VALIDATION OF THE ELEMENTAL PSYCHOPATHY ASSESSMENT IN A SAMPLE OF INCARCERATED MALES

by

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(Under the Direction of Josh Miller)

ABSTRACT

In response to limitations of extant psychopathy assessments, Lynam and Widiger (2007) recently advocated using a broad model of personality functioning to identify the core elements of psychopathy in order to develop a more accurate and comprehensive conceptualization of this PD. These authors identified a consensus set of psychopathic traits which eventually led to the development of the Elemental Psychopathy Assessment (EPA; Lynam, Gaughan, Miller, & Widiger, under review), a new self-report measure of psychopathy based on the Five-Factor Model of personality (McCrae & Costa, 1990). The current study examined the construct validity of the EPA in a sample of incarcerated males. The EPA demonstrated good convergence with an alternative psychopathy assessment, the Self-Report Psychopathy Scale (SRP-III; Williams, Paulhus, & Hare, 2007). The EPA bore meaningful associations with individual SRP-III factors which were consistent with the content of these scales. Additionally, the EPA exhibited convergent relations with externalizing behavior and disciplinary infractions. Because of the inclusion of simple traits, the EPA provided a clear view of the psychopathic features underlying specific externalizing behaviors and forms of misconduct. The EPA also manifested greater predictive and incremental validity than the SRP-III for disciplinary infractions. Assessing the

elemental units of psychopathy with the EPA has multiple advantages compared to alternative assessment methods, including the ability to examine the basic traits underlying behavioral outcomes of interest like externalizing behavior and institutional misconduct. The present study provides additional support for the construct validity of the EPA and highlights strengths of this assessment approach.

INDEX WORDS: Elemental Psychopathy Assessment, Psychopathy, Five-Factor Model, Self-report, Externalizing behavior, Institutional misconduct, Incarceration

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INTRODUCTION

Although not included in recent versions of the *Diagnostic and Statistical Manual* (i.e., DSM-IV; American Psychiatric Association, 1994), psychopathy is one of the most researched and empirically supported personality disorders (PDs; Lilienfeld, 1994). Despite increased attention and improved assessment instruments, current measures of psychopathy continue to be hampered by significant limitations, particularly with regards to content validity. However, a recently proposed alternative approach to test development (Lynam & Widiger, 2007) which focuses on the core general personality features of this PD may be able to avoid the problems of extant psychopathy measures.

Psychopathy: Conceptualization and Assessment with the PCL/PCL-R

The psychopathic personality is characterized by traits such as grandiosity, manipulativeness, lack of remorse or empathy, egocentricity, and shallow affect (Cleckley, 1941; Hare, 2003). Psychopathy is associated with a range of behavioral problems, including criminality (Kosson, Smith, & Newman, 1990; Porter, Birt, & Boer, 2001), recidivism (Hemphill, Hare, & Wong, 1998), and substance use (Taylor & Lang, 2006). Given its extensive relations with antisocial behavior, the construct of psychopathy is often linked with incarceration, and psychopathy has proven to be a valid and useful construct to consider in this setting. For example, psychopathic offenders are more likely to engage in institutional misconduct (Guy, Edens, Anthony, & Douglas, 2005) and to violate the conditions of their release (Hart, Kropp, & Hare, 1988). Psychopathy also has important clinical implications, as

psychopathic individuals may be more resistant to treatment and show less improvement than nonpsychopathic individuals (Ogloff, Wong, & Greenwood, 1990; cf, Salekin, 2002; Skeem, Monahan, & Mulvey, 2002).

The primary measure for assessing psychopathy, particularly in forensic settings has been the Psychopathy Checklist/Psychopathy Checklist-Revised (PCL/PCL-R: Hare, 1991; Hare, 2003). The PCL-R has been used extensively in clinical and institutional settings to identify individuals with elevated psychopathic traits and in empirical research to examine the construct of psychopathy and its nomological net. A substantial amount of this research has involved attempts to identify its underlying factor structure. Initial findings indicated that the PCL-R conformed to a two-factor structure (Hare, Harpur, Hakstian, & Forth, 1990; Harpur, Hakstian, & Hare, 1988; Templeman & Wong, 1994), with Factor 1 reflecting a "selfish, callous, and remorseless use of others" (Hare, 1991, p. 38) and Factor 2 reflecting a "chronically, unstable and antisocial lifestyle" (p. 31). Based on these descriptions, Factor 1 has been considered to assess the interpersonal and affective features of psychopathy (e.g., manipulativeness, grandiosity, callousness, lack of empathy), whereas Factor 2 measures features related to antisocial and deviant behavior. The two factors have been shown to correlate at approximately .50 (Harpur et al., 1988; Hare, 1991) and to manifest divergent relations with various external criteria. For example, Factor 1 has demonstrated positive relations with narcissism and interpersonal dominance (Harpur, Hare, & Hakstian, 1989), as well as emotional detachment (Patrick, Bradley, & Lang, 1993). Alternatively, Factor 2 has exhibited positive associations with negative emotionality (Verona, Patrick, & Joiner, 2001) and substance use (Taylor & Lang, 2006) and has demonstrated stronger correlations with antisocial personality disorder (APD) than Factor 1 (Harpur et al., 1989).

Despite the prominence of the two-factor model, several authors have proposed alternative factor structures. For example, Cooke and Michie (2001) developed a three-factor model that deemphasized the role of antisocial behavior in the psychopathy construct (and the PCL-R). According to these authors, criminality may best reflect an outcome of psychopathy, not a core feature. In support of this point, they noted that "many psychopaths have no antisocial history, and the converse is equally true, many individuals with chronic antisocial behavior not being psychopaths" (p. 185). Subsequently, Hare (2003) introduced a four-factor model that reemphasized the role of antisocial behavior in the structure of the PCL-R, which has received empirical support (Neumann, Kosson, & Salekin, 2007; Vitacco, Rogers, Neumann, Harrison, & Vincent, 2005). In this model, the traditional Factor 1, which is associated with the interpersonal and affective features of psychopathy, was divided into two separate dimensions (i.e., Interpersonal, Affective). Similarly, the traditional Factor 2 was also divided into two separate factors, one reflecting an unstable, irresponsible, and deviant lifestyle (i.e., Lifestyle) and the other representing antisocial behavior and criminality (i.e., Antisocial).

Although efforts to identify the underlying factor structure of the PCL-R have been helpful in understanding this instrument, Lynam and Widiger (2007) have suggested that it has led researchers to frame these investigations as examinations of the *construct* of psychopathy, not of a specific *measure* of psychopathy. According to Lynam and Widiger, "the measure has almost become the construct, and more recent authors are more likely to write about the structure of psychopathy than the structure of the instrument" (p. 161). The distinction between the PCL-R as one *measure* of psychopathy and the PCL-R as representing the *construct* of psychopathy is important, as Lynam and Widiger have questioned the conceptualization of psychopathy as measured by the PCL-R and suggested that "the PCL-R may not in fact provide a comprehensive

or adequate description of the key traits of psychopathy" (p. 163). Moreover, these authors have questioned the utility of trying to identify the basic elements of psychopathy by examining a single psychopathy measure. These issues are addressed further in the context of alternative methods of conceptualizing psychopathy.

Beyond the aforementioned issues related to the extensive training, time, and information required to administer the instrument, Lynam and Widiger (2007) have noted additional concerns related to its comprehensiveness and reliance on complex traits. Regarding the instrument's comprehensiveness, Lynam and Widiger (2007) suggest that the PCL-R conceptualization of psychopathy deviates in important ways from perhaps the most influential description of psychopathy, which was provided by Cleckley (1941/1976) in his seminal work *The Mask of Sanity*. In this book, Cleckley provided a detailed description of the psychopathic personality, which included 16 core traits/criteria (e.g., superficial charm and "good intelligence;" absence of delusions and other signs of irrational thinking; absence of "nervousness" or psychoneurotic manifestations; lack of remorse or shame; inadequately motivated antisocial behavior; pathologic egocentricity and incapacity for love). Similar to Rogers (1995), Lynam and Widiger explain that several of these traits are absent from the PCL-R. While Lynam and Widiger acknowledge that the omission of some traits may not be problematic because of their relevance to psychopathy (e.g., suicide rarely carried out), they also contend that "some of the exclusions might in fact have been a mistake, particularly the criterion of absence of nervousness and psychoneurotic manifestations" (p. 163). From Cleckley's early description of the psychopathic personality to later conceptualizations of this construct (e.g., Lykken, 1995), several prominent researchers have asserted that low anxiety is a core feature of this PD. As such, the PCL-R's lack of inclusion of content related to this trait may be a significant weakness.

The other major limitation of the PCL-R according to Lynam and Widiger (2007) is its reliance on complex traits. They argue that "many of the PCL-R items are themselves complex mixtures of different personality traits" (p. 164) and offer their translation of the PCL-R into the language of the FFM (Widiger & Lynam, 1998) as evidence of this issue. Of the 20 PCL-R items, only 5 were translated into a single facet. In contrast, the majority of the remaining items were translated into mixtures of multiple facets from multiple domains, highlighting their complex nature. One of the primary problems with complex traits is that they can obscure the relations between traits and relevant outcomes and behavior. Complex traits can often be characterized by a broad range of behaviors that occur for a multitude of reasons, not all of which are directly related to the core feature of the trait itself. Unfortunately, this breadth can muddle the assessment picture and make it more difficult to identify and assess the central features of the construct under study. Alternatively, simple traits are defined by a narrower range of personality features and behaviors which are specifically associated with the relevant simple trait. The specificity of simple traits ensures that only those behaviors and outcomes which are directly related to the core features of the trait will be considered. Simple traits help to clarify the assessment process and allow researchers to examine the basic traits associated with the behavioral outcomes of interest.

Self-report Assessment of Psychopathy

Despite these conceptual concerns, the PCL-R has demonstrated excellent reliability and validity (Hare, 2003) and is currently considered by many to be the gold-standard assessment of psychopathy; however, the instrument is not without additional limitations. For instance, administration requires extensive training, a lengthy interview, and access to file information pertaining to official criminal records and institutional behavior, which is not typically available

in non-institutionalized populations. Over the last two decades, several researchers have developed self-report measures of psychopathy which address these issues. Three of the most prominent and widely-used self-report instruments are the Self-Report Psychopathy Scale (SRP-III; Hare, 1985; Hare, Hemphill, & Paulhus, 2002; Williams, Paulhus, & Hare, 2007), the Levenson Self-Report Psychopathy Scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995), and the Psychopathic Personality Inventory/Psychopathic Personality Inventory-Revised (PPI/PPI-R; Lilienfeld & Andrews, 1996; Lilienfeld & Widows, 2005). To fully understand the current state of self-report methods of assessing psychopathy, it is important to examine these instruments both individually and collectively. The following review includes brief descriptions and relevant findings for each instrument and identifies and explores concerns about extant self-report measures of psychopathy.

It should be noted first, however, that self-report psychopathy instruments are also not without controversy. As such, a discussion of these measures would be incomplete without consideration of the potential hazards of this method of assessment. Lilienfeld and Fowler (2006) articulate several disadvantages to this assessment approach, including dishonest reporting and inaccurate responding by psychopathic individuals due to a lack of insight into how their behavior may affect others. While these concerns are significant and must be considered, they do not appear to preclude self-report measures from being used successfully to assess psychopathy for several reasons. For example, according to Lilienfeld and Fowler's review, research suggests that psychopathic individuals tend to respond accurately on self-report measures, including on items related to "socially deviant characteristics, such as antisocial behavior, recklessness, hostility, and poor impulse control" (p. 112). Additionally, they assert that psychopathic individuals are no more skillful at malingering than nonpsychopathic individuals. Moreover, they

suggest that through validity scales and the inclusion of items that may be indicative of psychopathic traits but do not require "veridical responding" (e.g. "I often get blamed for things that aren't my fault"; Lilienfeld & Fowler, p. 111), developers of self-report measures may be able to limit the impact of dishonest or inaccurate responding. In sum, although self-report assessments of psychopathy should be interpreted with caution, there does not appear to be sufficient evidence to suggest that they are inherently invalid.

Self-Report Psychopathy Scale

The Self-Report Psychopathy Scale (SRP; Hare, 1985) was designed to assess the personality traits and behaviors included in the PCL. Because the original SRP demonstrated only modest agreement with the PCL (r = .38; Hare), it was eventually revised to improve its correspondence. The revised measure, the SRP-II (Hare, Hemphill, & Paulhus, 2002), provided a global psychopathy score, as well as scores for the two traditional PCL-R factors. The two factors were created rationally by compiling items which were conceptually similar to each of the PCL-R factors. Of the 60 total SRP-II items, 31 were selected to comprise the two factors while the remaining 29 were not included in either of the factor scores. In the DSM-IV field trials, the SRP-II demonstrated modest correlations with an abbreviated measure of the PCL-R and DSM-III-R diagnoses of ASPD (Widiger et al., 1996). Beyond convergent relations with the PCL-R, SRP-II has also exhibited expected negative associations with measures of empathy and trait anxiety (Zagon & Jackson, 1994), as well as positive associations with measures of narcissism, Machiavellianism, and delinquency (Paulhus & Williams, 2004). Despite these supportive findings, it should be noted that factor analyses of the SRP-II indicate that the instrument does not capture the traditional two factors represented in the PCL-R in non-forensic

samples (Paulhus & Williams, 2004), which has lead these authors to question the validity of its factor scores.

