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Personality Constellations of Adolescents with Histories of Traumatic Parental Separations

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Abstract

Consistent with attachment theory and a developmental psychopathology framework, a growing body of research suggests that traumatic parental separations may lead to unique pathways of personality adaptation and maladaptation. The present study both examined personality characteristics and identified personality subtypes of adolescents with histories of traumatic separations. Randomly selected psychologists and psychiatrists provided data on 236 adolescents with histories of traumatic separations using a personality pathology instrument designed for use by clinically experienced observers, the Shedler-Westen Assessment Procedure (SWAP-II-A). Using a Q factor analysis, five distinct personality subtypes were identified: *internalizing/avoidant*, *psychopathic*, *resilient*, *impulsive dysregulated*, and *immature dysregulated*. 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. The personality subtypes demonstrated substantial incremental validity in predicting adaptive functioning, above and beyond demographic variables and histories of other traumatic experiences.

Keywords

Traumatic Parental Separation; Attachment Disruption; Adolescent Personality Pathology; Personality Subtypes; SWAP-II-A

Introduction

Attachment theory emphasizes the impact of parental separations on children's growing understanding and expectancies of themselves, their relationships, and the world (Bowlby,

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1969, 1973, 1980). The normative developmental experience of separation and reunion in consistent parenting allows for both proximity and autonomy in development (Bowlby, 1988; Slade & Aber, 1992). As the child develops autonomy, he or she can return to the parent a “secure base” after exploring the environment. However, when lengthy or recurring separations occur, Bowlby (1973) posited that personality could be diverted to new and less optimal developmental pathways representing the child’s attempt to adapt to his or her experience, particularly when children lose consistent connections to attachment figures, interfering with normative ways of regulating emotions and forming representations of loving, available attachment figures (internal working models).

In the present paper, we identify personality constellations of adolescents with histories of traumatic separations from their caregivers. Based on developmental research and clinical experience dating back to Bowlby’s early work on separation (Bowlby, 1969), we expected that different children could respond to traumatic separations with multiple different characterologic expressions and developmental outcomes. This is in fact supported by research identifying a range of biological (e.g., dysregulation of the cortisol diurnal patterns), social (e.g., indiscriminant friendliness, avoidance), and emotional presentations (e.g., dissociation, internalizing and externalizing psychopathology) subsequent to traumatic separations (Fergusson, Horwood, & Lynskey, 1994; Kobak, Little, Race, & Acosta, 2001; Meinlschmidt & Heim, 2005; Zeanah, Smyke, Koga, Carlson, & The Bucharest Early Intervention Project Core, 2005). The impact of a childhood traumatic parental separation may be particularly pronounced in adolescence, given the reorganization of relationships intrinsic to this developmental stage (i.e., the focus on attachment transitions from parents to peers and partners and the task of individuation) (Allen, Moore, Kuperminc, & Bell, 1998; Burge et al., 1997; Fonagy, Gergely, Jurist, & Target, 2002; Kernberg, 1998).

In adult samples, researchers have found that histories of attachment disruptions relate to later personality pathology in both retrospective cross-sectional studies (Arbel & Stravynski, 1991; Bradley, 1979; Malone, Westen, & Levendosky, 2011; Reich & Zananini, 2001) as well as prospective longitudinal research (Anglin, Cohen, & Chen, 2008; Crawford, Cohen, Chen, Anglin, & Ehernsaff, 2009; Räikkönen et al., 2011). Borderline Personality Disorder (PD) has been most commonly associated with separations (Bradley, 1979; Crawford et al., 2009; Reich & Zananini, 2001), which is unsurprising given some of the hallmark features of borderline pathology reflect fears of abandonment and an unstable representations. In a longitudinal study, Crawford and colleagues (2009) found that symptoms of Borderline PD were higher in children and adolescents with separations than those without separations, and that these Borderline PD symptoms then declined at a markedly slower rate across the lifespan when examining 30 year trajectories.

Other studies suggest that separations relate to a broader spectrum of personality pathologies including psychopathy (Gao, Raine, Chan, Venables, & Mednick, 2010), avoidant PD (Arbel & Stravynski, 1991), and schizotypal features (Anglin et al., 2008). In many of these studies, the research question was limited to a single PD, however, rather than accounting for the range of personality profiles that might be associated, in part, with the experience of the traumatic separation. More recently, using a personality Q-Sort procedure in an adult clinical sample, Malone and colleagues (2011) identified five distinct personality subtypes of

individuals with histories of separations: internalizing/avoidant, psychopathic, emotionally dysregulated, hostile/paranoid, and resilient. These personality subtypes were differentiated from one another based on developmental history variables, Axis I and II diagnoses, and current levels of adaptive functioning. The present study seeks to extend this work by examining whether similar subtypes are present in an adolescent clinical sample.

Aims of the Current Study

The goals of this research are threefold. The first goal is to provide a comprehensive portrait of the personality characteristics (pathological and non-pathological) that distinguish adolescent psychiatric patients with histories of traumatic separations from childhood attachment figures from other adolescent patients. The second goal is to discover whether clinically and empirically meaningful subtypes of these individuals could be identified empirically using methods designed from precisely this kind of personality subtyping. The third goal is 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 (e.g., adaptive functioning and etiologically relevant variables), and framing *a priori* hypotheses once the subtypes were identified but prior to examining the validity data. We assess the incremental validity of the subtypes in predicting outcomes of global adaptive functioning over and above demographic variables and history of childhood trauma.

Method

Participants

The study used data from a National Institute of Mental Health-funded project on the nature and classification of adolescent personality pathology. Participants were a random national sample of psychologists and psychiatrists with over five years experience post-licensure or residency, whose names were obtained through the membership rosters of the American Academy of Child and Adolescent Psychiatry and the American Psychological Association. Of those contacted one third agreed to participate, although we discontinued data collection for financial reasons after obtaining the responses of 950 clinicians. The response rate falls within the expected range of postal surveys of clinical and counseling psychologists according to a recent meta-analytic study (Van Horn, Green, & Martinussen, 2009), which found a mean response rate of 49.6% with 95% credibility interval 21%-78%). Despite this, data were not available to test whether the demographic profiles of the psychologists and psychiatrists who agreed to participate in this investigation were similar to those who refused.

Procedures

Clinicians were asked to describe “an adolescent patient you are currently treating or evaluating who has enduring pattern of thoughts, feeling, motivation or behavior—that is, personality problems—that cause distress or dysfunction.” While such patients must have problematic personality traits, they did not need to have a PD diagnosis. Clinicians were instructed to disregard the caveats in the DSM-IV regarding the application of axis II diagnoses to adolescents and asked to simply select a patient with any degree or form of

personality pathology as defined above. We collected a stratified random sample, stratifying on age (13–18) and gender. Clinicians were asked to select a patient whose personality they knew well enough to describe in detail, using as a guideline > 6 clinical contact hours but < 2 years. Clinicians received a \$200 honorarium for their participation, which took approximately two hours.

