Two subtypes of psychopathic criminals differ in negative affect and history of childhood abuse

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Abstract

Objective—Specification of the etiological mechanisms underlying psychopathy is a key step in developing more effective methods for preventing and remediating the callous and impulsive behavior that characterizes the disorder. Theoretical conceptualizations of psychopathic subtypes propose that a primary variant largely stems from impoverished affect, whereas a secondary variant is hypothesized to develop subsequent to adverse environmental experiences (e.g., childhood maltreatment). However, there has been a dearth of research demonstrating that psychopathic subtypes actually differ in terms of experienced childhood maltreatment in an adult offender population.

Method—The current study employed model-based cluster analysis (MBCA) in a sample of incarcerated, psychopathic males ($n = 110$) to identify subtypes of psychopathic offenders based on a broad personality assessment.

Results—Two subgroups emerged; one with high levels of negative affect (high-NA) and one with low levels of negative affect (low-NA). The high-NA subgroup scored significantly higher on measures of childhood maltreatment.

Conclusion—These results provide support for theoretical conceptualizations of psychopathic subtypes, suggesting that psychopathic offenders with high levels of negative affect experience a greater degree of childhood maltreatment.

Keywords

INTRODUCTION

Psychopathy is a personality disorder characterized by a collection of distinct interpersonal and affective traits (e.g., manipulativeness, callousness), as well as a disinhibited, reckless lifestyle (e.g., impulsivity, irresponsibility). It is estimated that 15% to 25% of the adult prison population meets criteria for psychopathy (Hart & Hare, 1996). Psychopathic

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individuals are significantly more likely to reoffend, both violently and non-violently, than non-psychopathic individuals (Harris, Rice, & Cormier, 1991) and commit a disproportionate amount of crime (Hare, 1998). Psychopathy thus represents a particularly severe disorder with devastating consequences to individuals as well as society.

Though psychopathy is frequently discussed as a unitary construct, there is a longstanding hypothesis that psychopathy can be categorized into two distinct subtypes: primary and secondary. Early theorists proposed that primary psychopathy had strictly innate, biological origins and could be characterized by low levels of anxiety whereas secondary psychopathy developed subsequent to adverse environmental experiences (e.g., childhood maltreatment), and was accompanied by an anxious temperament and high levels of negative affect (Blackburn, 1975; Blackburn & Lee-Evans, 1985; Karpman, 1941; Lykken, 1995; Porter, 1996). Lykken (1996), for instance, theorized that primary psychopathy originates from biological abnormalities and is characterized by fearlessness, pathologically low levels of anxiety, and unemotionality. He proposed secondary psychopathy as a distinct construct that, while phenotypically very similar to primary psychopathy, differs drastically in experience of neuroticism, negative affect and anxiety. Unlike the primary psychopath, Lykken argued that the secondary psychopath often experiences tension and stress during and/or after the commission of crimes. Empirically, there has been fairly consistent support for two distinct subtypes of psychopathy that differ in terms of anxiety and negative affect (Blackburn, Logan, Donnelly, & Renwick, 2008; Claes, Tavernier, Roose, Bijttebier, Smith, & Lilienfeld, 2014; Gill & Stickle, 2016; Hicks, Markon, Patrick, Krueger, & Newman, 2004; Kimonis, Fanti, Isoma, & Donoghue, 2013; Kimonis, Frick, Cauffman, Goldweber, & Skeem, 2012; Olver, Sewall, Sarty, Lewis, & Wong, 2015; Skeem, Johansson, Andershed, Kerr, & Louden, 2007; Skeem, Poythress, Edens, Lilienfeld, & Cale, 2003). Notably, statistical methods of defining subgroups and variables included in these analyses vary considerably across studies, resulting in some inconsistencies in the number of psychopathic groups identified (e.g., Mokros et al., 2015) and the observed personality differences between them (e.g., Kimonis et al., 2012; Olver et al., 2015). In any case, there is a limited number of studies that have examined whether the secondary subtype of adult psychopathic offenders, who exhibit higher levels of anxiety and negative affect, indeed have a greater history of childhood maltreatment.

