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Psychopathy Assessment and Related Constructs: Differences and Distinctions for Primary and Secondary Psychopaths

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ABSTRACT

This study investigated the assessment of psychopathy from the perspectives of two self-report scales that differ substantially their construction and conceptual approach to the fundamental clinical subtyping of psychopaths: primary versus secondary psychopathic presentations. The self-report scales used in this study were the Levenson Self-Report of Psychopathy Scale (LSRP; Levenson et al., 1995) and the Perkins' Alienation Scale-Short Version (PAS; Perkins & Harper, 1998). It was hypothesized that the presence of psychopathy would demonstrate significant presence in the distribution of undergraduate students and additionally, that these measures would demonstrate construct validity and replicate previously established relationships between psychopathy measures and related constructs. Additional hypotheses proposed that factor-model of the LSRP would not adequately distinguish between primary and secondary psychopathic presentations, and that the co-morbidity model of the PAS would better fit the data. Observed results confirmed the presence of clinical-level psychopathic traits, demonstrated adequate convergent construct validity, and replicated the majority correlation patterns of psychopathy with other selected variables. Continuous variable analysis of LSRP primary and secondary psychopathy scores did not provide useful distinction in linear modeling, however, simultaneous classification as psychopathic-depressed provided evidence of significantly elevated hopelessness scores. Findings suggest that a primary focus on co-morbid presentations with clear implications for assessment in clinical and forensic settings and the need for specialized treatment approaches are described.

Psychopathy Assessment and Related Constructs:

Differences and Distinctions for Primary and Secondary Psychopaths

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To my parents, who encouraged me to pursue my dream. Thank you for supporting me all these years.

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CHAPTER I

INTRODUCTION

The Diagnostic and Statistical Manual of Mental Disorders, 5th edition (*5th ed.*; *DSM–5*; American Psychiatric Association, 2013) states that it was designed to assist clinicians, researchers, and psychopathology students to more efficiently and consistently learn, investigate, utilize, and communicate about psychological disorders. The primary strategy adopted in pursuit of these outcomes was to demonstrate improved psychometric evidence of consistent utilization (American Psychiatric Association, 2013). In fact, the primary goal for each revision or new edition of the DSM since *DSM-3* has been to produce a psychometrically more robust system (American Psychiatric Association, 1980, 1987, 1994, 2000, 2013). Furthermore, even though improved validity is also described as an anticipated and desired outcome, the direct target for psychometric improvement is clearly stated in the preface to each of these text editions as "more reliable diagnosis" (American Psychiatric Association, 2013, p. xli).

This apparent increase in concern of DSM authors and publishers over psychometric enhancement shadows the broader movement of American psychiatry in the 1970s away from the earlier popularity of the psychoanalytic approach toward a scientific, quantitatively based medical model (Blashfield, 1984). This shift in theoretical preference was widely endorsed in the medical and scientific communities as a necessary and positive move for psychiatry as a discipline (Spitzer et al., 1980). In the clinical world of patient diagnosis and treatment, this change in perspective was best

demonstrated by the DSM's adoption of explicit criteria sets of symptoms to improve diagnostic reliability. Beginning with the publication of *DSM-3* (American Psychiatric Association, 1980), the specific criteria sets are explicitly listed and improved communication among the various constituencies utilizing the DSM are generally credited for apparent improvements in diagnostic accuracy, agreement, and utility. This attribution is widely endorsed and seems almost unquestioned by most *DSM-5* users, even though the majority of these professionals understand, at least at a fundamental level, that concurrent psychometric improvement of reliability and validity is difficult, as the strategies to improve one most often challenge or undermine the other (Blashfield & Draguns, 1976). Nowhere is this natural tension more apparent than in the DSM's strategic inclusion of additional disorder categories (more categories should produce improved validity) and the subsequent challenge to reliability created by having more diagnoses to choose from (more categories directly makes inter-diagnostician agreement more challenging).

Nevertheless, the movement across editions and revisions to the DSM since 1980 seems to be fairly obvious, with each edition coming in a larger book with more categories and even more explicit criteria sets (American Psychiatric Association, 1987, 1994, 2000, 2013). Certainly, demonstrations of improvement in both the validity and reliability of the DSM diagnostic system was desirable. However, in several cases, the American Psychiatric Association's continuing pursuit of clearer and more specific criteria sets for disorders in subsequent DSM revisions resulted in an apparent overemphasis on behavioral history at the expense of more descriptive or characterological presentations.

This dilemma is clearly visible when one considers the theory, research, and practice with individuals with a history of significant violations of societal norms and frequent externalizing behaviors. In the *DSM-5*, this pattern among adults is labeled "Antisocial Personality Disorder" (APD) and is described as involving "a persistent pattern of disregard for, and violation of, the rights of others" beginning in childhood and continuing through adolescence (American Psychiatric Association, 2013, p. 659). A review of the listed criteria and descriptive texts for APD in DSM editions from 1968 to the present seems to clearly demonstrate an increasing emphasis on a behavioral history of societal rule infractions and deviance as the primary diagnostic consideration in determining the presence of APD.

By selecting the APD label, the DSM authors chose to essentially create a new term, rather than use one of several existing constructs, namely sociopathy, psychopathy, and dyssocial personality. This choice was initially met with resistance from the research community, and eventually by a general abandonment by researchers and clinicians alike, in favor of the construct of psychopathy (Hare, 1985). In this context, it is quite interesting that even in the *DSM-5* (American Psychiatric Association, 2013), the authors continue to try to position APD as the more inclusive construct, as some attributes of psychopathy, sociopathy, and dyssocial personality are all listed as features of APD. For example, Ogloff (2006) stated that APD shared features with psychopathy, yet it was somehow also both much broader and founded primarily on behavioral actions rather than personality traits. Alternatively, Hare and Neumann (2009) argued that although psychopathy includes the history of externalizing behaviors similar to the DSM's APD,

psychopathy is actually the broader construct, encompassing deficiencies in interpersonal, affective, lifestyle, and antisocial domains (Hare & Neumann, 2009).

Several additional issues continue to challenge the adoption of APD as the primary conceptual model used by research and clinical professionals working in forensic settings. One of these issues involves the apparent overuse of APD, particularly among those with criminal records (Ogloff, 2006). In the forensic setting, APD appears to be the strongly preferred diagnosis of choice, as 50% to 80% of prisoners are routinely found to meet the APD diagnostic, even though other research suggests that this number could or even should be closer to the 15-20% range when mental health professionals carefully assess inmates (Ogloff, 2006). In other words, it is a likely probability that some significant portion of a prison population already has been or, at some point in the future will be, false-positively diagnosed with APD. Additionally, over-focusing on the presence of a history of behavioral disturbance as the primary diagnostic consideration fails to capture psychopathic traits, preferences, and patterns of relating to others. Thus, prior to exposure as a violator of societal rules and norms, many individuals with psychopathic tendencies or traits may go undetected until, or unless, their presentation eventually becomes openly identified. In sum, it appears that the DSM's conceptualization of APD as practically utilized in assessment, research, and practice, is essentially a synonym for the richer concept of the Psychopathic Personality. Therefore, an examination of research delineating and illuminating the construct of psychopathy will be next pursued.

CHAPTER II

REVIEW OF LITERATURE

Psychopathy

With the publication of *the Mask of Sanity* (1955), Hervey Cleckley provided a clear alternative to the focus on a history of externalizing behaviors and rule violations characteristic of the DSM model. Cleckley's list of features is probably best conceptualized as a prototype model, with few individuals portraying all of the described traits. Cleckley wrote extensively about psychopathy and debated inclusion criteria, but throughout this process it was clear that he was chasing a construct, rather than a behavioral history. He offered the term *successful psychopath* using this phrase to describe people who are aware of social cues, but generally ignore these as irrelevant or give them only cursory consideration. *Successful* in this context then means essentially that they have not gotten into trouble for any social norm-violating behavior to date (Cleckley, 1955). He also described identifying frequent psychopathic traits in healthy individuals who otherwise appeared to be functioning normally. For instance, Cleckley identified frequent psychopathy patterns among scientists, businessmen, physicians, and psychiatrists, and concluded that without a recognized history of rule-breaking behavior for which the individual had been caught or convicted, the psychopath could be your neighbor, essentially hiding in plain sight. This dimensional conceptualization of psychopathy, emphasizes that a continuum exists ranging from the normal to the

disordered, which can be assessed by measuring degree of fit to the prototype, rather than an exclusive list of criteria to be met.

The core features of psychopathy have essentially been the same since the 1955 edition of his text. Cleckley (1955) delineated a list of 16 psychopathic characteristics, including charisma and superficial charm; untruthfulness; means-end thinking; absence of guilt, remorse, or shame; displays of antisocial behavior or prosocial norm violations; poor judgment; and difficulty anticipating or understanding the consequences of one's actions. Additionally, he described psychopaths as egocentric, narcissistic, and potentially incapable of deep or self-less love. He also noted they have poor insight, can be eccentric and at times offensive to others in their behavioral displays, and generally are insensitive or unresponsive to interpersonal conflicts or relational commitments (Cleckley, 1955). He also noted that they tend to be impersonal in intimate relationships, which are usually characterized as superficial and lacking in depth of intimacy or more precisely, vulnerability. Clearly, Cleckley's (1955) model was focused on more than a history of antisocial behaviors, presenting a rich list of personality characteristics for assessment when investigating potentially psychopathic individuals.

Other Perspectives on Psychopathy

It has already been noted that mental health professionals currently use the terms *psychopathy*, *sociopathy*, and *antisocial personality disorder* almost interchangeably to define the same pattern of symptom presentation (Hare, 1996). However, Hare (1996) and others have argued that there are real and important differences between these constructs, differences that are often misunderstood if not completely ignored. Thompson and colleagues (2014) argued that APD refers to a behavioral condition related to the

history of antisocial and criminal behavior, and in contrast, psychopathy is generally understood to describe a personality typology distinguished from APD by a lack of conscience, pathological lying, manipulation, and superficial charm. In other words, APD is primarily linked to committing rule-violating acts that are essentially counted for behavioral frequency and severity. Meanwhile, psychopathy emphasizes personality traits, as described by Cleckley (1955) and others. For example, Thompson et al. (2014) stated that psychopathy and antisocial personality disorder show obvious similarity in several characteristics, including the limited report of fear or anxiety a bold, almost charismatic interpersonal style, an inflated sense of self or grandiosity, narcissism, and elevated self-reported self-esteem, which most often appears to be insensitive to social pressure, failure experiences, and critical feedback (Thompson et al., 2014)

How Do Psychopaths and Non-Psychopaths Differ?