More recently, the instrument was revised again to improve its correspondence with the most current version of the PCL-R (Hare, 2003). The primary changes in this revision involved reducing content related to anxiety and increasing coverage of antisocial behavior. Perhaps most importantly, the resulting SRP-III (Williams, Paulhus, & Hare, 2007) includes a four-factor structure which overlaps with the four factors identified in Hare's (2003) analysis of the PCL-R. These four factors were labeled Interpersonal Manipulation (SRP-IPM), Callous Affect (SRP-CA), Erratic Lifestyle (SRP-ELS), and Antisocial Behavior (SRP-ASB). In its validation study (Williams, et al., 2007), the SRP-III total score demonstrated expected relations with alternative indices of psychopathy (PPI: r = .60; LSRP: r = .53), as well as with pathological personality traits (narcissism: r = .46; Machiavellianism: r = .48). Unfortunately, little research examining the convergent and discriminant validity of the four factors currently exists.

Levenson Self-Report Psychopathy Scale

Similar to the SRP, the Levenson Self-Report Psychopathy Scale's (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995) assessment of psychopathic traits was based on the PCL/PCL-R. Because of the influence of the PCL-R on its development, the LSRP was developed to provide indices of the traditional two factors of the PCL-R, including a factor related to the interpersonal and affective features of psychopathy (i.e., Factor 1) and a second factor associated with antisocial behavior and social deviance (i.e., Factor 2). Based on an etiological distinction between two psychopathy types put forth by Karpman (1941), Levenson and colleagues suggested that the first factor of the LSRP corresponds with primary psychopathy whereas the second factor corresponds with secondary psychopathy. According to Karpman, primary

psychopaths were believed to be born with a predisposition toward callousness, whereas secondary psychopaths "behaved badly" as a result of environmental factors. Although evidence examining the validity of this distinction is limited, recent research has provided support for the two psychopathy variants (Skeem, Johansson, Andershed, Kerr, & Eno Louden, 2007). However, because the LSRP factors were derived from the PCL-R and the majority of research with this instrument has framed them in this context, the factors will be referred to as Factor 1 and Factor 2 to reflect their relations with the PCL-R.

The LSRP total score has demonstrated expected relations with alternative measures of psychopathy (Hicklin & Widiger, 2005), as well as with external criteria, including antisocial behavior and substance use (Brinkley, Schmitt, Smith, & Newman, 2001; Lynam, Whiteside, & Jones, 1999), and passive avoidance deficits (Epstein, Poythress, & Brandon, 2006; Lynam et al., 1999). While these findings are promising, some have questioned the validity of the LSRP factors and their congruence with the PCL-R factors (e.g., Lilienfeld & Fowler, 2006). The primary criticism appears to involve concerns about the content coverage and discriminant validity of LSRP Factor 1, which has demonstrated equal relations with both PCL-R factors (Brinkley et al., 2001), similar correlations as LSRP Factor 2 with antisocial behavior (Levenson et al., 1995; McHoskey, Worzel, & Szyarto, 1998), and stronger relations with the Factor 2 scores of alternative measures of psychopathy (Lilienfeld & Hess, 2001).

A more recent examination of the personality traits associated with the LSRP factors suggests, however, that these criticisms may be overstated (Miller, Gaughan, & Pryor, 2008). Although the personality correlates of each self-report measure will be reviewed in more detail below when discussing their interrelations, it should be noted that Miller and colleagues found that LSRP Factor 1 exhibited strong relations with interpersonal antagonism. Because of the

prominence of antagonism in LSRP Factor 1, these authors concluded that "although LSRP [Factor 1] may not capture all traits found in PCL-R [Factor 1] psychopathy (e.g., glib/superficial charm; dominance), it appears to capture successfully a number of other traits that are central to the construct (e.g., grandiosity, callousness, selfishness, and manipulativeness)" (Miller et al., 2008, p. 460). In addition, these authors suggest that the equal correlations between LSRP Factor 1 and the PCL-R factors appear to be a problem of self-report measures in general, as similar findings have emerged with alternative instruments like the PPI (e.g., Berardino, Meloy, Sherman, & Jacobs, 2005). In sum, the LSRP appears to exhibit similar strengths and limitations as other self-report measures of psychopathy.

Psychopathic Personality Inventory

Unlike the SRP and LSRP, the Psychopathic Personality Inventory/Psychopathic Personality Inventory-Revised (PPI/PPI-R; Lilienfeld & Andrews, 1996; Lilienfeld & Widows, 2005) was not designed to be congruent with the PCL-R. In contrast, development of the PPI involved identifying and incorporating features from a variety of conceptualizations of psychopathy. The PPI is composed of eight subscales: Machiavellian Egocentricity, Social Potency, Fearlessness, Coldheartedness, Impulsive Nonconformity, Blame Externalization, Carefree Nonplanfulness, and Stress Immunity. Interestingly, factor analyses have shown that the PPI/PPI-R conforms to a two-factor structure, with Social Potency, Fearlessness, and Stress Immunity loading on Factor 1, and Machiavellian Egocentricity, Impulsive Nonconformity, Blame Externalization, and Carefree Nonplanfulness loading on Factor 2 (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003; Lilienfeld & Widows, 2005). Several observations about this factor structure may be particularly important to consider. First, in contrast to the PCL-R the PPI/PPI-R factors are orthogonal which suggests that the PPI does not assess a unitary construct.

Second, the Coldheartedness subscale did not load appreciably on either of the factors. This finding is puzzling given the central role of affective traits like callousness and lack of empathy to the construct of psychopathy, particularly to traditional conceptualizations of Factor 1. Lastly, Derefinko and Lynam (2006) have noted the counter-intuitive loadings of some of the PPI subscales, particularly Machiavellian Egocentricity and Blame Externalization, which "both loaded on PPI Factor 2 despite their seeming similarity to the PCL-R Factor 1 traits of grandiosity, manipulativeness, and failure to accept responsibility" (p. 264).

Despite these issues, there is evidence supporting the construct validity of the PPI. For example, in incarcerated samples PPI total scores have correlated positively with PCL-R total scores (Poythress, Edens, & Lilienfeld, 1998) and institutional infractions (Edens, Poythress, & Lilienfeld, 1999; Edens, Poythress, Lilienfeld, & Patrick, 2008; Edens, Poythress, & Watkins, 2001). Additionally, the PPI factors have demonstrated meaningful relations with external criteria that overlap to varying degrees with those of the PCL-R. For instance, PPI Factor 1 exhibited negative relations with stress reaction and minimal correlations with antisocial behavior and substance use, whereas Factor 2 exhibited positive associations with antisocial behavior and substance use (Benning et al., 2003).

Interrelations between Self-Report Measures

Research examining the individual correlates of the SRP-III, LSRP, and PPI/PPI-R has been promising. Although the measures vary to some extent in their developmental histories, factor structure, and length, they all seem to capture some of the central characteristics of psychopathy. While examining their individual relations with relevant criteria is a beneficial undertaking for understanding each instrument's nomological net, it is also particularly important to consider their interrelations at both the global and factor level. Investigations of the

convergence and divergence of the measures have revealed some positive findings, but unfortunately have also raised several major concerns. These issues are detailed below and explained within the framework of general personality traits, which have proven useful for understanding the similarities and differences between the instruments.

Several studies have examined the interrelations between various self-report measures of psychopathy and related constructs like ASPD, though not all of these investigations have included each of the instruments discussed here. A review of this research shows common findings across studies however. First, research shows that there is generally good convergence among the total and Factor 2 scales for the SRP, LSRP, and PPI (e.g., Benning, Patrick, Salekin, & Leistico, 2005; Derefinko & Lynam, 2006; Gaughan, Miller, Pryor, & Lynam, 2009; Hicklin & Widiger, 2005). Within the framework of the FFM dimensions and facets, the total scores for these instruments seem to be composed primarily of low Agreeableness and Conscientiousness, as well as a mixture of low and high Neuroticism (low: self-consciousness, anxiety, depression, vulnerability; high: impulsivity, angry hostility) and Extraversion (low: warmth; high: excitement seeking and assertiveness; Derefinko & Lynam, 2006; Hicklin & Widiger, 2005). Similarly, the personality correlates for the Factor 2 scales suggests that they assess similar constructs. Specifically, the Factor 2 scores for the SRP, LSRP, and PPI/PPI-R are all composed of low Agreeableness, low Conscientiousness, high Neuroticism, and generally low Extraversion (Gaughan et at., in press; Derefinko & Lynam, 2006).

In contrast to the total and Factor 2 scales, the Factor 1 scales appear much more divergent with correlations between scales significantly lower than between the corresponding total and Factor 2 scales (e.g., Derefinko & Lynam, 2006; Gaughan et al., 2009; Benning, Patrick, Salekin, et al., 2005). In their study, which included the PPI and SRP-II, Derefinko and

Lynam reasoned that the lack of convergence among the Factor 1 scales reflected divergences in construct content. Specifically, the personality correlates of PPI Factor 1 suggest that it is composed primarily of high Extraversion, including high warmth, gregariousness, and positive emotions, and low N, including low angry hostility. In contrast, the personality correlates of SRP-II Factor 1 indicate that it assesses low Agreeableness and low Neuroticism. These authors concluded that the Factor 1 scales of these instruments do not show good convergence because they assess different personality characteristics.

Alternatively, in their investigation of the SRP-III, LSRP, and PPI-R, Gaughan and colleagues (2009) noted that the poor convergence among the Factor 1 scales was primarily driven by the poor convergence between PPI-R Factor 1 and the other Factor 1 scales, as LSRP Factor 1 and the interpersonal (SRP-IPM) and affective (SRP-CA) scales of the SRP-III were all strongly interrelated. To further explore these findings, they submitted the scales from each of the inventories to a principal component analysis. The analysis included the four factor scales of the SRP (i.e., SRP-IPM, SRP-CA, SRP-ELS, and SRP-ASB), the Factor 1 and Factor 2 scales of the LSRP and PPI-R, as well as the PPI-R Coldheartedness scale which does not load on either of its factors. The principal components analysis identified four interpretable components, two of which corresponded with traditional conceptions of Factor 1 and Factor 2. The traditional Factor 2 component was composed of PPI-R Factor 2, LSRP Factor 2, and SRP-ELS (secondary loading). Alternatively, the traditional Factor 1 component was composed of LSRP Factor 1, SRP-IPM, SRP-CA, and PPI-R Coldheartedness. Interestingly, PPI-R Factor 1 did not load on this component with the other Factor 1 scales, but instead loaded on a separate component with SRP-ELS. Lastly, SRP-ASB loaded on its own component, which appeared to be made up

entirely of antisocial behaviors. The results of this principal component analysis suggest that PPI-R Factor 1 assesses different content than the Factor 1 scales of the LSRP and SRP-III.

The personality correlates of these components further supported the notion that the divergence among the Factor 1 scales primarily reflected PPI-R Factor 1. Specifically, the component corresponding to traditional Factor 1, which included LSRP Factor 1, SRP-IPM, SRP-CA, and PPI-R Coldheartedness, demonstrated its strongest correlations with Agreeableness (r = -.79), which is consistent with both theoretical conceptualizations (e.g., Widiger & Lynam, 1998) and empirical research (e.g., Lynam & Derefinko, 2006) of this factor. Alternatively, the component which was dominated by PPI-R Factor 1 was primarily related to high Extraversion (r = .46) and low Neuroticism (r = -.36), and to a lesser extent with low Agreeableness (r = -.27). These findings mirror those of Derefinko and Lynam (2006) and suggest that the lack of convergence between PPI-R Factor 1 and the other measures of the interpersonal and affective features of psychopathy (e.g., LSRP Factor 1; SRP-IPM; SRP-CA) is most likely due to the significant differences in the underlying traits that comprise these scales. Unlike alternative Factor 1 scales which primarily assess low Agreeableness, PPI-R Factor 1 places significantly less emphasis on interpersonal antagonism, and focuses exclusively on high Extraversion and low Neuroticism. The absence of antagonism in PPI-R Factor 1 may explain why previous research has shown that this scale is unrelated or weakly related to various externalizing problems, including aggression (Patrick, Edens, Poythress, Lilienfeld, & Benning, 2006) and antisocial behavior (Benning et al., 2003; Benning, Patrick, Blonigen, et al., 2005; Patrick et al., 2006). Moreover, the emphasis on high Extraversion and low Neuroticism in PPI-R Factor 1 indicates that this scale "assesses a psychopathy variant that is substantially different

than other psychopathy measures in terms of its emphasis on adaptivity rather than maladaptivity" (Gaughan et al., 2009, p. 990).

In sum, research on the convergence and divergence of self-report measures is both encouraging and concerning. Although there is good convergence among the total and Factor 2 scales of the SRP, LSRP, and PPI/PPI-R, the lack of convergence for the Factor 1 scales is problematic as it limits the field's ability to develop of a coherent body of empirical work on psychopathy. This poor convergence and varying personality correlates suggests that continued research is needed to identify the traits central to a conceptualization of this factor.

