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Can the Triarchic Model Differentiate between Psychopathy and Antisocial Personality Disorder?

By

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Can the Triarchic Model Differentiate between Psychopathy and Antisocial Personality

Disorder?

By

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Bachelor of Science The University of Alabama Tuscaloosa, Alabama 2011

Submitted to the Faculty of the Graduate School of
Eastern Kentucky University
in partial fulfillment of the requirements
for the degree of
MASTER OF SCIENCE
May, 2013

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DEDICATION

This thesis is dedicated to my parents
Micky and Kyong Wall
for their unconditional love and support

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I would like to thank my mentor, Dr. Dustin Wygant, for all the time he devoted to my professional development and education. I would also like to thank my other committee members, Dr. Robert Brubaker and Dr. MyraBeth Bundy, for their comments throughout this project. Additionally, I appreciate the mentorship I received from Dr. Martin Sellbom and Dr. Mark Klinger, as I feel I would not have gotten as far in my academic career without their advice. Finally, I would like to thank my love, Evan Lynch, for his encouragement and contribution of candy goodies on those days when I lacked motivation.

ABSTRACT

Although Antisocial Personality Disorder (APD) represents the closest diagnostic equivalent to psychopathy in the DSM-IV, it has long been recognized as failing to capture the full range of the construct. The current study examined the degree to which *boldness*, a trait domain within the Triarchic conceptualization of psychopathy (Patrick et al., 2009) that captures fearlessness, dominance, and low stress reactivity, represents a distinct difference between psychopathy and APD. Utilizing a sample of 108 male prison inmates, the current study examined the extent to which boldness, relative to meanness and disinhibition (indexed by the Triarchic Psychopathy measure; Patrick, 2010), accounted for incremental variance beyond APD symptom counts (indexed by the SCID-II APD module) in predicting the PCL-R total score. Hierarchical linear regression analyses were conducted in which the SCID-II APD symptom count was entered in the first step of the model, and the three Triarchic domains were entered in the second step.

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I. Introduction

Psychopathy is a personality disorder comprising a constellation of affective, interpersonal, and behavioral characteristics that include callousness, fearlessness, deceitfulness, grandiosity, impulsiveness, excitement seeking, and aggression, among others (Hare & Neumann, 2008). The psychopathy construct has an extensive history with varying personality patterns and clinical characteristics, dating back to the past two centuries (Million et al., 1998). Indeed, Psychopaths have been described by early theorists such as Pinel (1801) and Prichard (1835) to be "morally insane" or "morally perverted." Koch (1891) used the term "psychopathic inferiority" to describe individuals who engaged in deviant behavior due to heredity but who were not insane. Kraepelin (1915) expanded upon Koch's (1891) conceptualization to include categories defined by the most cruel and wicked of disordered offenders. One of the most complete clinical and theoretical conceptualizations of psychopathy was done by Cleckley (1941) in his observations of psychiatric patients that served the basis of his classic text, The Mask of Sanity. He identified 16 characteristics that differentiated psychopathic individuals from other patients. Some of these characteristics included negative attributes such as unreliability, untruthfulness and insincerity, and a lack of remorse or shame. However, these were "masked" by a superficially charming demeanor, good "intelligence," and an absence of delusions, irrational thinking, and "nervousness." Interestingly, Cleckley did not describe psychopathic individuals as overly aggressive or violent. On the other hand, McCord and McCord (1964), in their text, The Psychopath: An Essay on the Criminal Mind, described psychopathic individuals as vicious and cold with aggressive and dangerous motivation.

Psychopathy is not entirely represented in the current diagnostic nomenclature, the Diagnostic and Statistical Manual of Mental Disorders Fourth Edition Text Revision (DSM-IV-TR; APA, 2000). While the closest phenotypic manifestation of psychopathy in the DSM is Antisocial Personality Disorder (APD), the DSM-III and DSM-IV decisively concentrated the criteria for APD on behaviors reflecting a violation of social norms that would be more easily and reliably assessed. Consequently, the diagnostic counterpart for psychopathy since 1980 has deviated greatly from the construct of psychopathy (Hare, 1996).