The DSM approach to personality disorders, at least for the last 60 years, has emphasized the presence of dysfunctional traits or characteristics that are most easily observed in terms of the manner in which the individual interacts with the world, events, and others they encounter in everyday life (APA, 2013). The general threshold for the existence of a psychiatric disorder rather than a trait in the DSM is described as the pattern of behavior resulting in "impairment in social, occupational, or some other important area of functioning" (APA, 2013, p. 21). This model assumes a continuity between normal personality traits and characteristics which create clinical conditions primarily being determined by the degree of impairment or disability they create. In the case of psychopathy, it is precisely the psychopath's experienced consequences that guide this decision. For example, losing a job due to frequently arriving for work inebriated or

being despised and socially rejected uniformly by co-workers due to a habit of lying, gossiping, refusing to take responsibility for the consequence one's actions, or frequent and severe episodes of interpersonal conflict, all could be considered to have resulted in occupational impairment.

Thus, for psychopathy, this "level of impairment" or "it causes a problem in some important area of life" threshold sets a relatively clear and certain boundary between psychopathic traits or tendencies and those indicating the presence of a clinical disorder. Applying this threshold condition evidently establishes that an individual with psychopathic traits (e.g., charming, but superficial interpersonal relationships; manipulating others to achieve personal goals without regard to costs or consequences; little experience of fear, guilt, or remorse) but without direct impairment or restriction of life due to being identified as the perpetrator of an illegal act or inflicting damage or injury on another, as an example of showing many of the traits of psychopathy, without necessarily experiencing the conditions that would be considered to represent impairment or dysfunction, and thus, the presence of a clinical disorder. Alternatively, Thompson and colleagues (2014) observed that although psychopaths often seem to have a relatively simplistic and superficial understanding of emotions, many can masterfully mimic socially appropriate responses without raising suspicion (Thompson et al., 2014). In contrast, an average person may have a harder time ignoring or hiding strongly experienced emotional states.

Subtyping Psychopaths

A variety of efforts to subdivide psychopathy and related conditions (Conduct Disorder [CD], APD, etc.) have been proposed to attempt to group individuals more

specifically, anticipating that doing so may provide increased opportunity for identification of causal and/or developmental pathways and potentially more specific and effective strategies for treatment or early preventive intervention. For example, Quay and Werry (1986) described a four-group classification system for delinquent adolescents, with the labels *psychopathic delinquent*, *neurotic delinquent*, *inadequate delinquent*, and *subcultural delinquent*. Similarly, *DSM-3* proposed a two-dimensional model for the diagnosis of Conduct Disorder (CD), with factors of aggressive-nonaggressive and solitary-socialized and instructed diagnosticians to classify all CD-diagnosed cases into one of the four resulting categories (APA, 1980). Conceptually, this appeared to be a useful endeavor, as an adolescent participating in socialized, nonaggressive acts was judged to be significantly less impaired or dangerous than his or her solitary-aggressive counterpart. However, clinical data over the years immediately following the publication of *DSM-3* demonstrated relatively poor observed frequencies for two of the four cells, thus, despite strong clinically intuitive usefulness and theoretical relevance, the dimensionally-based subtyping approach was soon discontinued.

Research into more specifically articulated psychopathic presentations has historically produced little evidence for models identifying three or more distinct types of psychopathy. The most robust subtyping model to date involves the delineation between primary and secondary psychopaths (Hare & Cox, 1978). This model was originally proposed by Karpman (1941), who divided psychopathy into two clinical subtypes: symptomatic or idiopathic. Symptomatic psychopathy referred to an individual who would exhibit psychopathic traits usually as a result of an underlying emotional distress. Idiopathic psychopathy, on the other hand, presented itself without a cause and rarely

reacted to treatment. Karpman's theory helped researchers to identify two subgroups of those who display psychopathic traits.

This distinction generally appears to be very similar to that proposed by Quay and Werry (1986) for their distinction between psychopathic and neurotic delinquents, with the psychopathic subtype soon being relabeled as primary or "pure" psychopathy. Subsequently, they demonstrated significant interrater reliability for delineating between pure and neurotic delinquents in their work with adjudicated adolescents. In these writings, Quay (1987) emphasized that the difference between neurotic and pure, or "primary" delinquents essentially involved solely the presence or absence of negative emotional experiences, such as the presence of symptoms of anxiety, depression, guilt, remorse, or shame. Similarly, Hare and Neumann's (2009) research in adult forensic settings routinely found reliable and replicable classification differences between what they termed "primary" and "secondary" psychopaths. Again, they reported the sole distinguishing feature as the presence or absence of acknowledged or observed emotional distress.

This two-factor subtyping model has received significant support across forensic and patient settings, adolescents and adults, across language and cultural barriers, and in both normal and disorder-identified populations. Much as originally described by Cleckley (1955) and Hare (1980), primary psychopathy refers to the presence of classic psychopathic traits, such as grandiosity, absence of negative emotions, an inflated self-esteem, impulsivity and a sense of invulnerability, manipulation of or dominance over others, and a degree of social charm despite generally shallow or superficial interpersonal relationships (Thompson et al., 2014). Secondary psychopathy is still understood to carry

no requirement for limitation of psychopathic features, other than the presence and acknowledgment of negative emotions, often resulting in the presence of formal affective disturbance (Thompson et al., 2014). Secondary psychopaths are sometimes described as more withdrawn, hostile, and irritable, and, of course, almost by definition present with comorbid or co-occurring externalizing and internalizing disorder patterns (Thompson et al., 2014). This overlap of emotional and social difficulties has been observed to be frequently presented in clinical samples of prepubertal children, but rates decrease significantly after puberty, settling at a level of 25-40% of CD adolescents who fail to display evidence of the anticipated differentiation of internalizing and externalizing symptoms typical of post-pubertal adolescents (Peterson et al., 1991). The frequency and stability of this pattern of overlapping emotional and social-behavioral disorders has been similarly demonstrated in college students, adult inpatient and outpatient samples, as well as nonpatient and forensic settings, leading to the use of the label, socioemotional disorders, to identify the presence of these comorbid conditions.

Psychopathy Assessment

Based on Cleckley's list of psychopathy characteristics, DSM diagnostic criteria for APD and self-report scales for psychopathy and closely related concepts are already in existence (e.g., Spielberger's Sociopathy Scale [SPY]; Spielberger et al., 1978). Hare (1980) worked extensively over several decades drafting, evaluating, refining, and validating multiple assessment instruments for psychopathy. Working initially off of a foundation of qualities, traits, and characteristics described in Cleckley's (1955) model of psychopathy, Hare operationalized the components of Cleckley's prototype and published the clinician-completed Psychopathy Checklist (PCL, Hare, 1980) and soon after the

Self-Report of Psychopathy scale (SRP, Hare, 1985). Of course, continued scale development efforts by Hare, his colleagues, and a number of other psychopathy researchers led to multiple revisions of Hare's psychopathy scales (e.g., the Psychopathy Checklist-Revised (PCL-R); Hare, 2003) as well as a number of other significant additions to the assessment options available for advancing the self-report measurement of psychopathic characteristics in forensic and personality disordered populations. Crego and Widiger (2016) recently argued that Hare's PCL-R continues to be considered the gold standard in psychopathy assessment, an understandable position to take if the primary goal is to utilize the perspective of a clinician knowledgeable about the subject's record of delinquent and/or criminal acts, rather than a self-report scale clearly open to respondent bias, concerns over providing socially-undesirable responses, or intentional dissimulation.

However, a number of the alternative self-report scales developed concurrently with Hare's work on the SRP have made significant contributions to our ability to assess psychopathy, offering significant advances in the sensitivity, reliability, and validity, as well as a more sophisticated theoretical articulation of the prototypic or prominent subtypes of found in psychopathy assessment. Two of these additions will be utilized in this project due to their unique place and psychometric properties. The Levenson Self-Report of Psychopathy scale (LSRP; Levenson et al., 1995) is unique in that it is the first published measure to detail a specific subset of items for primary and secondary psychopathy. Developed through factor-analytic procedures, in which a two-factor solution was determined to best fit the sample data, primarily with factors distinguished on the basis of acknowledged (self-reported) or absent (or denied) emotional distress

experiences. Thus, the LSRP produces two scores, a Primary (Idiopathic) Psychopathy score and a Secondary (Symptomatic) Psychopathy score.

Alternatively, the Perkins' Alienation Scale-SV (Perkins & Kennedy, 1993; Perkins & Harper, 1998) was developed with a focus on the failure to integrate the norms, values and prohibitions of society as personally relevant goals and guides as the core feature of psychopathy. It was developed out of the writings and work of the French sociologist Emile Durkheim (1951), whose work on the cultural estrangement and normlessness components of alienation was central to this theoretically based, empirically derived scale with balanced number of items asking about adoption of both proscriptive and prescriptive norms. The PAS-SV is essentially a primary psychopathy measure developed specifically for use in affective disorder research. Following a co-morbidity model, the authors argue that the presence of emotional distress should be assessed through use of well-documented measures of depression, like the BDI-2. The Perkins Alienation Scale (PAS; Perkins & Harper, 1998) presents an abbreviated version of this empirically based measure focusing on the attributes of normlessness and cultural estrangement, including both the concept of violation of proscriptive norm prohibitions, as well as failure to endorse prescriptive norm expectations, arguing that each was centrally related to the lack of internalization of social goals and norms. In other words, alienation was best exemplified by the "poorly socialized" individual, defined as by the authors as one who fails to incorporate both the prescriptive and proscriptive norms of society.

Literature on Constructs Consistently Related to Psychopathy

Research on psychopathology focuses on defining the etiology and treatment outcomes for psychiatric disorders (Widiger & Crego, 2018). Implications from studies are posed to recommend the specific types of treatments signifying improved psychological health. Generally, psychopathology accompanies comorbid features that comprise a sizeable multifaceted network of intermingling dimensions that arise out of explicitly defined psychiatric disorders (McElroy et al., 2018). The term *comorbidity* refers to the co-occurrence of independent disorders, each with its separate etiology, which affects prognostic anticipations and pre and post-therapeutic outcomes (Feinstein, 1970; Widiger & Crego, 2018). It is broadly recognized that psychiatric comorbidities occur at a greater than chance frequency and produce heightened symptom severity and poor overall diagnosis (McElroy et al., 2018).