Psychopathy and General Personality Traits

Beyond illustrating the interrelations between extant self-report measures, the previous review highlights how general personality traits may improve our understanding of both psychopathy and PDs in general. Along with the increased interest in developing self-report measures of psychopathy, researchers have devoted more attention to using general trait models of personality to understand and assess this PD. According to these researchers, psychopathy can be understood as a maladaptive configuration of normal personality traits (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003; Miller, Lynam, Widiger, & Leukefeld, 2001). Although various personality models and measures have been used to examine psychopathy, including Tellegen's (1985) three-factor model and corresponding Multidimensional Personality Questionnaire (MPQ; Tellegen, in press; e.g., Benning, Patrick, Blonigen, et al., 2005; Verona, Patrick, & Joiner, 2001), a substantial portion of this research has utilized the Five Factor Model (FFM; McCrae & Costa, 1990) of personality, which is composed of five broad personality traits: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. Neuroticism refers to emotional adjustment and instability, and Extraversion

represents sociability and agency. Openness to Experience refers to interest and willingness to try or consider new activities, ideas, and beliefs. Agreeableness represents different interpersonal strategies ranging from agreeable to antagonistic, and Conscientiousness refers to the ability to control impulses and carry out plans and tasks, as well as organizational skills. As assessed by the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992), each of these higher order dimensions is further composed of six lower order facets.

Researchers have used the FFM in several important ways to examine and study psychopathy. One prominent line of research has involved examining the bivariate relations between measures of psychopathy and general personality traits. A meta-analytic review of this research by Lynam and Derefinko (2006) indicates that psychopathy is most strongly associated, inversely, with Agreeableness (*weighted mean r* = -.52) and Conscientiousness (*weighted mean r* = -.38). Additionally, researchers have used alternative methods for examining the core personality traits central to the construct of psychopathy. For example, Widiger and Lynam (1998) provided a personality profile of the PCL-R by translating PCL-R items into the language of the FFM. For instance, shallow affect (PCL-R item 7) was translated into low Warmth (a facet of Extraversion), low Positive Emotionality (a facet of Extraversion), low Altruism (a facet of Agreeableness), and low Tender-Mindedness (a facet of Agreeableness). Consistent with correlational findings, the FFM profile was primarily composed of traits related to an antagonistic interpersonal style and poor inhibition, but also bore smaller relations with facets of both and high and low Neuroticism and Extraversion. Later, Miller and colleagues (2001) developed an expert rated profile of psychopathy which captured the FFM traits considered most prototypical of psychopathic individuals. They then used the expert ratings to create an empirical FFM psychopathy score which has demonstrated expected relations with other measures of

psychopathy and important individual difference variables, like antisocial behavior and substance abuse (Miller et al., 2001; Miller & Lynam, 2003).

This line of research has made several important contributions to the field, including improving our understanding of the core personality features underlying psychopathy (i.e., low Agreeableness and low Conscientiousness), allowing for the use of measures of normal personality functioning to conceptualize and assess psychopathy, and demonstrating that general measures of personality may be as successful as actual self-report measures of psychopathy at assessing this personality construct (e.g., Walton, Roberts, Krueger, Hicks, & Blonigen, 2008). Additionally, it is clear that general personality models are useful platforms for understanding and explaining the convergence and divergence among measures of psychopathy. Overall, structural models of personality have proven to be useful for examining pathological personality traits.

Criticisms and Limitations of Extant Instruments

Both self-report measures of psychopathy and general personality inventories have been used successfully to assess psychopathy (e.g., Miller et al., 2001; Miller & Lynam, 2003; Benning, Patrick, Blonigen, et al., 2005), but these instruments are not without limitations. In a recent study, Walton and colleagues (2008) used Item Response Theory to examine the range of the latent psychopathy trait captured by both a measure of general personality (i.e., Tellegen's MPQ) and one of the most prominent self-report psychopathy inventories, the PPI. Findings indicated that the MPQ and PPI accounted for similar portions of the latent psychopathy trait, which suggests that they are equally successful in assessing psychopathy; however, neither measure was particularly successful at capturing variance at the extreme regions of the trait. These findings suggest that current self-report measures of psychopathy and general personality

inventories may be limited in their ability to adequately assess psychopathy, and in particular extreme levels of this personality configuration.

Extant self-report measures of psychopathy are useful for assessing and examining psychopathy, but these findings, along with the aforementioned problems related to the poor convergence of their Factor 1 scales, indicate that they are not without significant flaws. Similarly, general personality inventories have shown to be as useful as extant self-report measures of psychopathy in assessing psychopathy, but they may be unable to capture the entire psychopathy continuum. While both extant self-report instruments and general personality inventories have limitations, it must also be noted that the current gold standard for assessing psychopathy, the PCL-R, is also not without drawbacks.

Alternative Methods of Conceptualizing and Assessing Psychopathy

In response to these limitations with extant psychopathy assessments, Lynam and Widiger (2007) advocate using a broad model of personality functioning to identify the core elements of psychopathy in order to develop a more accurate and comprehensive conceptualization of this PD. They articulate three advantages to this approach, stating: 1) "the approach begins with simple traits that are more clearly separable from one another and which exist at the same level in a personality trait hierarchy;" 2) "the approach can eliminate reliance on a single particular instrument for identifying and understanding the core traits of psychopathy;" and 3) "because no model is necessarily imposed *a priori*, there is no conceptual drift" (p. 166). The latter two points appear particularly relevant now, given the aforementioned problem of investigations of the factor structure of the PCL-R being inappropriately described as examinations of the factor structure of psychopathy.

Because of its validity and comprehensiveness, these authors suggest that the FFM may be the most appropriate model. To identify the core components of psychopathy, they compared the FFM profiles obtained from correlational research (Derefinko & Lynam, 2006; Hicklin & Widiger, 2005), expert ratings of psychopathy (Miller, Lynam, Widiger, & Leukefeld, 2001), and their translation of the PCL-R (Widiger & Lynam, 1998). They identified 12 traits which were common across all three approaches. This consensus set of psychopathic traits included low levels on 5 facets of Agreeableness (straightforwardness, altruism, compliance, modesty, and tendermindedness), on 3 facets of Conscientiousness (dutifulness, self-discipline, and deliberation) and one facet of Extraversion (warmth), as well as high levels on one facet of Neuroticism (impulsiveness) and Extraversion (excitement seeking). Interestingly, if the PCL-R translation is excluded from this comparison and only the correlational and expert rating approaches are examined, eight additional common traits emerge. These traits include high levels of angry hostility (a facet of Neuroticism), assertiveness (a facet of Extraversion), and openness to actions (a facet of Openness), as well as low levels of anxiety, depression, and vulnerability (facets of Neuroticism), trust (a facet of Agreeableness) and openness to feelings (a facet of Openness). From these comparisons, Lynam and Widiger have provided a description of the core features of psychopathy from the perspective of simple traits.

This work has significant implications. Placing the central components of psychopathy within the framework of a model of general personality like the FFM allows for basic personality research (e.g., heritability of personality traits) to be incorporated into the study of psychopathy, which broadens the pool of available investigations. Moreover, conceptualizing the core psychopathic features from the perspective of basic personality traits provides a model of the fundamental simple traits which should be included in any measure of psychopathy. As such,

these new measures may be able to avoid some of the pitfalls of the PCL-R and extant self-report measures of psychopathy with regards to comprehensiveness and complex traits.

Elemental Psychopathy Assessment

Intriguingly, this research has already led to the development of a new self-report measure of psychopathy, the Elemental Psychopathy Assessment (EPA; Lynam, Gaughan, Miller, & Widiger, under review), that is based on basic personality traits from the FFM. In creating this instrument, Lynam and colleagues grouped the core psychopathic traits identified by Lynam and Widiger (2007) into five clusters: *interpersonal antagonism* (trust, straightforwardness, altruism, compliance, modesty, tendermindedness, warmth), *pan-impulsivity* (impulsiveness, excitement seeking, self-discipline, deliberation), *interpersonal dominance* (assertiveness), *lack of self-directed negative affect* (anxiety, depression, self-consciousness, vulnerability), and *negative other directed affect* (anger). The EPA is composed of 18 subscales which have a direct correspondence with the 18 NEO PI-R facets included in these personality clusters. The EPA subscales and corresponding NEO PI-R facet (in parentheses) are as follows: Unconcern (Anxiety), Anger (Angry Hostility), Self-contentment (Depression), Self-assurance (Self-consciousness), Urgency (Impulsiveness), Invulnerability (Vulnerability), Coldness (Warmth), Dominance (Assertiveness), Thrill-seeking (Excitement Seeking), Distrust (Trust), Manipulation (Straightforwardness), Self-centeredness (Altruism), Opposition (Compliance), Arrogance (Modesty), Callousness (Tendermindedness), Disobliged (Dutifulness), Impersistence (Self-discipline), and Rashness (Deliberation).

To address the measurement problems revealed by Walton et al. (2008), Lynam and colleagues (under review) created new items for the EPA in an effort to expand the coverage of the psychopathy continuum and improve measurement of extreme psychopathic traits. Using the

NEO PI-R facet items and descriptions as a framework, they wrote new items for the EPA to reflect more maladaptive/extreme variants of these traits (e.g., "I have more important things to worry about than other people's feelings" for Self-centeredness). Additionally, they developed two validity scales, one assessing inattentive responding and another assessing positive impression management.

In their validation study, Lynam and colleagues (under review) found the 18 scales of the EPA to be reliable (mean alpha = .81), homogenous (mean inter-item correlation = .34), and unidimensional. Moreover, the EPA subscales demonstrated good convergence with the corresponding NEO PI-R facet (mean convergent r = .66) from which they were developed, as well as good divergence from the other facets of the relevant NEO PI-R domain (mean divergent r = .37). The EPA also manifested stronger relations with alternative self-report measures of psychopathy (i.e., SRP-III, LSRP, and PPI-R). For example, of the 54 correlations between the 18 EPA subscales/NEO PI-R facets and the total scores from these three psychopathy measures, the EPA subscales demonstrated stronger relations than the original NEO PI-R facet in 41 instances. Moreover, the EPA subscales bore expected relations with conceptually similar factors/subscales of the three psychopathy instruments. This was most clearly visible for the PPI-R, as "each of the eight PPI-R scales was related to different EPA scales in a manner that was quite consistent with the constructs assessed by each of the EPA scales" (p. 24). For example, PPI-R Machiavellian Egocentricity demonstrated its strongest relations with EPA Manipulation and Self-centeredness, whereas PPI-R Coldheartedness exhibited it strongest association with EPA Coldness and Callousness. Beyond stronger bivariate relations, the EPA subscales also significantly out predicted the original NEO PI-R facet, explaining more additional variance in psychopathy scores (i.e., 13% vs. 1.8%). Similarly, when the subscales/facets of the EPA/NEO

PI-R where summed to create a total psychopathy score, the EPA continued to out predict the NEO PI-R, explaining more additional variance in the self-report psychopathy scores (17% vs. 1%).

In sum, Lynam et al. (under review) found strong support for the EPA in their initial validation study. The EPA subscales demonstrated expected relations with extant self-report measures of psychopathy, and overall these associations were stronger than those between the original NEO PI-R facets and the psychopathy instruments. The EPA subscales and global score also accounted for more unique variance in psychopathy scores than the NEO PI-R subscales and total score. These encouraging findings illustrate the utility of the EPA in assessing psychopathic traits. Because the EPA is based on basic personality traits, this instrument offers significant advantages over extant self-report psychopathy measures. In addition to allowing for basic personality research to be incorporated into psychopathy research, the EPA allows for more precise investigations of the relevant outcomes associated with this PD (e.g., antisocial behavior, institutional misconduct, recidivism) as the core psychopathic traits assessed by EPA subscales reflect simple traits. As articulated by Lynam and colleagues, "one can ask which elements are important for which particular outcomes" (p. 26).

Current Study

Because of the previously mentioned limitations of extant psychopathy measures, it is important to develop alternative measures of psychopathy which are based on basic personality traits and can capture the extreme ends of the psychopathy continuum. Although initial research suggests that the EPA may a particularly useful tool for conceptualizing and assessing psychopathy (Lynam et al., under review), further investigation is needed to establish the reliability and validity of this measure, particularly in forensic samples. The current study seeks

to examine the EPA's ability to assess psychopathy is a sample of incarcerated adult males. While findings by Lynam and colleagues indicate that the EPA can successfully assess psychopathic traits in non-institutionalized samples, it is important to determine if these findings hold in prison settings where psychopathic traits are likely to be more elevated and where individuals may be less likely to respond in an accurate and/or honest manner to personality questionnaires.

In addition to improving our understanding of and ability to assess psychopathy, the EPA may have particular benefits within clinical practice. For example, institutional clinicians could administer the instrument as a brief initial screen of psychopathic traits to identify offenders in need of further evaluation or for management purposes. The EPA may also help us to understand which basic, core traits are most relevant to the various problematic and dangerous outcomes associated with psychopathy (e.g., criminality, recidivism). Moreover, using the EPA to identify these traits may help to improve intervention and prevention strategies and lead to more targeted forensic assessments.