Of the 950 clinicians, 236 described an adolescent patient whom they had strong reason to believe had experienced “lengthy traumatic separations from primary caregiver for more than 6 weeks” 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 (e.g., from discussions with caregivers or chart data from residential facilities), that the patient had actually experienced traumatic separations. We deliberately chose to favor false negatives when clinicians lacked enough knowledge of the patient’s history, to avoid high rates of false positives. Clinicians also indicated an age range of when the separation occurred and how traumatic they perceived the separation to be for the patient. Separations resulting from divorce or parental death were assessed with separate questions. 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 (i.e., separations), given that they provided data on thousands of variables.

Measures

Shedler-Westen Assessment Procedure 200-item Q-sort for Adolescents (SWAP-II-A)—This Q-sort instrument assesses adolescent personality by relying on the skills of an experienced clinical observer. Clinicians rank-order 200 statements describing adolescent personality characteristics into eight categories based on applicability to the patient, from those that are not true or descriptive of the patient (assigned a value of 0) to those that are highly descriptive (assigned a value of 7). The SWAP-II-A shows considerable evidence of reliability and validity, predicting a range of measures of adaptive functioning (e.g., history of hospitalizations, school performance, violence), psychopathology (e.g., the CBCL), etiological variables (e.g., childhood history of abuse, family history of internalizing and externalizing disorders), and personality as assessed by independent interviewers blind to clinician data (Westen & Muderrisoglu, 2003; Westen & Shedler, 1999a, 1999b; Westen, Shedler, Durrett, Glass, & Martens, 2003).

The SWAP also demonstrates strong cross-observer validity. In a study with adult patients the correlations between independent observations from research interviewers and treating clinicians ranged from .50 to .90 range across scales, samples, and studies (Westen, Shedler, Bradley, & DeFife, 2012b). In addition, the self-identified theoretical orientation and professional degree of the clinician have little impact on the way they use the instrument (Shedler & Westen, 2004a, 2004b).

Clinical Data Form for Adolescents (CDF-A)—The CDF-A is a checklist designed for experienced clinical observers that assesses a range of variables relevant to demographics, diagnosis, and etiology (e.g., Westen & Shedler, 1999a; Westen et al., 2003). After providing

demographic data on themselves and the patient, clinicians rate the patient's adaptive functioning on a number of dimensions, such as school performance and peer relations. The next section of the CDF-A assesses aspects of the patient's developmental and family history such as history of foster care, family stability, physical and sexual abuse, and family history of psychosis. Previous studies using adult and adolescent samples demonstrate that clinicians' judgments on current adaptive functioning and family and developmental history variables predict theoretically relevant criterion variables (Dutra, Campbell, & Westen, 2004; Nakash-Eisikovits, Dutra, & Westen, 2002) as well as demonstrating high correlations between clinician-report and self-report data (most ranging from $r = .50-.70$) (DeFife, Drill, Nakash, & Westen, 2010).

Axis II Checklist—To generate both categorical and dimensional DSM-IV PD diagnoses, we presented clinicians with a randomly ordered checklist of the criteria for all Axis II disorders. To create categorical diagnoses, we applied DSM-IV decision rules to the present/absent data. To generate dimensional diagnoses that mirror those used in the PD literature, we summed the number of criteria judged present for each disorder.

Results

The 236 clinicians (61.1% male, 66.8% psychologists) who described an adolescent with traumatic separations prior to age 16 were similar to the overall sample of 950 clinicians in terms of theoretical orientation, with roughly half describing themselves as integrative or eclectic (as most adolescent clinicians are) roughly 40% describing themselves as either psychodynamic or cognitive-behavioral (in equal numbers), and most of the remainder describing their orientation as primarily biological. On average, clinicians were highly experienced, with 18.17 years ($SD = 8.47$) post-residency or post-licensure, and knew their patients well ($M = 12.48$ months of clinical contact, $SD = 10.83$).

Characteristics of Adolescent Patients with Histories of Traumatic Separations

Patients with histories of traumatic separations were split evenly by gender (49.4% female). Table 1 compares adolescents with traumatic separations to adolescents without traumatic separations across a number of domains. As seen in Table 1, the adolescents with separations were less likely to be Caucasian, were on average of lower socioeconomic status, and were more likely to be seen in the context of private practice compared to adolescents without separations. The adolescents with separations also had higher rates of PTSD and externalizing Axis I psychopathology. In terms of number of Axis II symptoms, the adolescents with separations had higher symptom counts of all four Cluster B PDs and Paranoid PD.

A Composite Portrait of Adolescents with Histories of Traumatic Separations

To obtain a composite portrait of the personalities of adolescents with traumatic separations, the SWAP-II-A profiles of the 236 adolescents with separations were averaged, and items were arranged in order 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-A Q-sort. The composite portrait in Table 2 depicts an adolescent who is emotionally dysregulated, angry, and unhappy. Interpersonal relationships with peers and authority figures are a struggle for these adolescents, and they tend to feel like “outsiders” who are misunderstood. Within relationships they tend towards having unstable representations and vacillate in their perceptions of others. They are also likely to project their own negative qualities on to others and lack insight into their own behavior. Compared to the adolescent patients without separations, the group with separations showed more externalizing features (e.g., hostility, anger, defiance) and fewer close relationships (see Table 2). This portrait should be highly familiar both to clinicians and to researchers who have studied attachment disruptions, such as children placed in orphanages, over the last 60 years (Freud & Burlingham, 1974; Spitz, 1965; Zeanah, Gunderson, Marino, Schwartz, & Frankenburg, 1989).

While the composite portrait provides a broad conceptualization of adolescents with traumatic separations, it may mask differences among subtypes of these adolescents who may function differently from one another depending on alternative developmental pathways guided by genetics, environmental events, and their interactions.

Q-analysis and Personality Subtypes with Adolescent Personality Constellations

We applied Q-factor analysis to see if we could identify clinically meaningful personality subtypes of adolescents with traumatic separations. Q-factor analysis is a statistical procedure for grouping together cases (individuals) who have a similar personality profile across the 200 items. This method has proven useful in the study of normal and pathological personality, in part because it does not require the assumption of mutually exclusive types (Block, 1978, 2008; Caspi, 1998; Robins, John, Caspi, Moffitt, & Stouthamer-Loeber, 1996). Thus, a patient can resemble one or more subtypes (prototypes) to varying degrees. This results in each subject having a score on every subtype indicating the extent to which he or she resembles the prototype.

Using standard exploratory factor-analytic procedures (see Tabachnick & Fidell, 2007), we first entered the data into a principal components analysis, specifying eigenvalues ≥ 1 (Kaiser's criteria). The scree plot, percent of variance accounted for, and parallel analysis (Horn, 1965; O'Connor, 2000) were used to determine the number of Q-factors to rotate. Visual analysis of the scree plot indicated a clear change in slope between the 5th and 7th factor. Based on these analyses, Q-factor analyses using Unweighted Least Squares (ULS) with a Promax (oblique) rotation were conducted for 5, 6, and 7 factor solutions. The Promax rotation allows for an orthogonal solution to be rotated again in order to allow some correlations between factors. The ULS extraction minimizes the squared residuals between the input and output correlation matrices, with communalities derived from the solution itself (Tabachnick & Fidell, 2007). The 6 factor solution yielded 5 coherent personality subgroups, accounting for 38.08% of the variance (17.93%, 9.17%, 4.80%, 3.40%, 2.80% for each Q-factor, respectively), although multiple solutions and algorithms identified similar personality constellations¹. The median correlation among factors was .06 (range: -.06 to .19), suggesting substantial differences in personality among different kinds of patients exposed to the same childhood stressor. Based on the items within the factors, we labeled the

subtypes “psychopathic,” “internalizing/ avoidant,” “impulsive dysregulated,” “resilient,” and “immature dysregulated.”