The DSM-III task force agreed that the clinical inferences necessary to determine the personality characteristics of a psychopathic individual decreased the reliability of the diagnosis; therefore, a diagnostic shift to behavioral characteristics commonly associated with the disorder was emphasized over the personality factors attributed to psychopathy (Hare, 1996). To obtain a diagnosis of APD, at least 4 of 10 behavioral categories had to have been met in addition to Conduct Disorder or a history of deviant behavior before the age of 15 (APA, 1980). These behavioral markers of APD included such things as an inability to sustain consistent work behavior, failure to conform to social norms with respect to lawful behavior, and irritability and aggressiveness, as indicated by physical fights or assaults.

The DSM-IV task force made slight changes in the APD diagnosis due to objections from the scientific community that psychopaths did not fit under the APD criteria (Millon, 1981). The DSM-IV added a blanket statement that "a lack of empathy, inflated self-appraisal, and superficial charm are features that have commonly been included in the traditional conceptions of psychopathy, and may be particularly

distinguishing of Antisocial Personality Disorder in prison or in forensic settings where criminal, delinquent, or aggressive acts are likely to be nonspecific" (APA, 1994, p.647). However, while acknowledging potential differences between APD and psychopathy in the text of the manual, the APD criteria still neglected persistent personality traits associated with psychopathy (Hart & Hare, 1997).

The disparity between psychopathy and APD is supported by prevalence estimates, which suggest that psychopaths account for 15-20% of incarcerated samples and 1% in the general population, whereas some estimates of APD can be as high as 80% in incarcerated settings (Hare et al., 1991). Moreover, the heterogeneity of the APD criteria inhibits their link to any specific etiology, whereas psychopathy has a strong etiological basis in neurobiology, specifically the amygdala (or more broadly the paralimbic system) and the prefrontal cortex (orbitofrontal, dorsal anterior cingulate) (Knutson & Cooper, 2005). APD has been found to be associated with antisocial parents, male gender, low socioeconomic status, minority race, poor parent-child relationship, antisocial peers, low intelligence, and low academic achievement (Farrington, 2006). It is important to note that even though potential causes of APD have been identified, these are not specific to any particular neurobiological referents for the disorder.

Assessment of Psychopathy

Much of the academic debate surrounding the construct of psychopathy has been about the best way to conceptualize and assess the disorder. Understanding the structure of psychopathy is fundamentally important to the study of the construct. Karpman's (1941) distinction between *primary* (reflecting affective deficits) and *secondary* (reflecting poor psychosocial learning) psychopathy has set precedent for later work on

psychopathy subtypes. The Psychopathy Checklist-Revised (PCL-R; Hare, 1991/2003) remains the most widely researched instrument for assessing psychopathy and has advanced a tremendous amount of empirical data about the construct (see Hare & Neumann, 2008 for a review of the PCL-R). Its factor structure can help differentiate such subtypes and provide better understand of the construct as a whole.

Authors of previous studies with the PCL-R have proposed the presence of two primary factors (e.g., Hare et al., 1990; Harpur et al., 1988; Templeman & Wong, 1994), roughly corresponding to Karpman's (1941) primary and secondary psychopathy domains. The first encompasses the affective and interpersonal features of psychopathy (e.g., superficial charm, shallow affect, and manipulativeness) and is commonly considered to be fundamental to the construct of psychopathy. The second factor captures the lifestyle and behavioral deviance characteristics of psychopathy (e.g., impulsivity, irresponsibility, and criminal behavior).