Given these benefits, it is important to determine the psychometric properties and nomological net of the EPA with an incarcerated sample. As such, the current research examined the reliability of the instrument and its relations with an alternative self-report measure of psychopathy. Additionally, the present research examined the associations between the EPA and externalizing behavior. Lastly, this investigation compared the predictive and incremental validity of the EPA and an alternative self-report measure of psychopathy with regards to institutional misconduct.[1]

[1] Predictive validity refers to statistical prediction, not longitudinal. The amount of variance in institutional infractions explained by each of the psychopathy instruments is tested.

CHAPTER 2

METHOD

Participants

Seventy-seven male inmates were recruited from a close security state prison in central Georgia which houses both general population and mental health inmates. The data for two inmates were excluded from the analyses after visual inspection of the completed questionnaires revealed a pattern of invalid responding. An additional five inmates were identified as invalid responders due to elevations on the EPA Infrequency and Too Good to be True scales. The data for these inmates were also excluded from the analyses, resulting in a final sample of 70 inmates. Participants ranged in age from 19 to 63 years (M = 37.0 years; SD = 11.27). The racial composition of the sample was predominately White (44%; n = 31), and Black (41%; n = 29), with the remaining individuals (n = 10) identifying as multi-racial. The majority of participants were either single (50%; n = 35), or divorced (29%; n = 20).

Recruitment involved placing advertisement fliers in each of the inmate dorms. Individuals interested in participating placed a note with their name in a drop-box envelope. The researchers met with these individuals to review the consent form and administer a literacy screen. Consenting procedures were completed either inivididually or in groups; all literacy screens were completed individually and involved reading aloud a text description of the study.

Although recruitment involved both general population inmates and inmates currently receiving mental health services, individuals with a diagnosis of a psychotic disorder or mental retardation were excluded from participating. The consent form included a a provision for

participants to agree to allow their medical records to be accessed to verify eligibility, as well as their institutional records to collect information about their current and prior convictions and disciplinary infraction history. Eligibility was determined by checking for the aforementioned diagnoses in the institution's medical records for each consenting participant.

Procedure

After providing informed consent, inmates either completed the study protocol or were scheduled to do so on a latter date due to time or space constraints. For inmates who did not complete the protocol on the same day they provided consent, the researchers verified eligibilty before scheduling them to complete the study. Alternatively, for inmates who completed the consent procures and protocol on the same day, the researchers verified eligibility after the inmates completed the questionnaires. Of this group of inmates, two individuals were later excluded due to the presence of a psychotic disorder. Additionally, one non-English speaking inmate was excluded.

Participants completed several questionnaires related to personality traits and externalizing behaviors in group testing sessions composed of 3 to 25 inmates. One inmate was identified as having reading difficulty during the literacy screen, and he participated in a separate assessment session in which a researcher read aloud the questionnaires. On the front page of the packet of questionnaires was an initial form that included a randomly chosen number. Inmates provided their Georgia Department of Corrections (GDC) identification number on this form. They then detached this form from the packet of questionnaires. After the researcher collected all of the identification forms, the participants completed a series of questionnaires. Following completion of the battery, the researchers debriefed the inmates and provided soda and cookies for their participation. The total time required to complete the questionnaires ranged from 45 to

90 minutes. Researchers were present throughout each testing session to answer questions, and all Institutional Review Board requirements were followed.

The purpose of requesting identification numbers was to allow each inmate's questionnaire data to be matched with data collected from the institutional records. As previously mentioned, information collected during the record review included current and prior convictions and disciplinary infraction history. The facility's staff assisted the researchers in gathering this data from the institution's computer database. The researchers decoded the institutional information onto a separate form and matched the data with each participant's questionnaires. The form containing the inmate identification numbers was then destroyed, and all data became identifiable by only the randomly chosen number. No questionnaires or records with identifiable information ever left the institution at any time.

Measures

Background Information Questionnaire (BIQ-S). The BIQ-S is a 7-item questionnaire designed to collect demographic information (i.e., age, ethnicity, race, marital status, and education).

Elemental Psychopathy Assessment (EPA). The EPA (Lynam, Gaughan, Miller, & Widiger, under review) is a 178-item, self-report measure of psychopathy which provides a global psychopathy score (EPA-Total), as well as scores on 18 psychopathy subscales and two validity scales (Infrequency; Too Good to Be True). For each item, individuals rate themselves on a 5-point Likert scale. The subscales were designed to assess more maladaptive variants of the NEO PI-R facets/traits identified by Lynam and Widiger (2007) as the core features of psychopathy. In the EPA, six of the subscales assess facets of Antagonism (Distrust; Manipulation; Self-centeredness; Opposition, Arrogance; Callousness; Disobliged), three scales

assess facets of Conscientiousness (Disobliged; Impersistence; Rashness), three scales assess Extraversion facets (Coldness; Dominance; Thrill-seeking), and six scales assess Neuroticism (Unconcern; Anger; Self-contentment, Self-assurance; Urgency; Invulnerability). Descriptive characteristics of the EPA are included in Table 1.

Self-Report Psychopathy Scale-III (SRP-III). The SRP-III (Williams, Paulhus, & Hare, 2007) is a 64-item, self-report measure of psychopathy which provides a global psychopathy score (SRP-Total), as well as scores for 4 subscales: Interpersonal Manipulation (SRP-IPM), Callous Affect (SRP-CA), Erratic Life Style (SRP-ELS), and Anti-Social Behavior (SRP-ASB). SRP-IPM and SRP-CA assess the interpersonal and affective features of psychopathy and correspond most closely with traditional Factor 1 of the PCL-R. Alternatively, SRP-ELS and SRP-ASB assess chronic social deviance and irresponsibility, antisocial behavior, and impulsivity, and correspond most closely with traditional Factor 2 of the PCL-R. Coefficient alphas for SRP Total, SRP-IPM, SRP-CA, SRP-ELS, and SRP-ASB were .94, .85, .83, .82, and .74, respectively. Descriptive characteristics of the SRP-III are included in Table 2.

Crime and Analogous Behavior Scale (CAB). The CAB (Lynam, Whiteside, & Jones, 1999) is a 44-item self-report inventory that measures various delinquent behaviors. The inventory contains content related to drug and alcohol use and antisocial behavior (e.g., fighting, stealing). An *alcohol use* (AU) index was created by standardizing and then summing the items related to alcohol use (M = 0; SD = 2.40). A *substance use* (SU) count was created by giving participants a "1" for every substance they endorsed using during their lifetime (7 items; M = 3.13; SD = 2.08). Lastly, an *antisocial behavior* (ASB) count was created by giving participants a "1" for every relevant act they endorsed during their lifetime (9 items; M = 5.27; SD = 2.38).

Disciplinary Reports (DRs). The Georgia Department of Corrections (GDC) maintains a comprehensive code of inmate misconduct. Similar to previous research examining institutional infractions (e.g., Edens, Poythress, & Lilienfeld, 1999), a scheme was created to categorize each form of misconduct. Each infraction was coded into one of three categories (see Appendix B for complete listing of DRs): Physical Aggression (PA; e.g., "Assault on an inmate," Injury to officer"), Verbal and Minor Physical Aggression (VMPA; e.g., "Verbal/Gesture threatening," "Projecting bodily fluids") or Non-Aggression/Acts of Defiance (NA/AD; e.g., "Possession of contraband," "Unauthorized absence," "Damage to state property"). For each category, a total score was created by summing the number of infractions (see Table 3). Additionally, the total number of infractions across all categories was summed to create a global score (DR Total).

Data Analytic Approach

First, to examine the construct validity of the EPA, bivariate correlations were computed between the EPA and SRP-III[2] (see Table 4). Second, the bivariate relations between the psychopathy instruments and externalizing behavior were examined (see Table 5). Next, to evaluate the relative predictive abilities of the EPA and SRP-III, semi-partial correlations were computed between the total scores from the psychopathy instruments and externalizing behavior (see Table 6). To further examine the predictive validity of the SRP-III, additional semi-partial correlations were computed using this instrument's factor scales (see Table 7). The convergence between the EPA and institutional misconduct was then evaluated by computing the bivariate correlations between the EPA scales and DRs (see Table 8). Lastly, semi-partial correlations were computed between the total scores on the psychopathy instruments and DRs to compare their respective predictive abilities (see Table 9).

[2] To determine the mean effect sizes (ES) between the scales of the psychopathy measures, individual correlations were transformed using the Fischer-Z transformation before being averaged and then transformed back.

CHAPTER 3

RESULTS

Descriptive Characteristics of the EPA

Table 1 presents the descriptive characteristics of the EPA. In general, the EPA subscales were fairly reliable with coefficient alphas ranging from .44 (Arrogance) to .87 (Anger) with a median of .76 (see Table 1). Fifteen of the 18 scales had coefficient alphas above .70.

Relations between the EPA and SRP-III

Table 4 provides the bivariate correlations between the EPA and the SRP-III factors. At the global level, EPA-Total demonstrated strong (i.e., $r > .50$) convergence with SRP-Total ($r = .89$) and all four SRP-III factors (rs = .68 to .87). In general, the SRP-III factors exhibited significant relations with all of the EPA Antagonism scales except Arrogance. More specifically, the Manipulation, Self-Centeredness, Opposition, and Callousness scales all demonstrated strong correlations with each of the SRP-III factors (with the exception of Self-Centeredness and SRP-ASB). Additionally, the four SRP-III factors exhibited strong associations with Dominance and Thrill-Seeking and significant relations with Disobliged and Rashness. The EPA scales assessing internally directed facets of Neuroticism (i.e., Unconcern, Self-Contentment, and Self-Assurance) were unrelated to the SRP-III scales (rs = .00 to .23), whereas the EPA scales associated with externally directed affect (i.e., Anger) and impulsivity (i.e., Urgency) significantly correlated with all of the SRP-III factors (rs = .38 to .57).

Relations between the EPA, SRP-III, and Externalizing Behavior

The bivariate relations between the EPA scales and externalizing behavior are presented in Table 5. AU significantly correlated with all subscales assessing interpersonal antagonism except Arrogance. Additionally, AU bore strong and moderate relations with Urgency and Rashness, respectively. In contrast, SU was primarily associated with Thrill-Seeking, but also demonstrated significant relations with Rashness and Manipulation. Similar to AU, ASB bore significant relations with the Antagonism based scales of Manipulation, Self-Centeredness, Opposition, and Callousness, and strongly correlated with Thrill-Seeking. For the SRP-III, AU exhibited significant relations with all four factor scales (see Table 5). SU bore moderate relations with SRP-ELS and SRP-ASB and also significantly correlated with SRP-IPM. Lastly, ASB most strongly correlated with SRP-ASB (r = .70), but also bore moderate to strong relations with SRP-ELS, SRP-CA, and SRP-IPM.

Table 6 presents the zero-order and semi-partial correlations between total scores on the psychopathy instruments and externalizing behavior, as well as the amount of predictive and incremental variance in each index of externalizing behavior explained by EPA-Total and SRP-Total. EPA-Total bore significant positive relations with AU and ASB, explaining 12% (AU) and 24% (ASB) of the variance, with an average r-squared of .13 for all three indices. SRP-Total significantly correlated with all three externalizing behavior indices, explaining 12% (AU), 14% (SU), and 36% (ASB) of the variance, with an average r-squared of .21. Semi-partial correlations were then computed from a simultaneous regression analysis in which a given index of externalizing behavior was regressed onto EPA-Total and SRP-Total. When SRP-Total was included, the relations between EPA-Total and AU and ASB were no longer significant, though EPA-Total exhibited a significant negative association with SU. Alternatively, when EPA-Total

was included, SRP-Total continued to demonstrate significant positive relations with SU and ASB, uniquely explaining 19% (SU) and 13% (ASB) of the variance.

The preceding results suggest that both psychopathy instruments are significantly related to externalizing behavior, but only SRP-Total uniquely accounts for variance in externalizing behavior. To further explore the predictive advantage of the SRP-III, semi-partial correlations were computed between the four SRP-III factors, EPA-Total, and the externalizing behavior indices (see Table 7). Specifically, semi-partial correlations were obtained from a simultaneous regression analysis in which a given index of externalizing behavior was regressed onto SRP-IPM, SRP-CA, SRP-ELS, SRP-ASB, and EPA-Total. When all four SRP-III scales and EPA-Total were included, only the traditional Factor 2 scales exhibited significant relations with SU and ASB. Specifically, SRP-ASB bore significant relations with SU and ASB; SRP-ELS demonstrated a significant association with SU. Overall, these results suggest that the traditional Factor 2 scales of the SRP-III are responsible for its incremental validity.

