



Published in final edited form as:

Correct Compend. 2010 ; 35(4): 6–13.

Borderline Personality Disorder Among Jail Inmates: How Common and How Distinct?

Courtney Conn [graduate student],

Department of Psychology at George Mason University.

Rebecca Warden [researcher],

Department of Psychology at George Mason University.

Jeffrey Stuewig [research associate professor],

Department of Psychology at George Mason University.

Elysha H. Kim [researcher],

Department of Psychology at George Mason University.

Laura Harty [graduate student],

Virginia Commonwealth University's School of Social Work.

Mark Hastings [research associate professor], and

Department of Psychology at George Mason University.

June P. Tangney [professor of psychology and a distinguished professor]

Department of Psychology at George Mason University.

Although borderline personality disorder (BPD) is rarely discussed in the forensic or correctional literature, a remarkably high percentage of jail and prison inmates suffer from this disorder, which is typically chronic and debilitating. This article describes the characteristics of BPD and contrasts it with psychopathy, another disorder assumed to be closely related. The authors estimate the prevalence of these disorders in a large sample of male and female jail inmates held on felony charges and present evidence showing that these are distinct disorders of personality, likely reflecting unique motivations and needs. Implications for effective management and treatment of inmates with BPD also are discussed.

What is BPD?

BPD is characterized by marked impulsivity and pervasive instability of affect, self-image and interpersonal relationships (American Psychiatric Association, 2000). High rates of substance abuse (Hatzitaskos et al., 1999; McCann, Ball and Ivanoff, 2000), anti-social activity (Coid, 1993) and behaviors aimed at harming the self (Wilkins and Coid, 1991) or others (Hernandez-Avila et al., 2000) have been associated with BPD. Emotional instability is a hallmark of BPD. As a consequence, individuals with BPD are at elevated risk for involvement in the criminal justice system. Whereas prevalence rates for BPD in the community are 1 percent to 2 percent (Kraus and Reynolds, 2001), rates among both male and female inmates have been estimated at 12 percent to 30 percent (Black et al., 2007; Douglas et al., 2007; Jordan et al., 1996; Singleton et al., 1998; Trestman et al., 2007). In

fact, the prevalence of BPD in correctional settings is typically higher than in psychiatric in-patient settings (about 20 percent), and more than double that of out-patient mental health clinics (about 10 percent) (American Psychiatric Association). Thus, it is important for those who work with inmates to understand BPD as a distinct disorder and to recognize that some “bad behavior” in correctional settings may be driven by this mental illness and may not be entirely volitional. Awareness of the behavioral manifestations of BPD, and the dysfunctional emotions and cognitions behind these behaviors, can lead to more effective strategies for managing and treating these individuals during their incarceration. Ideally, a better understanding of the scope and implications of BPD will stimulate development of programs to treat inmates with BPD and facilitate their successful reintegration into the community upon release.

What is Psychopathy?

In the current study, the constructs of BPD and psychopathy are emphasized (Hare, 1991). Psychopathy is related to, but distinct from, the Diagnostic and Statistical Manual of Mental Disorders’ (DSM-IV) diagnosis of anti-social personality disorder. This disorder is characterized by persistent involvement in anti-social behavior, beginning in childhood or adolescence, and includes behavioral symptoms such as impulsivity, deceitfulness, criminal activity and aggressiveness. Most incarcerated offenders (50 percent to 80 percent) have behavioral histories that meet diagnostic criteria for anti-social personality disorder, whereas a smaller subgroup (15 percent to 30 percent) meets criteria for psychopathy (Hare, 1991). Psychopathy is a more severe disorder represented by a cluster of personality traits in addition to the anti-social behaviors characteristic of anti-social personality disorder. The “gold standard” for assessing psychopathy is Hare’s Psychopathy Checklist-Revised (PCL-R; Hare, 1991). In fact, the PCL-R has come to define the construct of psychopathy in recent years. The PCL-R yields a total psychopathy score as well as two moderately correlated factor scores. Factor 1 assesses a personality style defined by glibness and superficiality, egocentric grandiosity, deceit and manipulation, lack of remorse and empathy, and shallow emotions in general. Factor 2 assesses a chronically unstable and anti-social lifestyle, focusing heavily on criminal and other problematic behaviors characteristic of anti-social personality disorder.

Notably, individuals who meet criteria for psychopathy score high on both factor 1 (psychopathic personality) and factor 2 (anti-social lifestyle), whereas those who meet criteria for anti-social personality disorder (the majority of incarcerated offenders) exhibit behaviors largely represented by factor 2 of the PCL-R, with or without the distinct personality characteristics that are the hallmark of psychopathy. Stated another way, there is very little personality in anti-social personality disorder, as defined in the DSM-IV. Although the DSM-IV states that “lack of empathy, inflated self-appraisal and superficial charm are features that have commonly been included in traditional conceptions of psychopathy and may be particularly distinguishing of anti-social personality disorder in prison or forensic settings where criminal, delinquent or aggressive acts are likely to be nonspecific,” the actual diagnostic criteria are largely behavioral and do not require such personality features. Anti-social personality disorder is generally diagnosed for anyone with a history of significant socially deviant, anti-social behavior stretching back to at least age 14. As

discussed by Blackburn (1988) and many others (Cooke and Michie, 2001; Hare, Hart and Harpur, 1991; Lilienfeld, 1994; Lilienfeld, Purcell and Jones-Alexander, 1997; Skeem and Mulvey, 2001; Skeem, Mulvey and Grisso, 2003), there are many factors that may cause a person to engage in anti-social behavior as an adolescent and to persist in such behavior into adulthood — for example, drug addiction, mental illness, personality characteristics, poverty, socialization and role models. Psychopathic personality is only one such factor, neither necessary nor sufficient for a diagnosis of anti-social personality disorder.

