names were obtained through the membership rosters of the American Psychiatric and American Psychological Associations. Of the clinicians contacted, over one-third ($N = 1201$) participated in the study. Other research describes the rationale for using clinicians as informants in basic science research (see Dutra, Campbell, & Westen, 2004;

Westen & Shedler, 1999a, 1999b). The advantage of this method is that clinicians are experienced observers who are able to make inferences and recognize subtle distinctions of psychopathology based on knowledge of what is considered normative. Unlike self-report measures and observation reports by significant others, clinician-report instruments are less vulnerable to defensive and self-presentational biases (Shedler, Mayman, & Manis, 1993; Westen & Weinberger, 2004).

Of these clinicians, 203 described an adult patient whom they had strong reason to believe had experienced a traumatic separation between the ages of 1 and 16 years. Clinicians were directed to classify childhood separations as absent unless they felt certain, based on data from the patient or collateral data, that the patient had actually experienced the event. This was done because the data not included are likely to include many false negatives when clinicians lacked enough knowledge of the patient's history but few false positives among patients included in this study. In addition to endorsing the presence of a separation, clinicians also indicated an age range of when the separation occurred and how traumatic they perceived the separation to be for the patient. This study did not select for patients with traumatic separations; thus, is not vulnerable to biases in subject ascertainment or likely clinician biases based on a single developmental history variable, given that they provided data on thousands of variables, of which separations in childhood were just one.

Procedures

Clinicians were sent letters inviting them to participate in an adult personality pathology study. The clinicians in this study were asked to provide data on a current adult patient who was in treatment for "enduring maladaptive patterns of thought, feeling, motivation, or behavior—that is, personality." Personality pathology was broadly defined to include the current conceptualization of Axis II by the DSM-IV, as well as a much wider range of subthreshold personality that might be less severe, or fail to fit into one of the current diagnostic categories. Clinicians were not asked to describe a patient with a particular diagnosis, nor did patients need to meet criteria for a PD. To ensure a random sample, the clinicians were asked to describe "the last patient you saw last week before completing this form who meets study criteria." It was requested that clinicians describe a patient whose personality they knew, with a guideline of ≥ 6 clinical contact hours but ≤ 2 years (to minimize personality change that might have occurred over the course of treatment).

Each clinician in the study described just one patient so that rater dependence variance would be minimized. Patient confidentiality was not compromised because no identifying information was collected. Clinicians completed a number of questionnaires and a Q-sort measure using only the information from their interactions with their patient. Measures were completed either with a mail packet that could be returned in a provided postage-paid envelope or, alternatively, using a secure web-based data submission program (www.psychsystems.net). Clinicians received a \$200 honorarium for their participation, which took approximately 2 hours.

Measures

Clinicians who participated in the current study completed a core battery of questionnaires related to their patient's demographics, personality, psychopathology, developmental history, and relationships. However, only the measures relevant to the current study are described below.

Shedler-Westen Assessment Procedure (SWAP-II) 200-item Q-sort. This Q-sort instrument assesses adult personality by relying on the skills of an experienced clinician who has observed a patient over an extended period of time, or who has administered an extensive, systematic, narrative interview (see, e.g., Westen & Muderrisoglu, 2003). Clinicians sorted (rank-order) 200 statements describing adult personality characteristics into eight categories based on applicability to the patient, from those that are not descriptive (assigned a value of 0) to those that are highly descriptive (assigned a value of 7). Following the suggestion by Block (1978, 2008), the SWAP-II items were written in "standard language;" in this case, the kind of

language experienced clinicians would use to describe a patient but without any use of jargon. This allowed for the collection of observational data from clinicians representing diverse theoretical backgrounds.

Initial evidence of validity, reliability, and utility of the SWAP-II have also been shown in taxonomic research (Westen & Harnden-Fischer, 2001; Westen & Shedler, 1999a, 1999b, 2000). Using the SWAP-II, interrater reliability has been established between a treating clinician and independent rater with the median correlation on SWAP-II dimensional personality traits being .82. Bradley and colleagues (2007) have found moderate correlations between self-report PD ratings made with the Personality Assessment Interview (PAI) and clinician diagnoses made with the SWAP-II for the same disorder (e.g., Borderline $r = .31$; Antisocial $r = .35$).

Clinical Data Form (CDF). The CDF assesses a range of patient variables including demographics, diagnoses, and etiology (e.g., Westen & Shedler, 1999a; Westen, Shedler, Durrett, Glass, & Martens, 2003). The first set of questions provides information about the treating clinician, including their age, sex, treatment setting, discipline, and theoretical orientation. The remainder of the CDF asks questions regarding the patient, including basic demographics, diagnostic features, adaptive functioning, and family and developmental history. Clinicians rate the patient's adaptive functioning using indices such as work functioning and romantic relationships. Further objective information, such as history of arrests, traumatic caregiver separations, psychiatric hospitalizations, and suicide attempts are also obtained. In addition, to asking about the presence of a traumatic separation, clinician's were also to rate the traumatic severity on a 1–5 scale, ranging from 1 (not at all) to 5 (very) and select one or more age range when it occurred (i.e., 1–6, 7–12, 13–16). Clinician's ratings of adaptive functioning variables are highly correlated with the same data obtained through independent interview, thus demonstrating interrater reliability and validity (Hilsenroth et al., 2000; Westen, Muderrisoglu, Fowler, Shedler, & Koren, 1997).

Axis II Checklist. The Axis II checklist is a randomly ordered checklist of all the criteria for the DSM-IV PD diagnoses that was completed by each clinician in regards to their patient. The measure is used to create both categorical and dimensional DSM-IV PD diagnoses. To create categorical diagnoses, the DSM-IV decision rules were applied to determine whether the disorder was either present or absent. Summing the number of endorsed symptoms for each disorder created dimensional scores. This method of assessing Axis II psychopathology produces patterns of comorbidity similar to those that are found using structured clinical interviews (Westen et al., 2003).

Results

Of the 1,201 participating clinicians, 203 described an adult with a history of a traumatic separation. Clinicians identified whether, to their knowledge, there had been “lengthy traumatic separations from primary caregiver for more than 6 weeks.” Separate questions assessed separations that were permanent, due to divorce or parental death. On average, these clinicians were also highly experienced, with 20.26 years (standard deviation [SD] = 9.22) postresidency or postlicensure. Finally, the clinicians describing an adult patient with a traumatic caregiving separation knew their patients well (mean [M] = 17.99 months, $SD = 24.31$).

