PERSONALITY VARIABLES IN RAPE AND SEXUAL ASSAULT PERPETRATION BY COLLEGE MEN: PSYCHOPATHY

AND THE FIVE-FACTOR MODEL

By

EMILY KAY VOLLER

Master of Science in Psychology

Oklahoma State University

Stillwater, Oklahoma

2007

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of DOCTOR OF PHILOSOPHY December, 2009

PERSONALITY VARIABLES IN RAPE AND SEXUAL ASSAULT PERPETRATION BY COLLEGE MEN: PSYCHOPATHY AND THE FIVE-FACTOR MODEL

Dissertation Approved:
Maureen Sullivan, Ph.D.
Dissertation Advisor
Dissertation Advisor
Trish Long, Ph.D.
Thad Leffingwell, Ph.D.
John Chaney, Ph.D.
Dale Fuqua, Ph.D.
A. Gordon Emslie, Ph.D.
Dean of the Graduate College

ACKNOWLEDGEMENTS

I would like to take this opportunity to express my gratitude to the individuals who assisted me on the road to completing this dissertation. There are many to thank.

First and foremost I want to thank my mentor, Trish Long, who, I have come to realize, is the kind of advisor students dream to find. Her dedication to her students is something to be admired. This was reflected in her willingness to continue to work with me despite the long distance and the many competing demands and responsibilities that came with her new position. She went above and beyond my expectations to ensure my success at OSU. I am truly grateful for her careful reading of my writing, her continual words of encouragement, and her constant support throughout all aspects of my graduate career. She has provided the type of guidance and mentorship that extend far beyond my thesis and dissertation. She has become for me an exceptional role model and friend, and I feel privileged to have had the opportunity to work with her.

Next I would like to extend my greatest appreciation to Allison Aosved, my lab mate, idol, and friend. Allison always helped me to keep my eye on the big picture and showed me there was really a light at the end of the tunnel. Her optimism, strength, and unwavering emotional support and encouragement kept me going, as did the many delicious meals she shared with me over the years. Allison is the kind of genuine person who never loses sight of her values and she has truly become an inspiration to me both professionally and personally. I feel honored to call her my friend.

Of course I want to acknowledge the members of my committee—Maureen Sullivan, who graciously stood in for Trish and helped me navigate the program; Thad Leffingwell, whose sense of humor kept me balanced along the way; John Chaney, who offered thoughtful questions and comments on this project, and Dale Fuqua, who generously gave his time outside of class to help me understand statistics. I thank each of them for their contribution.

And finally I dedicate this dissertation to my family, especially my mom and dad. I owe every ounce of my success to them for their constant and unhesitating support and encouragement throughout this long journey. For each new stage of my life, despite the miles between us, they are always there for me. Though there were times when they did not fully understand what exactly I was doing, they always knew it was important. They had endless confidence and faith in me that I could do anything, even when I did not believe in myself. To make them proud is my ultimate ambition. I cannot thank them enough.

TABLE OF CONTENTS

Chapter	Page
INTRODUCTION	1
I. REVIEW OF LITERATURE	
The Problem Ecological Model Microsystem Factors Individual Factors Broad Measures of Personality Five Factor Model of Personality Psychopathic Personality Psychopathic Personality and the Five Factor Model Statement of Purpose and Hypotheses	11 16 21 32 34 41
II. METHODLOGY Participants	63
Measures Procedure	64
V. FINDINGS	71
7. CONCLUSION	79
REFERENCES	95
ABLES	121
APPENDIXES	128
APPENDIX A—OKLAHOMA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD APPROVAL LETTER	128
APPENDIX B—MODIFIED SEXUAL EXPERIENCES SURVEY- PERPETRATION VERSION	129

LIST OF TABLES

Table		Page
1	Facets underlying each domain as measured by the NEO PI-R	121
2	Widiger and Lynam's (1998) Translation of the Hare Psychopathy Checklist-Revised (1991a) into the FFM as measured by NEO Personality Inventory-Revised (Costa & McCrae, 1992a)	122
3	Group means and results of analyses of variance or covariance for rape status	124
4	Group means and results of analyses of variance for sexual assault status	125
5	Summary of logistic regression analyses for personality variables predicting rape perpetration controlling for majority race status	126
6	Summary of logistic regression analyses for personality variables predicting sexual assault perpetration	127
	LIST OF FIGURES	
Figure		Page
1	The Ecological Model	13

CHAPTER I

INTRODUCTION

Sexual violence is a distressing problem in our society. The Federal Bureau of Investigation (2006) estimated that 93,934 forcible rapes occurred nationwide in 2005. Other studies have pointed to the enormity of sexual assault on college campuses, with one representative sample of college students revealing that 54% of women reported experiencing some form of sexual assault (Koss, Gidycz, & Wisniewski, 1987). In addition, Zawacki and colleagues (2003) recently found that 58% of men reported that they had committed some form of sexual assault, ranging from forced sexual contact to completed rape, with 14% indicating completed rape. Research has shown that over 95% of sexual assault victims are women and the vast majority of perpetrators against both female and male victims are men (Tjaden & Thoennes, 1998).

It is evident that sexual violence is a pervasive problem for which the causes are not clearly understood. The ecological model is one model that has been proposed to account for the many factors involved in the occurrence of sexual violence (e.g., Bronfenbrenner, 1977; Heise, 1998; Messman-Moore & Long, 2003). The ecological framework is conceptualized in terms of four levels of interrelated factors: individual, microsystem, exosystem, and macrosystem. At the level of the individual, developmental experiences, attitudes, and aspects of personality are used to explain an individual's propensity to sexually aggress. The level of the microsystem is that which involves the

immediate context in which the violence takes place, whereas the exosystem level refers to specific social structures where an individual can be found, such as associations with delinquent peers. Finally, the level of the macrosystem represents the overarching values, attitudes, and beliefs of the culture that impact the other three levels. These could include cultural attitudes that excuse violence against women, accept male dominance, and blame victims. The ecological model proposes that individual behavior can only be understood if the other levels are considered; in terms of sexual violence, factors at each of the four levels interact to predict an individual's likelihood to sexually aggress.

As the ecological model suggests, there is no single cause of sexual violence. Researchers have found a number of situational variables associated with sexual aggression including location, misperception of sexual cues, and alcohol consumption (Mark, Van Wie, & Gross, 1996). In addition, researchers have explored how these microsystem variables work synergistically with individual characteristics of perpetrators. Results have revealed a number of perpetrator variables related to sexual aggression, including life experiences such as childhood sexual abuse, delinquency, and early sexual behavior (Abbey & McAuslan, 2004; Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004; Senn, Desmarais, Verberb, & Wood, 2000). Other individual characteristics that have been linked to sexual aggression include the attitudes and beliefs of the perpetrator. For example, acceptance of rape myths, adversarial sexual beliefs, hostility toward women, and traditional gender role beliefs have all been associated with a greater likelihood to sexually aggress among men (Koss, Leonard, Beezley, & Oros, 1985; Lonsway & Fitzgerald, 1994; Malamuth, Linz, Heavey, Barnes, & Acker, 1995; Rando, Rogers, & Brittan-Powell, 1998).

In addition, investigators have explored aspects of personality that are related to an individual's increased risk for perpetration. Specifically, researchers have found that men who are more likely to perpetrate are hypermasculine (Mosher & Anderson, 1986) and have a higher need for power and dominance (Malamuth, 1986). In addition, some researchers assert that a general lack of empathy is also characteristic of sexual assault perpetrators, although the evidence to support this link has been inconsistent. Overall, results show that the relationship between sexual offending and empathy is relatively weak (Jolliffe & Farrington, 2004).

It is evident that a variety of individual characteristics are related to sexual aggression. However, less is known about how the overall personality constellation of perpetrators differs from that of nonperpetrators. It would be worthwhile to understand how perpetrators differ from nonperpetrators on a comprehensive conceptualization of personality, such as that provided by the five-factor model (FFM). The FFM of personality encompasses an individual's enduring experiential, attitudinal, interpersonal, emotional, and motivational styles (Costa & McCrae, 1992). This widely accepted model includes the Big Five personality traits of Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness.

The Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992) is a well-developed measure of the FFM, assessing the five major domains each represented by six lower level facet scale scores that define each domain. The domain of Neuroticism measures an individual's tendency to experience negative affect and the cognitive and behavioral styles that result from this tendency. Facets measured under this domain include anxiety, angry hostility, depression, self-consciousness, impulsiveness, and

vulnerability. Extraversion is a measure of sociability, dominance, activity level, and cheerfulness; facets that underlie this domain include warmth, gregariousness, assertiveness, activity, excitement seeking, and positive emotions. The next factor, Openness, is a measure of an individual's openness to experience, ideas, and values, and encompasses the facets of fantasy, aesthetics, feelings, actions, ideas, and values. Agreeableness is a factor that describes interpersonal tendencies, such as altruism, sympathy, and trust. Facets measured under this domain include trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. Finally, the factor of Conscientiousness encompasses a sense of control, such as a need for achievement, planning, and organization. It measures the facets of competence, order, dutifulness, achievement-striving, self-discipline, and deliberation (Costa & McCrae, 1992).

The FFM is considered the most robust and adequate taxonomy of personality (e.g., Digman, 1990), and preliminary investigations suggest that variations in this model can help explain differences in men who are more prone to committing acts of sexual violence. More specifically, Voller (2007) found that perpetrators of sexual assault revealed higher levels of depression and vulnerability from Neuroticism, lower levels of all but two facets from Agreeableness (no differences were found for compliance and modesty), lower levels of warmth, excitement-seeking, and positive emotions from Extraversion, lower levels of openness to feelings and ideas from Openness, and lower levels of dutifulness and deliberation from Conscientiousness when compared to nonperpetrators.

Thus, it appears that aspects of normal, overall personality as measured by the FFM are related to sexual aggression. A growing body of literature has also revealed that a psychopathic personality plays an important role in sexual perpetration (for review, see DeGue & DiLillo, 2005). Psychopathy is a term that represents a disordered personality encompassing several traits, including lack of empathy, use of manipulation, deceit, or violence, and poor impulse control. Psychopathic individuals often violate social norms without a sense of guilt or remorse, and frequently resort to acts of violence and aggression to control others and satisfy their own selfish needs (e.g., Porter & Woodworth, 2006). Based on these defining features, it is no surprise that psychopaths commit crime at an early age, have more versatile and higher rates of criminal behavior than any other offenders, and demonstrate a sizeable proclivity for committing various acts of violence and aggression (Porter, Birt, & Boer, 2001; Porter & Woodworth, 2006).

With regard to sexual violence and aggression more specifically, a recent review by Knight and Guay (2006) concluded that psychopathic criminals appear to be more likely than nonpsychopathic criminals to rape, and that psychopaths are overrepresented in samples of sex offenders. Moreover, there is evidence that psychopathy varies among different subtypes of offenders (for review, see Porter, Campbell, Woodworth, & Birt, 2002). Rapists typically show higher rates of psychopathy than child molesters, but individuals who offend against both adults and children demonstrate the highest rates (Porter et al., 2000). Furthermore, along with its consistent relation to general and violent recidivism (Rice & Harris, 1997; Salekin, Rogers, & Sewell, 1996), a growing body of evidence indicates that psychopathy is also a risk factor for sexual recidivism specifically

(e.g., Hanson & Bussiere, 1998). Thus, psychopathy appears to be a relevant construct with regard to sexual violence.

Given the state of the literature, both psychopathy and other personality traits appear important when considering perpetration of sexual assault. However, psychopathy has been primarily studied in incarcerated populations and little is known about psychopathy's role in college men's sexual aggression. Therefore additional examination with this population seems warranted. Furthermore, other aspects of personality may also be important to sexual perpetration, especially within these noninstitutionalized populations where levels of psychopathy are presumably lower. In addition, it is important to consider psychopathy in coordination with other personality traits. Based on the comprehensiveness of the FFM, it may be that it can help explain differences in perpetrators above and beyond that which can be explained by psychopathy alone. It would be useful to investigate further the complex interrelationships among these personality traits in order to provide additional insight into the nature of sexual perpetration. Thus, it was the purpose of this study to examine what role psychopathy itself plays in the perpetration of sexual violence by college men, and whether the FFM can help explain even more differences between perpetrators and nonperpetrators of sexual aggression. Prior to discussion of the specifics of the proposed study, an in-depth review of the literature is provided.

CHAPTER II

REVIEW OF LITERATURE

General Overview of the Literature

Sexual assault continues to be a pervasive problem in our society. The FBI estimated that 93,934 forcible rapes occurred nationwide in 2005 (FBI, 2006). However, because of the FBI's narrow definition of rape, and because the numbers are based only on reports to law enforcement, this number may be a gross underestimate of the problem. Other studies point to the enormity of sexual assault by broadening the definition and accounting for assaults that go unreported. Rates of sexual violence vary depending on definitions used by researchers, but the most common definitions and the ones used in the present study, come from Abbey and McAuslan (2004). These researchers distinguish between acts of rape and sexual assault. Their definition of rape meets the traditional legal definition and includes someone who perpetrates attempted or completed vaginal or anal intercourse, oral-genital contact, and/or object penetration by use of force, use of threat of force, or if the victim was unable to give consent due to the use of drugs or alcohol. Sexual assault is a more inclusive term and incorporates those who have completed intercourse, oral-genital contact, and/or object penetration by use of continual arguments or pressure or misuse of authority, and men who had perpetrated completed fondling through the use of force, threat of force, or drugs or alcohol.