Anti-social personality disorder, then, may be useful as a tool for prospective risk assessment; persistent anti-social behavior is apt to predict future anti-social behavior. However, it is less useful in understanding the influence of personality, distinct forms of mental illness and associated motivations on anti-social behavior. For these reasons, the authors focus on psychopathy as more narrowly defined by Hare (1991) as a disorder of behavior and personality.

BPD and Psychopathy Among Offenders

BPD is characterized by many of the behavioral features of psychopathy, including lack of inhibition, impulsivity, drug use and promiscuous sexual behavior (Kraus and Reynolds, 2001). Both psychopathy and BPD have been found to be predictive of criminal activity in men and women (Hart and Hare, 1997; Hare et al., 2000; Komarovskaya, Loper and Warren, 2007; Trestman et al., 2007). Not surprisingly, empirical evidence points to moderate comorbidity between BPD and psychopathy in men's prison populations (Douglas et al., 2007; Stalenhin and von Knorring, 1996). BPD and psychopathy have also been found to coexist in women's prison populations (Hochhausen, Lorenz and Newman, 2002; Salekin, Rogers and Sewell, 1997). However, each of these studies used unidimensional indicators of BPD, many employed modest samples and none of the studies considered both male and female inmates using the same methods.

Although defined as a discrete diagnostic category in the DSM-IV (American Psychiatric Association, 2000), there is ample evidence that symptoms of BPD are arrayed along a continuum. The current study assessed symptoms of borderline personality using the Personality Assessment Inventory (PAI; Morey, 1991). Research demonstrates that scores on the PAI borderline features scale converge with clinicians' diagnoses of BPD based on DSM-IV criteria. In a sample of 63 outpatients (BPD base rate 0.72), a T-score of 65 was deemed optimal, with 0.91 sensitivity, 0.79 specificity, 0.94 positive predictive power, 0.73 negative predictive power and an overall correct classification rate of 0.89 vis-à-vis the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II) diagnoses (Jacobo et al., 2007). Concordance between PAI-derived and clinician-derived classification is equivalent to the concordance between clinicians using DSM-IV criteria. In a recent study (Critchfield, Levy and Clarkin, 2007), trained clinicians using the SCID-II agreed 87 percent of the time on a diagnosis of BPD (base rate 0.76). Thus, a cut-score of 65 on the PAI borderline features scale agrees just as well with a clinician-derived SCID-II diagnosis as two independent SCID-II assessments agree with each other.

Psychopathy is similarly used most often as a dichotomous clinical variable, with scores above 30 on the PCL-R and scores above 18 on the Psychopathy Checklist: Screening Version (PCL:SV; Hart, Cox and Hare, 1995) indicative of psychopathy (and scores below these cut-scores indicative of an absence of psychopathy). Here too, however, there is abundant evidence that psychopathy reflects a true continuum. Recent taxometric analyses have provided no evidence of an underlying psychopathy taxon (Edens, Marcus and Lilienfeld, 2006; Guay, Ruscio and Knight, 2007; Marcus, John and Edens, 2004). In the current study, psychopathy and BPD were analyzed both as continuous variables and as dichotomous, diagnostic variables. The latter is presented to maintain consistency with clinical practice, estimating diagnostic comorbidity. In addition, analyses of BPD and psychopathy are presented as continuous variables because: first, a dimensional approach allows for less error in estimating the true shared (and unshared) variance in syndromes of interest, as is the focus here, and second, as discussed by Krueger and Piasecki (2002), a correlational approach may be ultimately more useful for assessing comorbidity because it circumvents the problem of concordance by chance, especially in cases where the base rates are quite high, as is likely in this context.

Gender Differences in Psychopathy and BPD

Diagnoses of BPD and psychopathy appear to be far from equal between men and women. Epidemiological studies have estimated that approximately 70 percent to 77 percent of those diagnosed with BPD in clinical and community samples are female (American Psychiatric Association, 2000; Swartz et al., 1990; Widiger and Trull, 1993; Widiger and Weissman, 1991). The overrepresentation of women diagnosed with BPD has come under scrutiny in recent years, with questions being raised about problems with the research such as sampling biases and instrument biases, as well as gender biases in the constructs (Bjorklund, 2006). For example, some clinical studies contain an overrepresentation of women due to the fact that women are more likely than men to present themselves for help (Akhtar, Byrne and Doghramji, 1986).

In fact, two recent epidemiological studies found no difference in prevalence of BPD by gender — one a population-based study of residents in Oslo, Norway (Torgersen, Kringlen and Cramer, 2001) and the other an epidemiological study in the U.S. (Grant et al., 2008). These studies also had their shortcomings. The response rate for the Torgersen et al. (2001) study was only 57 percent, and Grant et al. (2008) used a newly developed diagnostic interview carried out by lay interviewers with relatively low reliability. Taken together, the literature on gender differences in BPD has methodological limitations, but the weight of the evidence supports the widely held notion that BPD occurs at a considerably higher rate among women than among men.

Some recent research suggests that the gender differences in BPD are less pronounced in correctional settings relative to community samples. For example, in a sample of 220 prison inmates, Black et al. (2007) found that 27 percent of males and 55 percent of females presented with BPD. In a sample of 408 jail inmates, Trestman et al. (2007) found the prevalence of BPD to be 13 percent male and 23 percent female.

Research on gender differences in psychopathy consistently shows that females evidence lower rates of psychopathy compared with men. In their review of several large studies, Vitale et al. (2002) reported that 15 percent to 30 percent of male inmates score in the psychopathic range on the PCL-R, whereas 9 percent to 23 percent of female inmates score in the psychopathic range. Hare's (2003) normative data based on incarcerated offenders indicates that 15.7 percent of male inmates and 7.4 percent of female inmates meet criteria for psychopathy.