Relations between the EPA, SRP-III, and Disciplinary Reports

Table 8 presents the bivariate relations between the scales of the psychopathy instruments and institutional infractions. As previously mentioned, each Disciplinary Report (DR) was assigned to a category based on the nature of the infraction. For the EPA, Dominance significantly correlated with all three categories of institutional misconduct, as well as DR Total. Additionally, select EPA scales exhibited significant relations with the three forms of DRs. PA bore small to moderate correlations with Anger, Self-Assurance, Urgency, Coldness, Opposition, and Arrogance. VMPA demonstrated moderate relations with Callousness, whereas NA/AD exhibited small to moderate associations with Self-Contentment, Coldness, Opposition, and Callousness. Beyond Dominance, DR Total bore significant relations with Self-Contentment,

Self-Centeredness, Opposition, and Callousness. Alternatively for the SRP-III, SRP-CA significantly correlated with all thee DR categories and DR Total. Additionally, PA bore significant relations with SRP-IPM; and NA/AD exhibited a small association with SRP-ASB. Beyond SRP-CA, DR Total significantly correlated with SRP-IPM and SRP-ASB.

To compare the predictive validity of the EPA and SRP-III for institutional misconduct, new DR indices were first created to control for length of incarceration. Specifically, each DR category was regressed onto a variable denoting the length of incarceration (in months). Upon removing the variance associated with length of incarceration, the residual DR category variables were then saved and used to examine the relations between the total psychopathy scores and disciplinary infractions. Table 9 presents the zero-order and semi-partial correlations between EPA-Total, SRP-Total, and the residualized DR scores. EPA-Total exhibited significant positive relations with all three DR categories and DR Total, accounting for 13% (PA), 7% (VMPA), 14% (NA/AD), and 16% (DR Total) of the variance, with an average *r*-squared of .13. SRP-Total bore significant positive relations with three of the four DR scores, accounting for 8% (PA), 7% (NA/AD), and 8% (DR Total) of the variance, with an average *r*-squared of .07. Semi-partial correlations were then obtained from a simultaneous regression analysis in which a given DR category was regressed onto EPA-Total and SRP-Total. EPA-Total clearly outperformed SRP-Total in the multiple regressions as the contribution of SRP-Total was reduced to zero for all DR categories (*sr*s = -.14 to -.03). In contrast, EPA-Total remained significantly and positively related to three of the four DR categories (*sr*s = .15 to .30). Overall, these results indicate that EPA-Total uniquely accounts for more variance in DRs than SRP-Total.

CHAPTER 4

DISCUSSION

A recent review on the state of psychopathy assessment (Lynam & Widiger, 2007) highlighted several significant concerns with extant psychopathy measures, including their comprehensiveness and reliance on complex traits. Additionally, the poor convergence among the Factor 1 scales of several prominent self-report measures suggests that these psychopathy instruments assess different personality content (Derefinko & Lynam, 2006; Gaughan, Miller, Pryor, & Lynam, 2009). In response to these issues, Lynam and Widiger advocated utilizing a general personality model to identify the traits most central to psychopathy. These traits would then provide an outline of the basic components of psychopathy. Due to its comprehensiveness and empirical support, these authors chose the Five Factor Model (FFM; McCrae & Costa, 1990) of personality as their framework to examine the primary personality traits underlying psychopathy. Their review of correlational research (Derefinko & Lynam, 2006; Hicklin & Widiger, 2005), expert ratings of psychopathy (Miller, Lynam, Widiger, & Leukefeld, 2001), and an FFM translation of the PCL-R (Widiger & Lynam, 1998) led to the identification of 18 personality traits characteristic of psychopathy. These authors then developed a new self-report measure of psychopathy, the Elemental Psychopathy Assessment (EPA, Lynam, Gaughan, Miller, & Widiger, under review), based on these consensus traits. The current research builds on their initial validation study by examining the validity of the EPA with an incarcerated sample. Specifically, the current study examined the EPA's convergence with an alternative self-report

measure of psychopathy, relations with externalizing behavior, and predictive and incremental validity with regards to institutional misconduct.

EPA Scale Characteristics

Overall, the EPA scales were fairly reliable. With the exception of Arrogance, coefficient alphas ranged from .64 to 87, and the majority of the scales had coefficient alphas above .70. In general, these alphas were smaller than that those reported in the initial validation study (Lynam, et al., under review), which included undergraduate participants. The choice of samples may best explain the differences in reliability between the two studies. A sample of incarcerated individuals would be expected to have greater levels of psychopathic traits and lower levels of education than a sample composed of undergraduates, both of which could affect the consistency of responses. Researcher observations from the testing sessions suggested that the reverse wording on select items may have negatively impacted the reliability of the scales. Specifically, participants frequently noted confusion about the wording of negative items (e.g., "I do not believe that I am any more important than anyone else") which may have resulted in some inconsistent responding. Difficulty with item comprehension would seem to be less prevalent with college samples given the educational achievement required to gain college admission. Nevertheless, the overall reliability of the EPA scales was good.

Similar to findings from the initial validation study (Lynam, et al., under review), Arrogance demonstrated poorer reliability and non-existent relations with SRP-III. In fact, Arrogance was the only Antagonism based scale that failed to significantly correlate with the SRP-III in the current study. One possible explanation for the poor reliability may be that this scale assesses several different personality facets. An examination of the individual Arrogance items indicates that this scales assesses aspects of immodesty (e.g., Item 61: "Some people say

I'm too cocky and full of myself"), grandiosity (e.g., Item 56: "If I were in charge, the world would be a better place"), and entitlement (e.g., Item 86: "I deserve special treatment"). Because the EPA scales are composed of only 9 items, the inclusion of several different, but related, personality facets may limit the reliability of Arrogance. Given the prominence of pathological arrogance to the construct of psychopathy (Cleckley, 1941/1976), the EPA Arrogance scale clearly requires refinement to improve its reliability.

Convergence with an Alternative Psychopathy Assessment

A primary advantage of the EPA is its foundation on simple traits. By assessing the elemental units of psychopathy, the EPA has the power to provide a more detailed personality profile of related measures and constructs. This level of inspection is perhaps most relevant for understanding the factor scales of extant psychopathy instruments. In the current study, the EPA demonstrated convergent relations with the four factors of the SRP-III which were largely consistent with Lynam et al.'s (under review) validation study. SRP-IPM correlated most strongly with Manipulation, Opposition, Callousness, and Self-Centeredness, as well as with Thrill-Seeking; SRP-CA was most strongly associated with Callousness, Self-Centeredness, Coldness, Opposition, Manipulation, as well as with Thrill-Seeking; SRP-ELS most strongly correlated with Thrill-Seeking, Opposition, Manipulation, and Rashness; and SRP-ASB was most strongly associated with Manipulation, Thrill-Seeking, and Opposition. The prominence of interpersonal antagonism was clear as the SRP-III factors demonstrated strong relations with all of the Antagonism-based scales except Arrogance. These relations are consistent with prior theory and research demonstrating the central role of Antagonism to the construct of psychopathy (e.g., Gaughan, Miller, Pryor, & Lynam, 2009; Lynam, 2002).

The strong relations between Thrill-Seeking and all of the SRP-III factors was surprising as this impulsivity related trait is generally considered to be more characteristic of traditional Factor 2 scales (i.e., SRP-ELS, SRP-ASB). Although Thrill-Seeking bore its strongest relation with SRP-ELS, this scale also strongly correlated with SRP-IPM (r = .75) and SRP-CA (r = .68). In contrast, Thrill-Seeking bore smaller relations with these Factor 1 scales (rs = .40 and .43) and was most clearly relevant to SRP-ELS (r = .79) in the EPA validation study (Lynam et al., under review). Similarly, in prior research with the SRP-II, which included the two traditional factor scales, NEO-PI-R Excitement Seeking was most strongly associated with SRP-II Factor 2 (Derefinko & Lynam, 2006). It is unclear whether the divergence between the current results and that of Lynam et al. reflects the content of the EPA or a unique aspect of the current study. It is possible that for incarcerated individuals with higher levels of psychopathy and a history of criminal behavior, elevated Thrill-Seeking may manifest itself through more risky acts of manipulation and deception that carry a higher probability of severe legal consequence. Manipulating others for personal gain may more closely fulfill these individual's risk-taking urges than individuals without a history or inclination for criminal behavior. Moreover, the overlap between risk-taking and criminal behavior is apparent in this scale's item content, which includes both excitement-seeking associated with illegal activity (e.g., Item 91: "I get a thrill out of doing things that are illegal") and that related to potential personal injury (e.g., Item 75: "I would risk injury to do something exciting").

Beyond these interrelations, the associations between the Neuroticism-based scales of the EPA and the SRP-III were also noteworthy. In identifying a consensus set of psychopathic traits, Lynam and Widiger (2007) determined that all six of the FFM Neuroticism facets (i.e., Anxiety, Angry Hostility, Depression, Self-Consciousness, Impulsiveness, and Vulnerability) were

characteristic of psychopathy. Despite the prominence of these traits in these authors' review of the personality structure of psychopathy, the EPA scales derived from the FFM Neuroticism facets demonstrated varying relations with the SRP-III factors in the current study. EPA Anger and Urgency bore moderate to strong relations with all four SRP-III factors, whereas EPA Unconcern, Self-Contentment, Self-Assurance, and Invulnerability were not related to any of the factors.

Differentiating the content and focus of these EPA scales may be useful for understanding these differences. Anger assesses externally directed affect, whereas Unconcern, Self-Contentment, Self-Assurance, and Invulnerability assess internally directed facets of Neuroticism (e.g., depression, anxiety). Additionally, Urgency assesses impulsivity related content associated with the experience of cravings and the ability to resist temptations. These traits have received varying degrees of emphasis in current psychopathy conceptualizations and assessments. For example, the most prominent measure of psychopathic traits, the Psychopathy Checklist/Psychopathy Checklist-Revised (PCL/PCL-R: Hare, 1991; Hare, 2003), includes content associated with poor anger control (e.g., Item 10: Poor behavior controls) and impulsivity (Item 14: Impulsivity). Both theoretical conjecture (Widiger & Lynam, 1998) and empirical research (Harpur, Hart, & Hare, 2002) have demonstrated the relevance of these traits to the PCL-R's conceptualization of psychopathy. Although the PCL-R emphasizes short-temperedness and poor temptation control, the instrument places significantly less emphasis on internally directed negative emotionality. For example, a translation of the PCL-R into the language of the FFM indicated that the FFM Neuroticism facets of Anxiety, Depression, Self-Consciousness, and Vulnerability were completely unrepresented in this instrument's assessment of psychopathy. The omission of this content is a primary example of the "conceptual drift"

between prominent conceptualizations and assessments of psychopathy described by Lynam and Widiger (2007). Despite the long history of prominent theorists and researchers highlighting the absence of negative directed forms of affect like anxiety as a central feature of psychopathy (e.g., Cleckley, 1941/1976; Lykken, 1995), the PCL-R does not include content associated with these traits. Consequently, self-report measures designed to assess psychopathy as conceptualized in the PCL-R may not emphasize this content.

The SRP was constructed to assess the personality traits and behaviors included in the PCL (Hare, 1985) and its most recent revision involved reducing content related to anxiety to improve its correspondence with the PCL-R (Williams, Paulhus, & Hare, 2007). Accordingly, the relations between the EPA Neuroticism-based scales and the SRP-III in this study are consistent with the personality features measured in this instrument. With regards to negative affect, the SRP-III primarily focuses on impulsivity and externally directed anger, hence its strong relations with EPA Anger and Urgency (*r*s = .35 to .57). Alternatively, the SRP-III does not include content associated with low anxiety, depression, or stress; hence, EPA Unconcern, Self-Contentment, Self-Assurance, and Invulnerability were unrelated to any of the SRP-III factors (*r*s = .00 to .23). It is important to note that the EPA's emphasis on the absence of negative directed affect is not without precedent in extant psychopathy assessments. For example, the Psychopathic Personality Inventory/Psychopathic Personality Inventory-Revised (PPI/PPI-R; Lilienfeld & Andrews, 1996; Lilienfeld & Widows, 2005), a self-report psychopathy inventory which incorporates features from a variety of conceptualizations of psychopathy, also assesses this content in its Stress Immunity and Fearlessness scales. If the absence of internally directed negative affect is a core feature of psychopathy, then the inclusion of this content in the EPA represents a major strength.

Convergence with Externalizing Behavior

Although determining the EPA's convergence with an alternative measure of psychopathy is an important step in the validation process, it is also important to investigate its relations with other relevant criteria. Given the strong link between psychopathy and antisocial behavior (Kosson, Smith, & Newman, 1990; Porter, Birt, & Boer, 2001), the current study examined the EPA's relations with several indices of externalizing behavior, including alcohol use (AU), substance use (SU), and antisocial acts (ASB). The EPA scales demonstrated meaningful associations with each of these indices. For instance, AU was primarily associated with Urgency and Rashness, as well as all of the interpersonal antagonism scales except Arrogance. These relations are generally consistent with prior findings (e.g., Flory, Lynam, Milich, Leukefeld, & Clayton, 2002) and suggest that individuals who use alcohol in greater amounts are less able to resist cravings and more likely to act without considering the consequences. Similarly, the primary EPA correlates of SU were Thrill-Seeking and Rashness, Individuals with elevations on these scales would also be less likely to consider consequences before acting, as well as more greatly crave excitement and stimulation. Lastly, ASB was primarily associated with Thrill-Seeking, Manipulation, Opposition, and Callousness, which is consistent with past research examining the relations between antisocial behavior and the FFM. For example, FFM Agreeableness has emerged as the strongest and most consistent correlate of antisocial behavior (e.g., Miller, Lynam, & Leukefeld, 2003). Moreover, in their research Miller et al. determined that the FFM facets from which EPA Manipulation and Opposition were initially derived (i.e., Straightforwardness, Compliance) were two of the strongest facet predictors of antisocial behavior and conduct problems. Overall the bivariate relations for the EPA scales provide additional support for the validity of the EPA.