In a representative sample of 2,004 women, 14.5% revealed one or more attempted or completed sexual assault experiences (Kilpatrick, Best, et al., 1985). In 1992, the National Center for Victims of Crime sampled over 4000 women and found that 13% had experienced a completed rape. In an even larger national study, Tjaden and Thoennes (1998) surveyed 8,000 women and found that 18% said they had experienced a completed or attempted rape at some time in their life.

Because sexual assault is most common in late adolescence and early adulthood, many researchers have examined the prevalence of sexual assault in college students. In groundbreaking research by Kanin (1957), 28% of the college women sampled reported that they had experienced "forceful attempts at intercourse." This alarming research received little attention until the 1980s, when Koss and colleagues (1987) administered the Sexual Experiences Survey to a national sample of students from 32 colleges, and found that 54% of women disclosed some form of sexual victimization. Other researchers at various universities around the country have reported similar rates (e.g., Abbey, Ross, McDuffie, & McAuslan, 1996; Brener, McMahon, Warren, & Douglas, 1999; Muehlenhard & Linton, 1987). These figures demonstrate the enormity of the problem.

It is evident that sexual victimization is a widespread problem among women. Furthermore, sexual assault often leaves lasting impacts on victims, including a host of physical and psychological symptoms. It has been shown that women with a sexual assault history are more likely than those without such a history to report poor health status, several chronic diseases, and a variety of somatic symptoms in both reproductive and non-reproductive organ systems (Golding, 1994). They also show higher levels of self-injurious health behaviors and greater use of medical services (Goodman, Koss, &

Russo, 1993). Sexual assault history has been found to be associated with problems in women's reproductive and sexual health; specifically, it has frequently been associated with chronic pelvic pain, as well as other gynecologic symptoms such as menstrual pain or irregularity, excessive menstrual bleeding, genital burning, and painful intercourse (Golding, 1996). In addition, victims are at risk for contracting sexually transmitted diseases; it is estimated that STDs occur in 4-30% of victims (Goodman, Koss, & Russo, 1993).

Sexual victimization also has persistent impacts on the psychological functioning of many victims. During the assault, the victim is most likely focused on emotional and physical survival; immediately following the assault, psychological responses can include shock, extreme fear, confusion, and helplessness, as well as depression and anxiety (Burnam, et al., 1988; Frazier, 1990; Goodman, Koss, & Russo, 1993; Resick, 1993). The victim may also experience a variety of behavioral reactions such as difficulty sleeping, nightmares, exhaustion, headaches, substance use, and disrupted eating patterns (Neville & Heppner, 1999). Suicidal ideation is another common response to sexual assault, occurring in 33-50% of rape victims (Goodman, Koss, & Russo, 1993). For some victims, these symptoms decrease by the third month, but many others will continue to suffer effects. Longitudinal studies show that many survivors continue to experience chronic psychological problems including depression, anxiety, social and sexual adjustment difficulties (Neville & Heppner, 1999), and posttraumatic stress disorder (Foa & Riggs, 1995; Kilpatrick, Saunders, Veronen, Best, & Von, 1987). Foa and Riggs (1995) investigated emotional processing of traumatic experiences and found that 94% of female rape victims met symptom criteria (excluding duration) for PTSD at initial

assessment (14 days after the assault). Cultural myths about rape contribute to victims' reactions; myths like "the victim provoked it" or that "she secretly wanted it" can lead to feelings of self-blame, guilt, and shame (Goodman, Koss, & Russo, 1993).

It is clear that sexual assault is a distressing problem that leaves lasting negative effects on survivors. While a substantial amount of research has been conducted on victims, fewer studies have examined perpetrators of sexual violence. Antonia Abbey, a leading researcher in sexual assault, asserts "the most important lesson learned about interpersonal violence in the past 20 years is how frequently it is perpetrated by apparently normal individuals," (Abbey, 2005, p. 39). Research from national studies indicate that over 95% of sexual assault victims are women, and that perpetrators of both male and female victims are usually men (Tjaden & Thoennes, 1998). Few studies, however, have looked at sexually aggressive behavior in nonincarcerated men other than college students. As exceptions, in a sample of 65 men, Calhoun, Bernat, Clum, and Frame (1997) found that 22% reported engaging in some form of sexual coercion, ranging from sexual contact to rape. In a larger sample of 195 men from a mid-size industrial city in Canada, 27.3% reported being involved in some type of sexual coercion (Senn et al., 2000).

Most of the research on sexual assault perpetration has been conducted using college students. In a sample of 190 men, 15% reported having forced intercourse at least once or twice, and 12% admitted to physically restraining a woman for sexual gain. More than one third of these men acknowledged that they verbally coerced the woman into having intercourse and/or ignored the woman's protest (Rapaport & Burkhard, 1982). In a study assessing male-against-female sexual aggression in dating situations, 57.3% of

men reported being involved in some form of sexual aggression, ranging from kissing to sexual intercourse (Muehlenhard & Linton, 1987). A national sample of 2,972 college men revealed that 25% had been involved in some form of sexual assault since the age of 14; 7.7% reported engaging in acts that met the legal definition of rape or attempted rape (Koss, Gidycz, & Wisniewski, 1987). More recently, Zawacki, Abbey, Buck, McAuslan, and Clinton-Sherrod (2003) found that 58% of men indicated that they had committed some form of sexual assault, ranging from forced sexual contact to completed rape; 14% reported completed rape.

Malamuth (1989a) created a scale designed to measure Attraction to Sexual Aggression (ASA). This measure assesses attraction to various types of sexual interactions such as conventional sex, homosexuality, bondage, and unconventional sex. The items assess the self-reported likelihood of committing these various acts, including if assured of not being punished. Across three studies, 2.0% to 8.5% of men reported they would be somewhat or very likely to rape a woman if they were assured no one would know and they would not be punished. Furthermore, 6.0% to 9.5% of men reported they would be somewhat or very likely to force sex on a woman (Malamuth, 1989b).

Ecological Model

It is evident that some men are engaging in a broad range of sexually aggressive and coercive behaviors, from kissing a woman against her wishes, to forcing her to have intercourse. It is still unclear what circumstances or individual characteristics lead someone to perpetrate sexually aggressive behavior. Several theoretical models have been proposed to help understand the causes of sexual violence. One way to explain the

occurrence of sexual violence is through the ecological model (Belsky, 1980;
Bronfenbrenner, 1977, 1979; Grauerholz, 2000; Heise, 1998; Messman-Moore & Long,
2003; Neville & Heppner, 1999).

Bronfenbrenner (1977) originally developed this model to describe human development. He proposed a broader approach to human development that included not only the immediate setting that surrounds the developing person, but also the larger social contexts in which development takes place. Bronfenbrenner describes the ecological model as an interrelationship among personal, situational, and sociocultural factors.

Belsky (1980) extended this model to explain the etiology of child maltreatment, and others have used it to understand sexual revictimization (e.g., Grauerholz, 2000; Messman-Moore & Long, 2003) and sexual assault recovery (e.g., Neville & Heppner, 1999). Moreover, Heise (1998) advocated its widespread use to conceptualize the origins of violence against women.

It is useful to conceptualize this framework as four concentric circles, as shown in Figure 1. The innermost level is that of the individual. This level takes into account personal history that influences or shapes behavior. It includes developmental experiences, attitudes, and aspects of personality that influence the individual's reaction to microsystem and exosystem stressors. Examples of individual factors that could influence the propensity to sexually aggress include certain personality traits, attitudes and beliefs about sexual violence, witnessing violence, sexual assault history, and past sexual experiences (Heise, 1998).

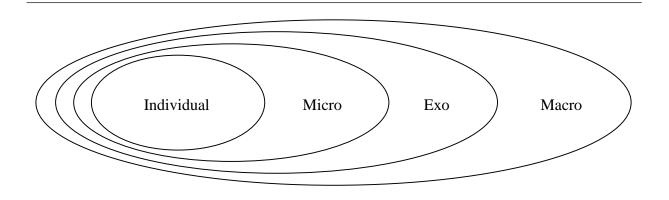


Figure 1. The Ecological Model Adapted from Heise (1998).

The next level is that of the microsystem, which involves the immediate context in which the violence takes place, such as that of an intimate or acquaintance relationship. This level also includes the subjective meanings an individual ascribes to those relationships. Microsystem factors that influence risk of sexual coercion or violence against women include patriarchal family structure, marital conflict, and the use of alcohol (Heise, 1998). Moreover, in a date rape situation, perceiving the victim as an easy target and/or misinterpreting cues are examples of microsystem factors that might influence the likelihood to sexually aggress.

Next are the exosystem factors, which refer to specific social structures in which the individual can be found; work, school, neighborhoods, and other institutions of society are examples (Bronfenbrenner, 1979). A number of exosystem factors have been associated with violence against women, such as low socioeconomic status, isolation of women, and delinquent peer associations (Heise, 1998). With regards to sexual aggression, men are likely to be influenced by their peer groups, especially if that group is supportive of aggressive behavior or pressures them to engage in such behavior.

DeKeseredy and Kelly (1993) found that male peer support of violence against women was a significant predictor of abuse by men in dating relationships.

Finally, the outermost circle refers to the macrosystem level. This level represents the overarching values, attitudes, and beliefs of the culture that impact the other three levels. Examples of macrosystem factors that have been linked to violence against women include male dominance, stereotypic gender role beliefs, sense of male entitlement, acceptance of physical punishment of women, and cultural attitudes that excuse violence as a way to resolve interpersonal disputes (Heise, 1998). Moreover, our society's tendency to blame victims of sexual assault is part of that cultural script that accepts sexual violence towards women and influences an individual's likelihood to perpetrate.

Overall, the ecological model represents a broader, more inclusive approach to understanding the occurrence of sexual violence. It also serves as an overarching framework that can guide future research in this area. It can be applied at the level of the environment to determine what risk factors are associated with higher rates of sexual violence in certain settings, or it can be applied in ways that focus on individuals to identify those men who are most prone to perpetrate. Researchers have examined factors at each level (e.g., Abbey, McAuslan, & Ross, 1998; Burt, 1980; Lonsway & Fitzgerald, 1994; Senn et al., 2000; Ullman, 2003). One that deserves more attention is the individual level.

Although much research has been done on perpetrator attitudes and beliefs (e.g., Burt, 1980; Lonsway & Fitzgerald, 1995), less is known about what aspects of an individual's personality are related to an increased likelihood of perpetrating. Some

researchers have looked at specific characteristics such as impulsivity and aggressiveness (e.g., Hersh & Gray-Little, 1998), but less has been done to understand the overall personality constellation of perpetrators. It would be worthwhile to understand how perpetrators differ from nonperpetrators on a comprehensive conceptualization of personality, such as that provided by the five-factor model (FFM). The FFM is considered the most robust and adequate taxonomy of personality (e.g., Digman, 1990), and preliminary investigations suggest that variations in this model can help explain differences in men who are more prone to committing acts of sexual violence (e.g., Voller, 2007).

In addition, several researchers have demonstrated that psychopathy is an important personality construct associated with the perpetration of sexual aggression (for review, see Knight and Guay, 2006). Psychopathy is a term that represents a disordered personality encompassing several traits, including lack of empathy, use of manipulation, deceit, or violence, and poor impulse control. Psychopathic individuals often violate social norms without a sense of guilt or remorse, and frequently resort to acts of violence and aggression to control others and satisfy their own selfish needs (e.g., Porter & Woodworth, 2006).

Psychopathy appears to be a relevant construct with regard to sexual violence. However, this has been primarily studied in incarcerated populations and further examination seems warranted. Other aspects of personality may also be important to sexual perpetration, especially within noninstitutionalized populations where levels of psychopathy are presumably lower (i.e., college students). In addition, it is important to consider psychopathy in coordination with other personality traits. Based on the

comprehensiveness of the FFM, it may be that it can help explain differences in perpetrators above and beyond that which can be explained by psychopathy alone. It would be useful to investigate further the complex interrelationships among these personality traits in order to provide additional insight into the nature of sexual perpetration. Thus, the purpose of the proposed study is to examine what role psychopathy itself plays in sexual assault perpetration by college men, and whether the FFM can help explain even more differences between perpetrators and nonperpetrators of sexual aggression. Before discussing specifics of this model, factors that have been previously related to perpetration will be reviewed with special focus on aspects of personality.

Microsystem Factors

Location. Much research has focused on the level of the microsystem to identify situational variables that are linked with a greater risk of sexual assault. Consistent risk factors have included the location of the assault, misperception of sexual cues, and the use of alcohol by both the victim and perpetrator (for reviews, see Marx, Van Wie, & Gross, 1996; Ullman, 2003). One consistent finding is that sexual assaults most often occur in isolated settings, typically in one of the couple's homes (Abbey et al., 2001). Miller and Marshall (1987) surveyed 795 undergraduate and graduate students and found that the most common setting for coercive sex was a private residence (55%), followed by a dormitory (15%), parked car (15%), or fraternity house (5%). Muehlenhard and Linton (1987) found that sexual assaults frequently occurred in apartments, with almost twice as many occurring in the man's apartment than in the woman's apartment. The

authors suggest that this could be related to the control a man has on his own "turf." It has also been shown that men find rape more justifiable if the couple goes to the man's house (Muehlenhard et al., 1985). Women in Muehlenhard and Linton's (1987) sample also reported that sexual assaults were more likely to have occurred at parties, which is consistent with research that shows women being targeted if they have been drinking (e.g., Abbey and Harnish, 1995; Parks and Miller, 1997).