Table 3 shows the 18 items that best characterized each subtype. The items with the highest factor scores on each subtype are arranged in descending order, expressed in standard deviation units. A brief description of each subtype follows.

Psychopathic—These adolescents are angry, manipulative, impulsive, and arrogant. They lack empathy, are critical of others, yet feel misunderstood themselves. They tend to be “defiant toward authority figures” and lack close friendships or relationships. They show “little or no remorse for harm or injury caused to others,” are “impervious to consequences,” and they “have little investment in moral values.”

Internalizing/avoidant—These adolescents have feelings of unhappiness, emptiness, inadequacy, anxiety, and helplessness. They 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.” They are also characterized by lack of “satisfaction or enjoyment” and the tendency to feel that “life has no meaning.”

Impulsive dysregulated—These adolescents have the tendency to engage in a number of risky behaviors including abusing alcohol or drugs, sexual promiscuity, self-mutilation, and running away from home. They “tend to act impulsively,” “seek thrills, novelty, and excitement,” and have emotions that “spiral out of control, leading to extremes.” Within relationships, they tend to surround themselves with “peers who are delinquent”; their “relationships tend to be unstable”; they tend to “become attached quickly or intensely.” Finally, they tend to be unable to soothe themselves without the help of another person.

Resilient—These adolescents are articulate, assertive, conscientious, and energetic. They enjoy challenges and gain recognition for accomplishments. At times they have the tendency to be anxious. Within relationships they are well liked, empathic, capable of intimacy, and can “recognize alternative viewpoints.” These teenagers may have the tendency to express anger indirectly or passively.

Immature dysregulated—These adolescents appear childish for their age and when upset they become “irrational” and “tend to revert to earlier, less mature ways of coping.” They tend to have emotions “that spiral out of control” and “change rapidly and unpredictably.” They are prone to intense anger, have little psychological insight, are needy and dependent, and think in concrete terms. Within their relationships, they lack social skills, feel misunderstood, and have difficulty making sense of others’ behavior. They fear rejection and abandonment, and are unable to soothe themselves without the help of another person.

¹The initial pre-rotation eigen values for each of the 6 Q-factors within this solution were 42.83 (18.15% variance), 22.18 (9.40%), 11.87 (5.03%), 8.58 (3.63%), 7.19 (3.04%), 6.14 (2.60%). The six-factor solution (in this case, retaining five of six Q-factors from the six Q-factor analysis solution) was chosen because of the strength of the primary loadings and the theoretical coherence of the results. The five-factor solution yielded results that although similar to the final subtypes, were less conceptually clear.

Validating the Personality Subtypes

The goal of the next set of analyses was to provide an initial test of the construct validity of the personality style. We tested specific predictions about patterns of association with criterion variables that should distinguish them (Andreasen, Endicott, Spitzer, & Winokur, 1977; Westen & Muderrisoglu, 2003). Criterion variables included Axis I and II psychopathology, individual history variables (e.g., history of abuse), and family history variables (e.g., substance abuse). 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. We anticipated that results with adolescent patients would follow similar patterns, to those identified by Malone et al., (2011) who examined associated features of personality subtypes of adults with histories of attachment disruptions. This previous study, found that the adult Psychopathic subtype had elevated levels of externalizing pathology, histories of physical abuse, and criminality. The Internalizing/Avoidant adults had elevated levels of internalizing pathology and with the exception of the Resilient subtype were the most well-adjusted in terms of current functioning. The adult Resilient subtype showed the lowest levels of psychopathology and the highest levels of adaptive functioning. The adult sample had a single Emotionally Dysregulated subtype, which had elevated levels of depression, substance use, and borderline personality pathology. This adult subtype also had elevated levels of histories of childhood sexual abuse and suicidal behavior. We expected that in our sample, the Impulsive Dysregulated subtype would most resemble the Emotionally Dysregulated subtype identified in adulthood. The Immature Dysregulated subtype that emerged in the adolescent sample was expected to show fewer externalizing symptoms (e.g., substance use and conduct disorder) and show features of interpersonal avoidance and awkwardness in conjunction with emotional lability. This is consistent with the work of Rutter and colleagues (2007) who identified deficits in theory of mind and the perception of reading emotional cues in some children who were followed longitudinally after being adopted from Romanian orphanages.

To test the *a priori* hypotheses, the personality subtypes were treated categorically. Adolescents were assigned to the subtype on which they had the highest factor loading, presuming (1) the loading was $> .35$, which indicates considerable match to the diagnostic prototype; and (2) the primary loading was $> .10$ higher than any secondary loading. (This method of assigning cut-offs to factor scores is described by DiStefano and colleagues, [2009]). Thus, patients who did not load highly on any factor or loaded highly on multiple factors were not included. Using this approach, 159 (67.4%) of the 236 adolescents were classified².

Demographic Variables by Subtype

Analysis of variance (ANOVA) was used to identify any differences between the subtypes on age, sex, and socioeconomic status and a Chi-Square Analysis was utilized to look at

²Of the unassigned adolescents, 46% did not load at $.35$ or above on any subtype, 14% loaded highly on both the psychopathic and impulsive dysregulated subtypes, 10% loaded on the psychopathic, impulsive dysregulated, and immature dysregulated subtypes, 5% loaded on both the impulsive dysregulated and immature dysregulated and 5% loaded on both the internalizing/avoidant and immature dysregulated subtypes.

differences on race. Subtypes differed significantly by sex ($F(4,154)= 5.80$, $MSE=1.3$, $p=.000$, effect size $r=.36$) and age ($F(4,153)= 3.22$, $MSE=8.11$, $p=.01$, $r=.28$), but not by socioeconomic status ($F(4,153)= 2.42$, $MSE=2.88$, $n.s.$, $r=.24$) or race and ethnicity ($X^2(16, N=159)= 25.93$, $n.s.$). (See Table 4 for demographic variables broken down by subtype.) Notable gender differences common to both samples were that psychopathic subtype was substantially male, while the impulsive dysregulated subtype was substantially female. Patients were also compared by characteristics of the traumatic separation but did not differ significantly by age of separation ($F(4,154)= .59$, $MSE=.16$, $n.s.$, $r=.16$) or by the clinician's rating of the separation's traumatic impact on a scale of 1–5 ($F(4,153)= 1.06$, $MSE=1.26$, $n.s.$, $r=.13$).