The Current Study

The current study drew on a large sample of male and female general population jail inmates to answer three key questions. First, what percentage of jail inmates charged with felonies score in the clinically significant range for BPD and psychopathy? Second, are the gender disparities in BPD observed in community and clinical samples similarly observed among incarcerated individuals? Third, to what degree do psychopathy and BPD represent distinct disorders of personality in an inmate population? Here examined are both the degree of comorbidity when considering dichotomous (diagnostic) measures of psychopathy and BPD, and the degree of covariation between continuous measures of psychopathy and BPD, considering both total and subscale or factor scores.

Method

Participants

Participants were 479 pre- and post-trial inmates in a metropolitan area county jail. The targeted population was inmates who would serve at least four months in jail. Selection criteria were:

- Either a) sentenced to a term of four months or more or b) arrested and held on at least one felony charge other than probation violation, with no bond or greater than \$7,000 bond;
- Assigned to the jail's medium- and maximum-security general population (e.g., not in solitary confinement, not in a separate forensics unit for actively psychotic inmates); and
- Sufficient language proficiency to complete study protocols in English or Spanish.

Of the 628 participants who agreed to participate, 76 percent ($n=479$) remained at the jail long enough to complete portions of the four- to six-session initial assessment relevant to the behaviors reported here. Participants were on average 32.5 years old ($SD=10$), mostly men (71.2 percent) and diverse in terms of racial/ethnic composition: 36.5 percent white, 44.7 percent black, 8.0 percent Latino, 3.1 percent Asian, 0.8 percent Middle Eastern, 0.4 percent Native American and 6.5 percent "other" or "mixed."

Procedures

Shortly after their move to the jail's general population (about one to two weeks), eligible inmates were presented with a description of the study and asked to participate. It was emphasized that the decision to participate would have no bearing on their status at the jail

or their release date. Interviews were conducted in the privacy of professional visiting rooms and the data are protected by a Certificate of Confidentiality from the Department of Health and Human Services. Inmates who completed the four- to six-session intake assessment received a \$15 to \$18 honorarium, an amount deemed noncoercive based on interviews with knowledgeable informants (i.e., inmates and deputies) who are familiar with the economy of this particular correctional setting.

Participants with sufficient English skills completed questionnaires using touch-screen computers that presented items visually and aurally. For participants requiring Spanish versions of the measures (about 5 percent of participants), questionnaire responses were gathered via individual interview.

Measures

Borderline personality was assessed with the PAI (Morey, 1991), a 344-item self-report measure of clinically relevant psychopathology and personality traits. The PAI includes 13 clinical syndrome scales, many of which include subscales reflecting the multidimensional structure of most psychological disorders. The borderline features scale of the PAI reflects the multifaceted nature of BPD, as revealed in factor analytic studies (Morey). The total borderline features scale comprises four subscales of six items each:

- Affective instability — assessing the intense and largely unmodulated emotional experiences with an emphasis on anger;
- Identity problems — assessing confusion about self-identity and lack of an integrated concept of self and others;
- Negative relationships — reflecting ambivalence about interpersonal relationships, characterized by acute dependence, fear of abandonment and distrust; and
- Self-harm — ostensibly reflecting self-harming behaviors that are characteristic of individuals with BPD; however, most items assess the more general characteristic of impulsivity, also a hallmark of BPD.

Internal reliability of the total borderline scale was high ($\alpha=0.89$) while the subscales were acceptable ($\alpha=0.64$ to 0.77 ; mean $\alpha=0.73$) and consistent with those reported by Morey (1991).

Psychopathy was assessed by clinicians using the PCL:SV, the screening version of the checklist (Hart, Cox and Hare, 1995). Completion of this measure required an in-depth psycho-social history interview, videotaped for coding with the participant's permission. In addition, inmates' criminal histories and jail records were used as collateral information by trained clinicians in conjunction with the interview to code the PCL:SV. Like the PCL-R (Hare, 1991), the PCL:SV provides a total psychopathy score as well as two factor scores. (On the PCL:SV factors are referred to as "parts." For simplicity, the PCL-R term "factor" is retained.) Total scores range from 0 to 24, with scores of 18 and above being indicative of psychopathy. Factor scores range from 0 to 12. Studies have shown the PCL:SV to be reliable and valid (Hart, Hare and Forth, 1994). The correlation between the PCL:SV and the PCL-R is 0.8, a level that is maximal given disattenuation across raters and time, and the

reliability of the individual scales. The correlation between factors ($r=0.5$) is equivalent to that of the PCL-R.

PCL:SV interviewers completed an advanced graduate course on theory, research and assessment of psychopathy, including intensive supervised training in the administration and scoring of the PCL-R and PCL:SV. Only those who successfully met inter-rater reliability criteria for both PCL-R and PCL:SV were cleared for coding protocols. A set of 54 cases were randomly selected for double-coding by a referent clinician with 15 years of professional experience conducting forensic evaluations and with advanced training in the PCL-R and PCL:SV. Single measure intra-class correlations, using a one-way random effects model, were 0.85, 0.79 and 0.85 for factor 1, factor 2 and total PCL:SV scores, respectively, showing a high degree of inter-rater reliability. Factor 1 captures the personality characteristics associated with psychopathy, including superficiality, grandiosity, deceitfulness, lack of remorse, lack of empathy and lack of responsibility. Factor 2 captures the behaviors associated with psychopathy such as impulsivity, poor behavioral controls, lack of goals, irresponsibility, adolescent anti-social behavior and adult anti-social behavior.

