2010

Successful Psychopaths: Investigating the Relationship Between Psychopathy, Protective Factors, and Antisocial Behavior

Haley Gummelt
SUCCESSFUL PSYCHOPATHS: INVESTIGATING THE RELATIONSHIP BETWEEN
PSYCHOPATHY, PROTECTIVE FACTORS, AND ANTISOCIAL BEHAVIOR

By

HALEY GUMMELT

A Thesis submitted to the
Department of Psychology
in partial fulfillment of the
requirements for the degree of
Master of Science

Degree Awarded:
Summer Semester, 2010
The members of the committee approve the thesis of Haley Gummelt defended on June 14, 2010.

_________________________________
Joyce Carbonell
Professor Directing Thesis

_________________________________
Alan Lang
Committee Member

_________________________________
Chris Schatschneider
Committee Member

The Graduate School has verified and approved the above-named committee members.
# TABLE OF CONTENTS

LIST OF TABLES ....................................................................................................................... iv

ABSTRACT ................................................................................................................................... v

INTRODUCTION ......................................................................................................................... 1

Psychopathy and Antisocial Personality Disorder ................................................................. 3
The Dimensional Nature of Psychopathy ............................................................................... 4
The “Successful Psychopath” .................................................................................................... 5
Evaluating Protective Factors in Nonclinical Samples ............................................................ 8
Current Study .............................................................................................................................. 8

METHODS .................................................................................................................................. 10

Subjects ..................................................................................................................................... 10
Measures ................................................................................................................................... 10
Procedure .................................................................................................................................. 13

RESULTS .................................................................................................................................... 15

DISCUSSION .............................................................................................................................. 17

APPENDIX A .............................................................................................................................. 23

APPENDIX B .............................................................................................................................. 25

REFERENCES ............................................................................................................................ 28

BIOGRAPHICAL SKETCH ..................................................................................................... 31
LIST OF TABLES

Table 1. Means and Standard Deviations of Predictor and Dependent Variables……………….20

Table 2. Correlations between Predictor and Dependent Variables……………………………..21
ABSTRACT

Psychopathy was originally defined in terms of emotional-interpersonal deficits and personality characteristics (Cleckley, 1941). However, some researchers also include antisocial behavior in their conceptualization of psychopathy (Hare, 1996a). It is hypothesized that noncriminals can possess the underlying personality traits of psychopathy, even if they do not demonstrate the antisocial deviance that some researchers believe is a core component of the construct. Using a sample of 135 undergraduates, this study uses the Fearless Dominance (FD) and Self-Centered Impulsivity (SC) factors of the Psychopathic Personality Inventory – Revised (PPI-R; Lilienfeld & Widows, 2005) to predict whether protective factors can moderate the relationship between psychopathy and antisocial behavior. Correlations show that FD is not correlated with antisocial behavior and is negatively correlated with some protective factors, whereas SC is correlated with antisocial behavior. Multiple regression analyses indicated that the relationship between SC and antisocial behavior is moderated by Personal Resources, such that Personal Resources can reduce the amount of antisocial behavior in which an individual engages.
SUCCESSFUL PSYCHOPATHS: INVESTIGATING THE RELATIONSHIP BETWEEN PSYCHOPATHY, PROTECTIVE FACTORS, AND ANTISOCIAL BEHAVIOR

Psychopaths are presumed to be qualitatively different from other people because they lack basic prosocial personality traits such as empathy, guilt, and perspective-taking (Marcus, John, & Edens, 2004). Early descriptions of psychopathy focused on these interpersonal and affective components (Cleckley, 1941/1982) and did not include deviant or antisocial behavior. However, psychopathy is often associated with criminality and antisocial behavior (Hare, 1996a). Research supports both conceptualizations of psychopathy, demonstrating that individuals can possess the personality characteristics of psychopathy with or without exhibiting antisocial behavior (Hare, 1993; Lilienfeld, 1994). The goal of the current study is to examine the role that protective factors play in differentiating these two groups.

Psychopathy is defined by interpersonal traits such as glibness, superficial charm, grandiosity, deception, and the tendency to manipulate others (Lykken, 1995). With regard to affective deficiencies, psychopaths reportedly have little empathy or depth of emotion (Hare, 2003). Other traits such as guiltlessness, dishonesty, egocentricity, low anxiety, and failure to form close emotional bonds are often included in the definition of psychopathy (Cleckley, 1941/1982). Cleckley (1941/1982) cautioned that psychopaths are not as easily identifiable as many individuals with other mental disorders, but rather they wear a “mask” and seem to be well adjusted. This mask serves to hide the psychopath’s underlying deviance and allows him/her to appear to be as well-adjusted as the rest of the population. This form of psychopathy as described by Cleckley (1941/1982) included only interpersonal and affective components and did not include the antisocial behavior that later became part of some definitions of the disorder. Instruments such as the Psychopathic Personality Inventory-Revised (PPI-R) were developed to assess this form of psychopathy, which examines only the emotional-interpersonal factors without taking into account any antisocial behaviors (Lilienfeld & Andrews, 1996). The PPI-R does not have any items related to criminality or conning behavior (Lilienfeld & Widows, 2005), which makes it appropriate for use with a non-incarcerated population. The PPI-R yields one overall total score, two factor scores, and eight content scale scores. The two factor scores of the PPI-R are Fearless Dominance (FD), also known as PPI-I and Self-Centered Impulsivity (SC),
also known as PPI-II. One of the scale scores, Coldheartedness, does not load onto either factor but is sometimes referred to as a factor in itself (Lilienfeld & Widows, 2005).