Characteristics of Adult Patients With Histories of Traumatic Separations (N = 203)

The 203 adults with a history of traumatic separations were 52.7% female. Table 1 compares the adults with traumatic separations to the adult patients without traumatic separations across a number of domains.

Differences in personality pathology between the adults with and without traumatic caregiving separations were assessed using an aggregated dimensional PD scale that comprised two variables after standardization: number of symptom criteria met for the given PD and a 5-point construct rating scale. Adults with traumatic caregiver separations had significantly higher rates of paranoid PD, $t [1184] = -2.53$, $p = .01$, and all cluster B PDs, including

antisocial PD, $t [1184] = -4.12, p = .001$, borderline PD, $t [1184] = -2.32, p = .02$, narcissistic PD, $t [1184] = -3.32, p = .001$, with the exception of Histrionic PD, $t [1184] = -.255, p = .80$.

Table 1

Characteristics of Adult Patients With and Without Traumatic Childhood Separations From Attachment Figures

	Adults with traumatic separations (N = 203)	Adults without traumatic separations (N = 988)	t (df)	Sig.
<i>Race^a</i>				< .01
Caucasian	76.2	83.9		
African American	12.4	5.4		
Hispanic	6.9	5.8		
Asian	1.0	2.4		
Biracial or Other	3.5	2.5		
<i>SES^a</i>				< .01
Poor	13.8	4.2		
Working class	26.6	27.4		
Middle class	31.5	40.6		
Upper middle class	22.2	24.4		
Upper class	5.9	3.7		
<i>Age: Mean (SD)</i>	41.40 (13.10)	42.48 (12.15)	1.13 (1183)	.26
<i>Education^a</i>				< .01
Less than high school	11.8%	3.0%		
High school	17.7%	18.4%		
Some college	26.1%	24.4%		
College	18.2%	25.3%		
Graduate School	26.1%	28.8%		
<i>Setting^a</i>				< .01
Private practice	66.5	74.4		
Clinic/hospital outpatient	17.7	16.6		
School	.5	.7		
Inpatient/partial program	5.4	3.4		
Residential facility	1.5	.8		
Forensic	6.9	2.0		
Other	1.5	2.0		
<i>Time in treatment (months) Mean (SD)</i>	18.0 (24.3)	17.2 (19.7)	-.47 (1176)	.64
<i>GAF - Mean (SD)</i>	56.8 (10.7)	58.2 (10.7)	1.67 (1188)	.10
<i>Comorbid Axis I Disorders</i>				
Major Depression	38	36	.38 (1189)	.71
Dysthymia	49	46	-.94 (1189)	.35
Bipolar	5	7	.88 (1189)	.38
Bipolar II/Cyclothymia	12	7	-2.18 (1189)	.03
Generalized Anxiety Disorder	16	19	.76 (1189)	.45
PTSD	20	15	-1.65 (1189)	.08
Social Phobia	6	9	1.39 (1189)	.17
Substance Use Disorder	25	18	-2.29 (1189)	.02
ADHD	8	6	-1.15 (1189)	.25

Note. df = degree of freedom; Sig. = significance; SD = standard deviation; M = mean; SES = socioeconomic status; GAF = Global Assessment of Functioning; PTSD = posttraumatic stress disorder; ADHD = Attention Deficit Hyperactivity Disorder. Data are percentages unless otherwise specified.

^aSubscript a denotes significance from chi-square test.

A Composite Portrait of Adults With Histories of Traumatic Separations

To obtain a composite portrait of the personalities of adults with traumatic caregiver separations, the SWAP-II profiles of the 203 adults with such separations were aggregated, and items were arranged from highest to lowest (i.e., most descriptive to least descriptive). Table 2 presents the 18 most descriptive items, which were selected because they represent the number of items that can be placed in the two “most descriptive” categories of the fixed distribution (piles 6 and 7) of the SWAP-II Q-sort. The 18 SWAP-II items represent the “average” personality of adults who have experienced a traumatic caregiving separation.

The composite portrait in Table 2 depicts an adult who is unhappy, anxious, and angry. Interpersonally, these individuals fear abandonment, but they also tend to feel like “outsiders” who are misunderstood. Within relationships, they tend to be needy or dependent and unable to tolerate criticism but are themselves critical of others. These adults also tend to feel helpless, experience feelings of emptiness, and ruminate or dwell on problems. This portrait also indicates, however, that these individuals tend to have a number of strengths, including being articulate, conscientious, and striving to meet moral and ethical standards.

This composite portrait provides a broad picture of adults with traumatic separations but it might mask differences that relate to more specific subtypes. For example, some adults might be more hostile and angry while others might be more emotionally dysregulated. To consider this possibility, the next part of the exploratory analyses identified possible personality subtypes.

Q-Analysis and Personality Subtypes With Adult Personality Constellations

A Q-factor analysis was applied to examine the possibility of clinically meaningful personality subtypes of adults with traumatic caregiver separations. Using standard factor-analytic procedures, the data were entered into a principal components analysis, specifying eigenvalues ≥ 1 (Kaiser’s criteria), and using the scree plot, percent of variance accounted for, and parallel analysis (Horn, 1965; O’Connor, 2000) to determine the number of Q-factors to rotate. These

Table 2
Composite SWAP-II Description of Adults with Lengthy Traumatic Caregiver Separations (N = 203)

SWAP Items	Mean ranking
Tends to fear s/he will be rejected or abandoned.	4.04
Tends to feel unhappy, depressed, or despondent.	4.04
Is articulate; can express self well in words.	3.87
Tends to feel anxious.	3.84
Tends to feel misunderstood, mistreated, or victimized.	3.61
Tends to feel s/he is inadequate, inferior, or a failure.	3.49
Tends to be conscientious and responsible.	3.33
Tends to be angry or hostile (whether consciously or unconsciously).	3.32 ^a
Tends to feel like an outcast or outsider.	3.27
Has moral and ethical standards and strives to live up to them.	3.24
Tends to be needy or dependent.	3.22
Tends to feel guilty (e.g. may blame self or feel responsible for bad things that happen).	3.2
Tends to feel helpless, powerless, or at the mercy of forces outside his/her control.	3.12
Tends to react to perceived slights or criticism with rage and humiliation.	3.11 ^a
Is prone to painful feelings of emptiness (e.g., may feel lost, bereft, abjectly alone even in the presence of others, etc.).	3.1
Tends to ruminate; may dwell on problems, replay conversations in his/her mind, become preoccupied with thoughts about what could have been, etc.	3.06
Tends to be critical of others.	3.04 ^a
Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc.	3.03