Beyond establishing whether subtypes of psychopathic offenders differ in terms of abuse histories overall, it may be informative to investigate whether either subtype is particularly associated with specific forms of abuse. There is a large body of work indicating that varying forms of childhood maltreatment (e.g., physical, emotional, sexual) are associated with differential developmental outcomes. For example, there is evidence that childhood *physical* abuse predisposes a person toward aggressive social interactions (Farrington et al., 2006; Forouzan & Nicholls, 2015; Malinosky-Rummell & Hansen, 1993), whereas childhood *emotional* abuse is related to lower self-esteem in adulthood and greater depressive symptomology (Gibb, Chelminski, & Zimmerman, 2007; Gross & Keller, 1992; Infurna, Reichl, Parzer, Schimmenti, Bifulco & Kaess, 2016). Thus, investigating the specific types of maltreatment that offenders experience may help inform the potential etiological pathways by which the experience of trauma contributes to the development of psychopathy.

Accordingly, the goals of the current study are twofold: first, to test the two-subtype model using MBCA in a sample of incarcerated, psychopathic offenders; and second, to examine differences in maltreatment history and type of maltreatment experienced between psychopathic subtypes and a non-psychopathic comparison group.

METHOD

Participants

Participants included $n = 222$ adult males incarcerated at medium-security prisons in Wisconsin. All participants were selected from a larger database of participants who had completed a battery of personality, cognitive, and self-report assessments (e.g., Psychopathy Checklist-Revised, PCL-R; Hare, 2003; Multidimensional Personality Questionnaire-Brief Form, MPQ-BF; Patrick, Curtin, & Tellegen, 2002). While we have been collecting PCL-R and MPQ-BF data for many years (approximately $n = 5,000$ inmates have completed these two measures), we recently added the Childhood Trauma Questionnaire (CTQ) to our standard battery of self-report assessments, and as a result, fewer participants have CTQ data available. Accordingly, we selected all participants in the larger database ($n = 110$) who met criteria for psychopathy (PCL-R 30) and who had PCL-R, MPQ, and CTQ data available. We then randomly selected a similarly-sized sample of participants ($n = 112$) who had MPQ data (to conduct a similar cluster analysis) as well as CTQ data, but did not meet criteria for psychopathy (i.e., PCL-R score < 30) as a control group.[1] Individuals in the larger database were eligible for participation if they were between the ages of 18 and 55, had no documented diagnosis of a psychotic disorder or posttraumatic stress disorder, and were not currently taking psychotropic medications. Additionally, participants were eligible if they had a 4th grade reading level or above and scored a 70 or above on a standardized measure of intelligence (Wechsler, 1981).

Procedure

Each eligible participant first completed two interview sessions and a packet of questionnaires which assessed personality, substance use, childhood maltreatment, and psychological functioning. Participants were reminded at the beginning of each session that their participation was voluntary and confidential. All participants provided informed, written consent prior to beginning data collection. Participants were paid at an hourly rate for their participation.

Psychopathy

The Psychopathy Checklist-Revised (PCL-R) was used to assess psychopathy (Hare, 2003). The PCL-R is a scale of 20 items rated 0–2 based on the degree to which the trait is present. The PCL-R can be further broken into a two-Factor and a four-Facet model. Factor 1 comprises the interpersonal-affective features of psychopathy (Facet 1: interpersonal; Facet 2: affective) whereas Factor 2 taps the lifestyle-antisocial features of psychopathy (Facet 3: lifestyle; Facet 4: antisocial). We computed Factor and Facet scores based on published

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[1]We conducted a MBCA with the non-psychopathic participants and a 4-cluster solution emerged as the best fitting model. Therefore, a single comparison group, rather than high- and low-NA comparison groups, was utilized.

guidelines, including prorating scores for item omission ($n = 6$ participants had missing items due to omission) (Hare, 2003). Trained undergraduates and professional research staff performed all clinical assessments based on information obtained during interviews and reviews of institutional files. A cut-off score of 30 was used to identify "psychopathic" offenders (Hare, 2003). Offenders with PCL-R scores below 30 were assigned to the "non-psychopathic" comparison group. Because participants were selected from a larger database, inter-rater reliability ratings were only available for $n = 19$ participants, but yielded a high intraclass correlation ($r = 0.98$ for PCL-R total scores. This is consistent with previously reported inter-rater reliabilities from our lab (Dargis, Newman, & Koenigs, 2015; Philippi et al., 2015; Wolf et al., 2015).