High scores on FD indicate low levels of social and psychological anxiety, low levels of tension and worry, low harm avoidance, and high levels of interpersonal dominance (Lilienfeld & Widows, 2005), as well as tendencies toward thrill-seeking and low empathy (Patrick, Fowles, & Kreuger, 2009). These are personality characteristics that can be viewed as beneficial rather than dysfunctional (Edens & McDermott, 2010). The construct of FD is consistent with Cleckley’s view of psychopathy (Cleckley, 1982), indicating above average intelligence and social charm, low anxiety, lack of delusions and irrational thinking, and low rates of suicide (Patrick & Bernat, 2009). It has been suggested that FD might demonstrate the “social lubricant” aspects of psychopathy that create the illusion of psychological health and well-being of the individual (Lilienfeld & Widows, 2005, p. 56). High scores on SC suggest a tendency for the individual to be self-centered, to be coldblooded in his/her use of others, to defy traditional values, to blame others for his/her own mistakes, and to exhibit reckless impulsivity (Lilienfeld & Widows, 2005). Specifically, it represents a “self-centered propensity to take advantage of others and to act on one’s impulses whenever deemed convenient” (Lilienfeld & Widows, 2005, p. 56). These are the characteristics that are more closely associated with antisocial behavior and are viewed as maladaptive (Edens & McDermott, 2010). SC has been shown to be associated with constructs such as anger, impulsivity, drug-related disorders, antisocial behavior as measured by the PCL-R (Hare, 2003), violence risk measures (Edens & McDermott, 2010), as well as impulsivity and aggressiveness, high anxiousness, and suicidal ideation (Patrick, Fowles, & Kreuger, 2009).

A triarchic model of psychopathy has recently been proposed by Patrick, Fowles, and Kreuger (2009). The triarchic model proposes that psychopathy is best understood by three phenotypic constructs: boldness, meanness, and disinhibition. Specifically, boldness describes a phenotypic style of individuals who have the ability to remain calm and focused in high-pressure situations or when facing a threat, are resilient in their ability to overcome stress, are self-assured and socially efficacious, and are able to easily tolerate unfamiliar and dangerous situations (Patrick, Fowles, & Kreuger, 2009). Meanness describes attributes such as lacking empathy, lack of close relationships with others, excitement seeking, exploitativeness, and empowerment through cruelty. It is analogous to callousness, coldheartedness, and antagonism and is prominent
Disinhibition is used to describe impulse control problems, an inability to engage in planning behavior, an absence of foresight, difficulty regulating affect, an inability to delay gratification, as well as an inability to engage in behavioral restraint (Patrick, Fowles, & Kreuger, 2009). Contemporary researchers do not view disinhibition as equivalent to psychopathy by itself. Instead, it needs to be paired with either boldness or meanness to warrant a diagnosis of psychopathy (Patrick, Fowles, & Kreuger, 2009). Although the triarchic model may be similar to the factors of the PPI-R, none of the three factors of the triarchic model load neatly onto the two factors of the PPI-R (Patrick, Fowles, & Kreuger, 2009).

Psychopathy and Antisocial Personality Disorder

The current edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association; 2000)* defines Antisocial Personality Disorder (ASPD) based on behavioral, and not psychological, criteria. However, the text description of the *DSM-IV* refers to ASPD as psychopathy and references many traditional personality features of psychopathy, including such specifiers as callous unemotional traits, glibness, superficial charm, etc. (APA, 2000). This creates the possibility that individuals who receive high scores on well-validated measures of psychopathy do not meet criteria for ASPD (Lilienfeld & Widows, 2005) and that individuals who meet diagnostic criteria for ASPD are not psychopathic. Thus, ASPD and psychopathy are defined as two distinct disorders; ASPD consists of deviant behaviors and does not include the underlying personality traits that are fundamental to the definition of psychopathy. Because ASPD is defined almost exclusively in terms of behaviors, it is synonymous with persistent criminal offending (Miller, Lynam, Widiger, & Leukefeld, 2001). In incarcerated populations, the relationship between psychopathy and ASPD is asymmetric; approximately 90% of psychopathic offenders meet ASPD criteria, while only 25% of offenders diagnosed with ASPD also meet criteria for psychopathy (Miller et al., 2001). This finding provides further evidence that an individual can exhibit antisocial behavioral both in the presence and absence of psychopathic personality traits. Therefore, it is possible that psychopaths can possess psychopathic characteristics and either refrain from engaging in antisocial behavior, or act on those tendencies in ways other than overt behavioral deviance.
The Dimensional Nature of Psychopathy

Lilienfeld (1998) has proposed that psychopathy is best defined as a continuum because it encompasses a range of traits and behaviors. Therefore, it is possible for an individual to exhibit varying levels of both emotional-interpersonal deficits and chronic social deviance. Marcus et al. (2004) and Guay, Ruscio, Knight, and Hare (2007) examined the latent structure of psychopathy using taxometric procedures. Their research supported Lilienfeld’s assertion that psychopathy is a dimensional, as opposed to a categorical, construct. Marcus et al. (2004) achieved this result using the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996) in a forensic population. In a similar study, Guay et al. (2007) achieved the same result using the PCL-R (Hare, 2003) in a forensic sample. This research shows that using a variety of instruments and definitions of psychopathy, it appears to have a dimensional nature, thus providing evidence that psychopathy exists as a dimensional construct.

This research also suggests that it is possible for psychopathy to exist on a continuum that also includes “normal” personality traits (Marcus et al., 2004). Understanding where someone falls on the dimension of psychopathy, versus stating either someone is or is not a psychopath, provides researchers with additional information about how well the individual may or may not function in society (Marcus et al., 2004). For example, it is possible that an individual high on the emotional-interpersonal deficits of psychopathy but low on the social deviance aspect can function reasonably well in society and overall appear to lead a “normal” life that is free from criminal behavior and involvement in the criminal justice system. Alternatively, an individual high in chronic social deviance but low in emotional-interpersonal deficits will likely be in contact with the criminal justice system and obtain less apparent success in life. Referring to an individual as “high on trait psychopathy” as opposed to referring to an individual as a “psychopath” carries a different connotation as well as different implications (Marcus et al., 2004). This implies that many individuals have some level of psychopathic traits and that these traits do not necessarily lead to criminal behavior but can be present in individuals who are non-criminals.