Misperception of sexual cues. Misperception of sexual interest is another risk factor commonly associated with sexual assault. Men typically perceive women as behaving more sexually and being more interested in sex than do women (Abbey & Harnish, 1995; Abbey et al., 1998; Abbey, Zawacki, & McAuslan, 2000). If a man has misperceived a woman's friendliness as sexual, he may feel as though he has been led on, which might make him feel justified in forcing sex (Goodchilds & Zellman, 1984; Ward, Hudson, Johnston, & Marshall, 1997). In fact, Goodchilds and Zellman (1984) found that over half of young men surveyed thought that forced sex was justifiable if the woman leads the man on, says yes and then changes her mind, or if he gets "so excited" that he cannot stop (as cited in Abbey, Zawacki, & Buck, 2005). In Muehlenhard and Linton's (1987) study, men reported that women had led them on to a greater extent on those dates where they were sexually aggressive. Furthermore, Abbey and colleagues (1998) found a strong, positive relationship between misperceiving sexual interest, and committing sexual assaults; that is, the more often men misperceived women's intentions, the more often they sexually aggressed. Finally, use of alcohol may increase the likelihood that a man will misinterpret a woman's sexual intent. For example, men misperceived a woman's friendly behavior as sexual interest and perpetrated sexual assaults more often

when they were drinking alcohol (Abbey, et al., 2001). In addition, the cognitive impairments that result from drinking alcohol may limit a man's ability to recognize a woman's attempts to clarify her intentions.

Alcohol. The use of alcohol may play an even larger role in the occurrence of sexual violence. One of the most consistent findings on risk factors is that approximately half of all sexual assaults involve alcohol use by the perpetrator and/or the victim. For example, of 206 college men who reported perpetrating an assault, 47% of the most serious assaults they described involved alcohol consumption (Abbey, McAuslan, & Ross, 1998). Similarly, Abbey and colleagues found that almost half of sexual assaults described by women involved alcohol, and it was most common for both the woman and the perpetrator to have consumed alcohol (Abbey, Ross, McDuffie, & McAuslan, 1996). In a national college sample, Koss (1988) found that 74% of men who raped said they were drinking or using drugs at the time of the assault, and 75% perceived that their victim was drinking or using drugs as well. In a national sample of college women, 53.4% reported that their assailant was using alcohol (Ullman, Karabatsos, & Koss, 1999). Likewise, about half of all victims report they were drinking alcohol at the time of the assault. In one study, of 231 women who reported being victims of sexual aggression, 55% reported being at least somewhat drunk at the time of the assault (Harrington & Leitenberg, 1994). In a national sample of college students, 42% of victims reported that they were using alcohol prior to their sexual assault experience (Ullman et al., 1999). More recently, Mohler-Kuo and colleagues (2004) used a national sample of college women to assess the prevalence of rape while the victim was intoxicated. They found that 72% of the rapes occurred when the women were so intoxicated that they were unable to give consent.

Researchers have postulated several explanations for the relationship between drinking alcohol and perpetrating sexual assault. Abbey (1991) discussed possible links including an increase in the perpetrator's expectations of power and justification of sexual violence. It also might be that alcohol acts as a sexual cue, increasing the chance that a woman's friendliness is misinterpreted as sexual intent, and reducing men's inhibitions against violence (Abbey, 1991; Muehlenhard & Linton, 1987). Additionally, men who believe alcohol increases their sex drive might use this to justify feeling unable to control their sexual urges (Abbey, 1996). Finally, men might encourage women to drink because they assume the women will be more sexually available and more likely to have sex with them (Abbey & Harnish, 1995; Corcoran & Thomas, 1991; Kanin, 1985). Parks and Miller (1997) found that women drinking in bars or at parties were at greater risk of sexual assault. Moreover, Kanin (1985) showed that 75% of date rapists admitted that they sometimes got a woman drunk so they could have sex with her.

Explanations have also been made for alcohol's role in becoming a victim of sexual assault. It may be that alcohol consumption by women triggers rape myths; that is, a woman who is drinking or drunk might be seen as "asking for it." For example, 40% of young men believed it was acceptable to force sex on an intoxicated date (Goodchilds & Zellman, 1984 as cited in Abbey et al., 1998). Other researchers suggest that drinking alcohol increases women's vulnerability by decreasing their resistance. In Harrington and Leitenberg's (1994) study, victims who felt somewhat drunk or perceived their perpetrator to be somewhat drunk resisted less than those who did not feel drunk or

perceive their perpetrator to be drunk. Alcohol can also reduce a woman's ability to assess risk or resist an attack. Testa and Livingston (1999) found that women often blame alcohol for impairing their judgment or causing them to do things they would not normally do. Another possible explanation is that women who drink are more likely to engage in a greater amount of consensual activity immediately before the assault (Harrington & Leitenberg, 1994). Perhaps this too is because of their impaired judgment, or because their inhibitions are lowered. Furthermore, drinking alcohol impairs motor skills, which can limit a woman's ability to successfully resist an assault. Studies have shown that victims who are intoxicated are less likely to use physical force in their resistance and are less able to find a way to escape the attack (Abbey et al., 1996b; Harrington & Leitenberg, 1994).

Another explanation for the correlation between alcohol use and sexual victimization is that women who are sexually assaulted begin drinking alcohol in high quantities after an assault as a way to cope with the experience. They may drink to avoid or reduce negative emotions or other mental health problems that come as a result. Or, it could be that the relationship between alcohol use and assault is reciprocal, such that women who are assaulted become more likely to use substances, which in turn increases their likelihood of revictimization. In other words, sexual victimization leads to increased alcohol use, and this increase leads to a greater risk of experiencing another assault. In a longitudinal study, Kilpatrick and colleagues (1997) followed 3,006 women for two years. They found that the use of substances increased the risk of a new assault in the subsequent two years, and after a new assault, use of alcohol and drugs significantly increased.

Individual Factors

Life experiences. Not only have microsystem factors been implicated in sexual assault perpetration, but it has been suggested that these microsystem variables work synergistically with individual characteristics of the perpetrator; that is, situational risk factors like alcohol consumption and misperception of sexual cues are reinforced by the experiences, attitudes, beliefs, and personality traits of the perpetrator (e.g., Abbey & Harnish, 1995; Malamuth Sockloskie, Koss, & Tanaka, 1991). Several studies have shown that life experiences, particularly in childhood and adolescence, can contribute to men's likelihood to perpetrate sexual violence. One such experience includes childhood sexual abuse. Researchers have shown that victims of childhood sexual abuse are more likely to perpetrate sexual assault in adolescence and adulthood (e.g., Romano & Deluca, 1997; Senn et al., 2000). For example, of 24 men who had committed a sexual offense, 75% had a history of childhood sexual abuse (Romano & De Luca, 1997). This rate is considerably higher than that found in community samples of men, which Bagley, Wood, and Young (1994) reported to be 15.6%. In a larger sample of 195 men, Senn and colleagues (2000) found that exposure to child physical or sexual abuse either as a victim or a witness was associated with higher rates of sexually coercive behavior as an adult. Similarly, in a 5-year longitudinal study, White and Smith (2004) found that those men who were physically punished, sexually abused, or who witnessed violence as children were more prone to perpetrate sexual assault in high school. Childhood sexual abuse is also related to higher rates of sexual violence among college men (Koss & Dinero, 1988; Malamuth et al., 1991). In a representative national sample of college men, those who

reported severe acts of sexual aggression were more likely to report more childhood sexual experiences, both forced and voluntary (Koss & Dinero, 1988).

Children with hostile home experiences, such as those previously mentioned, often associate with delinquent peers (Patterson, DeBaryshe, & Ramsey, 1989).

Childhood and adolescent delinquency have been tied to aggression against women.

Malamuth and colleagues (1991) found evidence for a model in which hostile home environments affect involvement in delinquency, which in turn influences sexual perpetration. In addition, Calhoun et al. (1997) found that delinquency was the strongest predictor of both coercive sexual behavior and attraction to sexual aggression. Abbey and McAuslan (2004) found that past sexual perpetrators engaged in more delinquent behavior than nonperpetrators, and less delinquent behavior than repeat offenders; in other words, the more delinquent behavior an individual engaged in, the more sexual offenses he later committed. Furthermore, researchers have also demonstrated a correlation between proclivity to antisocial behavior and the likelihood to sexually aggress (Prentky & Knight, 1991; Rapaport & Burkhart, 1984).

In addition to early sexual experiences, men who have many consensual sexual partners are more likely to commit sexual assault (for review, see Abbey et al., 2004). In a study of 71 self-disclosed date rapists, rapists were considerably more sexually active, more successful at attaining sexual gratification, and also appeared to always be in pursuit of sexual partners (Kanin, 1985). Malamuth and colleagues (1991; 1995) found that sex at an early age and sexual promiscuity predicted sexual assault by college males. Similarly, Abbey and colleagues (2001) found that men who had committed sexual assault had consensual sex at an early age and had more consensual sex partners when

compared with men who had not perpetrated assault. Most recently, Abbey and McAuslan (2004) examined men at two time points, and found that past assaulters and those who perpetrated at multiple time points were significantly different than nonperpetrators in terms of number of lifetime dating partners, age at first consensual sex, and number of consensual partners. These findings are frequently explained by the increased number of opportunities to commit sexual assault, and differences in sexual interest and motivation (Kanin, 1985; Malamuth et al., 1991).

Deviant sexual arousal. Researchers have also examined the role of deviant sexual arousal (e.g., arousal to violence, sexually coercive activity, pedophilia) as a discriminating factor between sexual offenders and non-offenders (e.g., Howes, 1998; Quinsey, Chaplin, & Upfold, 1984). Results have been ambiguous. Blader and Marshall (1989) asserted that sexual arousal patterns of rapists could not reliably discriminate between those of nonrapists. For example, Howes (1998) showed that nonsexual offenders exhibited deviant arousal patterns almost equivalent to those of sexual offenders; in other words, they could not discriminate between nonsexual and sexual offenders. In addition, Langevin and colleagues (1985) assessed arousal to rape stimuli among 20 men who had sexually assaulted women, and 20 nonviolent, nonsexual offenders. Similarly, response patterns revealed no differences in these groups. Finally, rapists in Firestone et al.'s (2000) study did not evidence any deviant sexual arousal.

However, Quinsey and colleagues (1984) found that rapists evidenced more sexual arousal to rape descriptions and less to consensual sex descriptions than did controls. Earls and Proulx (1987) were also able to distinguish rapists and nonrapists on the basis of arousal to a rape description. Additionally, in a meta-analysis of 12 studies,

Lalumiere and Quinsey (1994) drew three conclusions: 1) rapists show different arousal patterns than nonsexual offenders, 2) rapists respond more to depictions of rape than to consenting sex compared to nonsexual offenders, while nonsexual offenders prefer consenting sex to rape, and 3) graphic, brutal, and multiple rape depictions are most effective at distinguishing rapists from nonsexual offenders. Thus, arousal assessment research has shown mixed results. Firestone and his associates (2000) suggest that because rapists tend to be heterogenous, it might be that deviant sexual arousal occurs only in certain subgroups. A resolution to this controversy would have important implications.

Rape myth acceptance. In addition to life experiences and arousal patterns, various attitudes and beliefs of the perpetrator have also been linked with sexual aggression. One such attitude that has been consistently linked with perpetration is men's acceptance of rape myths, or rape supportive attitudes. Burt (1980) first defined rape myths as "prejudicial, stereotyped, or false beliefs about rape, rape victims, and rapists," (p.217). These beliefs serve to justify rape, which encourages offenders and puts blame on the victim. Examples of rape myths include "women ask for it," "any healthy woman can resist rape if she really wants to," and "women cry rape when they have something to cover up." There is evidence that a high level of rape myth acceptance exists in the general population (for review, see Lonsway & Fitzgerald, 1994). For example, over half of Burt's (1980) sample agreed that "if a woman goes home with a man on the first date, she implies she is willing to have sex." Likewise, over half of those surveyed believed that in the majority of rapes, the victim was promiscuous or had a bad reputation. The findings of Giacopassi and Dull's (1986) study revealed that a substantial proportion of

the college students surveyed (ranging from 17% to 75%) strongly or moderately agreed with each of nine rape myths on their scale.

More recently, Johnson, Kuck, and Schander (1997) re-examined acceptance of rape myths among college students and found a considerable number of students still believe a variety of myths. Those myths that tended to excuse the perpetrator were seen as more acceptable than those that blamed the victim. For example, 32.2% of respondents agreed with the myth that men have sexual urges they cannot control. A smaller, but still substantial proportion of those surveyed agreed with myths that tended to blame victims. For example, 26.3% believed that a woman's reputation should be an issue when considering a sexual assault, and 17.4% believed that women provoke rapes (Johnson et al., 1997).

In addition, significant differences in adherence to rape myths have been found between men and women, such that men are more likely to accept rape myths (Burt, 1980; Johnson et al., 1997; Lonsway & Fitzgerald, 1994). Caron and Carter (1997) surveyed 618 undergraduates and found that men were more tolerant of rape, more likely to blame the victim, and less negative in their views of rapists. Thus, it appears that men are more likely to adhere to those rape myths that tend to blame the victim and excuse the offender (Caron & Carter, 1997; Johnson et al., 1997; Quackenbush, 1991). This seems consistent with Lonsway and Fitzgerald's (1995) suggestion that men and women use rape myths differently; specifically, men believe them in order to justify rape, while women believe them in order to deny personal vulnerability.