Contrast Analyses

To validate the subtypes, we used contrast analysis to test *a priori* hypotheses. Contrast analysis maximizes power, reduces the likelihood of spurious findings that occur when running multiple analyses; and testing highly specific, focal, one-tailed (directional) hypotheses about the relative ordering of group means instead of more global questions that do not specify in advance *how* the groups may differ (Rosenthal, Rosnow, & Rubin, 1999). Thus, instead of asking, “Do the subtypes differ in features of borderline PD?”, contrast analysis asks questions such as, “Are the two emotionally dysregulated groups higher on borderline features than the other subtypes, and is the resilient group lowest in borderline pathology, given the level of pathology associated with borderline PD?” Thus the contrast analyses allowed us to make hypotheses regarding the relative ordering of group means (represented by contrast weights) on various Axis I and II disorders, adaptive functioning, developmental history, and family history variables.

The hypotheses regarding the different domains of criterion variables are presented in numeric form as contrast weights in Table 5. For example, the contrast weights for adolescent Major Depressive Disorder (MDD) of 0, 2, 2, –6, 2 represent the *a priori* hypothesis that the two emotionally dysregulated subtypes and the internalizing/avoidant subtype would have the highest rates of MDD (2), followed by the psychopathic subtype (0), and then lastly the resilient subtypes (–6). This hypothesis was developed taking into account research studying 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). As another example, the contrast weights for adolescent Conduct Disorder (CD) of 3, –4, 3, –3, 1 indicated that the psychopathic and impulsive dysregulated subtypes were expected to have the highest rates of CD (3), followed by the immature dysregulated subtype (1), with the resilient (–3) and internalizing subtypes (–4) expected to have the lowest rates. This hypothesis was supported by data suggesting that antisocial behavior is associated with both deficits in empathy and impulsivity (Blair, Peschardt, Budhani, & Pine, 2006; Burt & Donnellan, 2008; Moffitt, 2006).

Axis I and II variables were dummy coded (0/1), resulting in means that correspond to percentages (e.g., percent of patients with major depression within each subtype). Lunney (1970) has supported that use of dichotomous dependent variables for use in ANOVAs. All

other variables were similarly dummy-coded with the exception of global adaptive functioning, early-onset delinquency, and number of confidants, which were treated as continuous variables. The global adaptive functioning composite variable was created by averaging the standardized ratings of GAF, level of personality functioning, quality of peer relationships, and school functioning. The early-onset delinquency variable was a composite variable created by averaging the standardized ratings of arrests, violence, torturing animals, stealing, and fire setting. Number of confidants was coded on a 1 to 4 scale (1=none, 2= very few, 3= some, 4= many). Because the subtypes significantly differed on age and gender, these variables were controlled for in secondary analyses, which yielded the same patterns of significant findings.

Table 5 presents the results of the contrast analyses and corresponding effect sizes (r). We utilize r rather than d based on the recommendations of Rosnow and colleagues (2000) for calculating effect sizes when there are more than two groups. With regard to Axis I psychopathology, analyses supported expected associations of Major Depression, Substance Use Disorder, Oppositional Defiant Disorder, and Conduct Disorder vis-à-vis subtypes. Effect sizes for these analyses ranged from $r = .39-.65$ (medium to large). Expected findings regarding Generalized Anxiety Disorder (GAD) were not supported. While rates of 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 may be one of the residues of disrupted attachment in the resilient group. In addition, rates of Attention Deficit Hyperactive Disorder (ADHD) did not differ across subtypes.

With regards to Axis II psychopathology, all hypotheses were supported, with corresponding effect sizes ranging from $r = .42-.60$ (medium to large). The psychopathic subtype had the highest rate of Antisocial PD (67%), while the Impulsive Dysregulated had relatively high rates of both Antisocial PD (63%) and Borderline PD (67%). As expected, the Internalizing/Avoidant subtype had the highest rates of Avoidant PD (47%).

Contrast analyses also supported *a priori* hypotheses for global adaptive functioning and developmental history. Individuals with high loadings on the resilient subtype had the highest global adaptive functioning. The lowest functioning subtypes were psychopathic and emotionally dysregulated (including both the immature and impulsive dysregulated subtypes). Support for numbers of confidants were mixed. History of criminal activity was highest among the psychopathic subtypes, and history of suicide attempts was higher among the emotionally dysregulated subtypes (impulsive 75%; immature 53%). With regards to physical and sexual abuse, rates were elevated across expected subtypes. The highest rates of physical abuse occurred within the immature dysregulated (59%) and impulsive dysregulated (50%) subtypes.

Finally, regarding family history, 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 suicidality but not family history of illicit drug use.

Incremental Validity of the Traumatic Separation Personality Dimensions

The final set of analyses tested the incremental validity of these personality dimensions in predicting global adaptive functioning while holding constant demographic variables and a composite childhood trauma variable. The childhood trauma composite was created by averaging the standardized ratings of presence of childhood physical abuse, childhood sexual abuse, witnessing violence between parents, involvement of state agencies charged with protection of children, and maternal history of sexual abuse. Personality dimensions were treated as continuous variables for these analyses. Using hierarchical multiple regression, demographic variables (age, sex, race, and socioeconomic status) were included in the first step of the model, the childhood trauma composite variable was included in the second step, and the personality dimensions were placed in the third step. These analyses included the dimensional scores for all 236 adolescent patients.

As can be seen in Table 6, the demographic variables and the composite childhood trauma variable together accounted for a substantial amount of variance in functioning (18%). Of the demographic variables, socioeconomic status was the main predictor of functioning. However, in step 3 of the model, the personality dimensions added substantially to prediction, accounting for 36% more of the variance.

Discussion

The aim of this research was to identify personality subtypes of adolescents with traumatic attachment separations and then to provide initial validity data using contrast analyses, correlational analyses, and hierarchical linear regression. Consistent with a previous study of personality in adults with traumatic separations (Malone et al 2011), the sample converged on *psychopathic*, *internalizing/avoidant*, *dysregulated*, and *resilient* subtypes. The difference between the adolescent and adult samples was that the adolescent sample produced two types of dysregulated patients, one more impulsive and the other more immature, whereas the adult sample produced a hostile/paranoid subtype.

Our findings support the work of Bowlby (1973) who as part of attachment theory emphasized the relevance of traumatic separations to personality development. Bowlby posited that attachment styles developed in early relational contexts would relate to specific personality styles later in life. For example, that the anxious-ambivalent attachment strategy might be associated with a personality style that was clingy, anxious, and demanding. In contrast, the anxious-avoidant attachment strategy could be related to a personality style that lacked warmth and connectedness within interpersonal relationships. Our research highlights the range of personality styles that may develop in adolescents with histories of attachment disruptions.

The SWAP items provided a portrait of each subtype. Adolescents with separation histories who matched the psychopathic subtype (primarily male) tended to be rebellious, angry, and lacking in empathy for others. The internalizing/avoidant subtype was characterized by depressed mood, low self-esteem, and feelings of being an “outsider.” The impulsive dysregulated subtype (primarily female) was characterized by emotions that spiral out of control, unstable relationships, and difficulty with self-soothing. Other features central to

this subtype included substance abuse and sexual promiscuity. While the immature dysregulated group was similarly characterized by “emotions that spiral out of control,” these adolescents tended to be childish and have difficulty thinking in complex and insightful ways about their own mind and the minds of others. Finally, the resilient subtype was by far the healthiest, showing a capacity for emotional relatedness to others and goal-directed behavior but significant residual anxiety.