To compare the EPA's relations with externalizing behavior with those of the SRP-III, zero-order and semi-partial correlations were computed between the total scores of each psychopathy instrument and the externalizing indices. Both EPA-Total and SRP-Total bore significant correlations with AU, each explaining 12% of the variance. Additionally, EPA-Total demonstrated significant relations with ASB. However, SRP-Total was the stronger predictor for SU and ASB, explaining on average 11% more of the variance in each index. The results of the semi-partial correlations also demonstrated the greater predictive power of SRP-Total for SU and ASB compared to EPA-Total. In the multiple regressions, EPA-Total no longer bore significant positive relations with any of the externalizing indices. In contrast, SRP-Total demonstrated significant semi-partial correlations with both SU and ASB, uniquely accounting for larger portions of variance in each index than EPA-Total.

These results indicate that SRP-Total is more successful at predicting variance in substance use and antisocial behavior. Because the bivariate correlations between the SRP-III factors and externalizing behavior suggested that SRP-ELS and SRP-ASB are particularly relevant to SU and ASB (*r*s = .40 to .70), further analyses were computed using the factor scales to determine the specific aspects of the SRP-III contributing to its greater predictive power. The multiple regressions involving the four SRP-III factors and EPA-Total provide insight into the greater predictive power of SRP-Total. In the regressions, SRP-ELS and SRP-ASB were the only SRP-III factors to demonstrate significant semi-partial correlations with SU; for ASB, only the semi-partial correlation with SRP-ASB was significant.

These findings clearly indicate that the SRP-III factors designed to capture Factor 2 features of psychopathy (e.g., antisocial behavior, criminality, irresponsibility) are responsible for the instrument's higher incremental validity. The most likely explanation for the predictive

advantage of SRP-ASB and SRP-ELS is that these scales include items that reference specific antisocial acts, whereas the EPA does not explicitly assess externalizing behavior. For example, SRP-III Item 4 from SRP-ELS ["I have taken illegal drugs (e.g., marijuana, ecstasy)"] and Item 43 from SRP-ASB ["I have taken hard drugs (e.g., heroin, cocaine)] both explicitly reference serious drug use. The structure of these items is remarkably similar to those of the CAB designed to assess drug use [e.g., Item 5: "Have you ever smoked marijuana or hashish?"; Item 17: "Have you ever used any other "hard" drugs (e.g., heroin, speed, crank)?"]. Unsurprisingly, these SRP-III items each bore strong relations (*r*s = .52 and .61) with SU. SRP-ASB is particularly focused on assessing antisocial behavior, as all of the items on this scale reference a specific antisocial act (e.g., Item 12: "I have assaulted a law enforcement official or social worker"; Item 18: "I have never tried to force someone to have sex"; Item 21: "I have never attacked someone with the idea of injuring them"). The inclusion of an entire factor assessing specific antisocial acts best explains the stronger predictive powers of SRP-III for SU and ASB, as there is substantial predictor-criterion overlap. Because the EPA does not include such content, the instrument is less successful at explaining unique variance in these externalizing indices. This omission need not, however, be considered a limitation as it is consistent with the developmental strategy employed to design the EPA. The instrument was constructed to assess the *personality* features most characteristic of psychopathy (Lynam et. al, under review). The current results show that the traits assessed by the EPA are relevant to externalizing behavior despite the absence of items referencing specific antisocial acts. In this way, the EPA may be a purer measure of personality that the SRP-III.

Predictive Validity for Institutional Misconduct

To further explore the criterion validity of the EPA, the relations between this new psychopathy assessment and disciplinary reports (DRs) were examined. Several researchers have suggested that psychopathy is a strong predictor of institutional misconduct (Hare & McPherson, 1984; Hill, Rogers, & Bickford, 1996); however, the nature of the link between psychopathy and misconduct appears to vary based on the choice of assessment instruments. In a meta-analytic review of the relations between disciplinary infractions and psychopathy as assessed by the PCL-R (Guy, Edens, Anthony, & Douglas, 2005), the authors reported an effect size of r = .29 for the relationship between PCL-R total scores and total misconduct; however, Guy et al. noted the presence of substantial heterogeneity among the effects across studies and categories of misconduct. Additionally, the effect sizes for data from prisons in the U.S. were significantly smaller than the effect sizes from prisons outside the U.S. Overall, these findings suggested that psychopathy, as assessed by the PCL-R, may be of limited use in predicting institutional infractions.

In contrast, research employing an alternative assessment of psychopathy, the PPI, has shown this instrument to be a stronger and more consistent correlate of institutional misconduct. The PPI includes eight subscales and conforms to a two-factor structure (PPI-I, PPI-II; Benning, Patrick, Hicks, Blonigen, & Krueger, 2003). Studies based on both retrospective (Patrick, Edens, Poythress, Lilienfeld, & Benning, 2006) and longitudinal designs (Edens, Poythress, Lilienfeld, & Patrick, 2008; Edens, Poythress, Lilienfeld, Patrick, & Test, 2008) provide greater support the predictive utility of psychopathy, as assessed by the PPI, for disciplinary infractions. For example, Edens, Poythress, Lilienfeld, Patrick, et al. reported that the PPI total score and PPI-II demonstrated significant relations with total infractions, aggressive infractions, and

nonaggressive infractions. Similarly, Edens, Poythress, Lilienfeld, and Patrick observed that the PPI total score, PPI-I, and PPI-II exhibited significant relations with total infractions. In their investigation these authors also examined the relations between misconduct and scores on the PCL-R and found that neither the PCL-R total score nor any of the factor scores bore significant relations with any category of misconduct. Overall, these findings suggest that the utility of psychopathy as a predictor of institutional misconduct depends on the form of assessment.

In the current study, Dominance was the most consistent EPA correlate of institutional misconduct as this scale bore moderate correlations with all four DR categories. Additionally, Callousness, Opposition, and Self-Centeredness each significantly correlated with three of the four DR indices. The pattern of correlations for the EPA suggests that individuals who engage in higher levels of misconduct within correctional systems can generally be described as dominant, forceful, and aggressive, as well as unconcerned about others. In addition, these correlations indicate some interesting differences among the personality features associated with each category of DRs. For example, only PA bore significant relations with Anger and Urgency. In addition to being dominant and aggressive, inmates who engage in higher levels of physical aggression may also be described as having greater difficulty controlling their anger and resisting temptations. It seems reasonable to expect a personality profile composed of a combination of dominance and unconcern for the welfare of others along with poor anger controls and impulsivity to be associated with increased physical aggression.

The unique personality correlates of NA/AD were also noteworthy and intriguing. This DR category was the only specific form of misconduct to be significantly associated with Self-Contentment. Moreover, in contrast to the EPA correlates of PA, Anger and Urgency scales were unrelated to NA/AD. Overall, these results suggest that NA/AD may be associated with aspects

of positive emotional adjustment. The findings are not completely without precedent. For example, prior research with the PPI demonstrated that only PPI-I was significantly associated with non-aggressive institutional misconduct, whereas only PPI-I was significantly associated with aggressive infractions (Edens, Poythress, Lilienfeld, & Patrick, 2008; cf., Edens, Poythress, Lilienfeld, Patrick, & Test, 2008 who reported no relation for PPI-I). These authors concluded that:

> Those high on PPI-II may be more predisposed to overt forms of confrontation (verbal and/or physical) than are those inmates who obtain lower scores. Inmates high on PPI-I may be more prone to surreptitious or clandestine forms of misconduct . . . such as lying to staff, theft, and possession of contraband. (p. 537)

Unlike PPI-II, PPI-I has been shown to be assess features of positive adjustment (e.g., lack of anxiety or depression; Blonigen et al., 2005). These features appear to overlap with content from several EPA scales assessing internally directed negative affect, including Self-Contentment, and may be especially relevant to non-aggressive misconduct. The present results provide additional support for the EPA's ability to differentiate between forms of institutional misconduct. Similar to the above findings for externalizing behavior, these results show that the EPA is particularly useful for understanding the specific traits most relevant to disciplinary infractions because of its assessment of the elemental units of psychopathy.

The EPA also proved to be a more potent predictor of DRs than the SRP-III. EPA-Total bore significant convergent relations with PA, VMPA, NA/AD, and DR Total, accounting for nearly twice as much variance SRP-Total across all four categories (EPA-Total mean adjusted *r*-squared: .13; SRP-Total mean adjusted *r*-squared: .07). Moreover, EPA-Total strongly outperformed SRP-Total in the multiple regressions as none of the semi-partial correlations

remained significant for the SRP-III. In contrast, the semi-partial correlations with PA, NA/AD, and DR Total all remained significant for EPA-Total. Overall, EPA-Total uniquely contributed, on average, an additional 7% of the variance compared to 1% uniquely explained by SRP-Total.

The present findings provide initial support for the superior incremental validity of the EPA for disciplinary infractions. There are several possible explanations for the predictive advantage of the EPA. Given the consistent relations between EPA Dominance and all four forms of infractions, a dominant and forceful approach to interpersonal relations appears to be especially relevant to institutional misconduct. The inclusion of a specific Dominance scale may allow the EPA to more comprehensively and thoroughly assess these traits. Similarly, the inclusion of scales assessing specific aspects of externally and internally directed negative affect may have contributed to the EPA's elevated predictive powers as several of these scales (i.e., Anger, Self-Contentment) were significantly associated with select categories of misconduct. The omission of these traits in the SRP-III may limit its predictive abilities with regards to disciplinary reports. One final possibility is that because the SRP-III was designed to capture the features of psychopathy included in the PCL-R, it suffers from the same limitations as this instrument in terms of predicting misconduct. As described above, the PCL-R appears to be an inconsistent predictor of infractions (Guy et al. 2005); accordingly, measures derived from this instrument may have similar properties. Although additional research is needed to clarify these issues, the current findings show the EPA to be more successful at explaining predictive and incremental variance in institutional misconduct than a prominent self-report measure of psychopathy.

Implications

The present findings provide additional support for the validity of the EPA. In the current study, the EPA demonstrated convergent relations with the SRP-III, an alternative self-report psychopathy measure. Consistent with a wealth of research on the basic traits underlying psychopathy, the EPA scales based on FFM Antagonism demonstrated strong and consistent relations with all of the SRP-III factors. Additionally, the EPA bore meaningful associations with individual SRP-III factors which were consistent with the content of these scales. For example, EPA Coldness most strongly correlated with SRP-CA and bore smaller relations with SRP-ELS and SRP-ASB. Moreover, these results demonstrated areas of divergence between the two psychopathy instruments (e.g., differing emphases on internally directed negative affect) which may reflect a strength in content for the EPA.

The EPA also exhibited convergent relations with externalizing behavior and disciplinary infractions. The pattern of relations between the EPA and these constructs highlighted one of the major strengths of this new assessment. Unlike the majority of extant measures of psychopathy, the EPA is composed of simple traits. Simple traits are more useful than complex traits for understanding the personality features most relevant to various behaviors and outcomes. The advantage of simple traits could be seen in the personality correlates of both externalizing behavior and disciplinary infractions. The EPA provided a clear view of the psychopathic features underlying each of the externalizing behaviors and forms of misconduct. These results provided insight into which personality traits were most consistently relevant across categories (e.g., Dominance for DRs), as well as which traits show unique relations with specific behaviors (e.g., Anger and Urgency for PA). Because of the inclusion of simple traits, the EPA appears to be a more useful tool for examining the basic traits underlying behavioral outcomes of interest.

Assessing the basic units of psychopathy with the EPA has an additional advantage compared to alternative assessment methods. Because design of the EPA involved identifying the core features of psychopathy across multiple measures there is less risk of the "conceptual drift" described by Lynam and Widiger (2007). Unlike the PCL-R, which these authors argue deviates in important ways from several prominent conceptualizations of psychopathy (e.g., Cleckley, 1941/1976; Lykken, 1995), the EPA is less likely to not include important characteristics because it assesses a range of consensus traits identified across multiple methods and instruments.