Results

Prevalence of borderline personality and psychopathy

Most striking is the high rate of clinically significant borderline personality features, as shown in Table 1. Overall, 31.7 percent of the sample obtained T-scores of 70 or above on the total borderline scale, the cut-score deemed clinically significant by Morey (1991); 44.7 percent obtained T-scores of 65 or above, the cut-score identified as optimal by Jacobo et al. (2007) as a reliable indicator of SCID-II-derived diagnoses. The rates using Morey's criteria are similar to other studies showing astonishingly high rates of BPD among the incarcerated, e.g., 28 percent of women incarcerated in prison reported by Jordan et al. (1996); 23 percent of men incarcerated in prison reported by Singleton et al. (1998). Using Jacobo's cut-score of 65 or above, 41.6 percent of the men and 52.1 percent of the women met criteria for BPD, a gender difference that is statistically significant ($p<0.05$) but does not approach the 3-1 female-male prevalence ratio seen in community samples. Using Morey's cut-score of 70, 30.5 percent of the men and 34.7 percent of the women met criteria for BPD, a difference that is not statistically significant.

Regarding psychopathy, 15.4 percent of the sample met the recommended cut-score (18+) on the PCL:SV for psychopathy. The prevalence of psychopathy was 19.3 percent among the men and 5.8 percent among the women, a statistically significant difference ($p<0.001$). The sample's overall psychopathy rate and the much higher rate among men than women are consistent with previous research (Hare, 2003; Vitale, et al, 2002).

Thus far, the authors of the current study have considered BPD and psychopathy as dichotomous variables, but they are perhaps better examined as continuous constructs. The PAI borderline features scale provides T-scores (mean of 50, standard deviation of 10). As shown in Table 2, the sample's mean score was 63.37, strikingly close to the score of 65 considered by Jacobo et. al. (2007) to indicate the presence of BPD. For the overall mean scores for men and women did not differ significantly. For the borderline scale's four

subscales — affective instability, identity problems, negative relationships and self-harm (impulsivity) — the only significant gender difference in the sample's mean scores was in the negative relationships subscale, on which women scored slightly higher (see Table 2).

On the PCL:SV for psychopathy, the sample's mean score was 12.18 out of a possible 24 (a score of 18 or above is considered clinically significant). Men scored significantly higher than women on average (see Table 2). The sample scored higher on factor 2 (anti-social lifestyle) than factor 1 (personality and affective features), and men scored higher than women on both factors.

Comorbidity and correlation—Symptom comorbidity was surprisingly moderate for psychopathy and BPD, given their common links with impulsivity and anti-social behavior. As shown in Table 3, using a cut-score of 65 on the PAI borderline features scale, 49.7 percent of the sample did not score in the clinical range for either BPD or psychopathy. Using the more conservative cut-score of 70 for BPD, 60.3 percent of the full sample did not score in the clinical range for either disorder of personality. Regarding comorbidity, 9.4 percent of the sample (11.4 percent of men and 4.3 percent of women) met criteria for both BPD and psychopathy using a cut-score of 65 on the PAI borderline features scale. Using a cut-score of 70 on the PAI borderline features scale, 7.7 percent (9.4 percent of men and 2.9 percent of women) met criteria for both BPD and psychopathy.

Table 4 shows the bivariate relationships between PCL:SV psychopathy scores and PAI borderline personality symptoms, including correlates of the total scales and sub-scales or factors. The correlation between the PAI total BPD scale and the PCL:SV total psychopathy score was 0.26 ($p < 0.01$), similar to findings in a smaller sample of inmates (Rogers, Jordan and Harrison, 2007). The total psychopathy score was significantly correlated with each of the borderline personality subscales, with small to medium effect sizes, among both men and women. The relationship between total psychopathy and total BPD scores was accounted for primarily by factor 2 psychopathy, as shown in Table 4. For the sample as a whole, psychopathy factor 1 (personality and affective features) was not correlated with total BPD scores, nor with three of the four BPD subscales. Only the self-harm (impulsivity) subscale was significantly correlated with factor 1 psychopathy. Tests of the difference between independent correlations using a Bonferroni correction indicated no gender differences in the magnitude of the correlations.

Discussion

Three especially notable findings were the high rate of BPD among jail inmates, the modest gender difference in BPD among inmates and the modest correlation between symptoms of BPD and psychopathy. Each has implications for correctional staff and a more general understanding of BPD.

The extraordinarily high rate of clinically significant symptoms of BPD in this sample of general population jail inmates detained on felony charges is striking. Compared with community estimates of 1 percent to 2 percent (American Psychiatric Association, 2000; Kraus and Reynolds, 2001), nearly 45 percent of inmates obtained T-scores of 65 or above

on the PAI borderline features scale, the cut-score identified by Jacobo et al. (2007) as a reliable estimate of DSM-IV diagnoses of BPD.

In terms of practical implications, this means that frontline correctional staff at adult detention centers would benefit from being educated about the nature of the illness, such as its clinical presentation and strategies for managing the disorder. Being able to understand and identify an inmate's unacceptable behavior as part of a mental illness, as opposed to it being entirely volitional, could result in more productive strategies for management and appropriate referral. Equally important, forensic staff of adult detention centers are certain to have extensive contact with inmates suffering from BPD, typically undiagnosed upon incarceration. To meet the needs of such inmates and to enhance safety for all, forensic staff might find it helpful to explore ways to incorporate empirically supported treatments for BPD that are modified for the jail environment. For example, several efforts have been made to adapt dialectical behavior therapy in a cost-effective manner for correctional settings (Cahill-Masching and Ray, 2003; Evershed et al., 2003; McCann et al., 2000; Nee and Farman, 2005). Owing to the nature of the illness, inmates with BPD frequently become caught in a cycle of repeated re-offense and reincarceration because the kind of intensive, long-term treatment required to effectively treat BPD is not readily available upon reentry into the community. Inmates with BPD — and society in general — would benefit from the implementation of specific treatment planning and services to prepare inmates with BPD for community reentry, including efforts to ensure continuity of care for those suffering from this chronic and debilitating disorder.