^aIndicates that the SWAP item mean was significantly higher ($p < .05$) in the separation group than the non separation group.

procedures suggested a four-factor or five-factor solution. Q-factor analysis using unweighted least squares (ULS) with a Promax (oblique) rotation were conducted for four-factor, five-factor, and six-factor solutions. The six-factor solution yielded five coherent personality subgroups, accounting for 39.71% of the variance (17.23%, 11.31%, 5.43%, 3.53%, 2.20% for each Q-factor, respectively), although multiple solutions and algorithms were tested to identify the most robust Q-factors (in this case, retaining five of six Q-factors from the six Q-factor analysis solution). The median correlation among factors was .05 (range $-.25$ to $.19$), suggesting that they are not only distinct but also fairly dissimilar. Based on the items within the factors, the personality subtypes were labeled “internalizing/avoidant,” “emotionally dysregulated,” “resilient,” “hostile/paranoid,” and “psychopathic.” This Q-factor solution was chosen because of the strength of the primary loading and the theoretical coherence of the results. The four-factor solution did not include the “psychopathic” subtype and the five-factor solution yielded results that although similar to the final subtypes, were less conceptually clear.

Table 3 shows the 18 items that best characterized each subtype. The items with the highest factor scores on each prototype are arranged in descending order, expressed in standard deviation units. (In Q-factor analysis, because cases are factored over items, instead of items over cases, patients receive factor loadings indexing their degree or match to the construct, and items receive factor scores.) The factor scores indicate the item’s centrality to the construct in relation to the other items in the item set. The following paragraphs give a brief description of each personality subtype based on the representative SWAP-II items.

Internalizing/avoidant. These adults are characterized by feelings of inadequacy, guilt, anxiety, and unhappiness. They are likely to be constricted and unassertive, with the tendency to turn anger against themselves rather than expressing it outwardly. These adults fear rejection and abandonment and tend to “feel like an outcast or outsider.” They avoid social situations, are self-conscious, and “tend to feel ashamed or embarrassed.” Strengths include being conscientious and striving for moral and ethical standards. However, their standards are often unrealistic, leading to increased self-criticism.

Emotionally dysregulated. Adults in this subtype tend to have emotions “that spiral out of control,” “change rapidly and unpredictably,” and become irrational when stressed. These adults tend to be angry, unhappy, and impulsive. Within their relationships, they fear abandonment and have trouble seeing positive and negative characteristics of individuals simultaneously. Their relationships tend to be unstable and they tend to become attached too quickly. Finally, they are unable to soothe themselves without the help of another person.

Resilient. These adults with traumatic caregiver separations tend to be articulate, conscientious, creative, and insightful. They enjoy challenges and use talents effectively and productively. Interpersonally, they are able to sustain meaningful relationships, tend to be well liked, and are comfortable in social situations. These individuals tend to find meaning both in nurturing or mentoring others and belonging to a greater community. They also have the tendency to be competitive and controlling.

Hostile/paranoid. Adults with traumatic caregiver separations within the hostile/paranoid subtype tend to be self-righteous, angry, arrogant, and unhappy. Interpersonally, they lack close friendships, are critical, suspicious, with the tendency to blame others for their own shortcomings. At the same time, these individuals tend to feel like outsiders and feel misunderstood and/or mistreated.

Psychopathic. This final subtype of adults tends to be deceitful, impulsive, angry, and manipulative. They lack empathy and have little psychological insight. They take advantage of others and show little or no remorse for harm that they inflict. They tend to abuse drugs and alcohol and engage in unlawful behavior, but they are “impervious to consequences.” Their lives tend to be unstable in terms of work and/or living arrangements that are identity defining. They tend to “con” others, repeatedly convincing them that they intend on changing (e.g., “This time it is really different”).

Table 3
Personality Subtypes in Adults With Traumatic Separations From Attachment Figures in Childhood

<i>Q factor 1—Internalizing/Avoidant</i>	<i>Mean</i>
Tends to feel s/he is inadequate, inferior, or a failure.	2.92
Tends to feel guilty (e.g., may blame self or feel responsible for bad things that happen).	2.83
Tends to feel anxious.	2.74
Tends to feel unhappy, depressed, or despondent.	2.72
Tends to feel ashamed or embarrassed.	2.72
Tends to be passive and unassertive.	2.39
Tends to be shy or self-conscious in social situations.	2.37
Has trouble acknowledging or expressing anger toward others, and instead becomes depressed, self-critical, self-punitive, etc. (i.e., turns anger against self).	2.33
Tends to fear s/he will be rejected or abandoned.	2.20
Has difficulty acknowledging or expressing anger.	2.14
Tends to feel helpless, powerless, or at the mercy of forces outside his/her control.	2.05
Has moral and ethical standards and strives to live up to them.	1.96
Tends to be inhibited or constricted; has difficulty allowing self to acknowledge or express wishes and impulses.	1.95
Is self-critical; sets unrealistically high standards for self and is intolerant of own human defects.	1.93
Tends to avoid social situations because of fear of embarrassment or humiliation.	1.91
Tends to feel like an outcast or outsider.	1.75
Tends to ruminate; may dwell on problems, replay conversations in his/her mind, become preoccupied with thoughts about what could have been, etc.	1.73
Tends to be conscientious and responsible.	1.70
<i>Q factor 2—Emotionally Dysregulated</i>	<i>Mean</i>
Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc.	3.72
Tends to become irrational when strong emotions are stirred up; may show a significant decline from customary level of functioning.	3.40
Tends to have extreme reactions to perceived slights or criticism (e.g., may react with rage, humiliation, etc.).	2.65
Emotions tend to change rapidly and unpredictably.	2.63
Is prone to intense anger, out of proportion to the situation at hand (e.g., has rage episodes).	2.53
Is prone to painful feelings of emptiness (e.g., may feel lost, bereft, abjectly alone even in the presence of others, etc.).	2.32
Tends to fear s/he will be rejected or abandoned.	2.32
When upset, has trouble perceiving both positive and negative qualities in the same person at the same time (e.g., may see others in black or white terms, shift suddenly from seeing someone as caring to seeing him/her as malevolent and intentionally hurtful, etc.).	2.28
Is unable to soothe or comfort him/herself without the help of another person (i.e., has difficulty regulating own emotions).	2.14
Lacks a stable sense of who s/he is (e.g., attitudes, values, goals, and feelings about self seem unstable or ever-changing).	2.14
Tends to act impulsively (e.g., acts without concern for consequences).	2.02
Tends to be angry or hostile (whether consciously or unconsciously).	1.95
Tends to feel misunderstood, mistreated, or victimized.	1.90
Tends to feel unhappy, depressed, or despondent.	1.86
When distressed, perception of reality can become grossly impaired (e.g., thinking may seem delusional).	1.85
Tends to become attached quickly or intensely; develops feelings, expectations, etc. that are not warranted by the history or context of the relationship.	1.73
Relationships tend to be unstable, chaotic, and rapidly changing.	1.71
Tends to be needy or dependent.	1.67