Cooke and Michie (2001) found that the traditional two-factor model was not adequate due to the use of confirmatory factor analysis of PCL-R data, so they proposed a three-factor structure of psychopathy using structural equation modeling. Psychopathy can be understood as having a superordinate factor, Psychopathy, with 3 supporting factors: Factor 1: *Arrogant and Deceitful Interpersonal Style*, Factor 2: *Deficient Affective Experience*, and Factor 3: *Impulsive and Irresponsible Behavioral Style*. Factor 1 captures the interpersonal style of psychopathy (e.g., superficial charm, a grandiosity, pathological lying, and manipulativeness). Factor 2 encompasses the affective features of psychopathy (e.g., shallow affect, lack of empathy, and lack of remorse). Factor 3 captures the behavioral deviance of psychopathy (e.g., impulsivity, irresponsibility,

criminal behavior). Cooke and Michie's (2001) conceptualization of psychopathy differs from the traditional two-factor model such that the affective and interpersonal traits associated with psychopathy are seen as two distinct concepts.

Other researchers have framed the PCL-R structure using four facets (Hare, 2003) that load onto the two-factor model. The four facets include: *Interpersonal, Affective, Lifestyle, and Antisocial*. The *Interpersonal* and *Affective* facets load onto first factor (Interpersonal/Affective), whereas the *Lifestyle* and *Antisocial* facets load onto the latter (Social Deviance). This model also follows a hierarchical structure of psychopathy.

Other research on psychopathy has focused more on viewing the disorder as a constellation of dimensional personality traits (e.g., Lynam, 2002; Miller, Lynam, Widiger, & Leukefeld, 2001; Widiger & Lynam, 1998). An earlier study by Hare (1982) investigated psychopathy utilizing the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975) and found that psychopathy was positively correlated with the Psychoticism scale, which measures egocentricity, interpersonal coldness, lack of empathy, and impulsiveness. Other work has utilized the five factor model to frame the disorder as representing low levels of agreeableness and conscientiousness, which reflects antagonism and poor impulse control (Lynam & Derefinko, 2006; Widiger & Lynam, 1998). Studies using the Multidimensional Personality Questionnaire (MPQ; Tellegen, in press) found psychopathy to be associated with high Negative Emotionality, particularly Aggression, high Social Potency, and low Constraint (Lilienfeld & Andrews, 1996; Verona, Patrick, & Joiner, 2001).

Lilienfeld and Andrews (1996) developed a psychopathy-specific personality model to study the disorder. The Psychopathic Personality Inventory (PPI) was developed

to represent the core personality traits associated with Cleckley's (1941) classic observations of psychopathy in *The Mask of Sanity*, as well as other conceptualizations of psychopathy. Moreover, the PPI included items that did not explicitly reference criminal behavior, thus making the instrument more useful in non-offender samples. The PPI was later revised to include normative references for both community and correctional settings (PPI-R; Lilienfeld & Widows, 2005).

Research has identified two factors among the PPI-R's eight primary scales:

Fearless Dominance and Impulsive Antisociality (Benning, Patrick, Blonigen, Hicks, and Iacono, 2005). Fearless Dominance, which consists of three scales (Social Potency, Fearlessness, & Stress Immunity), captures socially dominant and manipulative qualities, as well as resiliency to stress and fear. Self-Centered Impulsivity, originally called Impulsive Antisociality on the PPI, captures self-centered and reckless tendencies, impulsivity, and proneness to blame others. It consists of four scales: Machiavellian Egocentricity, Rebellious Nonconformity, Blame Externalization, and Carefree Nonplanfulness. One PPI-R scale, Coldheartedness, which captures callousness and lack of guilt, does not load onto either factor.

Triarchic Model of Psychopathy

Patrick, Fowles, and Krueger (2009) proposed the triarchic model in order to integrate and frame various historical conceptualizations (e.g., DSM-III APD, APA, 1980; Cleckley, 1941; McCord & McCord, 1964) and measurement models (e.g., PCL-R, PPI) of psychopathy. These various models differ to varying degrees in how much emphasis they place on aspects such as criminal behavior and affective deficits. This conceptualization describes psychopathy in terms of three phenotypic domains of

boldness, meanness, and disinhibition. Patrick and colleagues (2009) linked these domains to distinct developmental (e.g., difficult and fearless temperaments) and neurobiological (orbitofrontal cortex, limbic system) pathways. Patrick and colleagues indicate that the three domains represent the key to understanding psychopathy in its varying manifestations: criminal and noncriminal, primary and secondary, stable and aggressive, unsuccessful and successful.