Along those same lines, some researchers have proposed that it is important to study individuals who lie along the lower to moderate level of the psychopathy dimension (such as college students or community residents) versus strictly focusing only on those individuals at the higher end of the dimension (such as prison inmates), as is typically done (Sellbom and Verona,
2007). It is argued that studying those individuals who are lower on the continuum of psychopathy provides more information about psychopathy because it allows researchers to rule out variables that typically affect those individuals who are higher on the continuum of psychopathy, such as long-term drug use, the acute effects of incarceration, and the effects of recurrent institutionalization (Lilienfeld, 1994). If this is the case, research examining psychopathy in non-clinical samples can be generalized to more severely affected individuals, specifically those individuals who are incarcerated or institutionalized as a result of psychopathic traits and accompanying antisocial behavior (Lilienfeld, 1998).

Despite evidence that psychopathic traits and associated features exist on a continuum, to date researchers almost exclusively label individuals as either being a “psychopath” or not. Thus, individuals who meet criteria for psychopathy based on the current measures of the construct, such as the PCL-R and PPI-R, will simply be labeled as a “psychopath” or as a non-psychopath, despite the fact that research has shown that the cut scores used to define who is a psychopath and who is not, are arbitrary, as the construct lies along a continuum (Guay, et al., 2007; Marcus, et al., 2004). In the current study this tendency to describe psychopathy categorically will be reflected through the use of these dichotomous terms; however, psychopathy will be assessed dimensionally, as indicated by current research.

The “Successful Psychopath”

Because individuals are generally classified as psychopaths after coming into contact with the criminal justice system, it is believed that the vast majority of psychopathic individuals are criminals. However, recent theorists have reported that the assumed low base rate of psychopathy in non-criminal settings may be misleading with regard to the actual number of psychopaths that exist in the community because researchers fail to identify them with current procedures (Falkenback, Poythress, Falki, & Manchack, 2007; Forth, Brown, Hart, & Hare, 1996b; Hare, 1993; Lilienfeld, 1994). In 1941, Cleckley identified people who did not engage in criminal behavior but possessed psychopathic personality characteristics. Later, the term “successful psychopath” was coined by Widom (1978) to describe individuals who admit to committing crimes but escape detection. The description of a successful psychopath has since been narrowed to describe the individuals that Cleckley (1941) first described who possess personality traits of psychopathy without engaging in antisocial behavior. Recent conceptualizations of successful psychopaths assert that a successful (or noncriminal)
psychopath is an individual who embodies and exhibits the essential personality characteristics of psychopathy but who refrains from behavior that is severely antisocial (Hall & Benning, 2006). Specifically, successful psychopaths are described by some researchers as possessing the same interpersonal and affective characteristics of psychopathy as individuals who do engage in chronic behavioral deviance, but these successful psychopaths abstain from engaging in criminal behavior (Mullins-Nelson, Salekin, & Leistico, 2006-Nelson et al., 2006).

Cleckley (1982) warned that not all psychopaths engage in criminal behaviors; rather, they can be found throughout society in a wide variety of occupations. It is only through becoming acquainted with an individual that psychopathic characteristics become apparent, as these individuals tend to abstain from engaging in criminal activity and instead act out largely in interpersonal settings. As described by Cleckley (1982) psychopaths tend to initially make a good impression and are likeable; they appear to be generally well-adjusted and do not overtly display personality flaws. Hare (1993) argued that clinical cases of psychopathy “represent only the tip of a very large iceberg” (p. 115). In other words, there are numerous psychopaths who exist in the community and can be found in a wide variety of contexts, from the business world, to the arts and entertainment industry, to academia, to blue collar workers. These individuals may avoid breaking the law, but instead display psychopathic traits that are observable in their interactions with others, their business transactions, and a variety of other activities (Hall & Benning, 2006).

Researchers have proposed that the same underlying characteristics that can cause dangerousness in the criminal psychopath can also allow people to engage in daring leadership or heroic behavior, if those individuals have protective factors that diminish the probability that they will engage in criminal behavior (Lykken, 1995). Other research has shown that certain aspects of psychopathy, such as fearlessness and social dominance, are positively related to educational achievement and resilience against mood and anxiety disorders (Benning et al., 2003). Additionally, it has been suggested that certain traits of psychopathy, such as glibness and superficial charm, might help an individual achieve professional success (Lykken, 1995), but that psychopaths might have trouble in other domains of life, such as broken relationships with family, friends, and coworkers (Hall & Benning, 2006). Further, it is possible that some of society’s heroes, leaders, and adventurers share certain characteristics with psychopaths, but they
differ on levels of socialization, intelligence, or socioeconomic status, as well as chronic social deviance; therefore, they are never identified as a psychopath (Lykken, 1995).

In a study that compared PCL-R data from 54 members of the general population to normative data, which used a forensic population, of the PCL-R, the results showed that individuals with elevated levels of psychopathy can be found to exist outside of correctional and forensic psychiatric populations (DeMatteo, Heilbrun, and Marczyk, 2006). Furthermore, this study provided evidence that individuals in the general population can exhibit the core personality features of without also engaging in antisocial behavior. This demonstrates that it is possible for individuals to possess the personality features of psychopathy without engaging in antisocial behavior or coming into contact with the criminal justice system (DeMatteo et al., 2006). It is unclear whether successful psychopaths are “subclinical” versions of those psychopaths who are incarcerated, whether their antisocial tendencies are indulged in more adaptive ways, or whether they have psychopathic personalities without any deviant behavioral tendencies (Hall & Benning, 2006). Researchers have found successful psychopaths interesting because, although they may not engage in overtly illegal behaviors, they violate social norms and the rights of others. For instance, they may achieve personal or professional success at the expense of people close to them, such as family, friends, and coworkers (Hall & Benning, 2006).