Personality assessment for MBCA

The Multidimensional Personality Questionnaire-Brief Form (MPQ-BF; Patrick, Curtin, & Tellegen, 2002) is a 155 question, self-report measure of personality traits. The MPQ-BF trait scales are highly correlated with the full MPQ and are consistent with its higher order factors (Patrick et al., 2002). The MPQ-BF consists of 11 primary trait scales: Wellbeing, Social Potency, Achievement, Social Closeness, Stress Reaction, Aggression, Alienation, Control, Harm Avoidance, Traditionalism, and Absorption (see Supplemental Table 1 for descriptions of scales). The subscales can be combined into three higher order dimensions: Negative Affect, Positive Affect, and Constraint. An additional subscale, Absorption, does not load highly on any of the three higher order dimensions (Patrick et al., 2002). For these 11 subscales, Cronbach's α ranged from .75 to .89 ($M = .82$). We selected the MPQ-BF for the MBCA based on its breadth of personality characteristics as well as consistency with previous research (Hicks et al., 2004).

Maltreatment History

The Childhood Trauma Questionnaire (CTQ) was used to assess experienced childhood maltreatment (Bernstein & Fink, 1998). The CTQ is a 28-item scale comprised of five subscales which assess different types of trauma, including physical abuse (e.g., "I was punished with a belt, a board, a cord, or some other hard object"), physical neglect (e.g., "I didn't have enough to eat"), emotional abuse (e.g., "People in my family said hurtful or insulting things to me"), emotional neglect (e.g., "I felt loved" [reverse scored]), and sexual abuse (e.g., "Someone tried to make me do sexual things or watch sexual things"). All subscales consist of five items scored on a five-point rating scale from never true (1) to very often true (5). Two items on the physical neglect scale and all items on the emotional neglect scale are reverse scored. Cronbach's α ranged from .72 (physical neglect) to .92 (CTQ total score). The lower alpha level for the physical neglect scale is consistent with previous studies (Grassi-Oliveira et al., 2014).

Data Analyses

Model-based cluster analysis (MBCA) was performed on the MPQ-BF data using the computer package mclust (Fraley, Raftery, Murphy, & Scrucca, 2012) in the statistical language R (Ihaki & Gentleman, 1996) and the expectation maximization algorithm to classify psychopathic offenders (PCL-R total score 30) into subtypes. The goal of MBCA is to use a fit criterion to estimate the number of subgroups within a sample. As such,

MBCA avoids common criticisms of other clustering techniques (e.g., k means) because the number of clusters is based on the best fit model, rather than a predetermined number. MBCA compares different models with varying assumptions (volume, shape, orientation) about the structure of the data, and a fit index is calculated for each model to determine the best fit model. The models range from very simple (e.g., all parameters are held constant) to the least parsimonious (e.g., all parameters can vary). The mclust package compares ten models to account for the possible covariance structures. If the best fitting model indicates a one-cluster solution, then the observed data is multivariate, normal and does not contain a mixture of subgroups. The fit index used, the Bayesian Information Criterion (BIC), maximizes the best fit model while minimizing the number of parameters being estimated. The mclust package identifies the best fit model as the least negative BIC value. Differences in BIC less than three are typically considered insignificant (see Mokros et al., 2015). Subgroups were then compared on the MPQ variables used to create them, the PCL-R Factor and Facets, and maltreatment history. Means and standard deviations for all personality variables are included in Table 1. Means and standard deviations for CTQ scores are included in Table 2.

RESULTS

MBCA

The best fit model for the psychopathic offenders yielded a two-cluster solution, (Cluster 1, $n = 72$; Cluster 2, $n = 38$) with spherical shape and equal volume (BIC = −3427.67). The BIC values for the other fit models ranged from −5583.98 to −3432.96. The two other closest fitting models yielded BIC values of −3432.96 and −3440.53. Three quarters of the sample had a high probability of correct cluster assignment (90%). These clusters comprise two subgroups of psychopathic offenders.