Furthermore, studies have identified that individuals with conduct disorder experience higher rates of comorbidity with other psychological disorders (McElroy et al., 2018). According to Pisano et al. (2017) psychopathy and conduct disorders are similarly classified in which others' fundamental rights and social norms or rules are violated. Interestingly, psychopathy was previously classified to be a negative specifier for antisocial and aggressive behaviors, but it has been rediscovered as a relevant factor for subtyping conduct disorder in youths (Pisano et al., 2017). Moreover, it is a known fact that conduct disorders typically induce isolation and denunciation. Research suggests that socially isolated/withdrawn individuals are at risk of adverse outcome adjustments, which produces ongoing socioemotional difficulties in the future (Rubin et al., 2009). Hence, research exploring comorbidity of psychopathy with other psychological

disorders has found this dimension to covary with anxiety and mood/socioemotional disorders (Werner et al., 2015). Moreover, this comorbidity construct has been steered by the research community to delineate more dependably the differences found explicitly in the classification of psychopathy, which will be pursued next. This is a construct that should be examined to grasp its etiology and progression in order to recommend treatment implications for it.

Socialization and Alienation

Following the work of Emile Durkheim (1951), Perkins and Kennedy (1993) argued that the failure to internalize both the prescriptive and proscriptive norms of society created a degree of misfit between the individual and society which has typically been called alienation. This quality of poor socialization emphasizes the primary lack of engagement with society, and under certain circumstances may explain the significant overlap in cases of depression co-occurring with conduct disorder or psychopathy. It is this particular vulnerability, which Durkheim termed anomie or anomic suicide that is often found in mid- or even late-adolescents who fail to emotionally differentiate between externalizing and internalizing disorders during the post-pubertal, early-adolescent years. Furthermore, it is particularly the cultural estrangement and normlessness components that are believed to establish a basis for the occurrence of Durkheim's anomic suicide, which Melvin Seeman (1959,1991) detailed as the most fragile or vulnerable type of his six kinds of alienation. The significant negative correlation between socialization and depression draws attention to this co-occurrence. Thus, poor socialization (alienation) is seen to consistently and positively correlate with depressive symptom severity measures, like the BDI and BDI-2 (Holliman & Montross, 1984).

An Emotional Processing Deficit

It may be that emotional processing is impaired in psychopaths (Casey et al., 2013), and that an emotional processing deficit leads to potential emotional dysregulation (Brook et al., 2013). Psychopaths have been reported to present both emotional dysregulation and impulsive aggression (Long et al., 2014). Thus, the poorly socialized and potentially suicidal individual may be thought of as disconnected from society (alienated) and yet experiencing significant emotional distress (depressed/anxious), creating the basis for an impulsive act of self-harm.

On the surface, it appears that the presence of primary psychopathic traits would serve as protective factors against severe emotional distress or potential suicidal behavior (Međedović et al., 2018). However, the presence of secondary psychopathic features (experiences of guilt, shame, and remorse) may also potentially render individuals less capable of protecting themselves against the crushing pain and hopelessness of suicidal thought. In other words, the emotional distress of understanding the consequences of once's actions and experiencing guilt, shame, and remorse, while representing a healthier (less impaired) ability to empathize or perspective-take, may result in an individual who is a substantial risk of self-harm. Cleckley (1955) suggested that suicide would be rarely carried out by psychopaths as the distortions in thinking and biased attributions along with the failure to thoughtfully process criticism and negative feedback are generally considered to insulate them from negative emotions (Verona et al., 2001). However, it now seems that this conclusion is much too broad, as the rates of suicidal ideation and overt hopelessness are observed to be exponentially higher among those who experience both the alienation of the psychopath along with significant emotional distress (Perkins &

Saleem, 2019). Restated, the co-occurrence of psychopathic personality and severe emotional distress may result in a less impaired psychopath who shows elevated levels of hopelessness, suicidal ideation, and vulnerability and is at significant risk of self-harm (Verona et al., 2001).

Sensation Seeking and Impulsivity

In essence, psychopaths exemplify impaired affective processing and may be characterized by the typology of poor planning skills, heightened aggressiveness, and impulsivity (Konicar et al. 2015). Psychopaths' impulsive acts and poorly executed plans for crime provide support for their lack of emotional stability. Psychopathy has traditionally been associated with impulsivity and sensation seeking (Blackburn, 1969; Cleckley, 1955). Sensation seeking involves arousal and a preference for the novel stimulus (Zuckerman, 2007). Criminals seek intense stimulation who are high stimulus seekers, and low stimulation seekers show weaker reactions to intense emotional or sensory stimuli (Zuckerman, 2007). Sensation seeking includes a general defiance factor for drug use, law noncompliance, and sexual risks (Zuckerman, 2007). It seems feasible that a distinction between primary and secondary psychopaths might be observed in sensation-seeking and involvement in risky behavior being more often observed or reported by primary psychopaths.

Empathy

Empathy may be thought of as a s type of affective awareness and responsiveness, or the presence of a spontaneous emotional acknowledgment of the emotion elicited in others (Oswald, 1996). To further extrapolate, empathy is imagining oneself in another person's situation where an individual understands another person's experience by

feeling the emotions but without the self actually experiencing it (Hodges & Myers, 2007). In other words, an individual feels the emotions but does not get extremely distressed over it to the point it affects their psychological well-being. In contrast, sympathy includes the experience of being moved by the story enough to become entwined with the other person's experience (Hodges & Myers, 2007). Cognitive empathy is the extent to which an individual perceives or has evidence for successfully guessing what the other person was thinking and feeling (Hodges & Myers, 2007). Empathy is an overarching theme for cognitive and affective perspective-taking abilities. Empathy has three components: 1) feeling similar emotion as another person which is referred to as emotional contagion, 2) experiencing personal distress in response to perceiving another's plight, and 3) feeling compassion for others known as an empathic concern, which is associated with feeling for others and helping people even if it involves some sacrifice (e.g., time, effort or money) (Hodges & Myers, 2007). The aptitude to recognize affective states and the competency to take an individual's cognitive and affective perspective are prerequisites to accurately empathize (Anastassiou-Hadjicharalambous & Warden, 2008). The combined prerequisites of social awareness and empathy are thereby known to inhibit antisocial conduct (Anastassiou-Hadjicharalambous & Warden, 2008).

Perspective-Taking

According to Davis (1983), perspective-taking refers to the ability to automatically adjust the psychological point of view of others, whereas empathic concern deals with other-oriented feelings such as sympathy and concern for less fortunate people. Perspective-taking comprises the domains of cognitive and affective. Cognitive perspective-taking refers to the aptitude in recognizing and understanding the thought

processes of others (Oswald, 1996). The usual means of assessing the cognitive dimension involves showing participants pictures of different characters and who are then asked to articulate the stories from the perspective of each character introduced (Oswald, 1996). In contrast, affective perspective-taking dimension is often referred to as affective recognition that aids an individual in identifying and understanding what the other person is feeling (Oswald, 1996). Researchers assess for affective recognition by asking the participants to identify the significance behind emotions included in either audiotapes, film clips, or cartoons (Oswald, 1996). Participants who can do well at this task can comprehend emotions and empathize well with the recipient.

Callous-Unemotional

Furthermore, cognitive and/or affective perspective-taking deficits are reported to be frequently displayed by individuals with conduct disorder (CD; Anastassiou-Hadjicharalambous & Warden, 2008). A study evaluated children and classified them into three groups ranging from elevated unemotional traits, CD low on Callous-unemotional (CU) Traits, and naturally developing norm group (Anastassiou-Hadjicharalambous & Warden, 2008). The results revealed that children with low callous-unemotional traits had both affective and cognitive perspective-taking deficits (Anastassiou-Hadjicharalambous & Warden, 2008). Similarly, children with high callous-unemotional traits had intact competency in the cognitive construct of perspective-taking but showed a deficit in affective perspective-taking (Anastassiou-Hadjicharalambous & Warden, 2008). The individuals with these deficits are unable to regulate their emotions functionally and do not successfully integrate well into society.

Researchers suggest that empathy is strongly associated with general well-being, proper social functioning, and appropriate prosocial behavior (Queirós et al., 2018).

Psychopathic individuals display an inherent lack of empathy (Beussink, 2016). Furthermore, Beussink's (2016) study evaluated the effects of perspective-taking on empathy-related characteristics such as appropriate emotional reactions, empathic concern, perceived closeness with the target, and prosocial behaviors in college students. The study hypothesized that perspective-taking would lead to an increase in empathic domains in students exhibiting high levels of psychopathy. Results demonstrated individuals displayed callous affective traits of psychopathy when they imagined themselves as the distressed target; there was increased concern and sadness produced within them. Psychopaths high in interpersonal or erratic lifestyle traits displayed decreased empathetic concern for the target. This means psychopaths who generally show deficit in perspective-taking are either cognitively and affectively impaired or both.

Awareness of Deficits (Alexithymia)

Moreover, understanding feelings/emotions within oneself and others is an asset in forming an interpersonal connection with a person. Emotional capability involves embodying emotional awareness, recognizing and accepting emotional responses, directing oneself to goal-oriented behavior, and controlling one's impulses (Malkoç et al., 2019). This is a building block that constitutes one's emotional aptitude and evaluation of others. As previously mentioned, the dimension of psychopaths involves affective and interpersonal disturbances. Therefore, interpersonal skills, social and emotional appraisal understandingly will be presented in unique ways in psychopaths. Studies have begun to identify psychopathy to be closely related with alexithymia (Haviland et al., 2004; Singh

et al., 2011). Furthermore, individuals with alexithymia share psychopathic characteristics (Haviland et al., 2004). *Alexithymia* refers to a deficit in emotional processing and emotional regulation (Taylor & Bagby, 2000). Alexithymia involves difficulty finding words and differentiating feelings from bodily sensations of emotional arousal (Parker et al.,1993; Taylor & Bagby, 2000). Primary and secondary classification of psychopathy has been associated with reduced empathic concern (Takamatsu & Takai, 2019). To further expand upon alexithymia covarying with psychopathy, studies concurred secondary psychopathy to be a significant predictor of alexithymia though primary psychopathy has yet to generate a suitable significance (Lander et al., 2012).