Specifically, certain aspects of psychopathy may be related to a wide variety of positive outcomes, with regards to both psychosocial and cognitive functioning, although they may be detrimental in other areas, such as personal relationships (Hall & Benning, 2006).

Assessing psychopathy in a college population may help researchers to understand the successful psychopath and his/her emotional functioning. Studies in non-forensic populations provide information about the skills that successful psychopaths use to avoid correctional institutions and law enforcement, despite causing significant problems in social, interpersonal, and business contexts (Mullins-Nelson et al., 2006). Accordingly, it has been proposed that using undergraduates to investigate the characteristics of successful psychopaths will provide more information about what factors keep them from engaging in criminal behavior and will shed light on whether they are truly different from those psychopaths who engage in antisocial behavior and are incarcerated (Forth et al., 1996). Even though there is a low base rate of criminal behavior within the college population, useful data regarding protective factors can still be obtained because it is expected that college students will have lower levels of criminal behavior.
or personality disorders because of their increased level of protective factors. Further, if successful psychopaths are in the community, it is expected that some undergraduates will have some psychopathic characteristics (Lilienfeld, 1994).

Evaluating Protective Factors in Nonclinical Samples

Risk measures provide useful information about the likelihood that an individual will engage in deviant behavior. Risk assessment instruments are maximally effective when they take into account a wide range of factors that might influence deviant behavior and related outcomes (Miller, 2006a). Protective factors are those factors that can diminish the effect that risk factors have on the individual (Miller, 2006a). Protective factors, such as social support, education, and employability have also been discussed with regard to criminal recidivism, and they have recently come under scrutiny with regard to psychopathy (DeMatteo, et al., 2005). Protective factors are individual or environmental characteristics that diminish the likelihood an individual will become an offender. Protective characteristics include: a positive relationship with at least one caregiver, confidence, self-esteem, positive self-concept, a sense of autonomy, emotional support, and community activities (Mullis, Cornille, Mullis, & Huber, 2004), as well as environmental supports, including education and the ability to get a job and positive social supports (Miller, 2006b). When these protective factors are not taken into account, individuals appear to be at a higher risk for engaging in antisocial behavior than they may actually be (Miller, 2006a). Looking at protective factors adds considerable information to other risk variables which may over-pathologize an individual. It is also possible that individuals lacking in protective factors are more likely to engage in antisocial behavior than those individuals who do have protective factors. Therefore, risk assessment measures that include protective factors provide more accurate information regarding possible engagement in antisocial behavior (Miller, 2006a).

Current Study

The current study seeks to examine the relationship between psychopathy, protective factors, and antisocial behavior. Specifically, the goal is to determine whether protective factors can serve to decrease the amount of antisocial behavior in which individuals with psychopathic personality traits engage. Psychopaths are believed by some researchers to be criminals and exhibit antisocial behavior (Hare, 1996a), but it is possible that some psychopaths do not engage in antisocial behaviors (Lilienfeld & Andrews, 1996). There is a paucity of research that has
examined the differences between those individuals who engage in chronic social deviance and those with the same personality characteristics who abstain from deviant behavior. Understanding the differences between these two groups may help identify “protective” factors that prevent psychopaths from engaging in antisocial behavior. The current study has four main hypotheses:

1. The SC factor will be correlated with antisocial behavior, whereas the FD factor will not. This is hypothesized because it has been shown that the FD factor correlates with traits that are adaptive and not dysfunctional (Eden & McDermott, 2010; Patrick & Bernat, 2009).

2. The FD factor is hypothesized to positively correlate with the Personal Resources Scale, as well as with the Environmental Scale.

3. The SC factor is hypothesized to correlate positively with antisocial behavior and negatively with the Personal Resources and Environmental Scales.

4. It is hypothesized that there will be an interaction between SC, protective factors, and antisocial behavior such that individuals who score higher on SC and have higher protective factors will evidence fewer antisocial behaviors than those individuals who score high on SC and do not concurrently have protective factors.

Consideration was given to using the triarchic model. However, it was decided that the two factors of the PPI-R were more appropriate (Patrick, personal communication, April 7, 2010).
METHODS

Subjects
Subjects used for analyses included 104 females and 47 males who were undergraduates recruited from introductory psychology classes at a large southeastern university in partial fulfillment of their course research requirement. Age and race data were missing for 39 subjects (25.8%) due to a data collection error. Subjects were between 18 and 24 years of age (mean = 18.58, SD = 0.9). In this sample, 67.6% identified as Caucasian (N = 102), 6.0% identified as African American (N = 9), 2.0% identified as Asian (N = 3), and 0.7% identified as Native Hawaiian (N = 1). The data used in the current study were collected as part of a research study that was approved by the university’s Institutional Review Board. This approval can be found in Appendix A, following Figure 1.

Data was excluded from subjects who produced invalid results on the PPI-R or IORNS. The Inconsistent Responding (IR40) scale of the PPI-R was used to identify individuals with invalid results. Invalid results on the PPI-R were defined as a sum of the absolute raw score differences of 45 or higher on the IR40, as those scores indicate random responding. The IORNS scores were considered invalid if scores on the Inconsistent Response Style scale (IRS) were greater than or equal to five. Sixteen subjects were excluded due to elevated scores on the PPI-R. No subjects invalidated the IORNS. T-tests showed that there was not a significant difference among those subjects who were excluded on gender and race, respectively (t = 1.014, p < .312; t = 1.183, p < .239). In the sample of excluded participants, 68.4% identified as Caucasian (N = 13), 10.5% identified as African American (N = 2), 5.3% identified as Asian (N = 1), and race data was missing for three subjects. However, there was a significant difference on age among those subjects who were included in the study and those who were not (t = -2.332, p < .021). Subjects who were excluded were between 18 and 24 years of age (mean = 19.25, SD = 1.69).