Boldness reflects social dominance, emotional resiliency, and venturesomeness and maps onto some of the notions of psychopathy proposed by Cleckley (1941) and Lykken (1957). Cleckley's conceptualization emphasized phenotypic boldness with disinhibitory tendencies as described as high social efficacy, absence of anxiety or neurotic symptoms, diminished emotional responsiveness, failure to learn by experience, and low suicidality. Lykken (1957) emphasized fearlessness in his conceptualization of psychopathy; however, boldness is not considered synonymous with the term "fearless," but rather is one way in which genotypic fearlessness can be expressed phenotypically. A genotype is the genetic makeup of an individual, specifically the genes that are present. A phenotype is the visible expression of an individual's genotype. Boldness is represented on the PPI to some degree as *Fearless Dominance* and less well by the PCL-R. The construct appears to be tapped somewhat by PCL-R Factor 1, in particular items reflecting its interpersonal facet (e.g., glibness/ superficial charm, grandiose sense of selfworth, pathological lying, and conning/manipulative). There is disagreement in the field of psychopathy research on whether "psychopathic boldness" (Fearless Dominance) is a key component of the construct (Lilienfeld et al., 2012; Miller & Lynam, 2012; Lynam & Miller, 2012). Miller & Lynam (2012) discussed in their meta-analytic review of the

PPI/PPI-R that Fearless Dominance is a protective factor against psychopathology and a measure of stable extraversion. Consequently, they object to the inclusion of Fearless Dominance as a central component of psychopathy since they claim it exhibits limited convergent validity to other central criterion variables of psychopathy. Lilienfeld and colleagues (2012) countered by stating that Fearless Dominance is central to understanding psychopathy and is consistent with most classical clinical descriptions of psychopathy (e.g., Cleckley, 1941). They demonstrated that Miller and Lynam's (2012) assertions are sharply at odds with evidence that shows the importance of Fearless Dominance in identifying subtypes of psychopathy and that psychopathy is associated with adaptive behaviors. Lynam and Miller (2012) respond that the presence of Fearless Dominance is not sufficient to indicate the presence of psychopathy and that it, at best, can be considered a diagnostic specifier rather than an essential feature of psychopathy. However, research has demonstrated that interaction effects among PPI/PPI-R psychopathy facets generally show that Fearless-Dominance moderates the association between Impulsive-Antisociality and maladaptive behavior (Kastner & Sellbom, 2012; Rock et al., in press). For instance, Kastner and Sellbom found an interaction effect for the Fearless-Dominance and the Impulsive-Antisociality factors. Scoring high on both factors was a stronger predictor of hypersexuality than scoring high on either facet in isolation. These interaction effects were present even when controlling for sensation seeking, impulsivity, and antisociality. Rock and colleagues (in press) found that Fearless-Dominance positively moderated the association between Impulsive-Antisociality and treatment failure. In other words, individuals high on FearlessDominance and when coupled with high Impulsive-Antisociality, this results in a combination of traits that increase the likelihood of treatment failure.

Meanness is defined as aggressive resource seeking without concern for others and includes traits such as callousness, hostility, and exploitativeness that is found in the McCord and McCord (1964) description of psychopathy, as well as Hare (1986). McCord and McCord identified lovelessness and guiltlessness as central to criminal psychopathy. The affective facet of Hare's PCL-R consists of items that overlap McCord and McCord's conceptualization (Item 7, "shallow affect;" Item 8, "callous/lack of empathy;" Item 6, "lack of remorse or guilt;" and Item 16, "failure to accept responsibility for own actions"). This phenotypic trait is also captured by the interpersonal factor of the PCL-R and the *Coldheartedness* scale of the PPI. A key issue is whether meanness can be measured separately from criminal or antisocial behavior. Patrick and his colleagues (2009) suggest that the PCL-R seems to capture more of an aggressive externalizing deviancy and that meanness can be disaggregated from the disinhibitory (externalizing) component.