Table 3
Continued

<i>Q factor 3—Resilient</i>	<i>Mean</i>
Is articulate; can express self well in words.	3.68
Tends to be conscientious and responsible.	3.13
Enjoys challenges; takes pleasure in accomplishing things.	3.02
Is able to use his/her talents, abilities, and energy effectively and productively.	2.72
Tends to be energetic and outgoing.	2.50
Finds meaning and satisfaction in the pursuit of long-term goals and ambitions.	2.46
Is able to assert him/herself effectively and appropriately when necessary.	2.45
Has moral and ethical standards and strives to live up to them.	2.43
Has a good sense of humor.	2.35
Tends to be liked by other people.	2.28
Is capable of sustaining meaningful relationships characterized by genuine intimacy and caring.	2.10
Is creative; is able to see things or approach problems in novel ways.	2.09
Is psychologically insightful; is able to understand self and others in subtle and sophisticated ways.	2.04
Appears comfortable and at ease in social situations.	1.91
Tends to be competitive with others (whether consciously or unconsciously).	1.89
Finds meaning and fulfillment in guiding, mentoring, or nurturing others.	1.84
Finds meaning in belonging and contributing to a larger community (e.g., organization, neighborhood, church).	1.80
Tends to be controlling.	1.63
<i>Q factor 4—Hostile/Paranoid</i>	<i>Mean</i>
Tends to be critical of others.	3.43
Tends to hold grudges; may dwell on insults or slights for long periods.	2.94
Tends to be self-righteous or moralistic.	2.56
Tends to be angry or hostile (whether consciously or unconsciously).	2.54
Tends to be controlling.	2.48
Tends to feel misunderstood, mistreated, or victimized.	2.45
Tends to get into power struggles.	2.37
Lacks close friendships and relationships.	2.32
Is suspicious; tends to assume others will harm, deceive, conspire against, or betray him/her.	2.21
Tends to feel unhappy, depressed, or despondent.	2.02
Tends to be dismissive, haughty, or arrogant.	1.85
Tends to ruminate; may dwell on problems, replay conversations in his/her mind, become preoccupied with thoughts about what could have been, etc.	1.84
Tends to blame own failures or shortcomings on other people or circumstances; his/her difficulties to external factors rather than accepting responsibility for own conduct or choices.	1.82
Tends to be oppositional, contrary, or quick to disagree.	1.81
Tends to have extreme reactions to perceived slights or criticism (e.g., may react with rage, humiliation, etc.).	1.76
Tends to be overly concerned with rules, procedures, order, organization, schedules, etc.	1.63
Has an exaggerated sense of self-importance (e.g., feels special, superior, grand, or envied).	1.58
Tends to feel like an outcast or outsider.	1.49

Table 3
Continued

<i>Q factor 5—Psychopathic</i>	<i>Mean</i>
Has little empathy; seems unable or unwilling to understand or respond to others' needs or feelings.	2.91
Tends to be deceitful; tends to lie or mislead.	2.79
Tends to act impulsively (e.g., acts without concern for consequences).	2.72
Has little psychological insight into own motives, behavior, etc.	2.62
Tends to abuse drugs or alcohol.	2.51
Tends to be manipulative.	2.50
Tends to be unreliable and irresponsible (e.g., may fail to meet work obligations or honor financial commitments).	2.50
Takes advantage of others; has little investment in moral values puts own needs first, uses or exploits people with little regard for their feelings or welfare, etc.).	2.50
Experiences little or no remorse for harm or injury caused to others.	2.43
Tends to engage in unlawful or criminal behavior.	2.30
Tends to show reckless disregard for the rights, property, or safety of others.	2.06
Appears impervious to consequences; seems unable or unwilling to modify behavior in response to threats or negative consequences.	2.03
Tends to be angry or hostile (whether consciously or unconsciously).	1.93
Tends to blame own failures or shortcomings on other people or circumstances; his/her difficulties to external factors rather than accepting responsibility for own conduct or choices.	1.93
Tends to be conflicted about authority (e.g., may feel s/he must submit, rebel against, win over, defeat, etc.).	1.84
Work-life and/or living arrangements tend to be chaotic or unstable (e.g., job or housing situation seems always temporary, transitional, or ill-defined).	1.81
Seems unable to settle into, or sustain commitment to, identity-defining life roles (e.g., career, occupation, lifestyle, etc.).	1.77
Repeatedly convinces others of his/her commitment to change but then reverts to previous maladaptive behavior; tends to convince others that "this time is really different."	1.72

Validating the Personality Subtypes

After identifying the personality subtypes of adults with histories of traumatic separations from attachment figures in childhood, the study sought to validate the personality subtypes using criterion variables. An initial test of the construct validity of the personality styles identified through Q-factor analysis was performed by testing specific predictions about patterns of association with criterion variables that should distinguish them (Andreasen, Endicott, Spitzer, & Winokur, 1977; Westen & Muderrisoglu, 2003). This study utilized data reported by the clinician including Axis I and II psychopathology, individual history variables (e.g., history of physical abuse), and family history variables (e.g., substance abuse, criminality). These criteria are similar to those elaborated by Robins and Guze (1970) for validating diagnostic distinctions, particularly comparing the subtypes on comorbid diagnoses, adaptive functioning, and etiologically relevant variables.