Because men tend to support rape myths that blame victims and justify sexual violence, it is not surprising that researchers have found a link between these rape

supportive attitudes and the self-reported likelihood of perpetration, as well as actual sexual assault perpetration, (e.g., Hamilton & Yee, 1990; Koss & Dinero, 1988; Koss et al., 1985; Malamuth et al., 1995; Muehlenhard & Linton, 1987). Briere and Malamuth (1983) examined rape myth acceptance in the prediction of college men's self-reported likelihood to sexually aggress and found that rape supportive attitudes predicted the likelihood to rape or use sexual force. In addition, Koss, Leonard, Beezley, and Oros (1985) found that men who actually forced or threatened forced sexual intercourse differed significantly from their nonaggressive peers in their degree of rape supportive attitudes.

Furthermore, in a national sample of college students, Malamuth, Sockloskie, Koss, and Tanaka (1991) examined characteristics of men who aggress against women. Using a comprehensive structural equation modeling approach they identified rape myth acceptance as one of the attitudinal predictors of sexual aggression. Dean and Malamuth (1997) extended findings of characteristics of men who sexually aggress. They found that coercive sexual fantasies, self-reported likelihood to rape, imagined sexual aggression, and actual sexual aggression were all positively correlated with rape supportive attitudes. More recently, Aosved (2005) found that, among other predictors, rape myth acceptance and rape proclivity were the best predictors of actual sexual perpetration. The results of these and previous studies point to the importance of rape myth acceptance as a discriminating factor among sexual assault perpetrators and nonperpetrators.

Adversarial sexual beliefs. Additionally, rape supportive attitudes have been correlated with other pervasive attitudes such as adversarial sexual beliefs, hostility toward women, and sex role stereotyping (Burt, 1980). First defined by Burt (1980),

adversarial sexual beliefs refer to "the expectation that relationships are fundamentally exploitative, that each party to them is manipulative, sly, cheating, opaque to the other's understanding, and not to be trusted" (p. 218). Examples of such beliefs include "a woman will only respect a man who will lay down the law to her" and "women are usually sly and manipulating when they are out to attract a man." Several studies have demonstrated that adherence to these beliefs is linked with rape myth acceptance (e.g., Fonow, Richardson, & Wemmerus, 1992; Reilly, Lott, Caldwell, & DeLuca, 1992). Moreover, using Burt's (1980) Adversarial Sexual Beliefs Scale, Rapaport and Burkhart (1984) found a significant correlation between adversarial sexual beliefs and men's self-reported aggressive behavior. Similarly, Koss and colleagues (1985) demonstrated that the more sexually aggressive a man was, the more likely he was to hold adversarial sexual beliefs and sex-role stereotypes.

Hostility toward women. Because Burt's scale focuses more on negative beliefs about women, Lonsway and Fitzgerald (1994) suggested that the relationship is actually between rape myth acceptance and hostility toward women. They later tested the hypothesis that Burt's (1980) scales are more related to a generalized hostility toward women, and that this generalized hostility is what accounts for their connection with rape myth acceptance. What they found was that hostility toward women accounted for 40% of the variance in men's rape myth acceptance, almost twice that of the variance among women's (21%). This suggests that for men, hostility toward women is more critical in the association with rape myth acceptance (Lonsway & Fitzgerald, 1995). Likewise, Koss and Dinero (1988) found that highly aggressive men demonstrated greater hostility

toward women and were more likely to view force and coercion as legitimate ways to gain compliance in sexual relationships.

Traditional gender role beliefs. Additionally, it has been shown that men's beliefs about gender roles are associated with men's beliefs and attitudes about sexual violence (for review, see Betz & Fitzgerald, 1993). Burt (1980) found that men who endorsed traditional beliefs about gender roles also endorsed higher levels of rape myth acceptance. More recently, Rando, Rogers, and Brittan-Powell (1998) examined gender role conflict and men's sexually aggressive attitudes and behavior. They demonstrated that greater adherence to traditional male gender roles related to higher levels of hostility toward women, rape myth acceptance, and sexual aggression. Furthermore, adherence to traditional gender roles has also been associated with men's arousal to depictions of rape and rape proclivity. Check and Malamuth (1983) classified 289 college students into categories of either high or low sex role stereotyping, and had them read three sexual depictions (two of which involved a stranger rape and an acquaintance rape). Results revealed that those individuals high in sex role stereotyping had arousal patterns that were equivalent to those typically found in rapist populations. In addition, 44% of those men indicated some likelihood to rape (Check & Malamuth, 1983). One explanation for the association between traditional gender role beliefs and acceptance of sexual violence is that for some sexually aggressive men, behaving in dominant and aggressive ways reinforces the concept of being a "real man" (Malamuth et al., 1995).

Hypermasculinity. It has been shown that traditional gender role attitudes are one influence maintaining the existence of sexual violence. One avenue along which this operates is the idea that men are to be violent and powerful in the name of masculinity.

Mosher and Sirkin (1984) used the term "hypermasculine" to describe men who believe violence to be manly, view danger as exciting, and have callous attitudes toward women. They developed the Hypermasculinity Inventory to measure these components, and found that men with higher hypermasculinity had higher rates of self-reported sexual aggression (Mosher & Anderson, 1986; Mosher & Sirkin, 1984). Other research has supported these findings (Korelewski & Conger, 1992; O'Donohue, McKay, & Schewe, 1996). Moreover, when allowed to invent their own circumstances surrounding a potentially sexual interaction, only hypermasculine men indicated a greater likelihood of raping a hypothetical woman (Smeaton & Byrne, 1987). Additionally, in a study of hypermasculinity and marital rape, Sullivan and Mosher (1990) found that hypermasculine men self-reported more sexually aggressive behavior, believed themselves to be more entitled to callous sex with women, and were more likely to commit rape. Finally, a recent meta-analysis of 39 studies looked at how strongly 11 different measures of masculine ideology were related to sexual assault. All but one measure was significantly related to sexual assault, with the largest effect size being Mosher and Sirkin's (1984) hypermasculinity scale (Murnen, Wright, & Kaluzny, 2002).

Other researchers have examined the mechanisms behind the associations between hypermasculinity and sexually violent attitudes and behavior. For example, O'Donohue and colleagues (1996) extended the research by looking at the role of outcome expectancies. They found that hypermasculine men perceive less negative consequences associated with rape, and are thus more inclined to rape. In addition, Hill and Fischer (2001) found that men's sense of entitlement mediated the link. More specifically, masculinity predicted general entitlement, which predicted sexual

entitlement, which in turn predicted a variety of rape-related attitudes and behaviors (Hill & Fischer, 2001).

A related construct that has been associated with sexual aggression is that of "hostile masculinity." Hostile masculinity includes two components: 1) the desire to be in control and dominating, and 2) a defensive and distrustful orientation to women (Malamuth et al., 1991). When Malamuth et al. (1991) studied this construct, their results demonstrated that men with higher masculinity were more likely to engage in coercive sex. Further, Malamuth and his colleagues (1995) examined the role of hostile masculinity in predicting sexual and physical aggression and found a more direct relationship to sexual aggression. It has also been shown that hostile masculinity accounts well for individual differences in men's imagined sexual aggression (Dean & Malamuth, 1997). Finally, in Murnen at al.'s (2002) meta-analysis, hostile masculinity was the second highest predictor of self-reported sexual assault. Thus, it is evident that this extreme form of masculinity is related to sexual aggression.

Need for power and dominance. One of the components of hostile masculinity described earlier involved the desire for power and dominance over women (Malamuth et al., 1991). Researchers have examined these constructs separately and have found them to be important motivational factors in sexual aggression as well (e.g., Malamuth, 1986; 1989b). For example, college men who accepted male sexual dominance were more likely to have engaged in verbal sexual coercion and forceful rape (Muehlenhard & Falcon, 1990). Lisak and Roth (1988) found that scales measuring underlying power distinguished sexually aggressive men from nonaggressive men. In addition, a large meta-analysis of 72 studies showed that men's need for power or dominance strongly

predicted acceptance of rape (Anderson, Cooper, & Okamura, 1997). More recently, Chiroro and colleagues (2004) extended these findings to show that anticipated sexual dominance mediated the relationship between men's rape myth acceptance and rape proclivity. These results are consistent with the idea that men commit sexual violence as way to exert power and control over women.

Empathy. Since men who accept male sexual dominance are willing to use coercion and force to obtain sex, it seems likely that these men would also lack an adequate level of empathy. Indeed, much sexual assault research has focused separately on this construct. One definition of empathy often used by researchers is "the ability to understand and share in another's emotional state or context," (Cohen & Strayer, 1996, p. 988). There is an assumption that increasing empathy can reduce recidivism, which has influenced many sex offender treatment programs to employ some form of empathy training (e.g., Marshall, 1999). However, the empirical evidence for this link has been inconsistent. For example, in a study of child molesters, rapists, incarcerated nonsexual offenders, and controls, the groups did not differ significantly on empathy scores (Hayashino, Wurtele, & Klebe, 1995). However, Lisak and Ivan (1995) studied empathy in a group of self-reported sexually aggressive college men and found that aggressive men scored significantly lower than nonaggressive men on a measure of empathy. Similarly, when looking at juvenile offenders, juvenile sex offenders scored significantly lower on empathy than non-sex-offending delinquent juveniles (Lindsey, Carlozzi, & Eells, 2001).

Researchers have carried out systematic reviews to try to understand these findings. In 1988, Miller and Eisenberg conducted the first systematic review of the

relationship between empathy and aggression, as well as other antisocial behaviors. Their findings revealed modest but not totally consistent support for the theory that empathy is negatively related to aggression. More recently, Jolliffe and Farrington (2004) analyzed 35 studies spanning 32 years of research. They examined a subset of 18 studies looking at sex offenders exclusively and found that the disparity in empathy between mixed offenders and controls was greater than between sex offenders and controls. In all, their results showed that the relationship between sex offending and empathy was relatively weak.

Marshall and colleagues (1995) suggested that sex offenders hold back empathy toward their own victims, but do not necessarily lack empathy toward all people in general. To examine this theory, Fernandez and Marshall (2003) compared 27 incarcerated rapists and 27 incarcerated nonsexual offenders while targeting victim specific empathy. Results confirmed the theory, showing that rapists demonstrated the least empathy toward their own victim; furthermore, rapists and nonsexual offenders did not differ in their empathy toward a sexual assault victim of an unknown assailant. Similarly, Marshall and Moulden (2001) found that rapists had lower empathy toward their own victims when compared with any other women. However, contrary to Marshall et al.'s (1995) suggestion, rapists in this study were less empathetic than nonsexual offenders and nonoffenders toward a female victim of sexual assault.

Broad Measures of Personality

Research has shown that a variety of individual characteristics such as life experiences, attitudes, beliefs, and capacity for empathy are related to sexual aggression.

However, researchers have investigated these factors independently and have not closely examined the overall personality of perpetrators. The literature examining the overall personality of sexual perpetrators most frequently uses the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1967). This research has yielded inconsistent findings. For example, Rader (1977) studied the MMPI profiles of men who had raped, exposed, or committed a nonsexual assault. The profiles suggested that rapists are more depressed, irritable, angry, hostile, and have limited ability to communicate and empathize. In addition, they were seen as unpredictable and peculiar in their thinking (Rader, 1977). However, in a study by Quinsey, Arnold, and Pruesse (1980) examining MMPI profiles in six offender groups, the rapist group did not differ from any of the other groups. Furthermore, some researchers suggest that the MMPI may not be the best instrument to use in assessing personality, as it seems more appropriately viewed as a measure of psychopathology (Levin & Stava, 1987).

Other studies examining personality in sex offenders have used the Edwards
Personal Preference Schedule (EPPS; Edwards, 1959), the Eysenck Personality
Questionnaire (EPQ; Eysenck & Eysenck, 1975), or the Sixteen Personality Factor
Questionnaire (16PF, Cattell, Eber, & Tatsuoka, 1970). Levin and Stava (1987) reviewed
36 studies, of which 15 used personality tests other than the MMPI to assess sex
offenders. While most of these studies examined personality in pedophiles, two utilized
the EPPS to examine personality characteristics of men convicted of rape. Fisher and
Rivlin (1971, as cited in Levin & Stava, 1987) compared EPPS profiles of a group of 100
rapists with the profile of a sample of 130 adult male offenders. Rapists were
significantly higher on succorance, abasement, nurturance, and endurance, and lower on

autonomy, achievement, change, aggression, and heterosexuality. Furthermore, Scott (1982) used the EPPS with a group of 20 men convicted of forcible rape and a control group of 20 violent, nonsexual offenders. Findings demonstrated that rapists showed a higher need for abasement and dominance and a lower need for autonomy and nurturance than nonsexual offenders.

Research using the EPQ and 16PF has primarily examined personality in pedophiles, exhibitionists, and other sexual anomalies in men (e.g., Forgac & Michaels, 1982; Langevin, Paitich, Freeman, Mann, & Handy, 1978; Wilson & Cox, 1983). Findings demonstrate differences among types of offenders on characteristics such as introversion, abasement, aggression, deference, and nurturance (Levin & Stava, 1987). Although these studies varied on the personality factor inventories used and populations assessed, the results suggest that research on the personality characteristics of sexual perpetrators is likely to show significant differences.

Five-Factor Model of Personality

Based on the difficulty interpreting the results of the aforementioned studies, it would be useful to understand if and how sexual perpetrators differ from nonperpetrators on a measure of personality that encompasses an individual's enduring experiential, attitudinal, interpersonal, emotional, and motivational styles (Costa & McCrae, 1992). One model that is commonly used to explain this level of personality is the Five-Factor Model (FFM). This model of personality is the most widely accepted to date (Funder, 2001), and includes the traits of Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. Stemming from earlier work by Norman (1963), Robert McCrae

and Paul Costa (1985) factor analyzed numerous broad personality-assessment measures as well as the English language, and concluded that these five broad traits summarized the trait approach to personality. According to Costa and Widiger (2002) and conclusions from a recent meta-analysis (O'Connor & Dyce, 2002), the current consensus is that the five broad dimensions are indeed the basic dimensions of personality. Furthermore, researchers agree that the FFM is a robust, adequate, and comprehensive taxonomy of personality (e.g., Digman, 1990; Goldberg, 1993).