A second striking finding concerns the relative parity in BPD symptoms across male and female inmates. Using Jacobo et al.'s (2007) cut-score of 65 on the PAI borderline features scale, 42 percent of male inmates and 52 percent of female inmates in this study scored in the clinical range, likely to meet DSM-IV criteria for BPD. This gender distribution among inmates contrasts sharply with that observed in community samples. In community and noncorrectional clinical settings, BPD is much more prevalent among women than men (American Psychiatric Association, 2000; Swartz, et al., 1990; Widiger and Trull, 1993; Widiger and Weissman, 1991). Although the 3:1 ratio has been recently called into question, and the precise gender ratio in the community population has yet to be determined, BPD continues to be viewed as a predominantly women's disorder.

Three implications follow from the current findings regarding the high rates of BPD among male inmates. First, to the extent that epidemiological studies show much higher rates of BPD among women in the community, this means that men with BPD are much more likely to be incarcerated than women with BPD. A key question for future research is what specifically about men with BPD places them at such high risk for involvement in the criminal justice system? What gender differences in presentation of BPD result in such disparate rates of incarceration? Second, epidemiological studies themselves are apt to be somewhat biased to the extent that they do not consider the large and growing population of incarcerated offenders in their estimates of the prevalence of BPD. Third, current clinical conceptions of BPD, derived almost exclusively from noncorrectional clinical settings, are apt to be incomplete and potentially misleading because they do not consider the very large but unseen sub-population of male offenders with BPD housed behind the walls of the

nation's jails and prisons. Attention to incarcerated men with BPD seems essential to the development of an accurate and complete conceptualization of this often misunderstood personality disorder.

The third striking finding from this report concerns the modest correlation between symptoms of BPD and psychopathy ($r=0.26$). Although the behavioral problems associated with BPD are in many ways similar to psychopathy (e.g., impulsivity, high rates of substance abuse and anti-social behavior), the two are clearly not simply different terms for the same disorder. In fact, results show that it is primarily factor 2 (anti-social lifestyle) that accounts for the modest covariation between BPD and psychopathy. In contrast, BPD was largely unrelated to factor 1 that assesses quintessential personality features of psychopathy such as superficiality, deceit and manipulation, and lack of remorse and empathy. These findings are consistent with previous studies showing that BPD tends to be more strongly associated with factor 2 than with factor 1 (Hart and Hare, 1989; Rutherford et al., 1997; Salekin et al., 1997; Shine and Hobson, 1997).

A key clinical distinction between BPD and psychopathy centers on the degree to which individuals suffer from psychological pain and distress. BPD is an extremely painful disorder characterized by serious anxiety and depression, affective instability, deep fears of abandonment and an unstable self-image. The classic psychopath (i.e., one who scores high on both factor 1 and factor 2) feels little internal distress apart from boredom and occasional experiences of intense anger. Rather than insecure and fearful of abandonment, he or she is perceived as cold and detached, unperturbed by the pain and suffering of others. This distinction may be useful to correctional staff working directly with inmates with BPD versus psychopathy.

Finally, it should be noted that no evidence was found for the notion that BPD is a “female version” of psychopathy. Psychopathy was substantially more prevalent among men, but the reverse was not true for BPD. The gender difference in favor of women was significant but modest when considering a cut-score of 65, and nonexistent when considering the traditional cut-score of 70 as well as mean scores on the PAI borderline features scale. Moreover, the correlations between BPD (total scale and four subscales) and psychopathy (total score and two factors) were statistically equivalent for men and women. An implication for correctional and forensic staff is that the possibility that male inmates suffer from BPD should not be excluded.

This study is not without its limitations, however. First, it was not an epidemiological study but rather assessed felony offenders at a single correctional institution. Base rates in psychopathy and BPD may vary by geographic area and type of institution. Moreover, unlike most extant studies of psychopathology in correctional settings, the current study was conducted in a county jail as opposed to a state or federal prison. Thus, caution is warranted in generalizing beyond urban county jail settings to prison populations or to less serious offenders charged only with misdemeanors. Nonetheless, because jails represent the gateway into the U.S. correctional system, including both those who will be confined short-term on site and those who will be transferred to state or federal prisons upon sentencing, it could be argued that jail samples such as the one studied here are more representative of the U.S.

population of 2.3 million incarcerated offenders than studies employing state or federal prisons. In fact, approximately half of the current sample was eventually transferred to another correctional facility — typically a state prison.

Second, BPD symptoms were assessed via the PAI borderline features scale, a self-report measure, rather than a comprehensive clinician-rated assessment such as the SCID-II. Although a clinician-rated assessment would have been more definitive, research demonstrates that scores on the PAI borderline features scale converge with clinicians' diagnoses of BPD based on DSM-IV criteria, with an overall correct classification rate of 0.89 vis-à-vis SCID-II diagnoses (Jacobo et al., 2007). Concordance between PAI-derived and clinician-derived classification is equivalent to the concordance between clinicians using DSM-IV criteria. In a recent study (Critchfield et al., 2007), trained clinicians using the SCID-II agreed 87 percent of the time on a diagnosis of BPD (base rate 0.76). Thus, a cut-score of 65 on the PAI borderline features scale agrees just as well with a clinician-delivered SCID-II diagnosis as two independent SCID-II assessments agree with each other.

Rapid turnover of offenders and the stress of initially being incarcerated places adults detained in jails at higher risk of clinically significant distress and functional impairment. Given the exceptionally high rates of BPD, arming correctional staff with better awareness of the illness and ways to manage and treat it are especially important given the limited mental health resources that are available in jail settings.