To test a priori hypotheses, the personality subtypes were treated categorically. Adults were assigned to the subtype on which they had the highest factor loading, presuming (a) the loading was $\geq .35$, which indicates a considerable match to the diagnostic prototype; and (b) the primary loading was $\geq .10$ higher than any secondary loading. Thus, patients who did not load highly on any factor or loaded highly on multiple factors were not included. Using this approach, 154 (75.9%) of the 203 adults were classified. Of the unassigned individuals, 39% did not load at .35 or above on any subtype, 16% loaded on both the internalizing/avoidant

Table 4

Percent of Sample Meeting Criteria for Subtypes as a Function of Presence or Absence of Traumatic Separation

	Separation N (percent of total)	No separation N (percent of total)
Internalizing/avoidant ^a	60 (29.6)	337 (34.1)
Emotionally dysregulated ^a	28 (13.8)	104 (10.5)
Resilient	24 (11.8)	129 (13.1)
Hostile/paranoid	20 (9.9)	60 (6.1)
Psychopathic ^a	22 (10.8)	39 (3.9)
Not classified	49 (24.1)	319 (32.3)
Total	203 (100)	988 (100)

^aIndicates that when treated dimensionally the differences between those with and without separations was significant equal variance.

and the resilient subtypes, and 34% loaded on the emotionally dysregulated subtype and at least one other subtype.

Table 4 presents the distribution of patients with and without separations across the subtypes. Using the SWAP-II it is possible to obtain the match of any patient (regardless of history) to any of the five subtypes. Most notable was that higher percentages of the psychopathic and emotionally dysregulated subtype occurred within the samples of individuals with traumatic separation histories as compared with those without separation histories. Treating the personality subtypes as continuous variables and using *t* tests yielded the same pattern of results. Within the adult sample, these differences were significantly higher in the separations group than the nonseparations group for the emotionally dysregulated, $t = -2.40$, $df = 1189$, $p = .02$, and psychopathic dimensions, $t = -3.89$, $df = 1189$, $p < .001$, and significantly lower than the nonseparations group for the internalizing avoidant dimension, $t = 3.33$, $df = 1189$, $p = .001$.

As previously noted, this study had only minimal information regarding the specific nature of the separation. One-way between subjects analysis of variance (ANOVA) were used to see groups differed on age of separation and the clinician's assessment of the traumatic impact of the separation. The age of separation data were available to see whether a separation occurred early (i.e., between ages 1 and 6 years or later in childhood; dummy coded 0/1). The percent of individuals experiencing the separation in early childhood was highest in the psychopathic group (40.9%) and lowest in the internalizing/avoidant group (23.3%). For traumatic impact, means ranged from 3.24 (psychopathic) to 3.92 (resilient). However, the groups did not significantly differ on either age of separation, $F(4,149) = .72$, mean squared error (*MSE*) = .15, *ns*, or traumatic impact, $F(4,148) = 1.03$, $MSE = 1.30$, *ns*.

Contrast analyses were used to compare the groups on validity criteria and to test a priori hypotheses. In this process, researchers assign weights based on the magnitude of predicted relationships between groups before looking at the results. These hypotheses are specified for each variable but the sum of the weights across groups must total zero. The a priori hypotheses were developed based on the previously reviewed theoretical and empirical literature and are presented along with the results in Tables 5 and 6. Hypotheses were developed independently by the first two authors and then, if necessary, modified using a consensus approach before running analyses. Benefits of using contrast analysis include the maximizing of power and reducing the likelihood of spurious findings that occur when running multiple analyses. In addition, contrast analysis tests highly specific, focal, one-tailed hypotheses about the relative ordering of group means instead of more global questions that do not specify in advance *how* the groups might differ (Rosenthal, Rosnow, & Rubin, 1999). This also allows the *F* statistic obtained from the ANOVA to be converted to a *t* statistic, allowing for one-tailed hypotheses to be tested (Hinkle, Wiersma, & Jurs, 1998).

As an example of interpreting the numeric hypotheses, in Table 5, the contrast weights for major depressive disorder (MDD) of 2, 2, -5, 1, 0 represent the a priori hypothesis that the

Table 5
 Axis I and Axis II Comorbidity by Adult Personality Subtype (in Percentages)

	Internalizing/ avoidant (N = 60) M (SD)	Emotionally dysregulated (N = 28) M (SD)	Resilient (N = 24) M (SD)	Hostile/paranoid (N = 20) M (SD)	Psychopathic (N = 22) M (SD)	Hypotheses ^a	t (df)	Sig.	r
Axis I									
Major Depressive Disorder	45 (50)	46 (51)	21 (41)	40 (50)	14 (35)	2 2 -5 1 0	2.40 (41.27)	<.05	.35
Generalized Anxiety Disorder	28 (45)	11 (31)	25 (44)	10 (31)	5 (21)	3 2 -2 0 -3	1.38 (107.45)	n.s.	.13
Substance use disorder	17 (38)	57 (50)	8 (28)	5 (22)	59 (50)	0 2 -6 1 3	4.82 (58.06)	<.001	.53
Axis II									
Antisocial	7 (25)	43 (50)	00 (00)	25 (44)	90 (29)	-5 3 -5 3 4	10.48 (78.24)	<.001	.76
Borderline	22 (42)	75 (44)	13 (34)	20 (41)	27 (46)	1 4 -8 2 1	4.25 (46.82)	<.001	.53
Paranoid	8 (28)	50 (51)	8 (28)	55 (51)	54 (51)	-4 2 -4 4 2	5.98 (52.21)	<.001	.64
Avoidant	70 (46)	36 (49)	17 (38)	50 (51)	5 (21)	4 1 -4 2 -3	6.94 (86.97)	<.001	.60

Note: df = degree of freedom; Sig. = significance; SD = standard deviation; M = mean; n.s. = non-significant.

^aHypotheses are represented by contrast weights.

emotionally dysregulated subtype and the internalizing/avoidant subtype would have the highest rates of MDD (2), followed by the hostile/paranoid subtype (1), the psychopathic subtype (0), and then, last, the resilient subtypes (-5). This hypothesis was developed taking into account research about outcomes of depression in individuals with traumatic separations related to dysregulation of the HPA axis, seen in both internalizing and emotionally dysregulated personality research (Heim & Nemeroff, 1999; Heim & Nemeroff, 2001; Lieb et al., 2004). This model can be used to interpret each of the hypotheses in Tables 5 and 6.

In these analyses, Axis I and II variables were dummy coded (0/1), resulting in means that correspond to percentages. All remaining variables were dummy coded with the exception of global adaptive functioning, criminality, and number of confidants, which were continuous variables. The global adaptive functioning composite variable was created by averaging the standardized ratings of the Global Assessment of Functioning, level of personality functioning, quality of peer relationships, and work or school functioning. The adult criminality composite variable was created by averaging the standardized ratings of the arrests within the past 5 years, violent crime committed in the past 5 years, and having been a perpetrator in an adult abusive relationship. Number of confidants was coded on a 1 to 4 scale, ranging from 1 (*none*) to 4 (*many*). Because the subtypes significantly differed on socioeconomic status, age, and gender, these variables were controlled for in secondary analyses, which yielded the same patterns of significant results.