Comparison of Psychopathic Subgroups

MPQ-BF—The MPQ-BF profile associated with the first subgroup of offenders includes significantly higher levels of Positive Affect subscales $t(108) = −6.59$, $p < .0001$, $d = 1.29$, and Constraint $t(108) = −4.22$, $p < .0001$, $d = .83$; whereas the MPQ profile associated with the second subgroup includes significantly higher levels of the Negative Affect subscales $t(108) = 9.98$, $p < .0001$, $d = 2.06$. Based on these MBCA results, the two subgroups are hereafter labeled "low negative affect (low-NA)" ($n = 72$) and "high negative affect (high-NA)" ($n = 38$).

Demographics—The low-NA subgroup did not differ from the high-NA subgroup on age (low-NA $M = 33.58$, $SD = 7.65$; high-NA $M = 32.84$, $SD = 7.62$), race (low-NA: 38% Caucasian, 59% African American, 3% Other; high-NA: 45% Caucasian, 50% African American, 5% Other), or IQ (low-NA $M = 98.58$, $SD = 13.10$; high-NA $M = 97.90$, $SD = 11.39$).

Psychopathy—The two psychopathic subgroups did not differ on PCL-R total scores or Factor 1 scores, (p's > .2). The high-NA group scored significantly higher on Factor 2 scores, $t(106) = 2.64$, $p = .01$, $d = .54$. Specifically, the high-NA group scored higher on

Facet 3, $t(106) = 3.11$, $p = .002$, $d = .64$. The two groups did not differ on the other three Facets (p's > .3).

Maltreatment History—The high-NA subgroup scored significantly higher on CTQ total scores than the low-NA subgroup, $t(109) = 3.23$, $p = .001$, $d = .61$. Examination of the specific CTQ abuse types revealed that the high-NA subgroup scored significantly higher than the low-NA subgroup on Emotional Abuse, $t(109) = 4.02$, $p = .0001$, $d = .76$; Physical Abuse, $t(109) = 2.48$, $p = .01$, $d = .47$ and Emotional Neglect, $t(109) = 3.10$, $p = .002$, $d = .59$. Subgroups did not differ on Physical Neglect or Sexual Abuse, (p's > .2).

Comparison of Psychopathic Subgroups with Non-Psychopathic Group

Comparisons between psychopathic subgroups and the non-psychopathic comparison group are included in Table 1. To summarize, both psychopathic groups scored significantly higher on the PCL-R, $F(2, 219) = 208.1$, $p < .0001$; Factor 1, $F(2, 219) = 107.1$, $p < .0001$; Factor 2, $F(2, 213) = 95.2$, $p < .0001$; and Facet 1, $F(2, 219) = 62.08$, $p < .0001$; Facet 2, $F(2, 219) = 63.46$, $p < .0001$; Facet 3, $F(2, 212) = 39.42$, $p < .0001$ and Facet 4, $F(2, 219) = 79.01$, $p < .0001$ than the comparison group. The high-NA psychopathic group scored higher than the comparison group on the Negative Affect scales, $F(2, 219) = 33.43$, $p < .0001$, $t(219) = 7.73$, $p < .0001$, and lower on the Constraint scales, $F(2, 219) = 8.71$, $p < .001$, $t(219) = −3.24$, $p = .001$; though the comparison group did not differ from the low-NA psychopathic group on these scales. The low-NA psychopathic group scored significantly higher on the Positive Affect scale than the comparison group, $F(2, 219) = 18.79$, $p < .001$, $t(219) = 5.38$, $p < .0001$. The high-NA psychopathic group scored higher than the comparison group on CTQ total scores, $F(2, 199) = 9.19$, $p < .001$, $t(199) = 4.25$, $p < .001$; Physical Abuse, $F(2, 199) = 11.33$, $p < .001$, $t(199) = 4.68$, $p < .001$; Physical Neglect, $F(2, 199) = 5.21$, $p < .01$, $t(199) = 3.03$, $p = .002$; Emotional Abuse, $F(2, 199) = 10.44$, $p < .001$, $t(199) = 4.33$, $p < .001$; and Emotional Neglect, $F(2, 199) = 7.23$, $p < .001$, $t(199) = 3.71$, $p < .001$. The groups did not differ on Sexual Abuse. The low-NA psychopathic group scored higher than the comparison group on Physical Abuse, $t(199) = 2.52$, $p = .01$; and Physical Neglect, $t(199) = 2.12$, $p = .03$. Finally, the comparison group did not differ from the psychopathic subgroups on age ($M = 32.79$, $SD = 7.66$), race (56% Caucasian, 37% African American, 7% Other), or IQ ($M = 100.57$, $SD = 12.27$).