Limitations, Future Directions, and Conclusions

Despite the promising results supporting the validity of the EPA, this study is not without limitations. The EPA was compared to another self-report measure of psychopathy, which raises the possibility that the relations between the two instruments were artificially inflated due to shared method variance. Future research should examine the EPA's relations with measures of psychopathy that employ alternative methods of assessment, including interviews like the PCL-R. Additionally, the present sample was composed exclusively of males. It will be important to determine if the present results can be replicated with incarcerated females. Lastly, institutional records were the only source of data used to assess infractions. Official records most likely underestimate the true occurrence of misconduct for several reasons. More covert forms of misconduct (e.g., possession of contraband) may be more difficult to monitor and detect than explicitly overt acts (e.g., assault on an officer). Additionally, anecdotal reports from the prison staff indicated that a significant quantity of infractions went unreported at the facility where data were collected. Despite these issues the EPA still explained significant portions of predictive and incremental variance in DRs which underscores its strong predictive utility. Beyond limitations

unique to this study, the EPA also demonstrated areas of concern. Specifically, consistent with its performance in the initial validation study (Lynam et al, under review), EPA Arrogance demonstrated poor reliability in the current research. Clearly modifications to this scale are necessary to improve its internal consistency.

In sum, the present findings provide encouraging support for the construct validity of the EPA. This research builds on the initial validation study conducted with undergraduates by demonstrating the validity of this new assessment for incarcerated males. The EPA provides a comprehensive assessment of psychopathy using simple traits. The instrument is clearly useful for understanding the personality features which are most predictive of institutional misconduct and may also be a particularly valuable tool for identifying the basic traits that are most relevant to the other problematic and dangerous outcomes associated with psychopathy (e.g., criminality, recidivism).

REFERENCES

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed. ed.). Washington, DC: Author.

Benet-Martinez, V. n., & John, O. P. (1998). Los Cinco Grandes across cultures and ethnic groups: Multitrait-multimethod analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology, 75*, 729-750.

Benning, S. D., Patrick, C. J., Blonigen, D. M., Hicks, B. M., & lacono, W. G. (2005). Estimating Facets of Psychopathy From Normal Personality Traits: A Step Toward Community Epidemiological Investigations. *Assessment, 12*, 3-18.

Benning, S. D., Patrick, C. J., Hicks, B. M., Blonigen, D. M., & Krueger, R. F. (2003). Factor Structure of the Psychopathic Personality Inventory: Validity and Implications for Clinical Assessment. *Psychological Assessment, 15*, 340-350.

Benning, S. D., Patrick, C. J., Salekin, R. T., & Leistico, A.-M. R. (2005). Convergent and Discriminant Validity of Psychopathy Factors Assessed Via Self-Report: A Comparison of Three Instruments. *Assessment, 12*, 270-289.

Berardino, S. D., Meloy, J. R., Sherman, M., & Jacobs, D. (2005). Validation of the Psychopathic Personality Inventory on a female inmate sample. *Behavioral Sciences & the Law, 23*, 819-836.

Blonigen, D. M., Hicks, B. M., Krueger, R. F., Patrick, C. J., & Iacono, W. G. (2005). Psychopathic personality traits: Heritability and genetic overlap with internalizing and

externalizing psychopathology. *Psychological Medicine: A Journal of Research in Psychiatry and the Allied Sciences, 35*, 637-648.

Brinkley, C. A., Schmitt, W. A., Smith, S. S., & Newman, J. P. (2001). Construct validation of a self-report psychopathy scale: Does Levenson's self-report psychopathy scale measure the same constructs as Hare's psychopathy checklist-revised? *Personality and Individual Differences, 31*, 1021-1038.

Cleckley, H. (1941). *The Mask of Sanity*. St. Louis, MO: Mosby.

Cleckley, H. (1976). *The Mask of Sanity* (5th. ed.). St. Louis, MO: Mosby.

Cooke, D. J., & Michie, C. (2001). Refining the construct of psychopath: Towards a hierarchical model. *Psychological Assessment, 13*, 171-188.

Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factory Inventory (NEO-FFI) Professional Manual*. Odessa, FL: Psychological Assessment Resources.

Derefinko, K. J., & Lynam, D. R. (2006). Convergence and divergence among self-report psychopathy measures: a personality-based approach. *Journal of Personality Disorders, 20*, 261-280.

Edens, J. F., Poythress, N. G., & Lilienfeld, S. O. (1999). Identifying inmates at risk for disciplinary infractions: A comparison of two measures of psychopathy. *Behavioral Sciences & the Law, 17*, 435-443.

Edens, J. F., Poythress, N. G., Lilienfeld, S. O., & Patrick, C. J. (2008). A prospective comparison of two measures of psychopathy in the prediction of institutional misconduct. *Behavioral Sciences & the Law, 26*, 529-541.

Edens, J. F., Poythress, N. G., Lilienfeld, S. O., Patrick, C. J., & Test, A. (2008). Further evidence of the divergent correlates of the Psychopathic Personality Inventory factors: Prediction of institutional misconduct among male prisoners. *Psychological Assessment, 20*, 86-91.

Epstein, M. K., Poythress, N. G., & Brandon, K. O. (2006). The Self-Report Psychopathy Scale and Passive Avoidance Learning: A Validation Study of Race and Gender Effects. *Assessment, 13*, 197-207.

Flory, K., Lynam, D., Milich, R., Leukefeld, C., & Clayton, R. (2002). The relations among personality, symptoms of alcohol and marijuana abuse, and symptoms of comorbid psychopathology: Results from a community sample. *Experimental and Clinical Psychopharmacology, 10*, 425-434.

Gaughan, E. T., Miller, J. D., Pryor, L. R., & Lynam, D. (2009). Comparing two alternative measures of general personality in the assessment of psychopathy: A test of the NEO PI-R and MPQ. *Journal of Personality, 77*, 965-996.

Guy, L. S., Edens, J. F., Anthony, C., & Douglas, K. S. (2005). Does Psychopathy Predict Institutional Misconduct Among Adults? A Meta-Analytic Investigation. *Journal of Consulting and Clinical Psychology, 73*, 1056-1064.

Guy, L. S., Edens, J. F., Anthony, C., & Douglas, K. S. (2005). Does Psychopathy Predict Institutional Misconduct Among Adults? A Meta-Analytic Investigation. *Journal of Consulting and Clinical Psychology, 73*, 1056-1064.

Hare, R. D. (1985). Comparison of procedures for the assessment of psychopathy. *Journal of Consulting and Clinical Psychology, 53*, 7-16.

Hare, R. D. (1991). *The Hare Psychopathy Checklist-Revised*. Toronto, ON, Canada: Multi-Health Systems.

Hare, R. D. (2003). *The Hare Psychopathy Checklist--Revised, 2nd edition*. Toronto, Ontario, Canada: Multi-Health Systems.

Hare, R. D., Harpur, T. J., Hakstian, A. R., & Forth, A. E. (1990). The revised Psychopathy Checklist: Reliability and factor structure. *Psychological Assessment, 2*, 338-341.

Hare, R. D., Hemphill, J. F., & Paulhus, D. L. (2002). *The Self-Report Psychopathy-Scale-II (SRP-II)*: Manuscript in preparation.

Hare, R. D., & McPherson, L. M. (1984). Violent and aggressive behavior by criminal psychopaths. *International Journal of Law and Psychiatry, 7*, 35-50.

Harpur, T. J., Hakstian, A. R., & Hare, R. D. (1988). Factor structure of the Psychopathy Checklist. *Journal of Consulting and Clinical Psychology, 56*, 741-747.

Harpur, T. J., Hare, R. D., & Hakstian, A. R. (1989). Two-factor conceptualization of psychopathy: Construct validity and assessment implications. *Psychological Assessment, 1*, 6-17.

Harpur, T. J., Hart, S. D., & Hare, R. D. (2002). Personality of the psychopath. In P. T. Costa, Jr. & T. A. Widiger (Eds.), *Personality disorders and the five-factor model of personality (2nd ed.).* (pp. 299-324). Washington, DC US: American Psychological Association.

Hart, S. D., Kropp, P. R., & Hare, R. D. (1988). Performance of male psychopaths following conditional release from prison. *Journal of Consulting and Clinical Psychology, 56*, 227-232.

Hemphill, J. F., Hare, R. D., & Wong, S. (1998). Psychopathy and recidivism: A review. *Legal and Criminological Psychology, 3*, 139-170.

Hicklin, J., & Widiger, T. A. (2005). Similarities and Differences Among Antisocial and Psychopathic Self-Report Inventories from the Perspective of General Personality Functioning. *European Journal of Personality, 19,* 325-342.

Hill, C. D., Rogers, R., & Bickford, M. E. (1996). Predicting aggressive and socially disruptive behavior in a maximum security forensic psychiatric hospital. *Journal of Forensic Sciences, 41*, 56-59.

Karpman, B. (1941). On the need of separating psychopathy into two distinct clinical types: the symptomatic and the idiopathic. *Journal of Criminal Psychopathology, 3,* 112-137.

Kosson, D. S., Smith, S. S., & Newman, J. P. (1990). Evaluating the construct validity of psychopathy in Black and White male inmates: Three preliminary studies. *Journal of Abnormal Psychology, 99,* 250-259.

Levenson, M. R., Kiehl, K. A., & Fitzpatrick, C. M. (1995). Assessing psychopathic attributes in a noninstitutionalized population. *Journal of Personality and Social Psychology, 68,* 151-158.

Lilienfeld, S. O. (1994). Conceptual problems in the assessment of psychopathy. *Clinical Psychology Review, 14*, 17-38.

Lilienfeld, S. O., & Andrews, B. P. (1996). Development and preliminary validation of a self-report measure of psychopathic personality traits in noncriminal populations. *Journal of Personality Assessment, 66,* 488-524.

Lilienfeld, S. O., & Fowler, K. A. (2006). The Self-Report Assessment of Psychopathy: Problems, Pitfalls, and Promises. In C. J. Patrick (Ed.), *Handbook of the psychopathy*. (pp. 107-132): Guilford Press.

Lilienfeld, S. O., & Widows, M. (2005). *Psychopathic Personality Inventory-Revised: Professional Manual*. Lutz, FL: Psychological Assessment Resources.

Lynam, D., Gaughan, E. T., Miller, J. D., & Widiger, T. A. (under review). Assessing the basic traits associated with psychopathy: Development and validation of the Elemental Psychopathy Assessment.

Lynam, D. R. (2002). Psychopathy from the perspective of the five-factor model of personality. In P. T. Costa, Jr. & T. A. Widiger (Eds.), *Personality disorders and the five-factor model of personality (2nd ed.).* (pp. 325-348). Washington, DC US: American Psychological Association.

Lynam, D. R., & Derefinko, K. J. (2006). Psychopathy and Personality. In C. J. Patrick (Ed.), *Handbook of the psychopathy.* (pp. 133-155). New York, NY: Guilford Press.

Lynam, D. R., Whiteside, S., & Jones, S. (1999). Self-reported psychopathy: A validation study. *Journal of Personality Assessment, 73*, 110-132.

Lynam, D. R., & Widiger, T. A. (2007). Using a General Model of Personality to Identify the Basic Elements of Psychopathy. *Journal of Personality Disorders, 21*, 160-178.

McCrae, R. R. (2008). A note on some measures of profile agreement. *Journal of Personality Assessment, 90*, 105-109.

McCrae, R. R., & Costa, P. T., Jr. (1990). *Personality in adulthood*. New York: Guilford Press.

McHoskey, J. W., Worzel, W., & Szyarto, C. (1998). Machiavellianism and psychopathy. *Journal of Personality and Social Psychology, 74*, 192-210.

Miller, J. D., Gaughan, E. T., & Pryor, L. R. (2008). The Levenson Self-Report Psychopathy Scale: An examination of the personality traits and disorders associated with the LSRP factors. *Assessment, 15*, 450-463.

Miller, J. D., Lynam, D., & Leukefeld, C. (2003). Examining antisocial behavior through the lens of the Five Factor Model of personality. *Aggressive Behavior, 29*, 497-514.

Miller, J. D., & Lynam, D. R. (2003). Psychopathy and the Five-factor model of personality: A replication and extension. *Journal of Personality Assessment, 81*, 168-178.

Miller, J. D., Lynam, D. R., Widiger, T. A., & Leukefeld, C. (2001). Personality disorders as extreme variants of common personality dimensions: Can the Five-Factor Model adequately represent psychopathy? *Journal of Personality, 69*, 253-276.

Neumann, C. S., Kosson, D. S., & Salekin, R. T. (2007). Exploratory and Confirmatory Factor Analysis of the Psychopathy Construct: Methodological and Conceptual Issues. In H. Herve & J. C. Yuille (Eds.), *The Psychopath: Theory, Research, and Practice.* (pp. 79-104): Lawrence Erlbaum Associates Publishers.

Ogloff, J. R., Wong, S., & Greenwood, A. (1990). Treating criminal psychopaths in a Therapeutic Community program. *Behavioral Sciences & the Law, 8*, 181-190.

Patrick, C. J., Bradley, M. M., & Lang, P. J. (1993). Emotion in the criminal psychopath: Startle reflex modulation. *Journal of Abnormal Psychology, 102*, 82-92.

Patrick, C. J., Edens, J. F., Poythress, N. G., Lilienfeld, S. O., & Benning, S. D. (2006). Construct Validity of the Psychopathic Personality Inventory Two-Factor Model With Offenders. *Psychological Assessment, 18*, 204-208.

Porter, S., Birt, A., & Boer, D. P. (2001). Investigation of the criminal and conditional release profiles of Canadian federal offenders as a function of psychopathy and age. *Law and Human Behavior, 25*, 647-661.