The results of the contrasts analyses and corresponding effect sizes are also presented in Tables 5 and 6. With regard to Axis I psychopathology, there was support for the expected associations of major depression and substance use disorder. Effect sizes for these analyses were .35 and .59, respectively. However, the expected findings regarding generalized anxiety disorder were not supported. Although rates of generalized anxiety disorder (GAD) were relatively low across all subtypes, it was notable that the resilient subtype seemed to have higher levels of the disorder than had been anticipated in relation to the other subtypes, suggesting that anxiety might be one of the residues of disrupted attachment in the resilient group.

With regards to Axis II psychopathology, all hypotheses were supported using contrast analyses, with corresponding effect sizes ranging from .42-.60. The psychopathic subtypes had the highest rates of antisocial PD (90%), while the adult emotionally dysregulated had relatively high rates of both antisocial PD (43%) and borderline PD (75%). As expected, the internalizing/avoidant subtypes had the highest rates of avoidant PD (70%). With regards to paranoid PD, rates were relatively elevated in the hostile/paranoid subtype (55%), psychopathic subtype (54%), and the emotionally dysregulated subtype (50%).

A priori hypotheses regarding global adaptive functioning and developmental history were also supported by the findings (Table 6). The individuals with high loadings on the resilient subtypes had the highest global adaptive functioning. The lowest functioning subtypes were the psychopathic and emotionally dysregulated. The hostile/paranoid subtype was characterized by having the lowest numbers of confidants. History of criminal activity was highest among the psychopathic subtype. With regards to physical and sexual abuse, rates were elevated across expected subtypes, with the exception of the rate of sexual abuse in the hostile/paranoid group (5%) being more similar to the resilient group (4%) than the other hypothesized groups. (However, results of the contrast analysis were still found to be significant.) Finally, results regarding family history variables were somewhat inconsistent. Consistent with the Axis I findings, family history of anxiety disorder did not differentiate the groups. The subtypes were differentiated by family history of criminality and illicit drug use but not by suicidality.

Discussion

The aims of this research were threefold: (a) to provide a composite portrait of the personality characteristics of adults with traumatic separation (b) to identify personality subtypes of adults with traumatic attachment separations using exploratory Q analyses, and (c) then to provide initial validity data for the identified personality subtypes using contrast analyses. The results showed that a composite description of the personalities among these individuals masks

Table 6
Developmental and Family History Variables by Adult Personality Subtype

	Internalizing/ avoidant (N = 60) M (SD)	Emotionally dysregulated (N = 28) M (SD)	Resilient (N = 24) M (SD)	Hostile/paranoid (N = 20) M (SD)	Psychopathic (N = 22) M (SD)	Hypotheses ^a	t (df)	Sig.	r
Adaptive functioning and developmental history									
Global adaptive functioning ^b	.06 (.60)	-.47 (.54)	.77 (.54)	-.24 (.66)	-.58 (.51)	0 -2 5 -1 -2	9.60 (40.85)	<.001	.83
Number of confidants ^b	2.13 (.54)	2.21 (.69)	2.46 (.51)	1.84 (.38)	1.86 (.64)	-3 -1 7 -2 -1	3.82 (33.06)	.001	.55
Criminality ^b	.17 (.49)	.53 (.88)	.13 (.34)	.47 (.96)	1.55 (.91)	-4 2 -4 2 4	6.85 (54.50)	<.001	.68
Suicide history (percent)	32 (47)	75 (44)	0 (0)	15 (37)	32 (48)	2 3 -7 1 1	10.92 (56.98)	<.001	.82
Physical abuse (percent)	20 (40)	42 (50)	8 (28)	25 (44)	41 (50)	1 2 -8 2 3	3.37 (59.75)	.001	.40
Sexual abuse (percent)	28 (45)	61 (50)	4 (20)	5 (22)	27 (46)	1 3 -6 1 1	5.49 (60.61)	<.001	.58
Family member history									
Anxiety disorder (percent)	27 (45)	25 (44)	25 (44)	5 (22)	23 (42)	3 2 -2 0 -3	.29 (76.14)	<i>n.s.</i>	.03
Illicit drug use (percent)	23 (43)	39 (50)	0 (0)	25 (44)	36 (49)	1 2 -7 1 3	6.15 (41.80)	<.001	.69
Criminality (percent)	10 (30)	25 (44)	8 (28)	10 (31)	32 (48)	-2 2 -4 1 3	2.38 (60.42)	<.05	.29
Suicidality (percent)	12 (32)	39 (50)	17 (38)	20 (41)	14 (35)	2 3 -7 1 1	.92 (38.83)	<i>n.s.</i>	.15

Note: df = degree of freedom; Sig. = significance; SD = standard deviation; M = mean; *n.s.* = non-significant.

^aHypotheses are represented by contrast weights.

^bSubscript b denotes standardized variables in SD units.

the patterned heterogeneity found in patients with histories of traumatic separations, which highlights the importance of using personality in clinical settings to better understand and organize the heterogeneous presentations of individuals with attachment disruptions. These results were consistent with additional research that used personality constellations to organize the diverse clinical presentations of people who share a common traumatic experience (Bradley, Heim, & Westen, 2005).

The identified subtypes were as follows: psychopathic, internalizing/avoidant, emotionally dysregulated, hostile/paranoid, and resilient. The SWAP-II items provided a portrait of the prototypical patient from each subtype. Although the subtypes showed some similarities to the personality typologies identified in those with PTSD by Miller and colleagues (2007, 2004; e.g., an internalizing subtype and subtypes with externalizing features), other nuances also emerged. The adult psychopathic subtype had little empathy for others and was characterized as manipulative and impulsive, with the tendency to engage in criminal acts. This subtype is consistent with clinical observations of Cleckley (1941), which were then studied empirically by Hare (2003) and Hare, Hart, and Harpur (1991). Blair (2006) indicates that psychopathy is characterized by behavioral components (impulsive acts and delinquent or criminal activity) common to not only antisocial diagnoses but also an emotional and interpersonal component characterized by a lack of empathy and guilt.