DISCUSSION

Based on a sample of $n = 110$ psychopathic criminal offenders, the results from this study support a two-subtype model of psychopathy in which subgroups differ substantially in their degree of negative affect. Moreover, the data demonstrate that one subgroup of psychopathic offenders is characterized by a more extensive history of childhood maltreatment. Specifically, the high-NA subgroup reported significantly greater emotional and physical abuse, as well as emotional neglect. Differences in MPQ Negative Affect scores and childhood maltreatment scores were also present between the high-NA group and the non-psychopathic comparison group, suggesting that the differences observed among psychopathic subgroups are not simply due to the low scores of the low-NA group. Overall,

this combination of results strongly supports theoretical conceptualizations of psychopathic subtypes, and specifies the unique maltreatment profile associated with the high-NA variant.

While the cross-sectional nature of the current study cannot decisively address etiological issues, the observed differences in negative affect between offender subtypes is consistent with the possibility that emotion dysregulation subsequent to childhood maltreatment may be one pathway to psychopathy. More specifically, the high-NA psychopathic offenders reported greater emotional abuse and emotional neglect than the low-NA offenders, suggesting that emotional maltreatment has specific associations with this subtype of psychopathy.

As such, considering the specific consequences of emotional maltreatment may help elucidate potential mechanisms contributing to the development of psychopathy. Notably, Schimmenti, Di Carlo, Passanisi & Caretti (2015) reported a very high prevalence of emotional abuse among psychopathic offenders and, moreover, found a positive relationship between PCL-R, Factor 1 and Factor 2 scores and emotional abuse history. The authors suggest that experiencing frequent (often inescapable), emotionally abusive relationships in childhood may result in extreme levels of distress among children that eventually reduce a child's ability to relate to others, interpret others' feelings, and/or take others' cognitive perspectives. These experiences, in combination with other environmental risk factors, may confer risk for the dysfunctional affective and impulsive behavioral profile that characterizes psychopathy.

Childhood emotional maltreatment has, however, been associated with a wide range of maladaptive outcomes, ranging from internalizing symptoms (e.g., Gibb et al., 2007) to externalizing behaviors (e.g., Riggs & Kaminski, 2010). Some have suggested that this range of symptoms is largely due to a disruption in the usual parent-child attachment bond that may occur in parent-child relationships characterized by emotional maltreatment. For instance, Riggs (2010) proposed a theoretical model in which early emotional abuse propagates insecure parental attachments (i.e., the child does not receive consistent nurturing throughout development from the parent, contributing to dysfunction in the parent-child relationship), which subsequently results in emotion regulation impairments, maladaptive coping responses, negative views of self, social dysfunction, and poor mental health.

Notably, parental attachment and parenting style have also been examined as potential precursors to psychopathic traits (Craig, Gray, & Snowden, 2013; Frodi, Dernevik, Sepa, Philipson & Bragesjo, 2010; Pasalich, Dadds, Hawes, & Brennan, 2012; Schimmenti, Passanisi, Pace, Manzella, Di Carlo, & Caretti, 2014). Schimmenti et al. (2014), for example, found that highly psychopathic inmates reported extensive abuse histories and evidenced indicators of dysfunctional parental attachment. Similarly, Pasalich et al. (2012) reported high rates of insecure attachment among children with callous-unemotional traits. While a connection has been made between psychopathy and dysfunctional parental attachment, recent studies investigating the impact of parenting techniques among children with psychopathic traits have been less conclusive (see Waller, Gardener & Hyde, 2013). Some investigators have reported a positive relationship between psychopathic traits in youth and ineffective/harsh parenting (e.g., Hyde, Shaw, Gardner, Cheong, Dishion &