Neuroticism (N) is the first domain and it measures an individual's tendency to experience negative affect, and the cognitive and behavioral styles that result from this tendency. The general inclination to experience affects such as fear, embarrassment, anger, guilt, and sadness are all encapsulated by this domain (McCrae & John, 1992). Additionally, individuals high in N are also likely to have irrational ideas, to be less able to control their impulses, and to cope more poorly than others with stress (Costa & McCrae, 1992). Extraversion (E) is the next domain, which is a measure of sociability, dominance, activity level, and cheerfulness (McCrae, 1991). People high on extraversion enjoy large groups and gatherings, and are assertive, active, and talkative. In addition, extraverts like excitement and stimulation, and are upbeat and energetic (Costa & McCrae, 1992). Less well known is the third domain of openness to experience (O). Individuals high in openness have active imaginations, are attentive to inner feelings, have a preference for variety, and have an intellectual curiosity. They are curious about the world and often have richer life experiences (Costa & McCrae, 1992). Moreover, these individuals are open to new ideas and values, and are willing to question authority, whereas individuals low on O are more conventional. Alternative forms of the FFM have sometimes labeled this domain Intellect, although O is not equivalent to intelligence (McCrae, 1991). Agreeableness (A) is the fourth factor and covers characteristics that describe interpersonal tendencies. This domain compares characteristics including altruism, sympathy, and trust, with those of callousness, antagonism, and cynicism (McCrae, 1991). Low A scores indicate an individual that is egocentric, skeptical of other people's intentions, and competitive, and is also associated with Narcissistic and Antisocial Personality disorders (Costa & McCrae, 1992). Finally, Conscientiousness (C) encompasses a sense of self-control, such as a need for achievement, planning, and organization (McCrae, 1991). Individuals low in C are known to be more apathetic in working toward their goals and there is some research showing that they are more hedonistic and interested in sex (McCrae, Costa, & Busche, 1986).

According to McCrae and John (1992), the FFM is appealing for three reasons. First, it incorporates a large array of personality constructs, which makes it possible for researchers of many different orientations to utilize it. Second, it is comprehensive, thus providing a foundation for which researchers can systematically investigate relations between personality and other constructs. Third, it is efficient, by offering a global description of personality in just five domain scores (McCrae & John, 1992). It is no surprise then, that researchers often assess personality in terms of the FFM. Fortunately, there is a well-developed, well-researched instrument available.

The Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992) is a concise measure used to assess normal adult personality using the FFM. It assesses the five major domains (N, E, O, A, and C), each represented by six lower level facet scale scores that define each domain (see Table 1 for a complete list of the facets measured in

each domain). By looking at an individual's standing on each of the broad domains, a comprehensive picture summarizing his or her emotional, interpersonal, experiential, attitudinal, and motivational styles can be created; the facet scales offer a more detailed analysis by measuring specific traits (Costa & McCrae, 1992). The NEO-PI-R has demonstrated utility in clinical and research settings, and would likely provide useful insight into the study of sexual perpetration.

Five-Factor Model and Sexual Violence

Based on the utility of the FFM and the NEO-PI-R, applying them to the area of sexual assault perpetration may provide insight into specific traits that contribute to perpetrators' behavior, and indicate where future treatment and intervention efforts could be directed. However, only a few studies have utilized the FFM in the area of sexual violence. Dennison, Stough, and Birgden (2001) used the NEO-PI-R to examine personality traits of 64 men incarcerated for committing sexual offenses against children. Findings demonstrated significant differences between the non-offender group and the offender group on several of the personality variables measured. For example, offender groups scored higher on Neuroticism, and lower on Extraversion and Conscientiousness when compared to non-offender groups and population norms. Moreover, the nonoffender group could accurately be distinguished from offender groups based on the personality profiles. This research points to the applicability of the FFM in discriminating among sex offenders. However, the focus of this study was on child sex offenders, and a relatively small sample size limits conclusions that can be drawn. More research is required to assess the generalizability of these findings across other sex offender populations.

Lehne (2002) also used the FFM to examine sex offenders undergoing forensic evaluation at the Johns Hopkins Hospital for Sexual Disorders Clinic. Ninety-nine sex offenders completed the NEO-PI (Costa & McCrae, 1985), and results showed that sex offenders were higher on all facets of Neuroticism and one facet of Extraversion. This provides some support for the idea that there are common personality factors associated with sexual offending. However, this study used a population of offenders that tends to be sexually compulsive with multiple offenses, and who were charged or convicted of at least one sex offense. There are likely differences between these types of offenders and those who remain undetected and/or unconvicted. Thus, while the results are promising, use of a normal, college sample might reveal other important relationships between the five factors and perpetration, perhaps unique to this population.

Forbes and Adams-Curtis (2001) examined the role of the Big-Five personality factors in the experience of sexual aggression in college males. They found no relationships between any of the personality traits and sexual aggression. However, the authors used a narrow definition of sexual aggression, focusing on the single dimension of actual or threatened physical force. In fact, of 146 men, none reported raping or using force to obtain sexual activity, only two reported using a threat of force, and one male reported unsuccessfully forcing a woman into sexual activity (Forbes & Adams-Curtis, 2001). In addition, rather than using the NEO-PI-R, the authors employed a measure created by Lippa (1991) that uses just 24 adjectives to produce a brief measure of the Big-Five personality factors. In all, this study was limited not only by its small sample size that produced perpetration rates much lower than most published reports, but also by the methods used to assess perpetration, as well as the FFM.

Most recently, Voller (2007) conducted a similar study that explored the role of the Five-Factor model in the perpetration of sexual aggression in the college sample to be used in the proposed study. However, the methodology was improved by using both broad and restricted definitions of sexual aggression (i.e., sexual assault versus rape), a larger sample size, and the most comprehensive measure of the FFM (i.e., NEO PI-R, Costa & McCrae, 1992a). One factor that was found to distinguish perpetrators from nonperpetrators was Neuroticism. Perpetrators of sexual aggression scored higher on this domain, suggesting that they may be prone to having irrational ideas and less able to control their impulses. The traits of anxiety, angry-hostility, depression, self-consciousness, impulsivity, and vulnerability all underlie the Neuroticism domain. Interestingly, the higher Neuroticism scores for perpetrators was largely a function of higher levels of vulnerability and depression.

Another factor that was found to distinguish perpetrators from nonperpetrators was Extraversion. Overall, perpetrators endorsed lower levels of Extraversion than nonperpetrators, which suggests that perpetrators of sexual aggression tend to be less sociable, and more reserved and independent than nonperpetrators. In addition to sociability, Extraversion also encompasses the facets of warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions. The lower level of Extraversion found for perpetrators was partly a function of lower scores on the facet of warmth. The finding that perpetrators of sexual aggression showed lower levels of warmth suggests that they may be less affectionate and friendly and have greater difficulty forming close attachments to others (Costa & McCrae, 1992a). An additional difference on positive emotions was found for perpetrators of rape. Specifically, rape

perpetrators endorsed lower levels of positive emotions, suggesting that they may experience emotions such as joy, love, and excitement less often than nonperpetrators.

In addition, Voller (2007) found that perpetrators endorsed lower levels of Openness when compared to nonperpetrators, which suggests that perpetrators of sexual violence tend to be more conservative in their outlook and prefer tradition to novelty (Costa & McCrae, 1992a). To the extent that this translates into traditional attitudes about gender and/or sexual beliefs, it could be argued that these results lend further support to research showing that perpetrators of sexual aggression demonstrate a greater adherence to traditional male gender roles, hostility toward women, and rape myth acceptance.

Perpetrators in Voller (2007) also revealed lower levels of Agreeableness when compared to nonperpetrators. Overall, Agreeableness is considered a dimension of interpersonal tendencies (Costa & McCrae, 1992a), and the facets underlying this domain include trust, straightforwardness, altruism, compliance, modesty, and tendermindedness. Voller (2007) found that perpetrators endorsed lower levels of straightforwardness than nonperpetrators suggesting that they may be more likely to use manipulation (e.g., through flattery or deception) and perceive these strategies as necessary social skills (Costa & McCrae, 1992a). Perpetrators also showed lower levels of altruism when compared to nonperpetrators, which may lend support to the notion that sexual offenders lack empathy (Lindsey, Carlozzi, & Eells, 2001). Two additional differences were found when comparing rape perpetrators and nonperpetrators. More specifically, rape perpetrators were also lower on tender-mindedness and trust, suggesting that they tend to be cold and cynical.

Finally, Voller (2007) found that perpetrators of sexual aggression reported lower levels of Conscientiousness when compared to nonperpetrators. Facets underlying Conscientiousness include competence, order, dutifulness, achievement, self-discipline, and deliberation. Perpetrators revealed lower levels of both competence and dutifulness when compared to nonperpetrators, suggesting that sexual aggressors tend to perceive themselves as less capable, prudent, and sensible, and may also be less likely to adhere strongly to ethical and moral principles. Additionally, it was found that rape perpetrators were lower on deliberation, indicating that they have a greater tendency to act without considering the consequences (Costa & McCrae, 1992).

Thus, it seems from the aforementioned studies that the FFM can provide insight into the personality constellation of perpetrators of sexual aggression. Findings from Voller (2007) and others indicate that there are several notable differences in the Big Five personality traits that may help distinguish perpetrators from nonperpetrators, particularly in a college population.

Psychopathic Personality

So it appears that aspects of normal, overall personality are related to sexual aggression. A growing body of literature has also revealed that a psychopathic personality plays an important role in sexual perpetration (for review, see DeGue & DiLillo, 2005). Psychopathy is a term that represents a disordered personality encompassing several traits, many of which may be directly related to the perpetration of sexual violence. Hervey Cleckley was one of the first to clinically define the psychopathic personality through the use of systematic, detailed case descriptions

(1941,1976). According to Cleckley, characteristics typical of a psychopath include superficial charm, lack of empathy, dishonesty, unreliability, self-centeredness, absence of anxiety, lack of remorse, failure to form strong emotional attachments to others, lack of insight, failure to learn from experience, sexual promiscuity, absence of delusions, and lack of direction. He also argued that although antisocial behavior is frequent in psychopathic individuals, it is not necessary to establish a diagnosis. In fact, it seems that at least some psychopathic individuals have been able to adjust to society somewhat successfully, and refrain from chronic involvement in antisocial behavior (Hall & Benning, 2006); nonetheless, Cleckley asserted that even these individuals engage in noncriminal behaviors that would still be considered significant violations of social norms.

Nonetheless, when considering the defining features of a psychopathic personality (e.g., lack of remorse and empathy, callousness, impulsivity, manipulativeness), it is no surprise that psychopaths cause many serious problems in society (for reviews, see Hart & Hare, 1997; Porter & Porter, 2007). Psychopaths are among the most dangerous individuals, as evidenced by criminal conduct beginning at an early age, more versatile and higher rates of criminal behavior than any other offenders, and their sizeable proclivity for committing various acts of violence and aggression (Porter, Birt, & Boer, 2001; Porter & Woodworth, 2006). In fact, research has shown that psychopathic offenders commit acts of violence more frequently than nonpsychopathic offenders (Hare & Jutai, 1983; Porter, Birt, & Boer, 2001). For example, psychopathy is associated with aggravated assault, the most severe and gratuitous physical abuse against partners (Huss & Langhinrichsen-Rohling, 2000), institutional aggression such as assaults on staff and

other inmates (Hare, Clark, Grann, & Thornton, 2000), premeditated homicide (Woodworth & Porter, 2002), and severe acts of sexual violence (Brown & Forther, 1997; Kosson, Kelly, & White, 1997). Furthermore, this pattern of violent offending is relatively consistent throughout the criminal careers of psychopaths (Porter, Birt, & Boer, 2001), establishing psychopathy as one of most important predictors of future violent offending (e.g., Rice & Harris, 1997; Salekin, Rogers, & Sewell, 1996). Indeed, scores on the Psychopath Checklist-Revised (Hare, 1992a) have been shown to reasonably predict general and violent recidivism in a variety of settings (for reviews, see Douglas, Vincent, & Edens, 2007; Gendreau, Goggin, & Smith, 2002; Hart & Hare, 1997). Moreover, there is an extensive literature showing that psychopathic criminals reoffend more quickly, more often, and more violently following conditional release than do other offenders (Hanson & Bussiere, 1998; Hare, Clark, Grann, & Thornton, 2000; Rice & Harris, 1997; Salekin, Rogers, & Sewell, 1996).

It is evident that psychopathy is an important predictor of violence and aggression. However, this has predominantly been established with incarcerated populations. Although research has begun to focus on the presence of psychopathy in the general population (for review, see Hall & Benning, 2006), there is a dearth of information in the existing literature regarding psychopathy and violence in nonincarcerated individuals. A few studies have recently approached this issue with community and college samples. For example, DeMatteo, Heilbrun, and Marczyk (2005, 2006) examined psychopathy and violent behavior in a sample of community men with and without criminal histories, and found that a substantial portion of noncriminal psychopaths reported a history of violent behavior. With regard to college samples,

Miller and Lynam (2003) developed a psychopathy prototype using the Five-Factor Model of personality and found that psychopathy was strongly related to higher levels of aggression on both self-report measures and laboratory tasks. Similarly, Crawley and Martin (2005) found that psychopathy was significantly related to self-reported impulsive-aggression in a sample of undergraduate women. Thus, it appears that not only do psychopathic personalities exist in the general population, but that these individuals may also be at greater risk for perpetrating acts of aggression.