Finally, disinhibition reflects a broad proclivity toward difficulties of impulse control, poor planfulness, and limitations in delaying gratification. Historical conceptualizations of psychopathy have emphasized this externalizing component to varying degrees (Prichard, 1835; Kraepelin, 1915; Lykken, 1957). However, contemporary researchers would not equivocate disinhibition or externalization to psychopathy. It is only when disinhibition is coupled with boldness or meanness that a diagnosis of psychopathy is considered appropriate. Disinhibition is captured by the second factor of the PCL-R and *Impulsive Antisociality* on the PPI. Disinhibition also

characterizes many of the symptoms of DSM-IV-TR Antisocial Personality Disorder (e.g., impulsivity or failure to plan ahead).

Psychopathy and Antisocial Personality Disorder

Research shows that APD and psychopathy are distinct constructs from an empirical viewpoint (Decuyper et al., 2009). In relation to the PCL-R, the APD criteria are strongly associated with the socially deviant behavior and criminal lifestyle components of Factor 2 (e.g., impulsivity, recklessness, irresponsibility, failure to conform to social norms) and only weakly associated with Factor 1, suggesting that APD is not identifying the core personality features of psychopathy (Hare, 1996). The DSM-IV-TR's focus on behavioral deviance rather than core affective and interpersonal characteristics limits its ability to index the full psychopathy syndrome. Skeem and Cooke (2010) do not think criminal behavior should be considered a central component of psychopathy because psychopathy cannot both embody and explain crime. Many researchers believe that crime is a consequence of psychopathy rather than a component of psychopathy (e.g., Cooke, Michie, & Hart, 2006; McCord & McCord, 1964; McDermott et al., 2000; Schneider, 1950). However, Hare and Neumann (2010) disagreed with Skeem and Cooke's (2010) assertions and contend that antisocial tendencies play an essential role in the construct of psychopathy.

Due to this limitation of APD, it is important to differentiate the two disorders, as psychopathy has been linked to particular etiological mechanisms, whereas the heterogeneity of APD symptoms limits identification of etiology. The Triarchic conceptualization of psychopathy might provide a means to differentiate between the two disorders. If APD can be compared to psychopathy in terms of the three Triarchic

domains (boldness, meanness, disinhibition), we might be able to address previous limitations in suggesting potential etiological mechanisms for APD.

II. The Current Study

The current study aimed to determine whether the Triarchic psychopathy model could differentiate between psychopathy and APD. The current study examined the DSM-IV-TR APD (indexed by the Structured Clinical Interview for DSM-IV Axis II Disorders [SCID-II]) in relation to psychopathy (as indexed by the PCL-R) in a sample of prison inmates. The Triarchic Psychopathy Measure (TriPM; Patrick, 2010) was used to assess the three triarchic domains. Given the lack of affective traits in the DSM-IV-TR symptoms of APD, the study hypothesized that Boldness will represent the residual psychopathy variance not captured by the APD criteria. In other words, Boldness will add to the prediction of psychopathy scores above and beyond Meanness and Disinhibition. The DSM-IV-TR APD criteria emphasize behavioral symptoms and to some degree interpersonal aggression and exploitativeness. Given that these factors are also well represented by the PCL-R, the triarchic domains of Meanness and Disinhibition should show less ability to distinguish between APD and psychopathy.

III. Method

Participants and Procedures

The current study utilized data on 108 male inmates recruited from Northpoint Training Center, a medium-security prison in Kentucky approximately 45 miles from Eastern Kentucky University. This project is part of a larger data collection at the prison that includes structured clinical interviews, self-report personality inventories, and neuropsychological measures. An assistant professor of psychology, who is also a licensed clinical psychologist with 8 years of clinical experience and specialized training in forensic assessment provided clinical supervision for all data collected by the graduate research assistants.