Wilson, 2013; Marshall & Cooke, 1999; McDonald, Dodson, Rosenfield, & Jouriles, 2011; Vitacco, Neumann, Ramos, & Roberts, 2003), while others have reported that children with psychopathic traits are largely unaffected by parenting style (e.g., Oxford, Cavell & Hughes, 2003; Wootton, Frick, Shelton, & Silverthorn, 1997; Yeh, Chen, Raine, Baker, & Jacobson, 2011).

Potentially contributing to these inconsistent results, studies examining parenting techniques and attachment style in children with psychopathic traits have not considered psychopathic subtypes. Among the highly maltreated high-NA subgroup, reducing parental hostility and/or increasing parental warmth may in fact lead to lasting behavioral improvements, whereas the low-NA variant may remain essentially unaffected by these parenting modifications. Further research is needed in order to clarify how psychopathic subtypes emerge in very young children, and if these variants differentially relate to parental attachment and parenting style. Such findings may have serious implications for early, targeted interventions with children displaying psychopathic characteristics, and help inform treatment tactics for adult psychopathic offenders. Although future work should continue to investigate the effects of early life trauma on the development of psychopathic traits and psychopathic subtypes, it is also important to consider how the experience of trauma may impact treatment outcomes among adult offenders with psychopathic traits, as in the current sample. While little is known about effective treatment of psychopathy, it is possible that high-NA adult psychopathic offenders would be more responsive to trauma-informed or trauma-focused care.

The current study is not without limitations. First, because of the cross-sectional design, it is not possible to conclusively infer causality or directionality between psychopathy and maltreatment. It is possible that childhood maltreatment plays a causal role in the development of psychopathic traits, but it is also possible that these children have inherent difficulty regulating their behavior, and therefore instigate abusive relationships with their caretakers (Plomin, 1995). Given the many risk factors for antisociality, it is also important to consider genetic contributions to the development of both subtypes of psychopathy as well as gene-by-environment relationships (see Farrington, 2005; Herndon & Iacono, 2005). Hicks, Carlson, Blonigen, Patrick, Iacono & McGue (2012), for instance, reported that different features of psychopathy have differential gene-by-environment interactions. Additionally, the current study utilized retrospective, self-report measures of maltreatment which can be a considered a limitation for several reasons. First, it is possible that psychopathic offenders misrepresented or had difficulty recalling their maltreatment histories. However, there is evidence that psychopathic offenders provide accurate self-reports on structured questionnaires, even for ostensibly negative traits and experiences. For example, a widespread self-report measure of psychopathic characteristics, the Psychopathic Personality Inventory (Lilienfeld & Andrews, 1996), has been validated in incarcerated samples (Poythress, Edens, & Lilienfeld, 1998). Second, it is possible that the observed differences on the self-report measures between subgroups stem primarily from a response bias driven by negative affect, or a tendency to report negative self-evaluative information. However, there is some evidence to suggest that negative affect does not impact the tendency to over-report traumatic events, but rather relates to the perception of how negatively the traumatic event impacts someone's' adult life (LaNoue, Graeber, Helitzer, & Fawcett, 2013).

We did not assess how participants' felt their experienced abuse impacted their lives, but it is possible that individuals high in negative affect feel they have been more adversely affected by childhood experiences, and this perception alters their self-report style or affective processing. In any case, future research should utilize additional behavioral and/or psychophysiological measures of affective processing to rule out this possibility.