REFERENCES

- Akhtar, S.; Byrne, JP.; Doghramji, K. *Journal of Clinical Psychiatry*. Vol. 47. Physicians Postgraduate Press, Inc.; Memphis, Tenn.: 1986. The demographic profile of borderline personality disorder.; p. 196-198.
- American Psychiatric Association. *Diagnostic and statistical manual of mental disorders IV-TR*. American Psychiatric Association; Washington, D.C.: 2000.
- Bjorklund, P. *Issues in Mental Health Nursing*. Vol. 27. Informa Healthcare; New York: 2006. No man's land: Gender bias and social constructivism in the diagnosis of borderline personality disorder.; p. 3-23.
- Black, DW.; Gunter, T.; Allen, J.; Blum, N.; Arndt, S.; Wenman, G.; Sieleni, B. *Comprehensive Psychiatry*. Vol. 48. Elsevier Science; New York: 2007. Borderline personality disorder in male and female offenders newly committed to prison.; p. 400-405.
- Blackburn, R. *British Journal of Psychiatry*. Vol. 153. Royal College of Psychiatrists; London: 1988. On moral judgements and personality disorders: The myth of psychopathic personality revisited.; p. 505-512.
- Cahill-Masching, L.; Ray, A. *Corrections Today*. Vol. 65. American Correctional Association; Alexandria, Va.: 2003. Developing programming for the severely behaviorally disordered female offender.; p. 68-72.
- Coid, JW. *British Journal of Psychiatry*. Vol. 162. Royal College of Psychiatrists; London: 1993. An affective syndrome in psychopaths with borderline personality disorder?; p. 641-650.
- Cooke, DJ.; Michie, C. *Psychological Assessment*. Vol. 13. American Psychological Association; Washington, D.C.: 2001. Refining the construct of psychopathy: Towards a hierarchical model.; p. 171-188.
- Critchfield, KL.; Levy, KN.; Clarkin, JF. *Psychiatric Quarterly*. Vol. 78. Springer; New York: 2007. he Personality Disorders Institute/Borderline Personality Disorder Research Foundation randomized control trial for borderline personality disorder: Reliability of axis I and II diagnoses.; p. 15-24.

- Douglas, KS.; Guy, LS.; Edens, JF.; Boer, DP.; Hamilton, J. Assessment. Vol. 14. Sage; Thousand Oaks, Calif.: 2007. The Personality Assessment Inventory as a proxy for the Psychopathy Checklist-Revised: Testing the incremental validity and cross-sample robustness of the anti-social features scale.; p. 255-269.
- Edens, JF.; Marcus, DK.; Lilienfeld, SO. Journal of Abnormal Psychology. Vol. 115. American Psychological Association; Washington, D.C.: 2006. Psychopathic, not psychopath: Taxo-metric evidence for the dimensional structure of psychopathy.; p. 131-144.
- Evershed, S.; Tenant, A.; Boomer, D.; Rees, A.; Barkham, M.; Watson, A. Criminal Behaviour and Mental Health. Vol. 13. Wiley; Hoboken, N.J.: 2003. Practice-based outcomes of dialectical behaviour therapy (DBT) targeting anger and violence, with male forensic patients: A pragmatic and non-contemporaneous comparison.; p. 198-213.
- Grant, BF.; Chou, SP.; Goldstein, RB.; Huang, B.; Stinson, FS.; Saha, TD.; Smith, SM.; Dawson, DA.; Pulay, AJ.; Pickering, RP.; Ruan, WJ. Journal of Clinical Psychiatry. Vol. 69. Physicians Postgraduate Press, Inc.; Memphis, Tenn.: 2008. Prevalence, correlates, disability, and comorbidity of DSM-IV borderline personality disorder: Results from the Wave 2 National Epidemiologic Survey on Alcohol and Related Conditions.; p. 533-545.
- Guay, JP.; Ruscio, J.; Knight, RA. Journal of Abnormal Psychology. Vol. 116. American Psychological Association; Washington, D.C.: 2007. A taxometric analysis of the latent structure of psychopathy: Evidence for dimensionality.; p. 701-716.
- Hare, RD. The Hare Psychopathy Check-list Revised. MultiHealth Systems; Toronto: 1991.
- Hare, RD. The Hare Psychopathy Checklist-Revised (PCL-R) technical manual. second Edition. Multi-Health Systems; North Tonawanda, N.Y.: 2003.
- Hare, RD.; Clark, D.; Grann, M.; Thornton, D. Behavioral Sciences and the Law. Vol. 18. Wiley; Hoboken, N.J.: 2000. Psychopathy and the predictive validity of the PCL-R: An international perspective.; p. 623-645.
- Hare, RD.; Hart, SD.; Harpur, TJ. Journal of Abnormal Psychology. Vol. 100. American Psychological Association; Washington, D.C.: 1991. Psychopathy and the DSM-IV criteria for antisocial personality disorder.; p. 391-398.
- Hart, SD.; Cox, DN.; Hare, RD. The Hare Psychopathy Checklist: Screening Version. Multi-Health Systems; Toronto: 1995.
- Hart, SD.; Hare, RD. Psychological Assessment. Vol. 1. Sage; Thousand Oaks, Calif.: 1989. Discriminant validity of the psychopathy checklist in a forensic psychiatric population.; p. 211-218.
- Hart, SD.; Hare, RD. Psychopathy: Assessment and association with criminal conduct.. In: Stoff, DM.; Breiling, J.; Maser, JD., editors. Handbook of anti-social behavior. John Wiley and Son.; Hoboken, N.J.: 1997. p. 22-35.
- Hart, SD.; Hare, RD.; Forth, AE. Psychopathy as a risk marker for violence: Development and validation of a screening version of the revised Psychopathy Checklist.. In: Monahan, J.; Steadman, HJ., editors. Violence and mental disorder: Developments in risk assessment. University of Chicago Press; Chicago: 1994. p. 81-98.
- Hatzitaskos, P.; Soldatos, CR.; Kokkevi, A.; Stefanis, CN. Comprehensive Psychiatry. Vol. 40. Elsevier Science; New York: 1999. Substance abuse patterns and their association with psychopathology and type of hostility in male patients with BPD and ASPD.; p. 278-282.
- Hernandez-Avila, C.; Burleson, JA.; Poling, J.; Tennen, H.; Rounsaville, BJ.; Kranzler, HR. Comprehensive Psychiatry. Vol. 41. Elsevier Science; New York: 2000. Personality and substance use disorders as predictors of criminality.; p. 276-283.
- Hochhausen, NM.; Lorenz, AR.; P Newman, J. Journal of Abnormal Psychology. Vol. 111. American Psychological Association; Washington, D.C.: 2002. Specifying the impulsivity of female inmates with borderline personality disorder.; p. 495-501.
- Jacobo, MC.; Blais, MA.; Baity, MR.; Harley, R. Journal of Personality Assessment. Vol. 88. Taylor & Francis; London: 2007. Concurrent validity of the personality assessment inventory borderline scales in patients seeking dialectical behavior therapy.; p. 74-80.