Psychopathy and Intelligence

Researchers have not extensively explored psychopaths' ability to suppress their physiological responses by controlling and manipulating self-report measures to go undetected by society. The ability to go unnoticed by society by using superior intelligence to manipulate people may explain the differences found in primary and secondary psychopaths. Psychopaths are alert, smarter than most people, and possess general objective intelligence (Bate et al., 2014). Psychopathic individuals react at a more stable level than their non-psychopathic counterparts when presented with both pleasant and unpleasant stimuli (Bate et al., 2014). Several studies have drawn a connection between those who have had higher psychopathic elevations and lower IQ scores, indicating that such individuals were more violent and impulsive than those exhibiting higher levels of psychopathy and elevated IQ scores (Bate et al., 2014). Offenders with low intelligence and high psychopathy were four times more likely to recidivate sexually

(Bate et al., 2014). Exploring intelligence in primary and secondary psychopaths would be an interesting construct to measure and replicate.

Emotional Intelligence and Psychopathy

Emotional intelligence (EI) is the ability to take other people's perspectives. It is recognized as a critical construct for effective functioning in everyday life and characterized by the successful integration and management of social interactions (Ermer et al., 2012). High emotional intelligence achieves social support, positive health outcomes, better stress management, and fewer interpersonal problems. Primarily, psychopathy is characterized by deficits in empathy and poor behavioral controls, which may be a product of holding lower emotional intelligence (Ermer et al., 2012). An observed difference between primary and secondary exists in their emotional expression. According to Vidal et al. (2010), psychopathy's primary and secondary variants differ in their level of emotional stability. Primary psychopaths display several core interpersonal deficits; such characteristics develop similarly in secondary psychopaths who are exposed to adverse childhood experiences (i.e., parental rejection and abuse) (Vidal et al., 2010). Research on emotional intelligence measures the ability to demonstrate how often individuals recognize and utilize emotional information about themselves and others. In contrast, Trait EI models evaluate individuals who can self-assess their emotional abilities (Ermer et al., 2012). Individuals with impaired EI are characterized by a lack of empathy and show deficits in insight about the emotional states of others and display impulsivity and poor behavioral controls (Ermer et al., 2012). In other words, individuals with impaired EI have a hard time controlling their elevated emotional state and demonstrate a deficit in empathy and insight.

Ermer et al. (2012) assessed emotional intelligence in incarcerated individuals while controlling for general intelligence. The results suggested that, by controlling general intelligence, psychopathy was associated with lower emotional intelligence. Significant correlations were only attained after controlling for general intelligence. General intelligence was evaluated in participants by using the Wechsler Intelligence Scale to meet the cutoff score of 70 or above, and dimensions of emotional intelligence such as Experiential EI (understanding emotional experiences) and strategic EI (ability to manage emotions) were assessed. The measure Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT Version 2.0) was used to assess for strategic EI and experiential EI, which produces global EI. General intelligence was positively correlated with global EI.

Hypothesized Distinctions Between Primary and Secondary Psychopathy

Psychopaths have been classified into two categories: primary and secondary (Thompson et al., 2014; Vidal et al., 2010). Both classifications serve to demonstrate dissimilarity found in the expression and presentation of psychopaths (Thompson et al., 2014; Vidal et al., 2010). Though regardless of the identifiable distinctions and deficits proposed by studies about psychopathy, the difference between primary and secondary psychopaths' levels of depression, hopelessness, alienation, sensation seeking, general and emotional intelligence has not been succinctly investigated in research. Therefore, the classification of psychopathy would be a relevant construct to explore since it posits the following research questions:

1) Do primary psychopaths’ levels of intelligence predict unique behavior and characteristics as opposed to secondary psychopaths?

2) Do primary and secondary psychopaths differ on the construct of emotional intelligence?

The results can illuminate how cognitive skills (perspective-taking, empathic concern) may be differentially related uniquely to primary or secondary psychopathic classification. The co-occurrence of psychopathy with intelligence emotional distress conditions could advance our understanding of the relationships of the variables affecting one's psychological well-being.

Current Study

Given significant and reliable distinctions articulated for the pure/primary and the neurotic/secondary types of psychopathy, it appears fundamentally important that researchers routinely assess for the presence of negative emotional states when examining the presence of psychopathy. Studies have identified that deficits in emotional intelligence and perspective-taking may be essential to improving our understanding of the world of the psychopath. The first hypothesis proposed that in a sample of college-aged adults, observation of a minority of students will show clinical level elevations of psychopathic characteristics. Secondly, it was hypothesized that scores on the Levenson Self-Report Scale of Psychopathy and Perkins Alienation Scale-Short Version will show convergent construct validity through being observed to be statistically-significantly and positively correlated. A third hypothesis suggests that elevated psychopathy scores will be significantly related to lower levels of emotional intelligence, with similar directional hypotheses confirming previous research on the pattern established for other related constructs, as reviewed above. Psychopathy measures (LSRP and PAS-SV) were hypothesized be to significantly and positively related to measures of emotional distress

(depression and hopelessness) and to be significantly negatively related to measures of empathetic concern and perspective taking. Finally, psychopathy score elevations were also proposed to be significantly positively related to measures of alexithymia and sensation seeking. A fourth hypothesis proposed that primary and secondary psychopathy would be observed to show significant and distinct relations to intellectual ability, with primary psychopathy predicted to correlate with higher levels of emotional intelligence and secondary psychopathy predicted to show a negative relationship with emotional intelligence.

Therefore, one of the goals of this study was to identify whether primary and secondary psychopaths differentially exhibit general/emotional intelligence. Overall, psychopaths are not treated as individuals plagued with mental illness; instead, they are treated as individuals with which one should cautiously interact. More sophisticated understanding of the distinctions between primary and secondary psychopathic presentations and their potential differential relations with the related constructs reviewed seemed an essential place to beginning trying to tease these issues apart, toward the eventual goal of providing more effective and specified interventions for psychopathic individuals.

CHAPTER III

METHODS

This study was designed as a cross-sectional, survey-based project that explored the relationship of psychopathy with several attitudes, abilities, preferences, deficits, and features proposed by theory to characterize psychopathy (Cleckley, 1955) and have been corroborated by research as consistently being significantly related in proposed directions. In addition to replicating previous evidence of significant correlations in anticipated directions between psychopathy component features, attention and analysis additionally shifted to specific investigation of these same patterns among college student participants meeting classification criteria for identification as showing prominent features of either primary or secondary psychopathy. Analysis of means differences for primary and secondary psychopathic groups were examined to ascertain the presence of any statistically-significant differences in the frequency and intensity of the factors across groups.

Participants

Undergraduate student volunteers enrolled in selected, campus-based lower-level psychology courses served as participants via online self-report questionnaires completion. The assessment battery consisted of scales described below as well as several demographic questions relating to gender description, classification year (e.g., freshman, sophomore, junior, senior), ethnicity and age, cumulative academic standing (grade point average [GPA]), and the student's current major. Participant consent was obtained prior

to participation via use of an explanatory informed consent statement followed immediately by a gateway question requiring positive endorsement stating consent to participate. Prospective participants were instructed to read the informed consent paragraphs prior to indicating their consent. Response to demographic and self-report scale questions was prevented without positive endorsement stating consent. An additional requirement for participation was attainment of 18 years of age, as the acquisition of parent/guardian consent for any college student of 17 years or less in age was anticipated to be cumbersome and time-intensive to obtain. As referenced in the informed consent paragraphs, Institutional Review Board (IRB) approval was obtained from the Abilene Christian University (ACU) IRB prior to subject recruitment for this project. A copy of the approval letter issued by the ACU IRB chair is also included as an Appendix A. A copy of the demographic form is included in an Appendix B, and along with each of the self-report scales included in the battery.

Participants in the study totaled 113 undergraduate students from a religiously affiliated mid-sized private school in the Southwest. Of the 112 respondents granting informed consent, 68.8% were females and 31.3% males. They were distributed across class as follows: 54.1% freshman, 22.5% sophomores, and 17.1% juniors. The majority of the population was white (45.3%), with 11.3% Hispanic or Latino, 7.5% Black or African American., and 28.3% identified as other. Furthermore, 26.8% of students were related to the medical/health field, 24.1% were education majors, 24.1% did not specify, 16.1% identified as business majors, and 10.7% were science majors.

Measures

Study participants completed demographic questions and study self-report scales by use of Google Form formatting of all content and response items. The battery included demographic questions and self-report scales assessing the frequency and severity of symptoms reported in the areas of psychopathy, alienation, depression, hopelessness, sensation-seeking, verbal and non-verbal intelligence, awareness of deficits, perspective-taking, and empathetic concern. A description and reported psychometric data for selected scales is presented below.

Depression

The Beck Depression Inventory - 2nd edition (BDI-2) is a 21-item self-report inventory designed to assess clinical levels of depression (Beck et al., 1996). Each item is rated on a four-point severity scale ranging from 0 (symptom not experienced) to 3 (symptom experienced at a severe level). Scale total scores are obtained by summing the values chosen for all items, with minimum and maximum total BDI-2 scores ranging from 0 to 63.

Wang and Gorenstein's (2013) comprehensive review included test-retest reliability from all 119 articles on depression in their article, resulting in the allocation of three groups: non-clinical, psychiatric/institutionalized, and medical samples. A comprehensive analysis of retained 119 studies reported an average alpha coefficient of 0.9 on the BDI-2, which ranged from 0.83 to 0.96 (Wang & Gorenstein, 2013). The test-retest reliability of BDI-2 displayed coefficients ranging from 0.73 to 0.96 within two weeks period (1 month to 6 months) for most studies (Wang & Gorenstein, 2013). The observed retest reliabilities were similar to the authors of BDI-2 study with clinical and

non-clinical population (ranges, 0.92 to 0.93) within a one-week period of application and replication of the measure (Wang & Gorenstein, 2013). The convergent validity was relatively good to excellent between the BDI and the BDI- 2 with validity coefficients ranging from 0.82 to 0.94 (Wang & Gorenstein, 2013). The BDI-2 is considered by most to be a valid and reliable self-report measure to discriminate between depressed and non-depressed patients that has improved concurrent, content, and structural validity (Wang & Gorenstein, 2013).