Psychopathic Personality Inventory—Revised

Despite the substantial amount of research on the construct of psychopathy, challenges remain regarding its assessment. Overall, Cleckley's (1941, 1976) conceptualization of psychopathy continues to provide a central point of reference (Patrick, 2006). Indeed, his detailed case descriptions established a set of criteria that served as a basis for Robert Hare's Psychopathy Checklist—Revised (PCL-R; Hare, 1991a; 2003), the current standard for diagnosing psychopathy (Fowles & Dindo, 2006). Psychopathy as defined by this widely used and extensively validated measure encompasses two distinct factors. Factor 1 emphasizes the interpersonal and affective deficits as described by Cleckley, and includes traits such as superficial charm, grandiosity, manipulativeness, callousness, and shallow affect. Factor 2 of the PCL-R emphasizes socially deviant behavior and may be conceptualized as a chronically antisocial lifestyle. Traits underlying this factor include a need for stimulation, poor behavioral controls, impulsivity, and irresponsibility. The PCL-R's two-factor structure is considered to be the best current operationalization of psychopathy (Lilienfeld, 1998). Although the PCL-R is the most well established and widely used measure, it requires

extensive training and time to administer (Lilienfeld, 1998). It incorporates an intensive semi-structured interview, as well as the evaluation of file information, typically correctional files. Because of this need for high quality file information, it is typically employed with institutionalized samples, and its use with nonclinical or student samples is somewhat impractical (Lilienfeld & Widows, 2005).

Self-report measures of psychopathy that can be used in nonclinical samples have recently become available. Two of the instruments include Levenson's Self-Report Psychopathy Scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995) and Hare's Self-Report Psychopathy Scale-II (SRP-II; Hare, 1991b as cited in Lilienfeld & Widows, 2005). While both of these instruments hold promise, questions remain regarding their construct validity, and neither provides subscale information for lower order traits of psychopathy. Lilienfeld and Widows (2005) assert that reliance on global psychopathy scores can lead researchers and clinicians to overlook important information regarding individuals' personality profiles. A third and even more promising self-report instrument is the Psychopathic Personality Inventory—Revised (PPI-R; Lilienfeld & Widows, 2005), a scale designed to assess psychopathic personality traits in noncriminal samples. Development of the PPI-R achieved three goals: 1) it clarified the nature of the psychopathy construct, 2) it created a personality-based measure containing lower order facets of psychopathy in addition to a global score, and 3) it produced a scale that is efficient and easy to administer in clinical and nonclinical settings (Lilienfeld & Widows, 2005). Moreover, the PPI-R assesses psychopathic personality traits without explicitly referencing criminal behaviors, which makes it especially suitable for the college sample under investigation in the proposed study. In addition, both the original version, the PPI

(Lilienfeld & Andrews, 1996), and the PPI-R have been shown to be correlated with scores on the PCL-R (e.g., Edens, Poythress, & Lilienfeld, 1999; Poythress, Edens, & Lilienfeld, 1998), as well as the LSRP and SRP-II (Lilienfeld & Widows, 2005).

Based on the utility of the PPI-R with noncriminal samples, applying it to the area of sexual assault perpetration in college men may provide insight into specific maladaptive traits that contribute to perpetrators' behavior. The PPI-R yields a total score reflecting variations in global psychopathy, as well as eight content scale scores that reflect variations in traits measured by each scale. The eight content scales include Machiavellian Egocentricity, Rebellious Nonconformity, Blame Externalization, Carefree Nonplanfulness, Social Influence, Fearlessness, Stress Immunity, and Coldheartedness. The Machiavellian Egocentricity scale measures an individual's propensity for exploiting and manipulating others for his or her own personal gain; individuals scoring high on this scale have a greater tendency to lie, bend the rules, and see themselves as superior to others. The Rebellious Nonconformity scale measures an inclination toward antiauthority attitudes and reckless disregard for social norms; items underlying this scale reflect a "rebel without a cause" (Lilienfeld & Widows, 2005). In addition, the Blame Externalization scale assesses a person's tendency to place blame on others rather than taking responsibility for his or her own misbehavior; individuals scoring high on this scale tend to view themselves as innocent victims of the situation or of the cruel intentions of others. The Carefree Nonplanfulness scale reflects an individual who lacks consideration and direction, and has a tendency to act without thinking; individuals scoring high on this scale also fail to learn from their mistakes. An individual who perceives him or herself as self-confident and charming will have a tendency to score

high on the Social Influence scale; this scale also reflects a person's ability to influence and manipulate others. The Fearlessness and Stress Immunity scales generally measure an individual's lack of anxiety and inclination to remain calm under threatening or stressful situations. Individuals scoring high on these scales tend to perceive themselves as daredevils who remain "cool" in dangerous circumstances. Finally, the Coldheartedness scale assesses a lack of feelings, empathy, or guilt, and individuals scoring high on this scale tend to be callous and lack close attachment to others (Lilienfeld & Widows, 2005).

The PPI-R also yields three higher order factor scores that can provide useful information on the various features of psychopathy. The first factor has been termed Fearless Dominance, and it encompasses the Social Influence, Fearlessness, and Stress Immunity scales. The second factor has been named Self-Centered Impulsivity, and it reflects scores on the Machiavellian Egocentricity, Rebellious Nonconformity, Carefree Nonplanfulness, and Blame Externalization scales. The final factor consists solely of the Coldheartedness subscale; Lilienfeld and Widows (2005) support the interpretation of this factor given its significance in the original conceptualization of psychopathy (e.g., Cleckley, 1976).

Psychopathic Personality and Sexual Violence

Although psychopathy is a theoretically important construct (Boer, Wilson, Gauthier, & Hart, 1997), its relationship to sexual violence is complex and deserves more attention (Knight & Guay, 2006; Porter, Campbell, Woodworth, & Birt, 2002; Porter et al., 2000). Issues with the measurement of psychopathy have contributed to some of the complexity in this literature. It was mentioned previously that the PCL-R is the most

widely validated and accepted measure of psychopathy. However, because it requires the use of extensive interviews and quality file information, much of the research with the PCL-R is done in correctional settings. Thus, much of the evidence available indicates that psychopathy plays an important role in the perpetration of sexual violence within criminal populations.

A recent review by Knight and Guay (2006) concluded that psychopathic criminals appear to be more likely than nonpsychopathic criminals to rape, and that psychopaths are overrepresented in samples of sex offenders. For instance, one of the first studies to directly compare the frequency of sexual assault convictions in incarcerated psychopaths with those of incarcerated nonpsychopaths found that 30% of psychopaths had a conviction for rape or indecent assault, as compared to 13% of the nonpsychopaths (Coid, 1992). In addition, Forth and Kroner (1994; as cited in Hare, 1998) found that 26.1% of rapists in a federal prison were psychopaths. Prentky and Knight (1991) examined 95 rapists in the Massachusetts Treatment Center for Sexually Dangerous Persons and found that 45.3% met criteria for psychopathy. Brown and Forth (1997) found similar results. Thus, it is evident that the prevalence of psychopathy in rapists is relatively high.

Moreover, sexual violence is considered a heterogeneous set of behaviors (e.g., preferred victim type, patterns of motivation, degree of impulsivity), and there is evidence that psychopathy varies among different subtypes of offenders (for review, see Porter et al., 2002). For example, Forth and Kroner (1995, as cited in Porter et al., 2000) assessed 456 adult sex offenders and found that rapists had the highest rate of psychopathy. Similarly, Porter and colleagues (2000) examined 329 sexual offenders and

found that rapists had higher rates of psychopathy when compared to child molesters, but that individuals who offended against both adults and children had by far the highest rates of psychopathy (64%). Other studies have found comparable results (Quinsey, Rice, & Harris, 1995; Rice & Harris, 1997). Furthermore, in addition to victim type, psychopathy appears to vary with respect to offenders' patterns of motivation. For instance, Brown and Forth (1997) examined the motivations and offense characteristics of 60 rapists and found that those who scored high on psychopathy were classified as either "opportunistic" (i.e., use of instrumental aggression motivated by impulsive exploitation and nonsexual motives) or "pervasively angry" (i.e., use of expressive aggression motivated by anger and nonsexual motives). On the other hand, rapists who scored low on psychopathy were more often classified as "sexually non-sadistic" (i.e., premeditated with sexual motives). Thus, it appears that psychopathic sex offenders also differ from nonpsychopathic sex offenders in their underlying motivations for perpetrating.

Along with its consistent relation to general and violent recidivism, a growing body of evidence indicates that psychopathy is also a risk factor for sexual recidivism specifically. For instance, in a meta-analysis of 61 longitudinal follow-up studies of sex offenders, scores on measures of psychopathy were consistently related to sexual recidivism (Hanson & Bussiere, 1998). To illustrate, Quinsey and colleagues (1995) followed 178 rapists and child molesters and found that psychopathy was a strong predictor of sexual and violent recidivism. Rice and Harris (1997) found similar results, although sexual recidivism was best predicted by a combination of psychopathy and deviant sexual arousal. More recently, Serin and colleagues (2001) followed 68 incarcerated sex offenders postrelease for 7 years and found that those with more

psychopathic characteristics recidivated sooner and at higher rates. Finally, Hildebrand et al. (2004) explored the roles of psychopathy and sexual deviant preferences in predicting sexual recidivism in a sample of 94 convicted rapists involuntarily admitted to a forensic psychiatric hospital. Results showed that rapists with high psychopathy scores were at particular risk for reoffending (sexual, violent, and general). Thus, the literature has consistently demonstrated that psychopathic individuals are at increased risk for sexual recidivism.

As noted earlier, the majority of previously reviewed studies involved the use of the PCL-R to examine psychopathy in convicted sex offenders. Because the need for a thorough interview and quality file information make the PCL-R impractical for use with noninstitutionalized populations, less is known about the role psychopathy plays in college men's sexual aggression. Few studies have examined psychopathy's role in college men's perpetration, and even fewer have utilized a broad measure of psychopathy. Most researchers have looked only at individual, psychopathy-related traits using various self-report measures. For example, studies of college men have demonstrated that sexual assault perpetrators appear to be more impulsive (Lisak & Roth, 1988; Petty & Dawson, 1989; Spence, Losoff, & Robbins, 1991), more aggressive (e.g., Petty & Dawson, 1989), and more manipulative (Christopher, Owens, & Stecker, 1993; Hersh & Gray-Little, 1998) than nonperpetrators. Rapaport and Burkhart (1984) administered the Responsibility, Socialization, and Empathy subscales from the California Personality Inventory (Gough, 1957) to a group of male college students. They found that the personality measures most predictive of sexual aggression included Responsibility and Socialization. More specifically, those who reported more sexually

coercive behavior shared personality characteristics of immaturity, irresponsibility, and a lack of social conscience; these traits are all associated with the construct of psychopathy as defined by Cleckley (1976) and Hare (1991a). In addition, using the Schedule for Nonadaptive and Adaptive Personality (Clark, 1993), the Interpersonal Reactivity Index (Davis, 1980), and the Sensation-Seeking Scale (Zuckerman, 1979), Hersh and Gray-Little (1998) found that men who engaged in unwanted sexual intercourse were more manipulative and sensation-seeking, while men who participated in any coercive or aggressive behavior (e.g., kissing or touching a female partner when she did not want to) were more manipulative, more impulsive, and less empathetic than those in consensual relationships.

In a larger sample of 378 college men, Kosson, Kelly, and White (1997) used the PCL-R (Hare, 1991a) to examine the relationship between psychopathy-related traits and sexual misconduct. Those men with higher scores on the PCL-R reported committing more acts of sexual aggression than men with lower scores; additionally, PCL Factor 1 scores (which measures superficial charm, grandiosity, manipulativeness, callousness, and shallow affect) uniquely predicted the use of force and threats (Kosson, Kelly, & White 1997). Thus, it appears that in incarcerated and college populations alike, psychopathic personality traits are associated with sexual aggression. However, with the exception of Kosson, Kelly, and White (1997), few studies have employed the use of a broad measure of psychopathy in college perpetrators, and none has examined the relation of the PPI-R with sexual aggression. Because the PPI-R is a comprehensive measure of psychopathy (i.e., yielding a global psychopathy index, as well as lower order facets), and because it is designed for use with noncriminal samples, its application may

provide additional insight into the relationship between psychopathy and sexual violence in college men.

Psychopathy and the Five-Factor Model

From the literature reviewed, it appears that overall personality features, both normal (i.e., as represented by the FFM) and disordered (i.e., psychopathic), are important constructs related to sexual perpetration. However, they are likely not totally independent constructs. Although it seems that the FFM and psychopathy represent very different types of personality, some researchers have suggested that psychopathy can be described in terms of the FFM (e.g., Lynam, 2002; Widiger & Lynam, 1998). It was mentioned earlier that the FFM is considered the most comprehensive taxonomy of personality (Digman, 1990; Goldberg, 1993). Widiger and Lynam (1998) therefore assert, "to the extent that a person is describing an important dimension of personality, it should then be evident within the FFM," (p. 172). The authors then make the claim that features of psychopathy as defined by Hare's PCL-R (1991a) are conceptually related to domains and facets of the FFM as assessed by the NEO-PI-R (Costa & McCrae, 1992a). They go on to translate each of the 20 items of the PCL-R in terms of 16 facets of the FFM; a complete translation is provided in Table 2. Overall, the profile resulted in facets from low Agreeableness, low Conscientiousness, a combination of high and low Neuroticism, and a combination of high and low Extraversion (Widiger & Lynam, 1998).