- Jordan, BK.; Schlenger, WE.; Fairbank, JA.; Caddell, JM. Archives of General Psychiatry. Vol. 53. American Medical Association; Chicago: 1996. Prevalence of psychiatric disorders among incarcerated women: Convicted felons entering prison.; p. 513-519.
- Komarovskaya, I.; Loper, A.; Warren, J. Criminal Justice and Behavior. Vol. 34. Sage Publications; Thousand Oaks, Calif.: 2007. The role of impulsivity in antisocial and violent behavior and personality disorders among incarcerated women.; p. 1499-1515.
- Kraus, G.; Reynolds, DJ. Clinical Psychology Review. Vol. 21. Elsevier; New York: 2001. The "A-BC's" of the Cluster B's: Identifying, understanding, and treating Cluster B personality disorders.; p. 345-373.
- Krueger, RF.; Piasecki, TM. Behaviour Research and Therapy. Vol. 40. Elsevier; New York: 2002. Toward a dimensional and psychometrically-informed approach to conceptualizing psychopathology.; p. 485-500.
- Lilienfeld, SO. Clinical Psychology Review. Vol. 14. Elsevier; New York: 1994. Conceptual problems in the assessment of psychopathy.; p. 17-38.
- Lilienfeld, SO.; Purcell, C.; Jones-Alexander, J. Assessment of anti-social behavior in adults.. In: Stoff, DM.; Breiling, J.; Maser, JD., editors. Handbook of anti-social behavior. John Wiley and Sons; New York: 1997. p. 60-74.
- Marcus, DK.; John, SL.; Edens, JF. Journal of Abnormal Psychology. Vol. 113. American Psychological Association; Washington, D.C.: 2004. A taxometric analysis of psychopathic personality.; p. 626-635.
- McCann, RA.; Ball, EM.; Ivanoff, A. Cognitive and Behavioral Practice. Vol. 7. Elsevier; New York: 2000. DBT with an inpatient forensic population: The CMHIP forensic model.; p. 447-456.
- Morey, LC. The Personality Assessment Inventory professional manual. Psychological Assessment Resources; Odessa, Fla.: 1991.
- Nee, C.; Farman, S. Criminal Behaviour and Mental Health. Vol. 15. Wiley; Hoboken, N.J.: 2005. Female prisoners with borderline personality disorder: Some promising treatment developments.; p. 2-16.
- Rogers, R.; Jordan, MJ.; Harrison, KS. Behavioral Sciences and the Law. Vol. 25. Wiley; Hoboken, N.J.: 2007. Facets of psychopathy, Axis II traits, and behavioral dysregulation among jail detainees.; p. 471-483.
- Rutherford, MJ.; Alterman, AI.; Cacciola, JS.; McKay, JR. Drug and Alcohol Dependence. Vol. 44. Elsevier; New York: 1997. Validity of the psychopathy checklist-revised in male methadone patients.; p. 143-149.
- Salekin, RT.; Rogers, R.; Sewell, KW. Journal of Abnormal Psychology. Vol. 106. American Psychological Association; Washington, D.C.: 1997. Construct validity of psychopathy in a female offender sample: A multitrait-multimethod evaluation.; p. 576-585.
- Shine, J.; Hobson, J. Journal of Forensic Psychiatry. Vol. 8. Taylor & Francis; London: 1997. Construct validity of the Hare Psychopathy Checklist, Revised, on a UK prison population.; p. 546-561.
- Singleton, N.; Meltzer, H.; Gatward, R.; Coid, J.; Deasy, D. Psychiatric comorbidity among prisoners: Summary report. The Stationary Office; London: 1998.
- Skeem, JL.; Mulvey, EP. Journal of Consulting and Clinical Psychology. Vol. 69. American Psychological Association; Washington, D.C.: 2001. Psychopathy and community violence among civil psychiatric patients: Results from the Mac Arthur Violence Risk Assessment Study.; p. 358-374.
- Skeem, JL.; Mulvey, EP.; Grisso, T. Psychological Assessment. Vol. 15. American Psychological Association; Washington, D.C.: 2003. Applicability of traditional and revised models of psychopathy to the Psychopathy Checklist: Screening Version.; p. 41-55.
- Stalenheim, EG.; von Knorring, L. Acta Psychiatrica Scandinavica. Vol. 94. Wiley; Hoboken, N.J.: 1996. Psychopathy and Axis I and Axis II psychiatric disorders in a forensic psychiatric population in Sweden.; p. 217-223.
- Swartz, M.; Blazer, D.; George, L.; Winfield, I. Journal of Personality Disorders. Vol. 4. International Society for the Study of Personality Disorders; Ann Arbor, Mich.: 1990. Estimating the prevalence of borderline personality disorder in the community.; p. 257-272.