The internalizing/avoidant subtype was characterized by depressed mood, low self-esteem, and feelings of being an "outsider." The DSM-IV characterizes avoidant PD as "a pervasive pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluations" (p. 721). Riggs, Paulson, Tunnell, Sahl, and Ross (2007) found that avoidant personality pathology was associated with a fearful attachment style, defined as having a negative view of both self and other. The individual with this object representational style feels not only as though other are unavailable to provide care, but that he or she is also unworthy of such care. This generalizes to later relationships, as individuals who experience attachment disruptions often have difficulty forming confiding relationships with peers (O'Connor et al., 1999; Vorria et al., 1998a; Vorria, Rutter, & Pickles, 1998b).

The emotionally dysregulated subtype was substantially female and was characterized by emotions that spiral out of control, unstable relationships, and difficulty with self-soothing. The subtype showed many similarities with borderline PD, which is described in the DSM-IV as "a pattern of instability in interpersonal relationships, self-image, and affects, and marked impulsivity" (American Psychiatric Association, 2000, p. 685). A number of studies indicate that attachment disruptions are associated with borderline personality pathology (Bradley, 1979; Paris, Nowlis, & Brown, 1988; Reich & Zanarini, 2001; Soloff & Millward, 1983). However, this experience is seen as neither necessary nor solely sufficient for the development of the disorder (Levy, 2005).

The hostile/paranoid subtype provided a portrait of a rigid, critical, and angry individual who lacks close relationships and is suspicious of others. The relationship between paranoid PD features and attachment has been explored in some of the psychoanalytic theoretical literature as the individual having experienced the early love object as both needed but also persecutory (Blum, 1981). The DSM-IV indicates that individuals with paranoid PD have a "pervasive mistrust and suspiciousness of others such that their motives are interpreted as malevolent" (p. 694). There is limited empirical research studying the attachment experiences and developmental history of individuals with paranoid features. However, Rankin, Bentall, Hill, and Kinderman (2005) found that both remitted and nonremitted paranoid patients reported a history of low-parental care.

Finally, the resilient subtype provided a portrait of a patient who would be likable, energetic, and articulate, with the capacity to pursue goals and have meaningful relationships. Although separations and loss might lead to increased rates of personality pathology, these are probabilistic, not deterministic associations. While some individuals have constitutional traits leading to an increased likelihood of personality pathology, others might have constitutional traits that are protective in the face of loss. This is consistent with the *resilience association*, in which temperament protects children from the impact of adverse environmental stimuli and any associated psychopathology (Shiner & Caspi, 2003). Similarly, other environmental

factors might have protected the individual after a separation (e.g., a secure attachment with another adult in his or her life).

It should be noted that individuals without separations can also be classified according to these subtypes, suggesting that the subtypes are unlikely unique to individuals with traumatic separations (just as internalizing an externalizing personality typologies are not unique to those with PTSD). Although one possibility is that the obtained typologies might be influenced by features of the SWAP-II measure as much as the history of separation, the analyses in Table 4 suggest that separations might predispose individuals to certain forms of psychopathology. Specifically, the psychopathic subtype and the emotionally dysregulated subtype were better able to describe individuals with separations than those without. This would be consistent with previous attachment research, which has described affect regulation, interpersonal stability, and lack of empathy and the ability to reflect on the perspective of potential victims as consequences of traumatic attachment disruptions (Bezirgianian, Cohen, & Brook, 1993; Fonagy, 1999; Fonagy & Bateman, 2008; Fonagy et al., 1997; Johnson, Cohen, Chen, Kasen, & Brook, 2006; Kernberg & Caligor, 2005). All of these characteristics could be influenced by mentalization deficits (impaired capacities to reflect upon the thoughts and emotions of self and other), which are related, in part, to experiences within the parent-child relationship (Fonagy, Gergely, Jurist, & Target, 2002).

Personality Subtypes and Comorbid Psychopathology: Axis I and II Criterion Variables

The contrast analyses tested a priori focal hypotheses to provide support for the taxonomies. As expected, the profiles differed by DSM-IV diagnoses. The psychopathic subtype was associated with antisocial PD. The internalizing/avoidant subtype was associated with avoidant PD and depression. The emotionally dysregulated subtype was strongly associated with borderline PD. However, some results were different than expected. For example, the subtypes were not differentiated based on GAD. Interestingly, although not significant, the resilient subtype had almost equally high rates (44%) of GAD as compared with the internalizing/avoidant subtype (45%). It might be that, although resilient, these adults are predisposed to higher levels of stress and anxiety, which might, in part, be associated with the traumatic separation. Attachment theory suggests that anxiety is a key force in maintaining contact and safety in the face of threats to security (Bowlby, 1969). Resilient individuals with higher levels of anxiety might have attachment systems that are overactivated due to a learned heightened sensitivity response. While in some cases this anxiety might be associated with Axis I pathology, at other times it might be an adaptive quality that once helped maintain contact in the face of an attachment disruption.

One other finding that was somewhat different than expected was with regard to paranoid PD. Although the adult subtypes did differ significantly on rates of this disorder, it was notable that three of the subtypes had elevated rates of this PD (emotionally dysregulated 50%, psychopathic 54%, and hostile/paranoid 55%). Although previous research has found that paranoid PD and antisocial PD are highly comorbid (Fonagy et al., 1996), another possible explanation for the elevated rates of paranoid symptomatology might be driven by the presence of traumatic separation. Future studies should assess whether the experience of the separation results in the child forming a belief that others will be inaccessible and unresponsive resulting in a schema that reflects others' untrustworthiness. Overall, the hostile/paranoid subtype is unlikely to be differentiated from the other subtypes simply by the presence or absence of the DSM-IV paranoid PD diagnosis.

Personality Subtypes in Relation to Developmental History and Family History Criterion Variables

After considering rates of Axis I and II psychopathology, additional criterion variables related to adaptive functioning, developmental history, and family history were used to provide further support for the subtypes identified in each sample. As hypothesized, personality

constellations dominated by dysregulation and deficits in empathy are associated with the greatest general impairment.

In terms of number of confidants, the resilient group, as expected, was characterized by having a greater number of close relationships than the other subtypes. Within the adult sample, the hostile/paranoid subtype and psychopathic subtypes were most impaired in this area. The hostile/paranoid individuals appear to be outcasts who likely stay away from people, because of their suspicious, critical, and controlling styles. This contrasts with those in the psychopathic subtype who likely have a lower number of confidants because of their tendency to manipulate and exploit others without regard for their welfare. Interestingly, individuals in the psychopathic subtype appeared to seek out others to use for their own purposes, while the hostile/paranoid subtype's intense mistrust leads them to isolate themselves. Common to both is the intense anger that pervades their personalities. This corresponds to the theoretical work of Meyer and Pilkonis (2005), who suggest that those with antisocial personality utilize a "dismissing" attachment style in which their sense of self as superior leads them to manipulate others, while those with paranoid personality pathology use a mixed "fearful-dismissing" attachment style. For these individuals, this mixed-style results in a primarily negative self-view that is beneath a façade of superiority and a general mistrust of others despite their desire for nurturance.