The hypothesis that psychopathy can be represented in terms of the FFM has been subjected to various tests. A recent meta-analysis examined the relationship between the FFM of personality (along with other structural models of personality) and psychopathy

(Lynam & Derefinko, 2006). The analysis yielded significant effect sizes between the FFM and psychopathy, and demonstrated that all five domains were significantly related to psychopathy; Neuroticism had a weak, positive relation, Extraversion and Openness both had weak, negative relations, and Agreeableness and Conscientiousness were both strongly, negatively related to psychopathy. Miller et al. (2001) tested Widiger and Lynam's (1998) profile more specifically by examining the relationship between psychopathy scores from the Levenson Self-Report Psychopathy Scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995) and facet scores on the NEO-PI-R. Results strongly supported Widiger and Lynam's hypotheses. Other studies have found similar results, providing sound evidence for the use of the FFM to represent psychopathy (e.g., Lynam, Whiteside, & Jones, 1999; Ross, Lutz, & Bailley, 2004). Consistent with previous research, psychopathy as measured by the PPI had significant negative correlations with all facets of Agreeableness, four facets of Conscientiousness (i.e., order, dutifulness, selfdiscipline, and deliberation), and two facets of Neuroticism (i.e., anxiety and selfconsciousness), as well as significant positive correlations with two facets of Extraversion (i.e., assertiveness and excitement-seeking); Openness was excluded from the analyses. Derefinko and Lynam (2006) found similar results.

Another approach researchers have taken to describe a psychopathic personality in terms of the FFM is to have psychopathy experts describe a prototypical psychopath in the language of the FFM. Miller and colleagues (2001) had psychopathy experts rate the prototypical psychopath on 30 bipolar statements, each representing a facet of the NEO-PI-R. The authors then created a profile based on the mean rating for each item. There was remarkable agreement among the experts, and the final profile was quite similar to

the one developed by Widiger and Lynam (1998). Thus, in addition to the empirical relations between measures of psychopathy and measures of the FFM, psychopathy experts agree that psychopathy can be described in terms of the FFM using a profile very similar to Widiger and Lynam (1998).

Overall, results from empirical studies and expert reports have been remarkably consistent: psychopathy as represented by the FFM involves low levels on all facets from Agreeableness, low levels of dutifulness, self-discipline, and deliberation from Conscientiousness, low levels of anxiety and self-consciousness, but high levels of angry hostility and impulsivity from Neuroticism, and high levels of excitement seeking from Extraversion. From the research reviewed, it seems as though psychopathy in terms of the FFM operates much the same as psychopathy assessed through more traditional means (Derefinko & Lynam, 2006). Furthermore, it is also important to note that those individuals who more closely match this FFM profile display more psychopathic behavior. Miller et al. (2001) found that those who more closely matched the expert prototype reported more antisocial behavior, substance use, and juvenile delinquency. In addition, Miller and Lynam (2003) found that the psychopathy index generated by matching NEO-PI-R scores to the expert profile was significantly correlated with self-reports of drug use, criminal behavior, risky sexual behavior, and aggression.

Thus, it appears that the FFM is useful for detecting a psychopathic personality, as well as psychopathic behaviors, including violence. Importantly, however, as is evident from the FFM profile of psychopathy (Miller et al., 2001; Widiger & Lynam, 1998), a number of facets of personality are considered unrelated to psychopathy. Based on the comprehensiveness of the FFM, it may be that these additional facets actually

provide more information about men who are likely to perpetrate violence. Among those unrelated facets are depression and vulnerability from Neuroticism, warmth and positive emotions from Extraversion, openness to feelings and ideas from Openness, and competence from Conscientiousness. Voller (2007) found that each of these facets distinguished perpetrators of sexual aggression from nonperpetrators in a college sample. Therefore, it may be that some of these facets will provide additional insight into the nature of sexual assault perpetration in college men. Perhaps examining the role of the FFM above and beyond psychopathy will help clarify the complex interrelationships among these various aspects of personality.

Statement of Purpose and Hypotheses

Given the importance of the topic and the current state of the literature, further investigation into the role of personality variables in explaining sexual assault perpetration seems warranted. As mentioned previously, few studies have investigated the overall personality constellation of perpetrators using the FFM, but preliminary investigations indicate that variations in this model help explain some differences in men more prone to perpetrating. In addition, several researchers have found that psychopathy is an important personality variable associated with sexual violence. However, little is known about the role it plays in college men's perpetration, as few studies have incorporated the use of a broad measure of psychopathy with this population of offenders. Furthermore, researchers have suggested that these two models of personality are not altogether independent, and that a psychopathic personality can be represented in terms of the FFM. However, the FFM represents a broad array of personality characteristics

beyond psychopathy. Because the sample in the current study was taken from a college population where the levels of psychopathy are presumably lower, it may be that the comprehensiveness of the FFM may explain differences in college perpetrators above and beyond that which can be explained by psychopathy alone. Thus, the purposes of the present study were to examine what role psychopathy itself plays in the perpetration of sexual violence by college men, and to determine whether the FFM can help explain even more differences between perpetrators and nonperpetrators of sexual aggression. The aim was to investigate further the complex interrelationships among these personality traits in order to provide additional insight into the nature of sexual perpetration by college men.

It was hypothesized that perpetrators of sexual aggression would differ from nonperpetrators on scales from a broad measure of psychopathy. Perpetrators were classified as those men who reported having engaged in rape or sexual assault. Rape was defined as perpetrating attempted or completed vaginal or anal intercourse, oral-genital contact, and/or object penetration by use of force, use of threat of force, or use of drugs or alcohol. Sexual assault incorporated those men who have completed intercourse, oral-genital contact, and/or object penetration by use of continual arguments or pressure or misuse of authority, but who have not perpetrated rape; sexual assault also included men who have perpetrated completed fondling through the use of force, threat of force, or drugs or alcohol.

As mentioned earlier, one aim of the current study was to examine what role psychopathy plays in sexual perpetration by college men. Because the Psychopathic Personality Inventory-Revised (PPI-R; Lilienfeld & Widows, 2005) is an empirically supported, comprehensive measure of psychopathy designed for use with college

populations, it was well-suited for this purpose. While psychopathy may be assessed using the NEO-PI-R in a general way, use of a tool specifically designed for evaluation of psychopathy appeared warranted here. Again, it was hypothesized that perpetrators of sexual aggression would differ from nonperpetrators on this measure. In addition to higher PPI-R total scores, it was hypothesized that several of the content scale scores would be related to sexual assault perpetration. First, Machiavellian Egocentricity is a scale measuring an individual's willingness to manipulate and take advantage of others for his or her own personal gain (Lilienfeld & Widows, 2005). Since research has shown that sexual assault perpetrators tend to be more manipulative than nonperpetrators (Christopher, Owens, & Stecker, 1993), it was hypothesized that perpetrators would reveal higher levels of Machiavellian Egocentricity than nonperpetrators. In addition, the Carefree Nonplanfulness scale measures a lack of forethought, or a tendency to act without considering consequences (Lilienfeld & Widows, 2005). Recently, Voller (2007) found that, when compared to nonperpetrators, perpetrators of rape reported lower levels of the FFM facet of deliberation, indicating that they may have a tendency to act without thinking. Thus, it was expected that perpetrators would endorse higher levels of Carefree Nonplanfulness than nonperpetrators. The Social Influence scale of the PPI-R may also be related to perpetration. This scale assesses an individual's tendency to be charming and skillful at influencing others (Lilienfeld & Widows, 2005). Because perpetrators often engage in nonphysical tactics such as verbal coercion and deceit (Degue & Delillo, 2005), it was expected that elevations on the Social Influence scale would also be found for perpetrators compared to nonperpetrators. Finally, the Coldheartedness scale of the PPI-R measures the absence of feelings of guilt and empathy (Lilienfeld & Widows,

2005). Although findings have been somewhat inconsistent (Jolliffe & Farrington, 2004), some researchers have found that perpetrators of sexual aggression endorse lower levels of empathy when compared to nonperpetrators (Lisak & Iva, 1995; Lindsey, Carlozzi, & Eells, 2001). Thus, it seemed reasonable to hypothesize that perpetrators would reveal higher levels of Coldheartedness when compared to nonperpetrators.

It was uncertain how the other four subscales would be related to sexual assault perpetration in college men. The Rebellious Nonconformity scale measures an inclination toward unconventionality and careless disregard for social norms. It is arguable that an individual prone to committing acts of sexual aggression would reveal higher levels of this scale. However, it was also reviewed earlier that perpetrators of sexual violence tend to have more traditional gender role beliefs, and adhere more strongly to societal myths about rape (Rando, Rogers, & Brittan-Powell, 1998). In addition, Voller (2007) found that rape perpetrators endorsed lower levels of openness to fantasy and ideas, suggesting that they may hold more conservative attitudes and a preference for conventionality. Thus, depending on how one conceptualizes these results and their relation to the Rebellious Nonconformity subscale, differences between perpetrators and nonperpetrators may or may not be seen.

It was also uncertain how the Fearlessness and Stress Immunity subscales of the PPI-R would be implicated in sexual assault. Both scales involve a lack of anxiety to physical threats or stress-provoking stimuli. High scores on these scales describe individuals who perceive themselves to be daredevils and able to remain calm under dangerous circumstances (Lilienfeld & Widows, 2005). Again, it seemed likely that perpetrators of sexual violence would reveal higher scores on these scales. However, in

that perpetrators of sexual assault tended to have higher levels of anxiety, and both sexual assault and rape perpetrators revealed significantly higher levels of vulnerability. This may suggest that anxiety, or a lack thereof, plays a different role in a sample of nonincarcerated perpetrators.

The final subscale of the PPI-R that may or may not distinguish perpetrators from nonperpetrators was Blame Externalization. This scale measures a general tendency to blame others for one's problems and rationalize one's misbehavior (Lilienfeld & Widows, 2005). It is possible that high levels of this measure correspond to an individual's adherence to rape myths that serve to justify rape by blaming the victims. Thus, it may be that perpetrators would reveal higher levels of Blame Externalization than nonperpetrators. While no specific hypotheses were made regarding this, or the three previously described subscales, exploratory analyses were conducted to determine what role, if any, they play in distinguishing perpetrators of sexual aggression from nonperpetrators.

In addition to exploring the role of psychopathy in college men's perpetration, the second purpose of the present study was to investigate whether the FFM of personality could explain differences above and beyond that which could be explained by psychopathy alone. Researchers have tested Widiger and Lynam's (1998) idea that psychopathy can be adequately represented by the FFM (Derefinko & Lynam, 2006; Hicklin & Widiger, 2005; Lynam, Whiteside, & Jones,1999; Miller et al., 2001; Ross, Lutz, & Bailley, 2004). Based on agreement among these tests, as well as expert profiles, it can be argued that psychopathy is reflected by low levels on all facets from

Agreeableness, low levels of dutifulness, deliberation, and self-discipline from Conscientiousness, low levels of anxiety and self-consciousness, but high levels of angry hostility and impulsivity from Neuroticism, and high levels of excitement seeking from Extraversion. Previous examination of these facets using the present data set (Voller, 2007) found that a number were related to sexual assault perpetration in college men. More specifically, Voller (2007) found that rape perpetrators revealed lower levels of all but two facets from Agreeableness (no differences were found for compliance and modesty), as well as lower levels of dutifulness and deliberation from Conscientiousness. Overall, six of the 14 facets considered to represent psychopathy were able to distinguish between perpetrators and nonperpetrators of sexual aggression in this college sample (Voller, 2007).

Of the remaining FFM facets considered unrelated to psychopathy, several may provide additional insight into the nature of sexual perpetration among college men. The ability of these factors to predict perpetration above and beyond psychopathy was examined. First, it was hypothesized that the facets of vulnerability and depression from Neuroticism would provide unique information. Voller (2007) found that higher levels of Neuroticism for perpetrators of sexual aggression were largely a function of higher levels of depression and vulnerability. This suggests that perpetrators may have more difficulty coping with stress and may be more easily discouraged and dejected (Cost & McCrae, 1992). Furthermore, research has shown that hypermasculinity, and a need for power and dominance, are often characteristic of perpetrators of sexual violence (Malamuth et al., 1991). It is possible that a man's sense of vulnerability may be an underlying impetus for such need and subsequent aggressive behavior. In addition to Voller (2007), research has

begun to evidence a relationship between sexual offending and depression, although primarily in incarcerated samples (Ahlmeyer, Kleinsasser, Stoner, & Retzlaff, 2003; Stinson, Becker, & Tromp, 2005). Therefore, it was expected that high levels of vulnerability and depression would contribute to the prediction of perpetration above and beyond psychopathy.

Other facets expected to predict perpetration were warmth and positive emotions from Extraversion. Voller (2007) found that perpetrators of sexual aggression endorsed lower levels of warmth and positive emotions than nonperpetrators, suggesting that perpetrators may be less affectionate and friendly and experience emotions such as joy, love, and excitement less often. It may be that perpetrators are interpersonally exploitive, lack close attachments to others, and are prone to negative emotionality. Based on this premise and the finding from Voller (2007), it was expected that warmth and positive emotions would predict perpetration above and beyond psychopathy.