The mean age of participants was 34.5 (9.8 SD) with mean education of 11.9 years (1.2 SD). The sample was predominantly Caucasian (60.7%), with 34.8% identifying themselves as African-American and the remaining inmates (4.5%) identifying themselves as coming from other ethnic groups. These inmates are serving sentences that range from 4 years (for Robbery) to Life (for homicide). Forty-six percent of the current sample was incarcerated for violent offenses, 26% for sexual offenses, and 16% for drug related offenses, among others.

Measures

Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II; First, Gibbon, Spitzer, Williams, & Benjamin, 1997). The SCID is a structured clinical interview commonly used in psychiatric research. In the current study, only the Antisocial Personality Disorder module from the SCID-II was administered to reliably assess the DSM-IV conceptualization of APD. Available data indicates good inter-rater

reliability for APD with this instrument with ICC ranging from .85 (Lobbestael, Leurgans, & Arntz, 2011) to .98 (Maffei et al., 1997). Rather than focusing on categorical identification of APD, the current study utilized the SCID-II APD questions as a dimensional symptom count ranging from 0-8.

Psychopathy Checklist – Revised (PCL-R; Hare, 2003). The PCL-R is a 20-item clinician rating scale for psychopathy. The PCL-R includes a semi-structured clinical interview and review of the participant's institutional record. Following the interview and file review, the researcher rates participant on a scale of "0" (not present), "1" (maybe, or occasionally, present), and "2" (definitely present) for each item, yielding a possible range of 0-40. Previous research studies have reported excellent inter-rater reliabilities of greater than .90 for the PCL-R (Hare, 2003; Hare et al., 1991). Twelve percent of the sample was independently rated by two graduate research assistants to calculate interrater reliability. The reliability for the Total Score of the PCL-R was good (ICC = .93).

Triarchic Psychopathy Measure (TriPM; Patrick, 2010). The TriPM is a 58-item measure of psychopathy (4th grade reading level) from the perspective of the triarchic conceptualization of the disorder, and operationalizes three domains of boldness, meanness, and disinhibition. Participants respond to each item on a 4-point Likert scale (1 = true, 2 = mostly true, 3 = mostly false, 4 = false). Previous research studies have reported sufficient internal consistency estimates for all three domains, ranging from .77 to .90 (Sellbom & Phillips, 2012; Stanley, Wygant, & Sellbom, in press). Internal consistency for the three domains in the current study ranged from .77 (Boldness) to .87 (Meanness), which was acceptable. The TriPM scales are moderately correlated with

overall PCL-R, PPI, LSRP, SRP-III, and YPI scores; demonstrating good construct validity (Patrick, 2010; Sellbom & Phillips, 2012; Stanley et al., in press).

IV. Results

Descriptive Statistics

Table 1¹ reports the means and standard deviations (SD) for the PCL-R Total scores, the

SCID APD scores, and the three domain of the Triarchic Psychopathy Measure. The mean of the PCL-R total scores was 19.7 with a standard deviation of 7.5, with 12% falling at or above 30.

Correlations

Zero-order correlations were calculated between PCL-R Total scores, SCID APD scores, and the three domains of the Triarchic Psychopathy Measure. Table 2 shows these results. As expected, PCL-R scores were significantly correlated with SCID APD scores (r=.54, p<.001), as well as the three domains of Boldness (r=.25, p<.01), Meanness (r=.26, p<.01), and Disinhibition (r=.27, p<.01). Also as expected, SCID APD scores were associated with Meanness (r=.29, p<.001) and Disinhibition (r=.42, p<.001), but not Boldness (r=.10, ns). Partial correlations were then calculated between PCL-R Total scores and the three domains of the Triarchic Psychopathy Measure controlling for SCID APD scores. Table 3 shows these results. Boldness was the only triarchic domain that was correlated with the PCL-R Total scores after controlling for APD (r=.21, p<.05).