Hopelessness

The Beck Hopelessness Scale (BHS) is a 20-item self-report scale part of a cognitive triad designed to measure negative expectancies relating to self and future (Beck et al., 1974; Boduszek & Dhingra, 2016). BHS has 11 negatively worded items and nine positively worded items. After reverse scoring, the resulting 20 item values are summed, producing a possible range of total BHS values from 0 to 20 (Beck et al., 1974). It has been reported to serve as a reliable predictor of suicide attempts and completed suicides (Boduszek & Dhingra, 2016). The internal consistency in a large sample of college students was reported as $\alpha = .88$ (Steed, 2001) with a stronger reliability of 0.88 in a study by Kocalevent et al. (2017).

Sensation Seeking

The Brief Sensation Seeking Scale (BSSS) is a self-report measure that taps into two dimensions: need for stimulation and a need for novel stimulus (Hoyle et al., 2002). It is comprised of four sensation seeking dimensions: experience seeking, boredom susceptibility, thrill and adventure seeking, and disinhibition (Hoyle et al., 2002). Each subscale contains two items, making a total of eight items. BSSS was constructed by

adapting items from Sensation Scale-V to specifically target adolescents (Zuckerman & Aluja, 2015). A study sample from two major metropolitan cities of *N*=7000 undergraduate students, and teens from 7 to 12th grade generated a Cronbach alpha, ranging from 0.79 to 0.79 (Hoyle et al., 2002). Test-retest reliability in a sample of children from ages 7-12 grade was 0.71 (Hoyle et al., 2002). BSSS is a valid measure to assess adolescents and young children's sensation-seeking behaviors (Zuckerman & Aluja, 2015).

Alienation

The Perkins Alienation Scale-Short Version (PAS-SV) consists of 40 items theoretically based self-report measure designed to capture alienation levels in individuals with affective disorders (Perkins & Harper, 1998). Subscales assess four domains believed to reflect the participants accepting, endorsing, or being socialized into prescriptive and proscriptive societal norms. Domains assessed by each subscale are: attitude toward general societal norms, family relationships, the work or school environment, and non-family (peer) relationships (Perkins & Kennedy, 1993).

Perkins and Kennedy (1993) reported that in a sample of 366 college students, the total Alienation score resulting from the sum of items from all four domains resulted in an observed internal consistency (coefficient **α**) of .935 and a two-week test-retest reliability (r) of .589. They also reported on an additional sample of 17 incarcerated adults with prominent psychopathic traits, based on physician/psychologist determination. In this forensic “clinical” sample Alienation assessed by the PAS-SV was observed to correlate significantly and positively with symptom severity measures of depression (BDI), anxiety (SRGTA), psychopathy (SRP and Hare’s Checklist), and

hostility, and negatively with Socialization scale from the California Personality Inventory (So-CPI), demonstrating strong construct validity.

Primary and Secondary Psychopathy

The Levenson Self-Report Psychopathy scale (LSRP) is a 26-item self-report measure that delineates differences found in primary and secondary psychopaths based on a single factor-analytic solution (Levenson et al., 1995). It consists of a Likert scale of four responses ranging from 1 to 4. The LSRP measure reports adequate internal-consistency reliability, with Cronbach's alpha reported for the two subscales of 0.82 for the primary scale and 0.63 for secondary (Levenson et al., 1995).

Intelligence

The Shipley-Hartford Institute of Living Scale (SILS) is used to assess general intelligence (Creed & Wiener, 1999; Shipley & Burlingame, 1941). It is a quick method for assessing intellectual impairment and average to superior intelligence (Shipley & Burlingame, 1941). The SILS takes approximately 20 minutes to complete and produces three summary scores: vocabulary, abstraction, and combined total scores (Creed & Wiener, 1999). The vocabulary subscale includes forty multiple choice verbal reasoning questions and measures crystallized intelligence (Creed & Wiener, 1999). The Abstraction subscale includes 20 series completion items of inductive and deductive reasoning that tap fluid ability (Creed & Wiener, 1999; Shipley & Burlingame, 1941). Schear and Harrison (1998) replicated linear regression method from research studies to estimate age-adjusted Wechsler Adult Intelligence Scale (WAIS) IQ scores from Shipley, which comprised of 125 male psychiatric patients between the ages of 20 and 70. The WAIS was designed to classify intelligence by estimating mental age and IQ, as well as

deficiency and deterioration in adults (Wechsler, 1939). The study generated correlations between observed and estimated IQ, which was .79 (Schear & Harrison, 1998). Results demonstrated that Shipley estimated WAIS full-scale IQ is relatively better compared to continuously normed WAIS IQ than when analyzed with WAIS tabled norms (Schear & Harrison, 1998). Correlations between total Shipley scores and full-scale WAIS IQ (FSIQ) have demonstrated be high, ranging from .73 to .90 (Bartz & Loy, 1970).

Similarly, Zachary et al. (1985) conducted a linear regression statistical test to estimate age-adjusted Wechsler Adult Intelligence Scale-Revised (WAIS-R) IQ Scores from Shipley. The sample consisted of 100 inpatients and then was replicated on a sample of 50 psychiatric inpatients. The cross-validation sample correlated .87 with the sum of scaled scores and .85 with IQ, which was obtained from the Shipley vocabulary and abstraction scores (Zachary et al., 1985). It did not under-or over-predict, meaning there was a high agreement between two procedures (Zachary et al., 1985). The study revealed WAIS-R summary scores from Shipley correlate highly with the observed scores and endorse Shipley as a good measure in professional, clinical and research settings to estimate an individual's overall intellectual aptitude (Zachary et al., 1985).

Dennis (1973) estimated validity of Shipley Hartford (SH) as a measure of intellectual functioning by converting SH total scores to estimate WAIS FSIQs by comparing it with the published tables in *N*=37 psychiatric patients (Dennis, 1973). Correlations and standard errors between predicted and actual FSIQs were computed (Dennis, 1973). Actual verbal IQ and predicted IQ correlations were to a small degree lower than actual FSIQs (Dennis, 1973). In contrast, performance IQ was considerably better (Dennis, 1973). An intended correlation was obtained by using age-corrected table

which led to the highest correlation with actual FSIQ (.79) with the smallest margin of error (7.7). The age scaled table demonstrated good stability at higher and lower SH scores whereas, non-age-corrected tables led to insignificant correlations with actual FSIQ standard scores with lower performance of SH scores (Dennis, 1973). The age scale table generated smaller errors than the rest of the tables incorporated into the study (Dennis, 1973). Dennis (1973) stated Paulson & Lin's (1970) age-corrected table is an efficient way to estimate WAIS FSIQ.

Awareness of Deficits (Alexithymia)

The Toronto Alexithymia Scale (TAS) is a 20-item self-report instrument commonly used to assess difficulty in identifying, describing feelings, and distinguishing them from bodily sensations of emotional arousal (Parker et al., 1993). The form consists of three components: 1) difficulty in identifying feelings in self (DIF); 2) difficulty in describing feelings to others (DDF); and 3) externally oriented thinking (EOT) (Parker et al., 1993). In a sample of students (N=401) and psychiatric patients (N=218), Cronbach alpha was found to be 0.80 to 0.83 (Parker et al., 1993). The initial scale validation study above generated the following total factor scale score correlations of DIF 0.75, DDF 0.75, and EOT 0.66 to 0.64 (Parker et al., 1993). Similarly, in a large Canadian community sample (N=1933), alpha coefficients and mean inter-item correlation ranged from 0.86 and 0.23 (Bagby et al., 2020). The assessed Canadian sample total scale score correlations were as follows; DIF Scale produced 0.76 and 0.37; the DDF Scale yielded 0.76 and 0.46; and; EOT Scale generated 0.71 and 0.24 computation (Bagby et al., 2020). The authors of TAS-20 reported test-retest reliability of 0.77 ($p < 0.01$) amongst N=72 college students on two occasions, three weeks apart (Bagby et al., 1994). There are

concerns raised about EOT factors demonstrating low estimates of internal consistency in several studies; whereas there have also been studies conducted yielding stronger correlations than DIF and DFF factor scales. The findings suggest tests reliability and validity of TAS is good to excellent (Bagby et al., 2020).

Empathy and Perspective-Taking

The Interpersonal Reactivity Index (IRI) is a dispositional measurement tool for assessing empathy (Davis, 1983). It consists of 28-items answered on a five-point Likert scale ranging from "Does not describe me well" to "Describes me very well." The measure has four subscales, each representing seven different items taken from each subscale. These subscales are Perspective Taking, Empathic Concern, Fantasy, and Personal Distress. Davis (1983) reported the psychometric properties of the measure. All four scales have acceptable internal and test-retest reliabilities (internal reliabilities range from .71 to .77; test-retest reliabilities range from .62 to .71).

Procedures

Undergraduate psychology course instructors were informed of the purpose of the study and invited to offer participation to their students and were provided the consent to participate text. The incentive for partaking in the study was receiving extra credit. Unless the participants indicated their consent to participate, they were unable to move forward to the first demographic question of the assessment. The consent text included the plan and purpose of the study, participant's rights, risks and benefits, privacy and confidentiality, and compensation for participation.

The assessment battery utilized the Google Forms platform to electronically gain consent and provide content and responses for all individual items, presented one at a

time. The collected data file was exported into Microsoft Excel format, and the data were checked for out of range values. When present, these values were changed to system missing values. Any reverse-scored items were then reversed and scale and subscale totals be computed in SPSS. Participants answering less than 95% of the items on an individual scale were assigned a missing total score.

Plan of Data Analyses

Inter-correlations for psychopathy and alienation were computed with all other scale and subscale scores to evaluate the degree to which this college student sample replicates the patterns previously observed in forensic and clinical setting samples. Subjects were then be evaluated for meeting established cut-off score criteria for depression on the BDI-2 and psychopathy on the PAS-SV, and those meeting criteria were classified as primary or secondary Psychopaths accordingly. The two groups were then examined via mean comparison procedures to ascertain the presence of any between groups differences reaching the level of statistical significance.