Rates of criminality followed the expected patterns. Given the literature regarding the criminal activity of psychopaths, the high rates associated with this subtype were not surprising. Similarly, the impulsive behaviors associated with borderline personality pathology suggest that these individuals would also be more likely to engage in illicit activity (Fonagy et al., 1997).

Histories of suicide attempts were most strongly associated with the emotionally dysregulated subtype. A number of studies have previously documented the association between both suicide attempts and parasuicidal behavior with aspects of affective dysregulation common to borderline personality pathology (Links et al., 2007; Yen et al., 2004).

Sexual abuse related most to the emotionally dysregulated subtype. These results are consistent with previous research linking childhood sexual abuse to borderline PD, which is characterized by dysregulated affect (Ogata et al., 1990; Westen, Ludolph, Misle, Ruffins, & Block, 1990; Zanarini, 1997). This finding has implications for understanding the ways in which multiple interpersonally traumatic developmental antecedents are associated with affective dysregulation. In childhood, these individuals faced multiple risk factors relating to being cared for and protected. In fact, factors such as family stability mediate these effects (Bradley, Jenei, & Westen, 2005), and others have conceptualized childhood abuse as sometimes symptomatic of difficulties within the attachment relationship (Alexander, 1992). This is consistent with a mentalization perspective in which the absence of parental mirroring leads to affective states that are undifferentiated, outside of awareness, and dysregulated (Fonagy et al., 2002). Overall, developmental history variables were associated with the subtypes in ways that were consistent with previous theory and research.

In contrast to the developmental history variables, family history variables were less successful in differentiating the subtypes, perhaps because of lack of reliability, or simply because family history of a class of disorders is too blunt an instrument for detecting gene-environment interactions (especially when the disorders themselves include substantial psychosocial influences).

Subtypes were, however, distinguished by family history of criminality, with the psychopathic subtypes showing the highest rates. This is consistent with the literature identifying the heritability of both callous-unemotional traits and the absence of empathy common to psychopathy (Blair, Peschardt, Budhani, & Pine, 2006; Wootton, Frick, Shelton, & Silverthorn, 1997). From a diathesis-stress perspective, it might be that individuals in this group who were already vulnerable to developing this personality style were at increased risk after the experience of traumatic separations and other correlated risk factors. In this case, a genetic predisposition for psychopathy might account for the covariance between temperament variables and variables affecting the family environment (e.g., parental consistency, warmth, and empathic responses; Shiner, 2006). Alternatively, parents who pass on

the genes that predispose their children to early-onset delinquency might be more likely to abandon their children.

Limitations

This research has several limitations. First, data in this study were cross-sectional. Without longitudinal prospective data, it is impossible to make causal statements about the impact of the traumatic separation on personality development. While one possibility is that an attachment disruption has a lasting impact on personality, another possibility suggests that personality characteristics were already present before the separation. Additionally, other factors that are correlated with the presence of separations, rather than the separation itself, might have been more influential to the formation of different personality constellations. Although attempts were made to account for some of these differences (e.g., controlling for socioeconomic status, education, gender, and age), it was not possible to fully account for confounding variables. For example, when comparing individuals with and without histories of separations on a broad range of characteristics, those with separations were lower in socioeconomic class, less educated, more likely to be African American, and more likely to be seen in a forensic, residential, or inpatient treatment setting than those without separations. This continues to point to separations as an often under recognized trauma that systemically affects those with less resources, who are less privileged, and correlates of these factors such as race (McLoyd, 1998).

Second, within this study a single informant (i.e., the treating clinician) described each patient. Future research should use multiple informants including the self-report of the patient. This would be beneficial both in terms of assessing personality, but also in terms of gathering information regarding the separation and the other criterion variables. Relatedly, this study had relatively little specific information regarding the nature of the separation. Although exploratory analyses revealed that subtypes did not differ based on age of separation or trauma severity associated with the separation, it is possible that other factors related to the precise quality of the separation would have helped to further differentiate the subtypes. For example, prolonged traumatic separations because of a parent's illness, being placed in foster care, having a parent in the military who is deployed in combat, or having a parent incarcerated are likely quite different experiences. In addition, this study suggested that certain aspects of the social environment were associated with different subtypes. The precise nature of the contribution of environmental risk and protective factors to personality development would be useful for understanding ways to assist patients who have experienced attachment disruptions.

Finally, this study utilized data from a clinical sample and might not reflect the more general population. Although subjects were not initially recruited based on their patients' histories of separations, it is possible that psychopathology was overrepresented in the sample. The presence of a resilient subtype provides support for the need to consider aspects of personality strengths as part of personality assessment.

Conclusion

In sum, the presence of personality subtypes among individuals with histories of traumatic separations has important clinical implications for both case formulation and intervention. In terms of case formulation, it provides support for both being thoroughly attentive to developmental history variables and also completing an assessment of personality characteristics. Traumatic separations were not associated with a single patient prototype or pattern of symptomatology. This study identified subgroups of people who predictably differ in their developmental histories, relationships, global functioning, and co-occurring psychopathology. Therefore, a careful assessment of personality from the onset of treatment would likely assist clinicians formulate their understanding of the patient and plan a treatment that will be most appropriate for those with a particular constellation of personality

characteristics. The data support the use of personality typologies as an overarching framework for organizing more general symptomatology.

The results of this study suggest that patients with histories of attachment disruption will not be best served by treatments that try to address discrete Axis I disorders (Westen & Bradley, 2005). Instead, working with these patients requires understanding how personality informs their Axis I symptomatology. For example, high rates of substance use disorders were common to both the emotionally dysregulated and psychopathic subtypes. It might be, however, that treating a substance disorder without considering the way that personality shapes the prognosis and both motivation and experience of the behavior ignores factors that will affect the treatment process.

Consistent with Bowlby's (1973) expectations, attachment disruptions are associated with a range of personality profiles that are likely related to genetic, environmental, and the gene-environment interactions. Initial support for the validity of subtypes was established through the expected associated patterns of psychopathology and developmental history variables.

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