Regression Analysis

A hierarchical linear regression analysis was conducted to determine the extent to which the Triarchic domains of Boldness, Meanness, and Disinhibition account for

¹ All tables are located in the appendix.

differences between APD and psychopathy. The PCL-R total score represented a dimensional dependent variable in the regression equation. The SCID-II APD symptom totals were entered into the first block of the regression equation to account for the psychopathy variance predicted by APD. Boldness, Meanness, and Disinhibition scales of the TriPM were entered into the second block of the regression equation to determine their incremental prediction of psychopathy (beyond the APD criteria). Incrementally validity was measured by the change in variance (i.e., R^2) accounted in the dependent variable (PCL-R) by the predictor variables. R^2 change was examined via an F test to determine whether the increments at each block of the regression equation were statistically significant. Results showed that APD accounted for 30% of variance (p < .001) in predicting PCL-R total scores. The Triarchic domains added 5% of additional variance (p < .05). In the final regression model, Boldness ($\beta = .21$, p = .01) was the only significant predictor of PCL-R scores among the triarchic domains in addition to APD ($\beta = .47$, p < .001). These results are found in Table 4.

V. Discussion

The current study aimed to determine whether the Triarchic psychopathy model could differentiate between psychopathy and APD. Psychopathy is associated with specific etiological mechanisms, whereas the heterogeneity of APD symptoms challenges the identification of etiological mechanisms. This may be due to the focus on observable behaviors, which could have numerous causes. The Triarchic model describes psychopathy in terms of three phenotypic domains of boldness, meanness, and disinhibition. Patrick and colleagues (2009) linked these domains to distinct developmental and neurobiological pathways, which might be able to address previous limitations in suggesting potential etiological mechanisms for APD.

Results suggested that Boldness appears to be a distinguishing phenotypic indicator of psychopathy (as indexed by the PCL-R) versus APD. Boldness added to the incremental prediction of PCL-R Total scores above and beyond APD scores. The results indicate that Boldness is a significant trait that helps to explain differences between APD and psychopathy.

The current findings also have some implications for the role of the Fearless-Dominance facet in understanding psychopathy. In response to Miller & Lynam's (2012) discussion on *Fearless Dominance*, Lilienfeld and colleagues (2012) make the point that PPI-FD is a robust marker of a clinically and theoretically meaningful subtype of psychopathy that corresponds closely to primary psychopathy as delineated by many scholars (i.e., Cleckley, Karpman). Lynam and Miller's (2012) response highlights the centrality of antisocial behavior to psychopathy. However, the current study's findings show it is important to consider more than just antisocial behavior, particularly Boldness

(Fearless Dominance) in conceptualizing psychopathy. In evaluation of the current study's results, SCID APD scores (reflective of antisocial behaviors and impulsivity) only account for roughly a third of the variance in PCL-R scores.

Lynam and Miller (2012) also make a point to state that PPI-FD has not been shown to be correlated with antisocial behavior and thus cannot serve as a core etiological factor of the disorder. However, Boldness/Fearless Dominance has been shown to have significant associations with global psychopathy, which has always been the DSM's target disorder with regards to APD (Hare, 1996). Investigating psychopathy without considering Boldness would leave researchers only examining a subset of psychopathic individuals (i.e., secondary psychopaths).