Implications of Proposed Study

The present aim of the study was to identify, classify, and assess participants meeting criteria for primary and secondary psychopathy from their non-psychopathic counterparts. It was proposed that classification for psychopathy will demonstrate the presence of these patterns in a non-clinical setting drawn from a religiously affiliated, Christian institution. The goal of the research was to find psychopathic traits and to carefully assess the degree to which primary and secondary psychopaths showed differences in perspective-taking and empathic-concern abilities. The ability or inability of primary and secondary psychopaths to identify and describe their emotions under the

context of human relations was hoped to provide insight into their level of emotional intelligence. Studies have shown that people with primary psychopathic traits have strong perspective-taking abilities with low concern for others. Therefore, consistent with previous observations, it was hypothesized that primary and secondary psychopathic differences in intellectual ability would exist and would demonstrate that primary psychopaths have better control over their behavior due to higher cognitive abilities, whereas secondary psychopaths are more impulsive and are more likely to get caught, possibly due to more limited intellectual ability.

CHAPTER IV

RESULTS

Replicating the Presence and Correlates of Psychopathy

The first hypothesis proposed that in a sample of healthy, college-aged adults with little to no behavioral history of severe antisocial acts, one would, nevertheless observe a distribution of alienation and psychopathy scores with a substantial number of individuals self-reporting the presence of a significant number of psychopathic traits. This is demonstrated by the distributions presented below in Table One.

Table 1

PAS-SV and LSRP Psychopathy Scale Distribution

	PAS-SV	LSRP
Valid *N*	111	110
Missing	1	2
Mean	73.18	57.87
Median	72.00	56.50
Mode	65.00	50.00
Std. Deviation	12.18	13.11
Range	61.00	62.00
Quartiles - 25	65.00	49.75
- 50	72.00	56.50
- 75	80.00	68.00

Additionally, it was proposed that scores on these instruments would be positively correlated, providing evidence of convergent construct validity. It was further hypothesized that significant correlations would be observed in the expected directions with other assessed variables. As seen in Table Two, the Levenson Scale of Psychopathy

and PAS-SV correlations showed the proposed relationship previous studies have established. Results from the Pearson correlation indicated LSRP was significantly and positively correlated with PAS-SV scores (r=.64, p<0.01). In terms of emotional distress, it was proposed that both psychopathy and alienation would be significantly and positively related to measures of depression and hopelessness, would be significantly and negatively related to measures of empathetic concern and perspective taking, and additionally would be significantly positively related to measures of alexithymia, sensation seeking, and primary psychopathy distinctly related to intellectual capacity.

As seen in Table Two below, depression and hopelessness were significantly positively related to psychopathy and alienation as hypothesized, as were sensation-seeking and awareness of deficits. Similarly, measures of empathic concern and perspective-taking showed the hypothesized significant, negative relationship. Others were also observed to be significantly related in the proposed directions.

Table 2

PAS-SV and LSRP Correlations with Other Assessed Variables

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	PAS-SV														
2	LSRP	.64**													
3	BDI-2	.39**	.39**												
4	BHS	.37**	.44**	.57**											
5	BSSS	.30**	.35**	.13	.15										
6	BSSS-Experience	.15	.20*	.02	.09	.76**									
7	BSSS-Boredom	.16	.20*	.11	.13	.76**	.52**								
8	BSSS-Adventure	.18	.22*	.04	.15	.83**	.54**	.49**							
9	BSSS-Disinhibition	.43**	.47**	.17	.11	.72**	.33**	.40**	.47**						
10	TAS	.38**	.48**	.41**	.35**	.23*	.07	.19*	.1	.24*					
11	IRI	-.25**	-.42**	.05	-.22*	.03	.08	.03	.08	-.08	-.34**				
12	IRI-Empathy	-.21*	-.42**	.1	-.12	.00	.06	.01	.04	-.1	-.27**	.90**			
13	IRI-Perspective	-.23*	-.36**	-.01	-.28**	.05	.07	.02	.1	-.04	-.35**	.90**	.63**		
14	SILS-Vocab	-.04	-.13	-.04	-.09	.01	.06	-.07	.08	-.15	-.12	.15	.13	.15	
15	SILS-Abstraction	-.03	-.11	.02	.01	-.09	-.13	.08	-.06	-.20*	.03	.01	-.04	.05	.34**

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Testing the Primary-Secondary Psychopathy Subscales for Statistically Significant Different Correlations

To explore the distinctiveness of the relation of each of these variables to primary and secondary psychopathy, the statistical significance of the difference between the primary and secondary LSRP correlations with each of the other variables assessed was calculated. As depicted in Table Three, both the primary and secondary psychopathy scale scores were significantly related to all other measures, with the exception of intellectual ability, where little evidence of clear relational pattern was evidenced.

Table 3

LRSP Primary versus Secondary Correlation

		1	2	3	4	5	6	7	8	9
1	LSRP-Primary									
2	LSRP-Secondary	.49**								
3	BDI-2	.22*	.51**							
4	BHS	.33**	.48**	.57**						
5	PAS-SV	.56**	.56**	.39**	.37**					
6	BSSS	.30**	.29**	0.13	.15	.30**				
7	IRI	-.39**	-.34**	0.05	-.22*	-.25**	.03			
8	TAS	.35**	.51**	.41**	.35**	.38**	.23*	-.34**		
9	SILS-Vocab	-.15	-.05	-.04	-.09	-.04	.01	.15	-.12	
10	SILS-Abstraction	-.10	-.05	.02	.01	-.03	-.09	.01	.03	.34**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

However, as presented in Table Four, when significance tests were calculated, the majority of these showed no clear pattern of a statistically significant (distinct) relationship. For example, although the BDI-2 computation produced a statistically significant difference in the anticipated direction ($z = +2.43$, $p = .015$) no other measured

variable demonstrated a significant distinct relation with primary vs. secondary psychopathy. While the Hopelessness Scale and the Toronto Alexithymia Scale came closest, achieving probability values of < .2, when consideration is given to the number of tests calculated, the observed probabilities of 12 % and 19% do not begin to approach the level required of any follow-up test requirement.

Table 4

Primary versus Secondary Psychopathy Correlation Differences

	Individual Correlations Primary and Secondary	
Measures	*Z Score*	*Probability*
PAS-SV	0.06	.950
BDI-2	2.42	.015
BHS	1.31	.192
TAS	1.55	.122
BSSS	0.09	.930
BSSS- Experience	-0.64	.522
BSSS- Boredom	-0.01	.988
BSSS-Adventure	0.21	.834
BSSS-Disinhibition	0.83	.405
IRI	0.44	.659
IRI-Empathy	1.24	.216
IRI-Perspective	0.38	.706
SILS-Vocab	0.69	.488
SILS-Abstraction	-0.40	.689

Classification Analyses

An alternative conception of the primary-secondary psychopathy distinction suggests that it is the co-occurrence or co-morbidity that offers the more appropriate model for conceptualizing secondary psychopathy. From this perspective, individuals scoring above an established cutoff for possessing psychopathic traits (the “high” psychopathy group) would also need to be classified as “high” or not on a measure of

depression. and the resulting distribution of remaining sample participants would be used to examine the presence of mean differences on the related measures.

In pursuit of this mean comparison approach, intended to maximize clinical utility and group distinctiveness, the following steps were performed and the resulting classification of psychopathic-trait individuals are summarized in Table Five. Previous research established that the significant presence of psychopathic traits or tendencies is generally seen with PAS-SV scores of 78/79 and above. When this cutoff criterion was applied to the current sample, a total 33 subjects remaining in the active sample were classified as "high" or psychopathy (alienation). That group was then divided between those meeting or following below established criteria for clinical-level depressive symptom severity, which for the BDI-2 is reported to be total scores of 19 or above (Oliver & Simmons, 1984). Therefore, if the BDI-2 score for symptom severity was 19 or higher, the participant was classified as depressed and psychopathic, or secondary psychopathic. If the BDI score was 18 or less, they were classified with primary psychopathy. Somewhat surprisingly, the chi-square expected frequency was significantly under-representative of our sample, causing a rejection of the null, or no difference hypothesis, and conclusion that our participants were not randomly distributed across the cells. See Table Five for details: Alienation = 2 (high) and Depression = 2 (high) shows an expected frequency of 8.9 and an observed frequency of 15 ($\chi^2 = 8.86$, $p = .004$).

Table 5

Depression and Alienation Crosstabulation

		Alienation		
Depression Group 1.00		1.00	2.00	Total
	Count	63a	18b	81
	Expected count	56.9	24.1	81.0
	%within Depression Group	77.8%	22.2%	100.0%
	%within Alienation	80.8%	54.5%	73.0%
	% of Total	56.8%	16.2%	73.0%
Depression Group 2.00	Count	15a	15b	30.0
	Expected Count	21.1	8.9	30.0
	% within Depression Group	50.0%	50.0%	100.0%
	% within Alienation	19.2%	45.5%	27.0%
	% of Total	13.5%	13.5%	27.0%
Total	Count	78	33	111
	Expected Count	78.0	33.0	111.0
	% within Depression Group	70.3%	29.7%	100.0%
	% within Alienation	100.0%	100.0%	100.0%
	% of Total	70.3%	29.7%	100.0%

Note. Each subscript letter denotes a subset of Alienation categories whose column proportions do not differ significantly from each other at the .05 level.

Finally, in order to calculate mean score differences between primary and secondary psychopaths, subjects classified into primary psychopathy (PAS-SV > 78) and secondary (PAS-SV > 78 and BDI-2 > 18) means were compared. Table Six shows the mean comparison statistical results computed as simple independent sample *t*-tests. As can be seen in Table Six, the hopelessness scale also now presents a statistically significant difference (primary mean = 2.94, secondary mean = 8.07; $t = 3.18$, $p = .005$). However, no other variables reached the level of statistical significance.