Measures
Psychopathic Personality Inventory – Revised (PPI-R; Lilienfeld & Widows, 2005). The PPI-R was designed using Cleckley’s criteria of psychopathy to provide a comprehensive assessment of the personality characteristics that are related to psychopathy (Lilienfeld & Widows, 2005). It is a self-report measure that was developed for use in both criminal and non-criminal populations to assess personality traits that are associated with psychopathy. It contains 154 items which are scored on a scale from 1 (false) to 4 (true). Further, the PPI-R does not have
any items related to criminality or conning behavior (Lilienfeld & Widows, 2005), which makes it appropriate for use with a non-incarcerated population. The PPI-R yields one overall total score, two factor scores, and eight content scale scores. The two factor scores of the PPI-R are Fearless Dominance, Self-Centered Impulsivity, and Coldheartedness. As described before, high scores on Fearless Dominance indicate an inability to predict social and psychological anxiety, low levels of tension and worry, low harm avoidance, and high levels of interpersonal dominance (Lilienfeld & Widows, 2005). High scores on Self-Centered Impulsivity suggest a tendency for the individual to be self-centered, to be coldblooded in their use of others, to defy traditional values, to blame others for their own mistakes, and to exhibit reckless impulsivity (Lilienfeld & Widows, 2005). The two factor scores are going to be used in analyses because the majority of the research examining the PPI-R supports the use of the two factor model (Benning et al., 2003).

Raw scores on the PPI-R are converted into T-scores with a mean of 50 and a standard deviation of 10 (Lilienfeld & Widows, 2005). The present study will use T-scores for the college/community sample. Internal consistencies of the PPI-R overall total and content scales have ranged from $\alpha = .78$ to $\alpha = .92$ in community/college samples. A test-retest reliability is $r = .82$ to $r = .93$ for a mean interval of 19.94 days (Lilienfeld & Widows, 2005). Additionally, the PPI-R has been shown to have construct validity, as it is significantly correlated with other measures of psychopathy, including the Self-Report Psychopathy Scale-II (SRP-II; Hare, Harpur, & Hemphill, 1989) and Levenson’s Self Report Psychopathy Scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995).

Inventory of Offender Risk, Needs, and Strengths (IORNS; Miller, 2006b). The IORNS (Miller, 2006b) assesses static risk, dynamic risk/need, and protective strength factors to predict the risk of recidivism for general, violent, or sexual offenders; however, it has also been used with non-offender samples. The IORNS is useful when examining risk because it examines both static and dynamic risk factors, as well as protective factors, as opposed to looking either at static factors or dynamic factors or protective factors exclusively (Miller, 2006b).

The IORNS contains 130 true/false questions and is comprised of four indexes, ten scales, fourteen subscales, and two validity scales. The Static Risk Index (SRI) consists of 12 items that assess unchangeable/ historical factors related to re-offense (e.g., previous violence, juvenile arrest, and previous revocations of probation/parole). The Dynamic Need Index (DNI)
consists of 79 items related to variables that can change be treated and over time (e.g., levels of responsibility, substance abuse, isolation, and mental health; Miller, 2006a). The Protective Strength Index (PSI) is comprised of items assessing whether an individual thinks before s/he acts, whether s/he can control his/her anger, whether s/he has received an education and/or training in order to get a job, and whether s/he has family and/or friends who provide support. The PSI is composed of two scales, the Personal Resources (PR) Scale and the Environmental (ENV) Scale. The PR consists of three subscales, Cognitive/Behavioral Regulation (9 items related to making better decisions and thinking about behavior consequences, whether an individual can think before engaging in behavior, and whether he/she has learned from past mistakes), Anger Regulation (5 items related to being able to control temper and anger) and Education/Training (5 items pertaining to having education and training for employment). The ENV is composed of 7 items measuring whether an individual has friends and family members who provide emotional and instrumental support (Miller, 2006b).

The IORNS also has two validity scales, the Inconsistent Response Style (IRS) and the Favorable Impression (FIM) scales. Elevated scores on the IRS indicate careless or random responding, lower reading level, or purposeful deceit. Scores can range from 0 – 10 and are considered invalid at scores of 5 and above, which included less than 2% of the offender normative sample (Miller, 2006b). The FIM scale indicates an overly favorable response style. High scores indicate that the individual perceives him or herself as free from serious personality flaws; therefore, protocols should not be invalidated based on elevations on the FIM, but rather that information should be used in the interpretation of the protocol (Miller, 2006b). The IORNS’ indexes and scales have been shown to have construct validity and are highly correlated with other assessment instruments, including the Personality Assessment Inventory (PAI; Morey, 1991; Miller, 2006b).

In community samples, the internal consistency of all indexes and scales of the IORNS is .60 or above (Miller, 2006b). The Environmental scale exhibited higher internal consistency with female community adults (α = .83) than male community adults (α = .67). A range of \( r = .68 \) to \( r = .86 \) has been found on test-retest reliabilities for the IORNS indexes when 100 male and female undergraduates were retested after a period of 21 days (Miller, 2006b).

**Structured Clinical Interview for DSM-IV Axis II Disorders Personality Disorders (SCID–II; First, Gibbon, Spitzer, Williams, & Benjamin, 1997).** The SCID-II is a semi-

---

12
structured clinical interview used to diagnose Axis II personality disorders according to the *DSM-IV-TR* criteria. Subjects answer either “yes” or “no” to questions on a screening measure. An interviewer then asks follow-up questions pertaining to those items to which the subjects responded “yes.” Each symptom is scored as ? (inadequate information), 1 (absent or false), 2 (subthreshold), or 3 (threshold or true). The SCID-II can be used to provide an overall symptom count (i.e., the number of symptoms coded as 3) or a personality disorder diagnosis. The current study used only the personality disorder symptoms from the antisocial personality disorder (ASPD) module of the SCID-II. Individuals who received a score 1 on the SCID-II were coded as not having the symptom, whereas individuals who received a 3 were coded as having the symptom. If an individual provided an answer that would receive a score of 2, it was probed until it was determined that the individual either did or did not have the symptom, so clients received either a 1 or 3 on each question.