The current study is important to consider in light of DSM-5's Antisocial Personality Disorder Model Section 3. The diagnostic criteria for APD proposed including elevations of personality trait facets reflecting the broad domains of *Antagonism* (specifically, Callousness, Deceitfulness, Manipulativeness, Hostility) and *Disinhibition* (specifically, Impulsivity, Irresponsibility, Risk Taking) (APA, 2011). In addition to exhibiting this dimensional personality trait profile, impairments in self-functioning (egocentrism, antisociality) and interpersonal functioning (lack of empathy and remorse, lack of intimacy with others) are required to meet criteria for APD. Interestingly, a Psychopathy Specifier may be included as well, requiring additional trait elevations on Attention Seeking (*Antagonism Domain*), and low elevations on Withdrawal (*Detachment Domain*) and Anxiousness (*Negative Affectivity Domain*) (Sellbom, 2013). High Attention Seeking and low Withdrawal will capture the social potency component of psychopathy, and low Anxiousness will capture the stress

immunity component. Together, this specifier is certainly reflective of Fearless Dominance/Boldness.

The current findings have some implications for the role of the Fearless-Dominance/Boldness facet in assessing psychopathy and APD. The current DSM diagnostic criteria for APD appears to merely capture the Meanness and Disinhibition traits of psychopathy. To bring to diagnostic classification closer to the target disorder, Boldness needs to be incorporated.

Limitations and Future Directions

These results must be considered in light of several limitations. First, the sample may not be generalizable to other populations as it was all male and geographically limited. Secondly, the sample was relatively small and therefore more research should be conducted for greater statistical power. Finally, no physiological data were collected to show potential etiological mechanisms reflective of fearlessness such as startle response indicators (i.e., Patrick, Bradley, & Lang; 1993; Levenston et al., 2000; Kramer et al., 2012). Despite these limitations, the current investigation is associated with some significant strengths. The measure of psychopathy has substantial psychometric support, especially for use with incarcerated samples. Also, APD was examined as a continuous rather than a dichotomous variable. Finally, a reliable measure of the Triarchic domains was used (Sellbom & Phillips, 2012; Stanley et al., in press).

Future research should extend the investigation to different populations, such as individuals recruited from more diverse geographic locations and more heterogeneous institutions as well as community samples. Boldness may be able to explain a subset of psychopathic individuals ("successful psychopaths"). Research has shown that

individuals higher on Fearless Dominance/Boldness may differ from their more criminal counterparts (Wall, Sellbom, & Marion, 2012). Optimally, physiological measures should be implemented to directly examine potential etiological mechanisms for APD versus psychopathy.

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APPENDIX

Table 1.

Descriptive statistics for all study measures.

Scale	M	SD	
PCL-R Total	19.69	7.52	
SCID-II APD	4.50	1.94	
Boldness	52.66	8.21	
Meanness	33.64	9.28	
Disinhibition	49.48	10.98	

Note. PCL-R = Psychopathy Checklist-Revised, SCID-II = Structured Clinical Interview for DSM-IV Axis II Disorders, APD = Antisocial Personality Disorder.

Table 2.

Intercorrelations for all study measures.

	1	2	3	4	5
1. PCL-R Total	-	.54***	.25**	.26**	.27**
2. SCID-II APD		-	.10	.29***	.42***
3. Boldness			-	.14	18*
4. Meanness				-	.41***
5. Disinhibition					-

Note. PCL-R = Psychopathy Checklist-Revised, SCID-II = Structured Clinical Interview for DSM-IV Axis II Disorders, APD = Antisocial Personality Disorder.

^{*}p < .05, **p < .01, ***p < .001

Table 3.

Partial correlations controlling for SCID-II scores.

	1	2	3	4
1. PCL-R Total	-	.21*	.16	.04
2. Boldness		-	.10	23*
3. Meanness			-	.33***
4. Disinhibition				-

Note. PCL-R = Psychopathy Checklist-Revised.

^{*} p < .05, ** p < .01, *** p < .001

Table 4.

Hierarchical linear regression analysis.

Block	R	$\stackrel{2}{R}$	ΔR^2	Final β	p
1 SCID APD	.543	.295		.468	< .001
2 Boldness				.211	.014
2 Meanness				.065	.472
2 Disinhibition	.590	.348	.052	.083	.396

Note. SCID-II = Structured Clinical Interview for DSM-IV Axis II Disorders, APD = Antisocial Personality Disorder.