Contrast analyses provided strong support for the subtyping. Subtypes differed by DSM-IV diagnoses. For example, the psychopathic subtype was associated with Antisocial PD, Conduct Disorder, and Oppositional Defiant Disorder. The internalizing/avoidant subtype was associated with Avoidant PD and Depression. The impulsive dysregulated subtypes were strongly associated with Borderline PD. However, some results were different than expected. For example, the subtypes were not differentiated based on GAD. Interesting, this finding was also found in the study examining subtypes of adults with histories of separations (Malone et al., 2011). Although not significant, the resilient subtype had the highest rates of GAD. From an attachment theory perspective, it may be that higher anxiety serves as a protective factor in children with histories of separations as anxiety is central in maintaining contact and safety in the face of threats to security/survival (Bowlby, 1969). The subtypes were also not significantly differentiated by ADHD. This suggests that the impulsivity that is a feature of some of the personality subtypes is unlikely to be attributable to an Axis I ADHD diagnosis but instead is a facet of personality.

Criterion variables related to adaptive functioning, developmental history, and family history also supported validity of the subtypes. As expected, the emotionally dysregulated and the psychopathic subtypes demonstrated the lowest global adaptive functioning, whereas the resilient subtype predictably showed the highest.

In terms of number of confidants, the resilient group, as expected, was characterized by a greater number of close relationships than the other subtypes. The psychopathic subtype had fewer confidants, as did the immature dysregulated patients, whose childishness and underdeveloped social skills characteristic appear to limit their capacity to form rich, mutual relationships. The deficits in reflective functioning (i.e., thinking about others' mental states) characteristic of this subtype may relate to the longitudinal research following Romanian adoptees, which has identified a subgroup who have persistent underdeveloped abilities with both theory of mind and perceptions of emotional expression in others, resulting in poor peer relationships (Rutter et al., 2007). The number of confidants within the internalizing/avoidant subtypes was higher than expected, perhaps attributable to the lack of severity associated with the subtype in global functioning. Although shy, these adolescents appear still to be able to form some meaningful relationships.

Rates of criminality and early-onset delinquency followed the expected patterns. Given the literature on fledgling psychopaths (Frick, Stickle, Dandreaux, Farrell, & Kimonis, 2005), the high rates of early and severe externalizing behavior associated with this subtype were not surprising. Similarly, the impulsive behaviors associated with Borderline pathology suggest that emotional dysregulation, particularly in adolescents, would also predispose to participation in illicit activity (Fonagy et al., 1997).

Sexual abuse related most strongly to the impulsive dysregulated subtype. These results are consistent with previous research linking childhood sexual abuse to Borderline PD, which is characterized by dysregulated affect (Bandelow et al., 2005; Gratz, Tull, Baruch, Bornova, & Lejuez, 2008; Laporte, Paris, Guttman, & Russell, 2011; Zanarini, 1997). A growing literature suggests that multiple interpersonally traumatic developmental antecedents are associated with affective dysregulation. Overall, developmental history variables were associated with the subtypes in ways that were consistent with theory and research.

A family history of an anxiety disorder did not differentiate the subtypes in either the present sample or a similar adult sample of patients with early histories of traumatic separations. Subtypes were, however, distinguished by family history of criminality, with the psychopathic subtypes showing the highest rates. This is consistent with research on the heritability of both callous-unemotional traits and the absence of empathy common to psychopathy (Blair et al., 2006; Wootton, Frick, Shelton, & Silverthorn, 1997). From a diathesis-stress perspective, it may be that individuals who were already vulnerable to developing this personality style were at increased risk following the experience of traumatic separations and other correlated risk factors. In this case, a genetic predisposition for psychopathy may 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 genes that predispose their children to early-onset delinquency may be more likely to abandon their children.

Incremental Validity

Perhaps the strongest validity analyses, because they are the most conservative, reflect the incremental validity of the personality dimensions in predicting adaptive functioning after controlling for demographic variables and histories of other childhood traumatic events. Socioeconomic status unsurprisingly predicted a substantial portion of the variance in global adaptive functioning. However, even when controlling for this and other demographic variables known to be associated with adaptation and maladaptation, as well as history of other forms of childhood trauma, personality subtypes predicted a substantial portion of incremental variance in functioning.

These analyses (particularly the standardized betas) revealed that impulsive dysregulated and psychopathic features were significant predictors of lower functioning, whereas the resilience dimension was a predictor of higher functioning. The findings on the personality characteristics of the teenagers who labeled “resilient,” which can be assessed with the SWAP-II-A despite their complexity, are consistent with longitudinal research from Hauser and Allen (2006) who studied the narratives of at-risk youth. They identified agency, persistence, self-esteem, complexity of thought, and narrative coherence—all characteristic of the resilience dimension—as descriptive qualities of adolescents who became higher functioning.

Limitations

This research had several limitations. First, data in this study were cross-sectional, making it impossible to make a causal statement about the impact of separations on personality. To what extent pre-existing temperament predisposed traumatized children to particular paths of adaptation and maladaptation, or the separations alone set many children off on problematic developmental pathways, cannot be answered based on these data. Nevertheless, it is striking, however, that such similar subtypes emerged as those found in an adult sample (Malone et al., 2011).

This study also relied on a single informant (the treating clinician) to describe each patient. Future research should use multiple informants to test further the validity of the subtypes and insure that rater variance was not accounting for the substantial evidence of validity we identified. However, previous research using the SWAP to assess specific dimensions of personality (rather than broader diagnostic judgments) in both adults and adolescents has demonstrated strong reliability and cross-observer correlations (e.g., between treating clinicians, independent interviewers, the patient) that reflect a healthy mixture of true variance and generally very smaller observer effects (Blagov, Bi, Shedler, & Westen, in press; Westen & Muderrisoglu, 2003; Westen, Shedler, Bradley, & DeFife, 2012a).

The study also suffered from a lack of specific information regarding the nature of the separation. While 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, the availability, familiarity, and quality of care and support from other adults very likely varied a great deal between subjects during the separation. In addition, the specific reasons for the separation (e.g., parental illness, incarceration, deployment in combat) are likely to have important and influential meanings for a child's developing sense of self and the world. In addition, future research would also benefit from understanding how an individual's specific attachment strategy or internal working model, mediates the relationship between a traumatic separation and the development of personality. Attachment disruptions may shape personality development via these relational schemas (Crawford et al., 2006; Shaver & Mikulincer, 2005; Westen, Nakash, Cannon, & Bradley, 2006).