In sum, the present study demonstrates two subtypes of adult psychopathic offenders that can be distinguished by negative affect and childhood maltreatment history. This finding supports multiple etiological pathways underlying psychopathy.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

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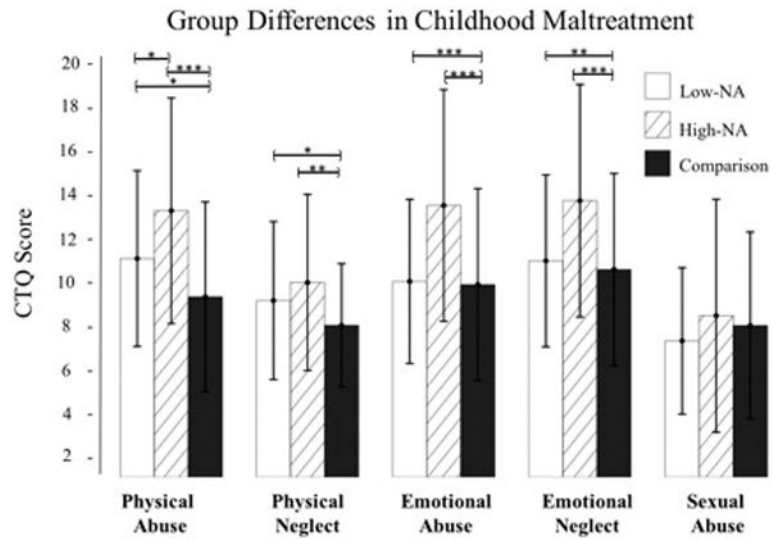
Figure 1.
Mean group scores on the Childhood Trauma Questionnaire subscales. Error bars represent standard deviations. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 1

Mean Personality Variables

	Psychopathic Subgroups		
	Low-NA (n = 72)	High-NA (n = 38)	Nonpsychopathic Comparison
MPQ Positive Affect	73.89 (10.21)	59.42 (12.22)	62.36 (16.78)
Wellbeing	8.63 (2.28)	6.3 (2.82)	6.89 (3.07)
Social Potency	6.72 (2.52)	5.95 (2.64)	4.87 (2.93)
Achievement	8.14 (2.58)	6.50 (3.07)	7.43 (2.94)
Social closeness	8.09 (2.77)	4.18 (2.56)	6.02 (3.82)
MPQ Negative Affect	41.54 (12.89)	65.87 (10.67)	41.79 (19.99)
Stress Reaction	3.71 (2.45)	6.60 (2.54)	4.52 (3.72)
Aggression	4.43 (2.82)	7.85 (2.79)	3.36 (3.12)
Alienation	3.24 (2.04)	6.95 (2.28)	4.07 (3.31)
MPQ Constraint	81.14 (14.30)	68.63 (15.71)	77.77 (15.27)
Control	8.56 (3.16)	6.18 (3.11)	8.34 (3.21)
Harm Avoidance	7.96 (3.04)	6.83 (3.40)	7.13 (2.85)
Traditionalism	7.18 (2.26)	5.34 (2.39)	7.01 (2.55)
MPQ Absorption	6.17 (2.97)	6.05 (3.07)	5.91 (2.94)
PCL-R	31.96 (1.78)	32.41 (2.34)	21.05 (5.33)
Factor 1	12.54 (1.99)	12.11 (1.75)	8.11 (2.42)
Facet 1	5.07 (1.77)	4.74 (1.70)	2.46 (1.59)
Facet 2	7.47 (.73)	7.37 (.81)	5.64 (1.49)
Factor 2	16.34 (1.82)	17.27 (1.60)	11.22 (3.80)
Facet 3	8.08 (1.23)	8.77 (.86)	6.47 (1.93)
Facet 4	8.24 (1.58)	8.50 (1.61)	4.61 (2.66)

Table 2

Mean Childhood Trauma Questionnaire Scores

	Psychopathic Subgroups		Nonpsychopathic Comparison
	Low-NA ($n = 72$)	**High-NA ($n = 38$)**	
CTQ Total Score	45.86 (56.90)	56.90 (20.73)	42.99 (16.92)
Physical Abuse	10.63 (4.27)	12.95 (5.48)	8.77 (4.61)
Physical Neglect	8.58 (3.84)	9.46 (4.28)	7.38 (2.99)
Emotional Abuse	9.51 (3.99)	13.20 (5.63)	9.36 (4.66)
Emotional Neglect	10.51 (4.18)	13.45 (5.65)	10.10 (4.66)
Sexual Abuse	6.63 (3.56)	7.85 (5.66)	7.37 (4.54)