Maffei et al. (1997) found excellent inter-rater reliability for categorical assessments (k's ranged from .651 to .981) and dimensional evaluations (ICC range from .901 to .982). Maffei et al. (1997) also reported that dimensional scores on the SCID-II were significantly more reliable than categorical evaluations (Wilcoxon Z = 2.353, p = .019). Interviewers were clinical psychology doctoral students and advanced undergraduate psychology majors trained in SCID-II administration. Fifteen percent (n = 38) of participants were randomly selected for inter-rater reliability analyses. Inter-rater reliability data were derived one of two ways. Either two raters were present during the interview and evaluated SCID-II symptoms (the primary rater administered the interview and rated the presence of symptoms, while the second rater only scored the symptoms), or a second rater examined the participants' recorded responses retrospectively and scored the presence of symptoms. Intraclass correlation coefficients were derived to determine the inter-rater reliability of the dimensional SCID-II symptom ratings (McGraw & Wong, 1996; Shrout & Fleiss, 1979). Intraclass correlation coefficients were .891.

**Procedure**

The current study used archival data that was collected as part of a research study entitled “Gender and Personality” for which introductory psychology students received 2.5 experiment credits for two and a half hours of participation in the study. Study subjects consisted of undergraduate students who signed up through an online program. After completing an informed consent form, subjects completed a packet of measures and were interviewed using the SCID-II.
Graduate students in a Ph.D. program in clinical psychology and advanced undergraduate psychology majors who were trained in the administration of the SCID-II conducted the SCID-II interviews.
RESULTS

This study used archival data with 151 subjects. However, 16 subjects were excluded due to invalid protocols. Therefore, 135 subjects were available for analysis. Due to the fact that no additional subjects could be added, a post-hoc power analysis was conducted to determine the minimal detectable effect sizes for correlations and unique $R^2$ in multiple regression. For the correlational and multiple regression analyses, and setting power at .80 and alpha at .05, this study was able to detect a zero-order correlation of .24 or higher, and unique variance accounted for, this study was powered to detect a minimal effect of $f^2 = .06$. This translated into unique $R^2$ ranging from 6% of the variance (if the other predictors account for no variance in the model) to 3% unique variance (if the other predictors account for 50% of the variance in the dependent variable).

Means and standard deviations for all study variables are presented in Table 1. Scores on the PPI-R ranged from 90 – 204 on the Self-Centered Impulsivity (SC) factor and from 68 – 96 on the Fearless Dominance (FD) factor. Scores ranged on the IORNS from 6 – 19 on the Personal Resources (PR) scale and from 1 – 7 on the Environmental (ENV) scale. The antisocial behavior symptom count ranged from 0 – 4.

Analyses testing for normality revealed that the symptom count of antisocial behavior, as well as the Environmental (ENV) Scales were skewed (antisocial behavior = 2.249, ENV = -5.315). The ENV Scale was also kurtotic (36.354) and therefore could not be used as a moderator. Outliers were found for SC, as well as the antisocial behavior symptom count and the ENV Scale. Mean imputation was used to bring outliers to the fence for SC to ensure that they did not account for too much of the variance. However, it was not possible to bring in outliers for the antisocial behavior symptom count or the ENV Scale.

Zero order correlations can be seen in Table 2. Correlations revealed that the two factors of the PPI-R, SC and FD, were not significantly correlated, $r = .077$, $p < .376$. This is consistent with previous research showing that the two factors of the PPI-R are orthogonal (Lilienfeld & Widows, 2005). As expected, FD was not significantly correlated with antisocial behavior, $r = .118$, $p < .172$. FD was negatively correlated with the PR scale, $r = -.247$, $p < .004$. However, it was not significantly correlated with the ENV scale, $r = -.025$, $p < .776$. A multiple regression was not used to test the relationship between FD, protective factors, and antisocial behavior because FD was not correlated with antisocial behavior.
This study investigated the relationship between two factors of psychopathy, protective factors, and their influence on antisocial behavior. Specifically, this study examined the whether there was an interaction between SC, protective factors, and antisocial behavior such that protective factors would moderate the influence of SC on antisocial behavior. SC was correlated with antisocial behavior, \( r = .389, p < .001 \). However, it was not significantly correlated with the PR scale (\( r = .156, p < .071 \)) or the ENV scale (\( r = -.151, p < .081 \)). To make it easier to interpret the interaction, the predictor variables of SC, PR, and ENV were centered. Multiple regression using SC and the ENV scale as independent variables indicated that the interaction between SC and Environment was not significant, \( R \) squared change = .001, \( p < .862 \). Multiple regression using SC and the PR scale as independent variables indicated that the interaction between SC and PR was significant, \( R \) squared change = .027, \( p < .041 \). As recommended by Aiken and West (1991), the interaction was probed to examine what was accounting for the variance. See Figure 1 for a graph of the interaction. PR was examined at high and low levels, and these regressions indicated that the simple effect of SC at low levels of PR was \( b = .009, t = 1.764, p < .08 \). At high levels of PR, \( b = .022, t = 5.144, p < .001 \). At low levels of SC, \( b = -.367, t = -1.277, p < .204 \) for PR. At high levels of SC, \( b = .430, t = .1462, p < .146 \) for PR.
DISCUSSION