Finally, data were from a clinical sample, limiting its generalization to a non-clinical population, which may or may not be a limitation, depending on the samples to which researchers and clinicians want to apply the SWAP-II-A. However, these data have unique ecological validity for understanding the clinical presentations of patients presenting for treatment with attachment disruptions. The findings may be valuable for empirically guiding the clinical understanding of the substantial percentage of clinically referred teenagers with a history of severe and traumatic separations.

Conclusion

The presence of personality subtypes among adolescents with histories of traumatic separations has important clinical implications for both case formulation and intervention. It

provides support for both being thoroughly attentive to developmental history variables and also completing an assessment of personality characteristics in adolescent patients. Ignoring the presence of personality pathology or resilience in adolescents with histories of traumatic separations would likely result in losing information central to providing a broad contextual framework for both guiding the treatment and understanding of the presenting symptomatology. For example, the adolescent processing the impact of an attachment disruption who has internalizing features may need the therapist to take a different approach than an adolescent with a similar history who has more psychopathic or alternatively dysregulated features. Each adolescent may have a different way of experiencing relationships and a sense of the developing self that is tied to personality. Considering personality features in these adolescent patients may be essential to understanding their navigation of developmental tasks regarding individuation and developing autonomy, which are particularly salient when normative experiences of separation and reunion were disrupted in early childhood. Finally, this research adds to a growing body of literature linking attachment theory and research to the study of personality development.

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Table 1
 Characteristics of Adolescent Patients with and without Childhood Traumatic Separations from Attachment Figure*

	Adolescents with Traumatic Separations (N = 236)	Adolescents without Traumatic Separations (N=714)	Sig.	Time in treatment (months) Mean (SD)	Adolescents with Traumatic Separations (N = 236)	Adolescents without Traumatic Separations (N=714)	t (df)	Sig.
<i>Race^d</i>			<.01					
Caucasian	66.0	82.9		GAF - Mean (SD)	12.9 (10.8)	12.3 (9.9)	-.20 (934)	.84
African American	13.6	5.9			54.9 (9.9)	57.4 (9.7)	3.39 (944)	.001
Hispanic	12.8	5.3		<i>IQ</i>	106.6 (14.2)	112.0 (14.3)	5.04 (935)	.000
Asian	3.0	2.5		<i>Comorbid Axis I Disorders</i>				
Biracial or Other	4.7	3.4		Major Depression	28	27	-.14 (947)	.89
<i>SES^d</i>			<.01	Dysthymia	40	41	.34 (947)	.73
Poor	17.5	2.1		Bipolar	8	7	-.32 (947)	.75
Working class	32.9	14.7		GAD	8	16	3.8 (947)	.000
Middle class	28.6	44.7		PTSD	25	8	-5.77 (947)	.000
Upper middle class	15	32.4		Social Phobia	5	9	2.25 (947)	.025
Upper class	6	6		Substance Use Disorder	25	15	-3.22 (944)	.001
<i>Age^d</i>			.24	ADHD	31	27	-1.16 (947)	.24
13	15.8	12.8		Conduct Disorder	22	12	-3.49 (947)	.001
14	16.2	14.7		ODD	40	32	-2.29 (946)	.02
15	15.4	19.1		<i>Comorbid Axis II (number of symptoms)</i>				
16	17.9	22.9		Paranoid PD	1.53	1.21	-2.40 (942)	.02
17	20.9	16.5		Antisocial PD	2.63	1.76	-5.57 (942)	.000
<i>Setting^d</i>			<.01	Borderline PD	3.26	2.61	-3.83 (942)	.000
Private practice	49.6	77.0		Narcissistic PD	2.40	1.85	-3.00 (942)	.003
Clinic/hospital outpatient	23.9	16.3		Histrionic PD	2.01	1.66	-2.39 (942)	.02
Inpatient/partial program	3.4	1.7		Avoidant PD	1.80	2.36	3.22 (942)	.003
Residential facility	12.8	1.1						
Forensic	5.1	1.1						
Other	5.1	2.8						

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Data are percentages unless otherwise specified
*
Subscript a denotes significance from Chi-square test

Table 2

Composite SWAP-II-A Description of Adolescents with Traumatic Separations from Attachment Figure (N = 236)

SWAP Items	Mean ranking
Tends to feel unhappy, depressed, or despondent.	3.86
Tends to feel misunderstood, mistreated, or victimized.	3.81
Tends to be impulsive.	3.69 *
Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc.	3.69
Is rebellious or defiant toward authority figures; tends to be oppositional, contrary, quick to disagree, etc.	3.67 *
Tends to be angry or hostile (whether consciously or unconsciously).	3.64 *
Tends to blame own failures or shortcomings on other people or circumstances; attributes his/her difficulties to external factors rather than accepting responsibility for own conduct or choices.	3.60 *
Tends to fear s/he will be rejected or abandoned.	3.39
When upset has trouble perceiving the same 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.)	3.33 *
Tends to be manipulative.	3.28 *
Attempts to avoid feeling helpless or depressed by becoming angry instead.	3.28 *
Lacks close friendships and relationships.	3.15 *
Is prone to intense anger, out of proportion to the situation at hand.	3.15 *
Tends to be unreliable and irresponsible (e.g., may fail to meet school or work obligations).	3.13
Has little psychological insight into own motives, behavior, etc.	3.11
Tends to give up quickly when frustrated or challenged.	3.10
Is articulate; expresses self well in words.	3.00
Tends to feel like an outcast or outsider.	3.00

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

Table 3**Personality Subtypes of Adolescents with Traumatic Separations from Attachment Figures in Childhood**

<i>Q factor 1- Psychopathic</i>	<i>Mean</i>
Is rebellious or defiant toward authority figures; tends to be oppositional, contrary, quick to disagree, etc.	3.35
Tends to blame own failures or shortcomings on other people or circumstances; attributes his/her difficulties to external factors rather than accepting responsibility for own conduct or choices.	2.60
Tends to be angry or hostile (whether consciously or unconsciously).	2.60
Tends to be critical of others.	2.33
Has little empathy; seems unable or unwilling to understand or respond to others' needs or feelings.	2.26
Tends to be manipulative.	2.17
Attempts to avoid feeling helpless or depressed by becoming angry instead.	2.14
Tends to feel misunderstood, mistreated, or victimized.	2.04
Appears impervious to consequences; seems unable or unwilling to modify behavior in response to threats or negative consequences.	2.02
Is prone to intense anger, out of proportion to the situation at hand (e.g., has rage episodes).	2.02
Tends to hold grudges; may dwell on insults or slights for long periods.	1.96
Lacks close friendships and relationships.	1.94
Tends to be unreliable and irresponsible (e.g., may fail to meet school or work obligations).	1.89
Tends to act impulsively (e.g., acts without forethought or concern for consequences).	1.89
Takes advantage of others; has little investment in moral values (e.g., puts own needs first, uses or exploits people with little regard for their feelings or welfare, etc.).	1.89
Experiences little or no remorse for harm or injury caused to others.	1.87
Tends to be dismissive, haughty, or arrogant.	1.81
Tends to be deceitful; tends to lie or mislead.	1.68
<i>Q factor 2- Internalizing/Avoidant</i>	<i>Mean</i>
Tends to feel unhappy, depressed, or despondent.	3.51
Tends to feel s/he is inadequate, inferior, or a failure.	2.68
Tends to feel like an outcast or outsider.	2.44
Is prone to painful feelings of emptiness (e.g., may feel lost, bereft, abjectly alone even in the presence of others, etc.).	2.39
Tends to feel guilty (e.g., may blame self or feel responsible for bad things that happen).	2.28
Tends to be shy or self-conscious in social situations.	2.25
Tends to fear s/he will be rejected or abandoned.	2.23
Tends to feel listless, fatigued, or lacking in energy.	2.17
Appears to find little or no pleasure, satisfaction, or enjoyment in life's activities.	2.15
Tends to feel ashamed or embarrassed.	2.02
Tends to avoid, or try to avoid, social situations because of fear of embarrassment or humiliation.	1.78
Tends to feel helpless, powerless, or at the mercy of forces outside his/her control (beyond what is warranted by the situation).	1.77
Is self-critical; sets unrealistically high standards for self and is intolerant of own human defects.	1.76
Tends to feel anxious.	1.73
Has trouble acknowledging or expressing anger toward others, and instead becomes depressed, self-critical, self-punitive, etc. (i.e., turns anger against self).	1.71
Tends to ruminate; may dwell on problems, replay conversations in his/her mind, become	1.69