Table 6

Mean Comparisons Procedures

Primary1		N	Mean	Std. Deviation	Std. Error Mean
BDI-2	1.00	18	9.94	5.97	1.41
	2.00	15	27.20	9.24	2.38
PAS-SV	1.00	18	87.39	7.75	1.83
	2.00	15	88.47	9.41	2.43
BSSS	1.00	18	26.89	5.62	1.33
	2.00	15	26.33	9.06	2.34
BHS	1.00	18	2.94	2.65	0.62
	2.00	15	8.07	5.76	1.49
BSSS-Experience	1.00	18	7.06	2.01	0.47
	2.00	15	7.87	2.59	0.67
BSSS-Boredom	1.00	18	7.00	1.50	0.35
	2.00	15	6.73	3.06	0.79
BSSS-Adventure	1.00	18	6.06	2.07	0.49
	2.00	15	6.33	3.13	0.81
BSSS-Disinhibition	1.00	18	6.78	2.21	0.52
	2.00	13	5.69	2.21	0.61
TAS	1.00	18	53.78	11.03	2.60
	2.00	15	61.53	15.47	3.99
IRI	1.00	18	33.61	9.83	2.32
	2.00	15	37.80	12.00	3.10
IRI-EC	1.00	18	14.56	5.78	1.36
	2.00	15	17.40	5.33	1.38
IRI-PT	1.00	18	16.56	4.67	1.10
	2.00	15	17.73	6.69	1.73
LSRP	1.00	18	67.28	9.52	2.24
	2.00	15	73.33	13.13	3.39
LSRP-Primary	1.00	18	41.17	7.61	1.79
	2.00	15	42.87	9.37	2.42
LSRP-Secondary	1.00	18	26.11	4.10	0.97
	2.00	15	30.47	5.36	1.38
SILS-Vocab	1.00	18	28.61	7.89	1.86
	2.00	15	29.60	3.70	0.96
SILS-Abstractionx2	1.00	18	19.22	9.21	2.17
	2.00	15	20.00	6.14	1.59

CHAPTER V

DISCUSSION

Hypotheses Restated and Review of Findings

The present aim of the study was to replicate findings from previous research and test the hypotheses proposed about potential differences in correlations of other constructs with primary and secondary psychopathy. This project was specifically focused on the co-occurrence of psychopathy and depression as a practical operational; definition for the presence of secondary psychopathy. Our first hypothesis proposed in a sample of healthy, college-aged adults, distribution of alienation and psychopathy self-report scale scores would show a full range of scores with a substantial minority of the sample placing above standard cutoff levels for the presence of psychopathy. A total of 33 out of our sample of 112 participants placed into the psychopathic-tendency range, confirming this hypothesis. The second hypothesis proposed that scores on the LSRP and the PAS-SV would be statistically significantly, positively correlated. It was also expected LSRP and PAS-SV would demonstrate construct validity. Thereby providing the evidence that both measures are to some extent measuring the same construct. This prediction was also supported by the observed intercorrelation of the LSRP and PAS- SV (r =.64, p <0.01).

The third hypothesis suggested psychopathy score elevations would be related to lower levels of emotional intelligence. This directional hypothesis stated that psychopathy measures (LSRP and PAS-SV) would be significantly and positively related

to measures of depression and hopelessness and, alternatively, would be significantly and negatively related to measures of empathetic concern and perspective-taking. Similarly, psychopathy measures (LSRP and PAS-SV) were predicted to show a statistically significant, positive relation to measures of alexithymia and sensation seeking. An additional, fourth hypothesis proposed that primary and secondary classifications of psychopathy to be positively and negatively related to intellectual ability, respectively. The primary and secondary classifications will be differentially related, with primary psychopaths showing unimpaired emotional intelligence and higher IQ, whereas secondary psychopaths will demonstrate lower emotional intelligence and IQ.

The results revealed the undergraduate student population with little to no behavioral history of antisocial acts reported the presence of psychopathic traits. Table Two reveals, Levenson Self-report Psychopathy Scale achieved a statistical significance of $p<0.05$ with the measures of emotional intelligence, depression, hopelessness, alienation, and sensation seeking. The posed directional hypothesis was thereby successfully replicated. Individuals self-reporting alienation and psychopathy were depressed, embodied hopeless, endorsed the need for novel stimulus and demonstrated awareness/emotional intelligence deficits.

A statistically significant relationship with higher/lower emotional and intellectual ability between primary vs. secondary was also hypothesized. As was seen in Table 2, the correlation between psychopathy and general intelligence was not significant. Similarly, the individual relationships the primary and secondary psychopathy scales also showed no significant relationship to changes in observed intellectual ability. Furthermore, the correlations of primary and secondary subscales were calculated with its related

constructs. By these means, Table Four, revealed that primary vs. secondary *z* scores generated a non-significance finding with emotional intelligence measures. Non-significance was also attained with hopelessness, sensation seeking, and alienation. This means a distinction about primary regulating their emotions better than secondary could not be made. Therefore, the hypothesis of primary psychopaths showing unimpaired emotional intelligence and higher IQ, whereas secondary psychopaths demonstrating lower emotional intelligence and lower IQ is rejected. The current study failed to replicate the distinct primary vs. secondary psychopathy relations with intellectual and emotional differences hypothesized on the basis of previous research findings (Bate et al., 2014; Ermer et al., 2012).

Table Four shows a statistically significant difference between primary and secondary was found on the measure of depression. A hand-calculated examination of Levenson's primary and secondary scale provided a *z*-score probability of .015 with depression. This finding is not unusual as research has established depression and psychopathy to be inversely associated with each other (Lovelace & Gannon, 1999).

Table Five shows that the alienated group formed for the purpose of maximizing clinical utility by closely outlining differences exhibited by primary vs. secondary psychopathy had, in fact, clinical-levels of self-reported psychopathic features or traits. Primary psychopaths (alienated, but not significantly depressed) and secondary psychopaths (depressed and alienated) reported statistically significant different levels of hopelessness, as hypothesized.

Research has shown that a positive correlation exists between secondary psychopathy and suicidal ideation (Pennington et al., 2015). Another study showed that

the antisocial dimension of psychopathy was associated with increased incidence of self-injurious behavior (Swogger et al., 2009). Suicidal ideation and hopelessness are observed to be higher amongst those exhibiting both alienation and psychopathic traits (Perkins & Saleem, 2019). Cleckley (1955) suggested that suicide would be rarely carried out by psychopaths because their general pre-dispositional traits protect them from distortions in thinking, criticisms, and negative-feedback (Verona et al., 2001). Researchers have proposed primary experience no negative emotions as opposed to secondary who embody remorse, guilt, and shame (Cleckley, 1955; Hare, 1980; Quay,1987). Although these distinctions mentioned above have been made about psychopathy, the present study nevertheless established that both primary and secondary experienced hopelessness. Table Six showed a significant mean difference of five points between primary and secondary. Individuals presenting with secondary psychopathic traits endorsed the items of hopelessness understandingly more than those exhibiting primary features. Hence, a conclusion about the primary vs. secondary susceptibility to self-injurious and reckless behavior can be reliably posed. An individual with secondary psychopathic traits displaying elevated levels of hopelessness and suicidal ideation is vulnerable and at a significant risk of self-harm and risky behavior. This finding sets this study apart makes it theoretically and clinically relevant. Therefore, the co-occurrence of psychopathy with other socioemotional disorders should not be neglected and thoroughly examined.

Limitations of Current Project

The limitation of the study was accessibility to attainable measures and time constraints. The measures included in the initial proposal of the study were expensive,

required a considerable amount of time to acquire and administer. Measures carefully chosen had good reliabilities, validities and were cost-effective. The advantage of some of the scales selected is they are not widely used such as Perkins Alienation Scale, which makes this study design unique. Nevertheless, the design simultaneously limits and presents a multifaceted number of problems with measuring the essence of the posed hypotheses. The crux of the hypothesis rests on identifying and differentiating psychopath's intelligence and experience of negative emotions. Shipley-Hartford Institute of Living Scale was used to assess intelligence. The scale may have captured just a fraction of IQ in the undergraduate student population. The Shipley Hartford measures crystallized intelligence and merely taps into fluid abilities. The scale restriction for assessing more broad/complex IQ dimensions could explain the non-significance found between psychopathy and intelligence.

Furthermore, Levenson Self-Report Psychopathy Scale (LSRP) appears to be a fairly reliable measure of overall psychopathy. There have been debates about the Levenson three-factor model as potentially a better fit, however, considerable difficulties with the callousness scale have discouraged its use. Thus, the two-factor model, emphasizing the primary vs secondary distinction, is argued by the authors as the best way to interpret LSRP score elevations (Salekin et al., 2014). There are no concerns about the items using negatively worded linguistics to assess psychopathy (Tsang et al., 2018). Nevertheless, the current study established that LSRP primary and secondary subscale failed to demonstrate discriminant validity. The factor-model of the LSRP did not sufficiently distinguish between primary and secondary presentations. The primary and secondary subscales both showed nearly equivalent positive correlations with

depression, hopelessness, and alienation measures. The correlation between primary psychopathy and depression is particularly problematic, suggesting that some of the item content on the LSRP-Positive scale had overlapping content with BDI-2 items. This severely limited the ability of the LSRP in general to provide evidence of distinctive and arguably orthogonal constructs (primary and secondary psychopathy). The primary subscale should not, by design, reflect any depressive/hopeless content. Therefore, LRSP primary subscale theoretically should not have correlated significantly and positively with depression and hopelessness, yet it did. The LSRP secondary subscale correlated significantly with depression and hopelessness, which is not surprising as secondary psychopaths are known to embody negative emotions. Moreover, the primary and secondary subscale and PAS-SV correlations scores were identical (r=.56). Noteworthy differences in these correlations were expected to be reflected here since secondary psychopaths are more prone to impulsive and affective disturbances than primary (Cleckley,1955; Hare,1980; Quay, 1987). The co-morbidity model of the Perkins Alienation Scale-Short Version demonstrated good construct validity and explained the difference between primary vs. secondary more reliably as opposed to Levenson Self-Report Psychopathy Scale.

Additionally, the self-report measure relies on an individual to present an actual depiction of their current internal state. It is possible for results to be skewed by co-occurring disorders presenting themselves to endorse the items of psychopathy. Therefore, Hare Psychopathy Checklist-Revised, which consists of a lengthy interview and file review assessing personality and behavioral dimensions, could be a better measure to use for the current study, but due to its inaccessibility, LSRP was incorporated

in the current study (Lynam, 1999). The Hare Psychopathy Checklist-Revised could have further reliably distinguished individuals likely to be high on psychopathy and, through clinical interviews, provided a detailed life history record to look for possible comorbid socioemotional disorders (Lynam, 1999).

Moreover, the study could have benefited from additional participants because it would allow a more accurate reading on the differentiating variance exhibited in psychopaths. The sample size of the current study may have masked more reliable differentiation between psychopaths. The population at a prestigious Christian institution are expected to display good overall mental aptitude, moral regulation, and behavioral control. Therefore, an unobscured distinction between primary and secondary could be more accurately found in public schools or in juvenile establishments versus high esteemed universities.