Poythress, N. G., Edens, J. F., & Lilienfeld, S. O. (1998). Criterion-related validity of the Psychopathic Personality Inventory in a prison sample. *Psychological Assessment, 10*, 426-430.

Reynolds, S. K., & Clark, L. A. (2001). Predicting dimensions of personality disorder from domains and facets of the Five-Factor Model. *Journal of Personality, 69*, 199-222.

Salekin, R. T. (2002). Psychopathy and therapeutic pessimism: Clinical lore or clinical reality? *Clinical Psychology Review, 22*, 79-112.

Skeem, J., Johansson, P., Andershed, H., Kerr, M., & Louden, J. E. (2007). Two subtypes of psychopathic violent offenders that parallel primary and secondary variants. *Journal of Abnormal Psychology, 116*, 395-409.

Skeem, J. L., Monahan, J., & Mulvey, E. P. (2002). Psychopathy, treatment involvement, and subsequent violence among civil psychiatric patients. *Law and Human Behavior, 26*, 577-603.

Taylor, J., & Lang, A. R. (2006). Psychopathy and Substance Use Disorders. In C. J. Patrick (Ed.), *Handbook of the psychopathy*. (pp. 495-511): Guilford Press.

Tellegen, A. (in press). *Manual for the Multidimensional Personality Questionnaire*. Minneapolis: University of Minnesota Press.

Tellegen, A. (1985). Structures of mood and personality and their relevance to assessing anxiety, with an emphasis on self-report. In A. H. Tuma & J. D. Maser (Eds.), *Anxiety and the anxiety disorders.* (pp. 681-706). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Templeman, R., & Wong, S. (1994). Determining the factor structure of the Psychopathy Checklist: A converging approach. *Multivariate Experimental Clinical Research, 10*, 157-166.

Verona, E., Patrick, C. J., & Joiner, T. E. (2001). Psychopathy, antisocial personality, and suicide risk. *Journal of Abnormal Psychology, 110,* 462-470.

Vitacco, M. J., Rogers, R., Neumann, C. S., Harrison, K. S., & Vincent, G. (2005). A Comparison of Factor Models on the PCL-R with Mentally Disordered Offenders: The Development of a Four-Factor Model. *Criminal Justice and Behavior, 32,* 526-545.

Walton, K. E., Roberts, B. W., Krueger, R. F., Hicks, B. M., & Blonigen, D. M. (2008). Capturing abnormal personality with normal personality inventories: An item response theory approach. *Journal of Personality, 76,* 1623-1648.

Widiger, T. A., Cadoret, R., Hare, R., Robins, L., Rutherford, M., Zanarini, M., et al. (1996). DSM--IV antisocial personality disorder field trial. *Journal of Abnormal Psychology, 105,* 3-16.

Widiger, T. A., & Lynam, D. R. (1998). Psychopathy and the five-factor model of personality. In T. Millon, E. Simonsen, M. Birket-Smith & R. D. Davis (Eds.), *Psychopathy: Antisocial, criminal, and violent behavior*. (pp. 171-187). New York, NY: Guilford Press.

Williams, K. M., & Paulhus, D. L. (2004). Factor structure of the Self-Report Psychopathy scale (SRP-II) in non-forensic samples. *Personality and Individual Differences, 37,* 765-778.

Williams, K. M., Paulhus, D. L., & Hare, R. D. (2007). Capturing the four-factor structure of psychopathy in college students via self-report. *Journal of Personality Assessment, 88,* 205-219.

Zagon, I. K., & Jackson, H. J. (1994). Construct validity of a psychopathy measure. *Personality and Individual Differences, 17,* 125-135.

APPENDIX A

TABLES

Table 1
EPA Scale Characteristics

	Mean	SD	Alpha
Unconcern	2.96	.90	.83
Anger	3.00	.95	.87
Self-Contentment	2.90	.81	.73
Self-Assurance	3.17	.81	.80
Urgency	2.99	.80	.78
Invulnerability	3.40	.73	.76
Coldness	2.17	.73	.76
Dominance	3.07	.71	.73
Thrill-Seeking	2.76	.85	.80
Distrust	3.36	.65	.64
Manipulation	2.29	.81	.80
Self-Centeredness	2.28	.80	.85
Opposition	2.62	.75	.75
Arrogance	3.09	.48	.44
Callousness	2.31	.75	.76
Disobliged	2.12	.62	.66
Impersistence	2.37	.80	.80
Rashness	2.84	.73	.75
EPA-Total	49.72	7.08	.95

Table 2
SRP-III Scale Characteristics

	Mean	SD	Alpha
SRP-IPM	39.30	10.44	.85
SRP-CA	40.57	9.77	.83
SRP-ELS	46.88	10.73	.82
SRP-ASB	45.76	10.29	.74
SRP Total	172.51	36.64	.94

Note. IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Life Style; ASB = Antisocial Behavior.

Table 3
DR Characteristics

	# of DRs	Mean	SD
Physical Aggression	5	.39	.77
Verbal and Minor Physical Aggression	4	.23	.64
Non-Aggression/Acts of Defiance	28	5.37	9.09
DR Total	37	6.01	9.88

Note. # of DRs refers to the total number of infractions included in each category.

Table 4
Correlations between EPA and SRP-III

	SRP Total	SRP IPM	SRP CA	SRP ELS	SRP ASB	ES
EPA-Total	.89*	.85*	.87*	.76*	.68*	.82
Unconcern	.14	.23	.16	-.01	.12	.13
Anger	.56*	.47*	.57*	.42*	.53*	.51
Self-Contentment	.18	.20	.21	.06	.17	.16
Self-Assurance	.12	.15	.12	.05	.13	.11
Urgency	.48*	.38*	.40*	.48*	.46*	.44
Invulnerability	.04	.14	.03	-.01	.00	.04
Coldness	.50*	.48*	.69*	.36*	.26	.47
Dominance	.60*	.57*	.50*	.51*	.56*	.55
Thrill-Seeking	.80*	.75*	.68*	.82*	.60*	.74
Distrust	.48*	.46*	.47*	.47*	.30	.44
Manipulation	.81*	.81*	.67*	.71*	.69*	.74
Self-Centeredness	.66*	.64*	.74*	.52*	.44*	.61
Opposition	.78*	.72*	.69*	.74*	.60*	.71
Arrogance	.23	.21	.19	.22	.20	.21
Callousness	.70*	.67*	.76*	.57*	.50*	.65
Disobliged	.45*	.38*	.51*	.37*	.36*	.42
Impersistence	.18	.15	.23	.22	.03	.16
Rashness	.53*	.45*	.47*	.61*	.35*	.49

Note. IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Life Style; ASB = Antisocial Behavior; ES = Effect size.
*$p \leq .01$.

Table 5
Correlations between EPA Scales, SRP-III Factors, and Externalizing Behavior

	AU	SU	ASB	ES
EPA				
Unconcern	-.26*	.03	.09	-.05
Anger	.36**	.15	.32**	.28
Self-Contentment	-.23	-.02	.22	-.01
Self-Assurance	-.24*	-.04	.13	-.05
Urgency	.50**	.18	.27*	.32
Invulnerability	-.22	.12	.15	.02
Coldness	.28*	-.01	.20	.16
Dominance	.09	.02	.30*	.14
Thrill-Seeking	.29*	.37**	.53**	.40
Distrust	.42**	.14	.12	.23
Manipulation	.34**	.24*	.47**	.35
Self-Centeredness	.32**	.01	.35**	.23
Opposition	.31**	.24	.44**	.33
Arrogance	.00	-.04	.06	.01
Callousness	.33**	.13	.42**	.30
Disobliged	.30*	.04	.18	.18
Impersistence	.29*	-.10	-.06	.05
Rashness	.41**	.27*	.21	.30
SRP-III				
SRP-IPM	.30*	.33**	.55**	.40
SRP-CA	.30*	.14	.48**	.31
SRP-ELS	.32**	.41**	.40**	.38
SRP-ASB	.33**	.41**	.70**	.50

Note. AU = Alcohol Use; SU = Substance Use; ASB = Antisocial Behavior; IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Life Style; ASB = Antisocial Behavior; ES = Effect size.
*$p \leq .05$. **$p \leq .01$.

Table 6
Relations between EPA-Total, SRP-Total, and Externalizing Behavior

	Alcohol Use				Substance Use				Antisocial Behavior			
	r	r^2	*sr*	sr^2	*r*	r^2	*sr*	sr^2	*r*	r^2	*sr*	sr^2
EPA-Total	.35**	.12	.08	.01	.19	.04	-.30**	.09	.49**	.24	-.10	.01
SRP-Total	.35**	.12	.09	.01	.37**	.14	.43**	.19	.60**	.36	.36**	.13

Note. *r* = zero-order correlation; *sr* = semi-partial correlation.
*$p \leq .05$. **$p \leq .01$.

Table 7
Semi-Partial Correlations between SRP-III Factors, EPA-Total, and Externalizing Behavior

	Alcohol Use	Substance Use	Antisocial Behavior
	sr	*sr*	*sr*
SRP-III			
SRP-IPM	-.07	.12	.07
SRP-CA	.00	-.16	.04
SRP-ELS	.07	.29**	-.10
SRP-ASB	.13	.24*	.44**
EPA-Total	.11	-.14	-.02

Note. sr = semi-partial correlation. IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Life Style; ASB = Antisocial Behavior.
*$p \leq .05$. **$p \leq .01$.

Table 8
Correlations between EPA, SRP-III, and Disciplinary Infractions

	PA	VMPA	NA/AD	Total	ES
EPA					
Unconcern	-.01	.16	.21	.20	.14
Anger	.34**	.21	.18	.21	.24
Self-Contentment	.05	.19	.35**	.34**	.24
Self-Assurance	.24*	.14	.21	.22	.20
Urgency	.24*	.08	.07	.09	.12
Invulnerability	.10	.16	.14	.15	.14
Coldness	.28*	.15	.25*	.27*	.24
Dominance	.42**	.33**	.37**	.40**	.38
Thrill-Seeking	.13	.12	.10	.12	.12
Distrust	.19	.15	.13	.15	.16
Manipulation	.15	.16	.18	.19	.17
Self-Centeredness	.31*	.16	.35**	.36**	.30
Opposition	.28*	.23	.29*	.30*	.28
Arrogance	.25*	-.02	.20	.20	.16
Callousness	.22	.32**	.33**	.34**	.30
Disobliged	.09	-.15	.19	.17	.08
Impersistence	.05	.00	-.01	.00	.01
Rashness	.14	.09	.06	.08	.09
SRP-III					
SRP-IPM	.28*	.23	.23	.25*	.25
SRP-CA	.30*	.26*	.34**	.36**	.32
SRP-ELS	.22	.14	.16	.18	.18
SRP-ASB	.22	.20	.27*	.29*	.25

Note. PA = Physical Aggression; VMPA = Verbal and Minor Physical Aggression; NA/AD = Non-Aggression/Acts of Defiance; ES = Effect size; IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Life Style; ASB = Antisocial Behavior.
*$p \leq .05$. **$p \leq .01$.

Table 9
Relations between EPA-Total, SRP-Total, and DRs

	PA				VMPA				NA/AD				DR Total			
	r	r^2	*sr*	sr^2	*r*	r^2	*sr*	sr^2	*r*	r^2	*sr*	sr^2	*r*	r^2	*sr*	sr^2
EPA Total	.36**	.13	.24*	.06	.27*	.07	.15	.02	.38**	.14	.30**	.09	.40**	.16	.30**	.09
SRP Total	.28*	.08	-.08	.01	.23	.05	-.03	.00	.27*	.07	-.14	.02	.29*	.08	-.13	.02

Note. Values indicate the relation between each psychopathy instrument and residualized DR scores in which the variance associated with length of incarceration was removed. PA = Physical Aggression; VMPA = Verbal and Minor Physical Aggression; NA/AD = Non-Aggression/Acts of Defiance. *r* = zero-order correlation; *sr* = semi-partial correlation.
*$p \leq .05$. **$p \leq .01$.

APPENDIX B

DISCIPLINARY REPORT CATEGORIES

Disciplinary Report Categories

Physical Aggression	Verbal and Minor Physical Aggression	Non-Aggression/Acts of Defiance
Assault on officer	Obscene words/gestures	Causing a fire
Assault on inmate	Projecting bodily fluids	Conspire/plan disturbance strike
Assault without a weapon	Projecting nuisance items	Damage to state property
Injury to inmate/oneself	Verbal/gesture threatening	Defacing/damaging property
Injury to officer		Disrupt/damage utilities
		Disrupting count
		Exposure/exhibition
		Failure to follow instructions
		Failure to perform work assignment
		Insubordination
		Lying
		Obstruct duties of staff
		Possession of cell phone
		Possession of ammunition
		Possession of any drug/narcotic
		Possession of weapon
		Possession of contraband
		Refusal of a substance test
		Selling drugs
		Sexual activity
		Smoking
		Smoking in a restricted area
		Soliciting sexual activity
		Theft
		Unauthorized absence
		Unauthorized attaching of material
		Unauthorized presence
		Under influence of drugs