<i>Q factor 2- Internalizing/Avoidant</i>	<i>Mean</i>
preoccupied with thoughts about what could have been, etc.	
Tends to be inhibited or constricted; has difficulty allowing self to acknowledge or express wishes and impulses.	1.68
Tends to feel life has no meaning.	1.64
<i>Q factor 3- Impulsive dysregulated</i>	<i>Mean</i>
Tends to act impulsively (e.g., acts without forethought or concern for consequences).	3.13
Tends to abuse alcohol or drugs (beyond what is normative given his/her age, background, etc.).	3.00
Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc.	2.64
Tends to become attached quickly or intensely; develops feelings, expectations, etc. that are not warranted by the history or context of the relationship.	2.44
Tends to surround him/herself with peers who are delinquent or deeply alienated.	2.35
Tends to feel unhappy, depressed, or despondent.	2.31
Tends to seek thrills, novelty, excitement, etc.; appears to require a high level of stimulation.	2.17
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
Is sexually promiscuous for a person of his/her age, background, etc.	2.12
Relationships tend to be unstable, chaotic, and rapidly changing.	2.12
Is unable to soothe or comfort him/herself without the help of another person (i.e., has difficulty regulating own emotions).	1.98
Tends to be sexually seductive or provocative (e.g., may be inappropriately flirtatious, preoccupied with sexual conquest, prone to use his/her physical attractiveness to an excessive degree to gain notice).	1.85
Emotions tend to change rapidly and unpredictably.	1.84
Tends to be unreliable and irresponsible (e.g., may fail to meet school or work obligations).	1.81
Tends to engage in self-mutilating behavior (e.g., self-cutting, self-burning, etc.).	1.79
Tends to run away from home.	1.65
Tends to choose sexual or romantic partners who seem inappropriate in terms of age, status (e.g., social, economic, intellectual), etc.	1.64
Has trouble acknowledging or expressing anger toward others, and instead becomes depressed, self-critical, self-punitive, etc. (i.e., turns anger against self).	1.63
<i>Q factor 4- Resilient</i>	<i>Mean</i>
Has a good sense of humor.	3.24
Tends to be liked by other people.	3.17
Is articulate; can express self well in words.	2.78
Tends to be energetic and outgoing.	2.69
Enjoys challenges; takes pleasure in accomplishing things.	2.68
Is capable of sustaining meaningful relationships characterized by genuine intimacy and caring.	2.64
Is able to assert him/herself effectively and appropriately when necessary.	2.43
Is able to use his/her talents, abilities, and energy effectively and productively.	2.22
Appears comfortable and at ease in social situations.	2.16
Has moral and ethical standards and strives to live up to them.	2.11
Is empathic; is sensitive and responsive to other peoples' needs and feelings.	2.08
Tends to be conscientious and responsible.	1.96
Has areas of accomplishment or achievement other than school (e.g., sports, music, etc.) for which s/he gains considerable recognition.	1.93

<i>Q factor 4- Resilient</i>	<i>Mean</i>
Generally finds contentment and happiness in life's activities.	1.82
Tends to feel anxious.	1.70
Has the capacity to recognize alternative viewpoints, even in matters that stir up strong feelings.	1.65
Finds meaning and satisfaction in the pursuit of long-term goals and ambitions.	1.63
Tends to express anger in passive and indirect ways (e.g., may make mistakes, procrastinate, forget, become sulky, etc.).	1.60
<i>Q factor 5- Immature Dysregulated</i>	<i>Mean</i>
Seems childish for his/her age (e.g., acts like a younger child or primarily chooses younger peers).	2.87
Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc.	2.84
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.).	2.64
When distressed, tends to revert to earlier, less mature ways of coping (e.g., clinging, whining, having tantrums).	2.49
Has little psychological insight into own motives, behavior, etc.	2.40
Tends to be needy or dependent.	2.38
Tends to think in concrete terms and interpret things in overly literal ways; has limited ability to appreciate metaphor, analogy, or nuance.	2.16
Tends to have extreme reactions to perceived slights or criticism (e.g., may react with rage, humiliation, etc.).	2.14
Is unable to soothe or comfort him/herself without the help of another person (i.e., has difficulty regulating own emotions).	2.07
Tends to become irrational when strong emotions are stirred up; may show a significant decline from customary level of functioning.	2.03
Lacks social skills; tends to be socially awkward or inappropriate.	1.97
Has difficulty making sense of other people's behavior; tends to misunderstand, misinterpret, or be confused by others' actions and reactions.	1.94
Emotions tend to change rapidly and unpredictably.	1.93
Is prone to intense anger, out of proportion to the situation at hand (e.g., has rage episodes).	1.90
Tends to blame own failures or shortcomings on other people or circumstances; attributes his/her difficulties to external factors rather than accepting responsibility for own conduct or choices.	1.86
Tends to feel misunderstood, mistreated, or victimized.	1.70
Tends to be ignored, neglected, or avoided by peers.	1.58
Tends to fear s/he will be rejected or abandoned.	1.55

Table 4
Demographic Variables by Adolescent Personality Subtype (in percentages unless otherwise noted)