Recommended Directions for Future Research

The comorbidity of depression and psychopathy is a highly debated topic that has yielded little research about the co-occurrence of these variables. Several studies are demonstrating that psychopathy and depression are mutually exclusive constructs. In contrast, some research studies suggest that psychopathy and depression are independent constructs (Willemsen et al., 2011). The studies suggesting an exclusive relationship propose that psychopaths' grandiose and interpersonal styles are incompatible with depressive individuals' feelings of guilt and remorse (Willemsen et al., 2011). However, the studies proposing an independent relationship suggest that both depression and psychopathy intersect with each other without mutually interacting with each other (Willemsen et al., 2011).

The comorbidity of psychopathy and depression is now well established as a frequently observed, yet poorly understood, psychiatric presentation. It is often thought counterintuitive that this overlap exists at all, yet it does, and these patients or individuals are among the most fragile in society in terms of mental health and emotional stability. It therefore falls squarely on the shoulders of clinicians and researcher alike to respond to this poorly understood comorbidity with both research and treatment strategies that uniquely serve or investigate these often troubled and ostracized members in our societies.

Recent classification discussion of "depressive psychopathy" appear promising but have yet to receive mainstream attention (Price et al., 2013). At the very least, it seems clear that clinical assessment must routinely assess for the mutual presence of depression and psychopathy or conduct disorder in at-risk individuals. As current and previous research has demonstrated, depression, hopelessness and alienation co-occurrence lead to awareness, empathy and perspective taking deficits. Depressed alienated individuals could be at a higher risk of developing or presenting with antisocial characteristics. Furthermore, psychopathy dimension includes the component of callousness and anti-sociality. Hence, the clinical population presenting with psychopathology should be carefully assessed for antisocial personality disorder and psychopathy. There is much discourse on DSM diagnosis of antisocial personality disorder missing the mark in accurately identifying psychopathy, therefore it is suggested for future assessments that careful considerations concerning psychopathy be understood to arrive at a clinically informed decision.

A future direction would be a replication of the study by using a public-school/ imprisoned sample and utilizing measures of WAIS-IV/Raven's Standard Progressive Matrices and Mayer-Salovey-Caruso emotional and Hare Psychopathy Checklist-Revised (PCL-R) to make available a suitable framework to assess difference between primary secondary classification. An identified population with depression and psychopathy could be utilized to account for the co-varying added negative emotional traits that the current study failed to delineate more dependably.

The present study found that emotional deficits do exist between psychopaths. Limited empathy is associated with problematic coping styles (Jonason et al., 2020). High order coping skills comprise of three components constructive, destructive, and social coping (Jonason et al., 2020). Destructive coping is characterized as antisocial troubled person high neuroticism, low agreeableness, limited openness, and conscientiousness (Jonason et al., 2020). Social coping represents people that are agreeable who feed off social interactions (Jonason et al., 2020). Research conducted on personality traits using big five measure, appraising primary versus secondary differentiation on IQ, emotional intelligence, socioemotional disorders, and higher order coping skills can prove to present thought-provoking findings. The readily accessible proactive coping inventory scale which has good internal validity and reliability could be incorporated into future research to assess differences amongst psychopaths' aspirations and coping styles (Greenglass et al., 1999). Future research should focus on identifying psychopaths and offering them constructive coping skills, and raising psychopath's emotional appraisal to see if that could curb their interpersonal/affective disturbance.

Implications for Clinical Assessment and Practice

Beyond consistent practice with adolescent and adult clients to assess for mutual depressive and psychopathic presentations, the use measures specifically developed for this population with non-overlapping item content seems at least one obvious place to begin. In a similar vein, the most obvious clinical applications would seem to echo the same perspective, as supportive gentle "depression therapy" would neither address psychopathic tendencies, nor would a though love behavioral program on facing the consequences of your actions seem appropriate for the delinquent who is also severely depressed. A more thoughtful and clearly more sophisticated approach is needed from both assessment and treatment perspectives. It is in many ways like carefully handling a statistical interaction where it is hard to discover the magic, if we continue to look at only one variable or problem at a time. Each plan must be carefully crafted and implemented by targeting the co-occurring conditions of emotional distress and psychopathic tendencies. Developing specific behavioral and cognitive programs to target specific disorders exhibited by the identified clinical population explicitly is warranted.

Knowledge of treatment effectiveness in one may aid in treatment innovations in others. Research on innovative ways to identify and treat comorbidity will serve the misdiagnosed population well. The challenge with comorbid presentations herein lies with having to address several problems simultaneously. There is not always one problem that is needed to be addressed; several other co-varying factors lead to unsuccessful treatment results. For example, focusing on treating psychopathy while disregarding making modifications to programs and neglecting to account for substance abuse, hopelessness, suicidal ideation, and self-injurious behavior would only lead to further

deterioration in patients. An improvement can be observed by devising ways for psychopaths to behave by helping them regulate their emotions better through offering them coping skills. Carrying out perspective-taking exercises could increase empathy and inhibit impulsivity. Additionally, setting small attainable goals would produce hope and overall protect against negative emotions. The primary source of the problem should be taken into account, or else the disorder's overall symptomology worsens. Lastly, antisocial personality disorder diagnosis criteria borders upon the dimension of psychopathy; therefore, intervention programs should carefully assess for psychopathy before the antisocial disorder diagnosis is given.

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APPENDIX A

IRB Approval Letter

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
325-674-2885

February 18, 2020

Simon Saleem

Department of Psychology

Abilene Christian University

Dear Simon,
On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "Primary vs. Secondary Psychopaths Aong Us: How would you know it if it came to you on the street?"

(IRB#19-148) is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.
I wish you well with your work.

Sincerely,
Megan Roth, Ph.D.
Director of Research and Sponsored Program

APPENDIX B

Demographic Questions

Sex	**Classification**
Female	Freshman
Male	Sophomore
Prefer Not to say	Junior
	Senior
AGES	**GPA**
18-19	0-1.99
20-21	2.00-2.99
22-24	3.0-3.49
25+	3.5+
Ethnicity/Race	**MAJOR**
White	Social Science
Hispanic or latino	Education
Black or African American	Business
Asian Pacific Islander	Medical/ Health
MultirRacial	Science
Others	Bible/ Ministry
	Others

APPENDIX C

Informed Consent

Introduction:

You may be eligible to take part in a research study. You must be 18-years-old and a college student at Abilene Christian University. This form provides important information about that study, including the risks and benefits to you, the potential participant. Please read this form carefully and ask any questions that you may have regarding the procedures, your involvement, and any risks or benefits you may experience. You may also wish to discuss your participation with other people (e.g., family member).

PURPOSE AND DESCRIPTION: This research study seeks to identify contemporary developments of distress and anxiety and social awareness. Our research team from the Psychology Department at ACU is studying how insight, social intelligence, and perspective-taking ability contributes to an individual's personality, social development, and self-awareness. We are looking for undergraduate student voluntary participants who will be asked to complete several questionnaires about personality, attitudes, thoughts and emotions, and daily experiences. If you take part in the study, you will be asked to fill out set of questionnaires, which will take approximately 1 hour to complete. Results will be presented at the Southwest Psychological Association in 2019 and may ultimately be published. Please let us know if you would be willing to participate by talking to your instructor about your interest in participating in this research project by contacting us

through the information provided in the form. This project will involve completion of online surveys with multiple parts. You will then take the questionnaires on various topics on a Likert scale system. The banner number will be asked and passed on to the course instructor(s), with no identifying information retained in the project data file, with only participants' responses preserved in the data file. With identifying information stripped, data to be used in statistical analysis will be maintained on a university owned computer currently assigned to this project with restricted
access (password-protected). Data will be maintained by the Faculty Sponsor for a period of no more than three years following project completion.

Participant Rights:

Your participation in this research is completely voluntary. There will be no penalty for refusal to participate, and you have the ability to withdraw your consent and participation at any time. There will be no penalty for removing yourself from the study, and you have the ability to request that all previously gathered information be removed from the study immediately upon withdrawal. Your participation may be terminated early by the investigators under certain conditions, such as if you no longer meet the eligibility criteria, the researchers believe it is no longer in your best interest to continue participating, you do not follow the instructions provided by the researchers, or the study is discontinued. You will be contacted by the investigators and given further instructions in the event that you are withdrawn by the investigators.

RISKS & BENEFITS: The primary risk with this study is breach of confidentiality. The disclosed information may have repercussions on your social and interpersonal life. We have taken considerable steps to minimize this risk. We will only be using numerical

codes on your file including only the year and major. The data collected will be stored in a separate enclosed file. The only individuals who could access the cabinet would be faculty mentor and principle investigator. There will be only one shared key and the files will be kept in a room completely inaccessible to unauthorized personal. Google Forms could be utilized for participants to fill out their responses to questionnaires' electronically. The website may collect information from your computer. You may read their privacy statements here: https://support.google.com/drive/answer/2450387?hl=en and https://safety.google/privacy/privacy-controls/

There are no other risks associated with this project, including stress, psychological, social, physical, or legal risk, considered to be greater than any of those that are experienced in daily life. If, for any reason, you begin to experience discomfort or stress during this project, you may end your participation at any time without penalty or negative consequences. You may also request that any already gathered information be removed from the study.

PRIVACY & CONFIDENTIALITY: Questionnaires and all recorded information will be identified using a numerical system with your first name and year attached to a specific file folder. All recorded information will be stored securely and only individuals who are directly involved in the research process will have access to these items. All information will be kept as long as is scientifically useful; most information is kept for five years after the publication of results. Results from this study may be presented at research and conference. The obtained information may also be presented at professional meetings or in publications. You will not be identified individually; results will be analyzed by looking at the group as a whole. Data collected will be observed by research

staff who are responsible for protecting the rights and well-being of the individuals who participate in research. Additionally, the Institutional Review Board of Abilene Christian University has the right to access the informed consent forms and study documents at any time.

Compensation:

You will be given the opportunity to earn extra credit to participate in research. Furthermore, we will your put names in a confidential box for a chance to win 50-dollar Amazon gift card.

Contacts:

You may contact any of the researchers at the following addresses and phone numbers, if you have any desire to discuss your participation in the study, or request information about the results of the study.

Principle Investigator: Simon Saleem, BS

sfs18a@acu.edu

Faculty Mentor: Scott Perkins, PhD

perkinss@acu.edu

325-674-4826

If you have any further questions or concerns about your rights as a research participant, contact ORSP at orsp@acu.edu or by telephone at 325-674-28