The current study examined whether the two factors of psychopathy as measured by the PPI-R differentially predicted antisocial behavior and would be moderated differently by protective factors. It was hypothesized that the Self-Centered Impulsivity (SC) factor of the PPI-R would be correlated with antisocial behavior, whereas the Fearless Dominance (FD) factor would not. Additionally, it was hypothesized that the FD factor would correlate positively with protective factors, both the Personal Resources (PR) and Environmental (ENV) scales of the IORN but negatively with antisocial behavior because FD has been shown in previous research to be related to behaviors that are beneficial (Edens & McDermott, 2010). The opposite hypotheses were made for the SC factor. Specifically, it was hypothesized that the SC factor would correlate positively with antisocial behavior and negatively with the protective factors, as the literature has shown that individuals with a high SC score engage in more antisocial behavior (Hare, 2003), score higher on violence risk measures (Edens & McDermott, 2010), and evidence more impulsive and aggressive behaviors (Patrick, Fowles, & Kreuger, 2009). Finally, it was hypothesized that an interaction would occur between SC, protective factors, and antisocial behavior such that individuals who endorse more protective factors would engage in fewer antisocial behaviors.

Previous research has shown that the two factors of the PPI-R are orthogonal, and our data replicated this finding. Our hypothesis that FD was uncorrelated with antisocial behavior was supported, as well as our hypothesis that SC was correlated with antisocial behavior. This is consistent with other research that suggests that FD is related to characteristics and behaviors that may be adaptive and not antisocial (Edens & McDermott, 2010). This provides additional evidence that individuals who score high on SC engage in antisocial behavior (Edens & McDermott, 2010; Hare, 2003). Further, FD was negatively correlated with PR, indicating that as individuals score higher on Personal Resources, they score lower on FD. This suggests that PR may help to prevent the development of FD and that individuals who score high on FD do not have PR. Further, FD was not significantly correlated with ENV, suggesting that whether someone has a strong support system, such as friends or family, does not influence whether they also have psychopathic characteristics. FD may describe those individuals who are successful psychopaths, as they have psychopathic traits but do not act on them in ways that are severely antisocial.
The interaction term of SC and PR accounted for three percent of the variance. The interaction is important because it shows that it is the combination of SC and PR work together to predict antisocial behavior. The interaction was probed and the effect that seems to be accounting for most of the variance is high levels of PR. At high levels of PR, individuals engaged in significantly more antisocial behavior. This suggests that PR, rather than preventing individuals from engaging in antisocial behavior, allows individuals to engage in antisocial behavior more successfully. This is an interesting finding because it suggests that protective factors may operate differently among psychopaths than non-psychopathic offenders. Specifically, protective factors work to reduce antisocial behavior in non-psychopathic offenders. It is possible that, amongst psychopaths, protective factors could provide them with the opportunity to engage in antisocial behavior successfully. PR include things such as being able to learn from past mistakes, being able to regulate one’s emotions, and being able to control one’s temper. It is possible that these abilities could allow the psychopath to be more manipulative of others and engage in antisocial behavior more surreptitiously. For example, if a non-psychopathic individual becomes angry and begins yelling at someone, it may be easy to predict that he/she will then engage in assaultive behavior. However, if a psychopathic individual is able to conceal those emotions, he/she may then be able to act out in such a way that requires more planning and is more difficult to prevent. It is possible that at this level, college students have similar personal and environmental resources and, therefore, it was difficult to detect differences on those factors. However, differences may be found outside of a structured setting, once these individuals complete college.

The current study adds to the literature in several ways. First, it replicates previous research that the two factors of the PPI-R are orthogonal. It also shows that SC is correlated with antisocial behavior, whereas FD is not. Finally, it showed that PR can moderate the relationship between SC and protective factors. In the future, a larger sample size would increase the possibility that small effects would be found if they exist and that there would be more subjects who had engaged in antisocial behavior. Future research could examine whether those individuals who score high on FD could be considered successful psychopaths, whereas those individuals who score high on SC may engage in more antisocial behavior. A possible limitation is the lack of previous research examining whether there are specific protective factors that are relevant to psychopathy. For example, it is possible that the protective factors that were
measured by the IORNS may be related to criminal behavior in general and not psychopathy specifically, and that different protective factors might account for more variance. Specifically, the ENV scale was not related to the PR scale or either of the PPI-R factors. It could be that environmental factors, such as having friends or family, are not related to either factor of psychopathy or personal resources. It is possible that the factors that were used in the current study are less applicable than others that could be examined in the future. Other factors, such as intelligence, may play a bigger role in moderating the effect of psychopathy. The truncated range of antisocial behavior is a limitation. There are seven possible Antisocial Personality Disorder symptoms and the maximum score received by any one individual in the current study was four. Future studies using more individuals who engaged in a wider range of antisocial behavior could have different results. Finally, future research could examine the triarchic model of psychopathy using the PPI-R. If this model is supported by research using the PPI-R, more information about which factors of the triarchic model are related to antisocial behavior and whether protective factors can moderate the influence of different factors on antisocial behavior can be examined. More research about different factors of psychopathy could help to identify those individuals that are psychopathic and are likely to engage in severely antisocial behavior and those that are not.
Table 1

Means and Standard Deviations of Predictor and Dependent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Centered Impulsivity (SC)</td>
<td>137.92</td>
<td>22.48</td>
</tr>
<tr>
<td>Fearless Dominance (FD)</td>
<td>117.84</td>
<td>18.25</td>
</tr>
<tr>
<td>Personal Resources (PR)</td>
<td>15.01</td>
<td>3.58</td>
</tr>
<tr>
<td>Environmental Scale (ENV)</td>
<td>6.79</td>
<td>0.70</td>
</tr>
<tr>
<td>Antisocial Behavior Symptom Count</td>
<td>0.47</td>
<td>0.97</td>
</tr>
</tbody>
</table>
Table 2