	<i>Psychopathic</i> (<i>N</i> = 58)	<i>Internalizing/ Avoidant</i> (<i>N</i> = 33)	<i>Impulsive Dysregulated</i> (<i>N</i> = 24)	<i>Resilient</i> (<i>N</i> = 27)	<i>Immature Dysregulated</i> (<i>N</i> = 17)
<i>Age</i> : Mean(SD)	15.12 (1.56)	16.25 (1.22)	16.04 (1.57)	15.59 (1.80)	15.88 (1.93)
<i>Sex</i>					
Female	27.6	57.6	79.2	40.7	41.2
Male	72.4	42.4	20.8	59.3	58.8
<i>Race</i>					
Caucasian	60.3	63.6	66.7	70.4	88.2
African American	24.1	15.2	0	14.8	0
Hispanic	13.8	6.1	25.0	11.1	11.8
Asian	1.7	3.0	4.2	0	0
Biracial or Other	0	12.1	4.2	3.7	0
<i>SES</i>					
Poor	22.4	6.1	17.4	7.4	23.5
Working class	37.9	36.4	30.4	29.6	35.3
Middle class	25.9	30.3	17.4	33.3	29.4
Upper middle class	10.3	15.2	26.1	25.9	11.8
Upper class	3.4	12.1	8.7	3.7	0
<i>Separation</i>					
Early (age 1–6)	29.3	42.4	25.0	33.3	41.1
Traumatic Impact: Mean (SD)	3.48 (1.23)	3.70 (.95)	4.00 (1.1)	3.56(1.05)	3.75 (.78)

Table 5
Axis I and Axis II Comorbidity and Developmental and Family history by Personality Subtype

	<i>Psychopath</i> <i>hic</i> (<i>N</i> = 58) <i>M</i> (<i>SD</i>)	<i>Internalizin</i> <i>g/ Avoidant</i> (<i>N</i> = 33) <i>Mean</i> (<i>SD</i>)	<i>Impulsive Dysregulated</i> (<i>N</i> = 24) <i>M</i> (<i>SD</i>)	<i>Resilient</i> (<i>N</i> = 27) <i>M</i> (<i>SD</i>)	<i>Immature Dysregulated</i> (<i>N</i> = 17) <i>M</i> (<i>SD</i>)	<i>Hypotheses</i> (<i>contrast weights</i>) ^a	<i>t</i> (<i>df</i>)	<i>Sig.</i>	<i>r</i>
Axis I^b									
Major Depressive Disorder	16 (37)	55 (51)	42 (51)	15 (36)	41 (51)	0 2 2 -6 2	3.35 (63.00)	.001	.39
Generalized Anxiety Disorder	2 (13)	9 (29)	8 (28)	19 (40)	12 (33)	-2 3 -1 -2 2	.07 (73.77)	<i>n.s.</i>	.01
Substance Use Disorder	24 (43)	24 (44)	67 (48)	0 (0)	12 (33)	2 -2 3 -4 1	5.88 (47.63)	.001	.65
Conduct Disorder	40 (49)	0 (0)	33 (48)	11 (32)	12 (33)	3 -4 3 -3 1	4.85 (68.17)	.001	.51
Oppositional Defiant Disorder	71 (46)	3 (17)	46 (51)	19 (39)	41 (49)	2 -2 2 -4 2	5.07 (71.42)	.001	.51
Attention Deficit Hyperactive Disorder	33 (47)	12 (33)	29 (46)	30 (47)	18 (39)	1 -2 2 -2 1	.82 (83.31)	<i>n.s.</i>	.09
Axis II									
Antisocial	67 (47)	6 (25)	63 (49)	11 (32)	29 (47)	3 -4 3 -3 1	6.77 (116.97)	.001	.53
Borderline	28 (45)	9 (30)	67 (48)	4 (19)	35 (49)	1 1 3 -8 3	5.63 (57.79)	.001	.60
Avoidant	12 (33)	47 (51)	13 (34)	7 (27)	35 (49)	1 5 -4 -3 1	3.72 (63.23)	.001	.42
Adaptive Functioning and Developmental History									
Global Adaptive Functioning ^c	-.41 (.63)	.19 (.53)	-.37 (.55)	.39 (.55)	-.52 (.36)	-1 0 -1 3 -1	6.92 (40.85)	.001	.73
Number of Confidants ^c	1.93 (.59)	2.18 (.53)	2.29 (.69)	2.41 (.75)	1.76 (.44)	-2 -2 3 5 -4	3.76 (63.39)	.001	.43
Early-Onset Delinquency ^c	.66 (.91)	-.18 (.47)	.43 (.99)	-.12 (.40)	.40 (1.0)	5 -5 4 -5 1	4.88 (59.62)	.001	.53
Suicide History	34 (48)	33 (48)	75 (44)	15 (36)	53 (51)	0 1 3 -5 2	5.65 (66.71)	.000	.57
Physical Abuse	33 (47)	24 (44)	50 (51)	15 (36)	59 (51)	4 1 2 -9 2	3.19 (50.43)	.001	.41
Sexual Abuse	17 (38)	18 (39)	58 (50)	7 (27)	47 (51)	0 0 3 -5 2	4.91 (62.11)	.001	.53
Family History									
Anxiety Disorder	34 (76)	55 (90)	33 (76)	74 (98)	71 (99)	-2 2 1 -2 1	-.07 (97.65)	<i>n.s.</i>	.01
Illicit Drug Use	48 (50)	42 (50)	50 (51)	37 (49)	29 (47)	1 -1 2 -3 1	.63 (64.42)	<i>n.s.</i>	.08
Criminality	41 (50)	9 (29)	21 (41)	15 (36)	18 (39)	3 -3 2 -3 1	2.96 (130.29)	.002	.25
Suicidality	41 (81)	67 (96)	67 (96)	7 (38)	94 (102)	1 1 2 -6 2	4.81 (63.65)	.001	.52

^a Note: Hypotheses are translated into contrast weights in which each number corresponds to the respective factor (in the order shown)

^b Data are percentages unless otherwise specified

Subscript a denotes variables are presented in standard deviation units

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Table 6

Hierarchical Linear Regression Predicting Adolescent Global Adaptive Functioning from Demographic Variables (Step 1), Childhood Trauma (Step 2), and Personality Subtypes (Step 3) (N=236)

Predictor	<u>Stand. b</u>	<u>t</u>	<u>p</u>	<u>R</u>	<u>R²</u>	<u>F change</u>	<u>P change</u>
<u>Step 1</u>				.39	.16	10.46	.001
Age	.06	.94	.35				
Sex	-.02	-.37	.71				
Race/Ethnicity	.09	1.50	.14				
Socioeconomic Status	.38	6.23	.001				
<u>Step 2</u>				.43	.18	.03	.005
Age	.04	.80	.43				
Sex	-.08	-1.49	.14				
Race/Ethnicity	.06	1.34	.18				
Socioeconomic Status	.30	4.43	.001				
Childhood Trauma	-.19	-2.81	.005				
<u>Step 3</u>				.74	.54	34.96	.001
Age	.04	.80	.43				
Sex	-.08	-1.49	.14				
Race/Ethnicity	.06	1.34	.18				
Socioeconomic Status	.21	4.13	.001				
Childhood Trauma	-.08	-1.49	.14				
Psychopathic Subtype	-.20	-2.83	.005				
Internalizing/Avoidant Subtype	-.10	-1.55	.12				
Impulsive Dysregulated Subtype	-.23	-3.99	.001				
Resilient Subtype	.36	6.60	.001				
Immature Dysregulated Subtype	-.10	-1.85	.07				

Note: Global Adaptive Functioning Composite variable = sum of standardized ratings of GAF, personality functioning, quality of peer relationships, school functioning, and social support (# of confidants)