- Torgersen, S.; Kringle, E.; Cramer, V. Archives of General Psychiatry. Vol. 58. American Medical Association; Chicago: 2001. The prevalence of personality disorders in a community sample.; p. 590-596.
- Trestman, RL.; Ford, J.; Zhang, W.; Wies-brock, J. Journal of the American Academy of Psychiatry and the Law. Vol. 35. American Academy of Psychiatry and the Law; Bloomfield, Conn.: 2007. Current and lifetime psychiatric illness among inmates not identified as acutely mentally ill at intake in Connecticut's jails.; p. 490-500.
- Vitale, JE.; Smith, SS.; Brinkley, CA.; Newman, JP. Criminal Justice and Behavior. Vol. 29. Sage; Thousand Oaks, Calif.: 2002. The reliability and validity of the Psychopathy Checklist-Revised in a sample of female offenders.; p. 202-231.
- Widiger, TA.; Trull, TJ. Borderline and narcissistic personality disorders.. In: Sutker, PB.; Adams, HE., editors. Comprehensive handbook of psychopathology. second edition. Plenum Press; New York: 1993. p. 371-394.
- Widiger, TA.; M Weissman, M. Hospital and Community Psychiatry. Vol. 42. American Psychiatric Association; Arlington, Va.: 1991. Epidemiology of borderline personality disorder.; p. 1015-1021.
- Wilkins, J.; Coid, JW. Criminal Behavior and Mental Health. Vol. 1. Wiley; New York: 1991. Self-mutilation in female remanded prisoners I: An indicator of severe psychopathology.; p. 247-267.

Epidemiological studies have estimated that approximately 70 percent to 77 percent of those diagnosed with BPD in clinical and community samples are female.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 1

Percentage of Sample That Meets BPD and/or Psychopathy Cutoff

Disorder of Personality	Total	Male	Female	Chi-Square
BPD 65+	44.7%	41.6%	52.1%	4.409 *
BPD 70+	31.7%	30.5%	34.7%	0.832
Psychopathy Total	15.4%	19.3%	5.8%	13.825 **

Note. Full Sample n=479; Male n=341; Female n=138.

*
p<0.05.**
p<0.001.

Table 2

Means and Standard Deviations for Psychopathy and BPD as a Function of Gender

Disorders of Personality	Full sample	Male	Female	t-Test
PAI Borderline Total	63.37 (12.96)	62.82 (12.66)	64.73 (13.63)	1.46
Affective Instability	55.12 (12.29)	55.05 (12.19)	55.29 (12.59)	0.19
Identity Problems	61.12 (12.54)	60.55 (12.48)	62.54 (12.63)	1.58
Negative Relationships	63.71 (11.84)	63.00 (11.59)	65.46 (12.29)	2.07 *
Self-Harm (Impulsivity)	63.65 (14.87)	63.23 (14.41)	64.69 (15.96)	0.97
Psychopathy Total	12.18 (4.89)	12.94 (4.93)	10.33 (4.25)	-5.80 **
Factor 1	5.82 (2.93)	6.26 (2.95)	4.71 (2.57)	-5.73 **
Factor 2	6.37 (2.80)	6.67 (2.82)	5.62 (2.61)	-3.79 **

Note. Full Sample n=479; Male n=341; Female n=138.

*
p<0.05.**
p<0.001.

Table 3

Comorbidity of BPD and Psychopathy

	PCL:SV<18			PCL:SV 18+		
	Full Sample	Male	Female	Full Sample	Male	Female
BPD<65	49.7% (238)	50.4% (172)	46.4% (64)	6.0% (29)	7.9% (27)	1.4% (2)
BPD 65+	35.3% (169)	30.2% (103)	47.8% (66)	9.4% (45)	11.4% (39)	4.3% (6)
BPD<70	60.3% (289)	59.5% (203)	62.3% (86)	7.9% (38)	10.0% (34)	2.9% (4)
BPD 70+	24.4% (116)	21.1% (72)	31.9% (44)	7.7% (36)	9.4% (32)	2.9% (4)

Note. Full Sample n=479; Male n=341; Female n=138. n appears in parentheses.

Table 4

Correlations Between Psychopathy and BPD Total Scales and Subscales for Males, Females and Full Sample

Borderline Personality	Psychopathy								
	Total PCL:SV			Factor 1			Factor 2		
	Full Sample	Male	Female	Full Sample	Male	Female	Full Sample	Male	Female
Total BPD	0.260 ***	0.281 ***	0.300 ***	0.057	0.106	−0.002	0.394 ***	0.382 ***	0.491 ***
Affective Instability	0.220 ***	0.200 ***	0.312 **	0.049	0.059	0.035	0.333 ***	0.289 ***	0.473 ***
Identity Problems	0.129 **	0.132 *	0.208 **	−0.044	−0.016	−0.058	0.272 ***	0.249 ***	0.396 ***
Negative Relationships	0.205 ***	0.262 ***	0.170 **	0.061	0.124 *	−0.014	0.295 ***	0.328 ***	0.291 **
Self-Harm (Impulsivity)	0.301 ***	0.335 ***	0.297 **	0.131 **	0.195 **	0.024	0.390 ***	0.382 ***	0.460 ***

Note. Full Sample n=479; Male n=341; Female n=138.

*
p<0.05.**
p<0.01.***
p<0.001.