Correlations between Predictor and Dependent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-Centered Impulsivity</td>
<td>-----</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Fearless Dominance</td>
<td>.08</td>
<td>-----</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Personal Resources Scale</td>
<td>.16</td>
<td>-.25*</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Environmental Scale</td>
<td>-.15</td>
<td>.03</td>
<td>-.01</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>5. Antisocial Behavior</td>
<td>.39**</td>
<td>.12</td>
<td>-.11</td>
<td>-.07</td>
<td>-----</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.
Figure 1

*SC: Self-Centered Impulsivity, PR: Personal Resources

Interaction between Self-Centered Impulsivity, Personal Resources, and Antisocial Behavior
APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL
Office of the Vice President For Research  
Human Subjects Committee  
Tallahassee, Florida 32306-2742  
(850) 644-8633  FAX (850) 644-4392  

REAPPROVAL MEMORANDUM  

Date: 10/23/2008  

To:  
Joyce Carbonell  
Mc 1270  

Dept.:  PSYCHOLOGY DEPARTMENT  

From: Thomas L. Jacobson, Chair  

Re: Reapproval of Use of Human subjects in Research:  
Gender Role as a Moderator of Personality Traits  

Your request to continue the research project listed above involving human subjects has been approved by the Human Subjects Committee. If your project has not been completed by 10/21/2009 please request renewed approval.  

You are reminded that a change in protocol in this project must be approved by resubmission of the project to the Committee for approval. Also, the principal investigator must report to the Chair promptly, and in writing, any unanticipated problems involving risks to subjects or others.  

By copy of this memorandum, the Chairman of your department and/or your major professor are reminded of their responsibility for being informed concerning research projects involving human subjects in their department. They are advised to review the protocols of such investigations as often as necessary to insure that the project is being conducted in compliance with our institution and with DHHS regulations.  

Cc:  
HSC No. 2008.0829-R
APPENDIX B

INFORMED CONSENT FORM
Study #53: Personality Characteristics

Informed Consent Form

Joyce Carbonell, Ph.D., professor of psychology, has requested my participation in a research study here at Florida State University. The name of this study is Personality Characteristics. The purpose of the research is to understand how certain personality characteristics are related to each other, and how their relationships influence a person's behavior.

My participation will involve completing a number of questionnaires that ask about different feelings I experience and different ways in which I may behave or have behaved. My participation will also involve participating in an interview in which I will be asked about certain ways I may behave and about how I may think about myself and the things and people around me. Last, my participation will involve completing a computer exercise. The computer exercise involves responding to a stimulus on the screen by tapping a key on the computer keyboard. My participation in this study will be for approximately 2.5 hours, but not more than three hours. I understand that I will receive class credit (2.5 credits) for participating in this study; however, I will not be penalized if choose not to participate or withdraw from this study. I understand that I will not be paid any money for my participation in this study. If I leave the study before completion, I will receive credit for the time that I have participated.

I understand that, if I agree to participate in this study, there are minimal foreseeable risks or discomforts associated with completing the questionnaires, interview, and computer task. Although there may be no direct benefits to me, the possible benefits of my participation in the research include gaining greater knowledge about how personality characteristics interact to influence behavior. I must be 18 to participate in this study.

The results of this research study may be published but my name or identity will not be revealed. The researcher will do the following to maintain confidentiality of my records: I will be instructed to NOT write my name on any of the questionnaires and experimenters will also NOT write my name on my questionnaires. The experimenter will assign me an arbitrary identification number, and a file containing my questionnaires, computer task results, and interview will be marked with this number. Notes from the interview and my questionnaires will also be marked with this number. These materials will be kept in a file cabinet and the file cabinet will be kept in a locked room. My informed consent form and a master list of names will be kept separate from the questionnaires, computer task results, and
interview notes in a separate locked file cabinet in same locked room. Informed consent forms WILL NOT contain my arbitrary identification number, and no record will be kept that pairs my name with my arbitrary identification number. Only the experimenters will have access to any of this information. All resulting databases will contain only the arbitrary identification number paired with my answers to the questionnaires and interview questions, and only the experimenters will have access to the databases. The master list of the names of those who participated in this study will be kept only for the purposes of assigning class credit, and will be destroyed after arbitrary identification numbers are assigned. The master list of names will NOT contain my arbitrary identification number. Records will be kept confidential to the extent allowed by law.

Any questions I have concerning the research study or my participation in it, either before or after my consent, can be answered by Dr. Carbonell (carbonel@psy.fsu.edu)(644-1042), Amanda Gallagher (gallagher@psy.fsu.edu)(645-7224), or the experimenter present at the time of my participation. If I have questions about my rights as a subject/participant in this research, or if I feel I have been placed at risk, I can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Office of the Vice President for Research, at (850) 644-8633.

I have read the above informed consent form. I understand that I may withdraw my consent and discontinue participation at any time without penalty or loss of benefits to which I may otherwise be entitled. In signing this consent form, I am not waiving any legal claims, rights or remedies. A copy of this consent form will be given (offered) to me.

Participant’s Name ____________________________

Participant’s Signature __________________________

Date __________________________
REFERENCES


BIOGRAPHICAL SKETCH

Haley D’Ann Gummelt was born and raised in Texas. She is the daughter of D’Ann and Gerald Gummelt. Ms. Gummelt earned her Bachelor of Arts degree in the spring of 2007 from Sam Houston State University. As an undergraduate, Ms. Gummelt received the American Psychology and Law Society’s Award for Best Undergraduate Paper of the Year in 2007. She graduated Summa Cum Laude, with Highest Honors from the Honors Program, and with Academic Distinction from the College of Criminal Justice. She received Bachelor’s degrees in Criminal Justice and Sociology, with an additional minor in Psychology. In the fall of 2007 she began her studies in the clinical psychology doctoral program at the Florida State University under the direction of Dr. Joyce Carbonell. To date, Ms. Gummelt has presented her research at the 2007 American Psychological Association national conference in San Francisco, California and has one manuscript under review for publication.