In addition, the facets of openness to feelings and ideas from the Openness domain were also expected to relate to perpetration. Openness has received somewhat less attention by researchers, and few studies have linked it with psychopathy or sexual aggression. However, Voller (2007) found that perpetrators endorsed lower levels of Openness when compared to nonperpetrators, which suggests that perpetrators of sexual violence may tend to be more conservative in their outlook, and prefer tradition to novelty (Costa & McCrae, 1992). At the facet level, Voller (2007) found that perpetrators of rape revealed lower levels of openness to feelings and ideas, which suggests that they believe emotional states to be unimportant, and that they tend to be less open-minded. Thus, it may be theorized that conservative attitudes and a preference for tradition, may

translate into traditional attitudes about gender and/or sexual beliefs. It could then be argued that these results lend further support to research showing that perpetrators of sexual aggression demonstrate a greater adherence to traditional male gender roles, hostility toward women, and rape myth acceptance. Therefore, it was hypothesized that openness to feelings and ideas would also contribute additional information.

Finally, the facet of competence from Conscientiousness was anticipated to provide additional insight. Perpetrators in Voller (2007) demonstrated lower levels of competence when compared to nonperpetrators. This finding suggests that sexual aggressors tend to perceive themselves as less capable, prudent, and sensible (Costa & McCrae, 1992). It may then be theorized that perpetrators of sexual violence lack forethought and are reckless in their interactions with women. Furthermore, a misperception of sexual cues is another risk factor associated with sexual assault (e.g., Abbey, Zawacki, & Buck, 2005). Low competence may translate into a perpetrator being less receptive to a woman's actual intentions, and consequently being more likely to misperceive her behavior as sexual interest. Therefore, it was expected that competence will predict perpetration above and beyond psychopathy.

CHAPTER III

METHODOLOGY

Participants

Participants were 521 male college students recruited from a Psychology Department research participant pool for a study examining student attitudes and life experiences. Class credit was given for participation. Participants ranged in age from 18 to 55 years, with an average of 20.24 years (SD = 2.83). The majority of individuals reported they had never been married (91.4%; n = 476); 4.8% (n = 25) reported they were married or cohabiting; 0.2% (n = 1) reported they were divorced or separated, and 3.5% (n = 18) reported themselves in the "other" category. The majority of participants were European Americans (81.8%; n = 426); 5.4% (n = 28) were African Americans, 1.9% (n = 10) were Latinos, Hispanics, or Latin Americans, 6.5% (n = 34) were Native Americans, 2.9% (n = 15) were Asian/Asian Americans, and 1.6% (n = 8) placed themselves in the "other" category or did not respond. Socioeconomic status was assessed using the two factor index of social position (Myers & Bean, 1968) and ranged from lower to upper class; the average participant fell into the middle class. The majority of participants were heterosexual (95.2%; n = 496); 2.1% (n = 11) were gay men, 1.3% (n = 7) identified as bisexual, and 0.6% (n = 3) were undecided or questioning. Finally, the majority of participants were Protestants (61.4%; n = 320); 13.1% (n = 68) were

Catholics, 0.6% (n = 3) were Jewish, 1.9% (n = 10) were Buddhist, Muslim, or Hindu, 6.3% (n = 33) were agnostic or atheist, 0.2% (n = 1) were Wiccan or pagan, 10.6% (n = 55) were nonaffiliated, and 5.8% (n = 30) placed themselves in the "other" category.

Measures

The Life Experiences Questionnaire (LEQ)

The LEQ (Long, 2000) is a self-report instrument that includes questions regarding demographic information, child sexual experiences, and other potentially traumatic events (e.g., childhood physical abuse). For the purposes of this study, the LEQ was used solely to gather demographic information.

Revised NEO-Personality Inventory (NEO-PI-R)

The NEO-PI-R (Costa & McCrae, 1992) is a concise measure used to assess normal adult personality using the Five-Factor Model (FFM). It assesses the five major domains [Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A), and Conscientiousness (C)], each represented by six lower level facet scale scores that define each domain. There are two versions of the NEO-PI-R: Form S for self-reports and Form R for observer ratings. Form S, which was used for the purposes of this study, consists of 240 items (eight items per facet) answered on a 5-point scale ranging from 0 (strongly disagree) to 4 (strongly agree); individuals are to rate each item based on the degree to which they agree or disagree with the statement. Scores for the facets of each domain are calculated by summing up responses to the eight respective items for that facet; scores for each facet range from 0 to 32, with higher scores indicating a higher probability of

showing the distinctive features of that facet. After all of the facet scores have been calculated, those six scores are summed to provide the raw score for that broad domain; thus, domain scores can range from 0 to 192, with higher scores indicating a higher probability of demonstrating characteristics of that domain.

Internal consistencies within each of the five broad domains have been reported to range from 0.86 to 0.92 in self-reports; coefficient alphas for the individual facet scales have ranged from 0.56 to 0.81 (Costa, McCrae, & Dye, 1991). Internal consistencies for each domain, as well as for each facet scale were calculated with the present sample, and were good. Cronbach's alpha coefficients were as follows: N, $\alpha = 0.88$; E, $\alpha = 0.88$; O, $\alpha = 0.89$; A, $\alpha = 0.87$; and C, $\alpha = 0.88$. Cronbach's alpha coefficients for the individual facet scales ranged from 0.52 to 0.80. These values are acceptable for scales with only eight items (Costa & McCrae, 1992). A three-month test-retest reliability has been reported in the literature to range from 0.75 to 0.83 for the five broad domains (Costa & McCrae, 1992). Long-term test-retest reliability has been shown for the N, E, and O domains of the previous version of the instrument; specifically, a six-year longitudinal study found stability coefficients ranging from 0.68 to 0.83 (Costa & McCrae, 1988b).

The validity of the NEO-PI-R scales has also been supported. It has been correlated with most major personality inventories including the Personality Research Form (Costa & McCrae, 1988a) and the California Psychological Inventory (McCrae, Costa, & Piedmont, 1993). Moreover, in one study, Costa and McCrae (1992b) correlated each facet with 116 different scales from 12 different inventories representing a variety of theoretical perspectives. The data provided strong evidence for the convergent and discriminant validity of the facets; specifically, of the 150 correlations, 66 were greater

than 0.50 in absolute magnitude (Costa & McCrae, 1992b). Furthermore, the predictive power of the NEO-PI-R scales has been demonstrated with respect to a variety of external criteria, including psychological well-being, coping and defenses, needs and motivation, interpersonal traits, and creativity and divergent thinking (for review, see Costa & McCrae, 1992a).

Psychopathic Personality Inventory—Revised (PPI-R)

The PPI-R (Lilienfeld & Widows, 2005) is a self-report measure used to assess psychopathic personality traits in adults, particularly in non-forensic populations. It consists of 154 items answered on a 4-point scale ranging from 1 (false) to 4 (true); individuals are to rate each item based on the degree to which the statement is true or false for them. The PPI-R yields a global psychopathy score, eight content scale scores, and three factor scores. The content scales include Machiavellian Egocentricity (ME; 20 items), Rebellious Nonconformity (RN; 16 items), Blame Externalization (BE; 15 items), Carefree Nonplanfulness (CN; 19 items), Social Influence (SOI; 18 items), Fearlessness (F; 14 items), Stress Immunity (STI; 13 items), and Coldheartedness (C; 16 items). The factor scores include Fearless Dominance, which is made up of the SOI, F, and STI content scales, and Self-Centered Impulsivity, which is made up of ME, RN, CN, and BE content scales. These two factors correspond fairly well to PCL-R Factors 1 and 2, respectively (Benning et al., 2003). The third factor consists solely of the Coldheartedness subscale. The PPI-R also contains validity scales used to detect virtuous, deviant, and inconsistent responding.

Content scale scores are calculated by summing up responses to the respective items for that scale, with higher scores indicating a higher level of the distinctive traits measured by that scale. After all of the content scale scores have been calculated, those eight scores are summed to provide the raw total score; thus, total scores can range from 131 to 524, with higher scores indicating a higher level of global psychopathy.

Both the PPI-R total score and its subscales are internally consistent and stable over time. Internal consistency for the PPI-R total score has been reported at .92 in a community/college sample; coefficient alphas for the content scales have ranged from .78 to .87 (Lilienfeld & Widows, 2005). Internal consistencies for the total score, as well as for each content scale were calculated with the present sample, and were good. Cronbach's alpha coefficients were as follows: total score, $\alpha = 0.88$; ME, $\alpha = 0.82$; RN, α = 0.78; BE, α = 0.81; CN, α = 0.85; SOI, α = 0.84; F, α = 0.80; STI, α = 0.78; and C, α = 0.78. The PPI-R has also demonstrated excellent test-retest reliability; a 19.94-day testretest reliability (range = 12 to 45 days) has been reported to range from .82 to .95 (Lilienfeld & Widows, 2005). Similar reliability has been found for the original version of the PPI (e.g., Hicklin & Widiger, 2005; Lilienfeld & Penna, 2001). The validity of the PPI-R scales has also been supported. It has been correlated with several measures of psychopathy, as well as other measures of psychopathology. For example, the PPI-R demonstrated significant correlations with Levenson's Self-Report Psychopathy scale (LSRP; Levenson et al., 1995) and the Self-Report Psychopathy Scale—II (SRP-II; Hare, 1991b). Moreover, Poythress, Edens, and Lilienfeld (1998) found that the original version of the PPI was also significantly correlated with the PCL-R. In addition, the PPI-

R has demonstrated significant correlations with a measure of antisocial personality disorder that reflects *DSM-IV* criteria (Lilienfeld & Widows, 2005).

Modified Sexual Experiences Survey – Perpetration Version (MSES-P)

The MSES-P is a modified version of the 10-item Sexual Experiences Survey (SES; Koss & Gidycz, 1985) and was used to assess perpetration of adult unwanted sexual contact. The MSES-P asks a series of questions assessing whether specific types of sexual activities have been attempted or completed by the participant against any type of individual (i.e., acquaintance, stranger, spouse) since the age of 17. A likert-style format was employed, whereby participants answered the questions based on how many times they had experienced the activities (1 = never, 2 = once, 3 = twice, 4 = three times, 5 = four times or more).

The SES was modified for this study by extending the number of questions from 10 to 24. The original SES contains 4 questions regarding unwanted intercourse (due to arguments, misuse of authority, inability to give consent because of alcohol or drug use by the victim, and physical force), and 2 questions regarding attempted intercourse (due to alcohol or drug use by the victim; physical force or threat of force). These 6 questions were maintained. Phrasing of questions regarding alcohol and drug use was modified and modeled after those used by Muehlenhard, Powch, Phelps, and Giusti (1992). The SES contains 3 questions regarding unwanted sexual contact (including kissing, fondling, and petting) and 1 question regarding other unwanted sexual acts (including anal or oral intercourse and penetration by objects). For this study, these additional forms of sexual contact were reorganized into the following three areas: (a) kissing and fondling, (b) oral-

genital contact, and (c) penetration by objects. All four methods of coercion were assessed for each completed activity, and two methods of coercion (alcohol or drugs and physical force) were assessed for each attempted activity, resulting in a total of 24 questions.

An internal consistency reliability of 0.89 (for men) has been reported for the original SES with a one-week test-retest reliability of 0.93 (Koss & Gidycz, 1985). The correlation between a man's level of perpetration based on responses related to an interview several months later was 0.61 (Koss & Gidycz, 1985). Internal consistency for the modified version of this scale has also been examined in a sample size of 492 college men and was found to be 0.92 across assaults perpetrated by acquaintances, husbands, and strangers (Aosved, 2005). Internal consistencies for the items measuring sexual assault, as well as items measuring rape, were calculated for this sample and resulted in alphas of 0.92 and 0.97, respectively.

Procedure

Participants were recruited from a research participant pool and all surveys were administered via the web. Only those students registered for the experiment scheduling and tracking system had the opportunity to view and complete the online surveys.

Participants were required to be at least 18 years of age and able to read and complete survey materials. The study was fully described on the initial web page visited by students and informed consent was provided online. After participants provided consent for participation, they were directed to a new web page where they completed the anonymous and confidential set of survey materials. The order of the measures was as

follows: LEQ, NEO-PI-R, PPI-R, and MSES-P. Upon completion of the online survey, participants were provided with an online debriefing statement outlining the purpose of the study and identifying counseling services in the local community; all received course credit for their participation.

CHAPTER IV

FINDINGS

Prior to conducting planned analyses, responses to the NEO-PI-R and PPI-R were examined. NEO-PI-R scores in the present sample were typical when compared to the norms established for college-age men (Costa & McCrae, 1992a). More specifically, the average N score for the present sample was approximately equal to that of the normative sample (M = 86.42 SD = 19.48; M = 90.5 SD = 22.1; respectively), as were scores for E (M = 113.14 SD = 19.36; M = 116.7 SD = 25.3; respectively), O(M = 111.62 SD = 20.31;M = 113.9 SD = 18.5; respectively), A (M = 107.85 SD = 18.29; M = 107.4 SD = 16.2), and C (M = 109.29 SD = 18.87; M = 113.5 SD = 22.0; respectively). In addition, PPI-R total scores in the present sample ranged from very low (216) to very high (419) with an overall average score of 307.06 (SD = 30.40). This average was approximately equal to that which has been established in a normative sample of community/college men aged 18-24 years (M = 301.06 SD = 31.26; Lilienfeld & Widows, 2005). In addition, approximately 6.4% of the present sample had PPI-R total scores that would be considered in the clinically significant range, as defined by T scores greater than or equal to 65 (Lilienfeld & Widows, 2005). Overall, responses to both the NEO-PI-R and PPI-R in the present sample were comparable to those of other college samples.

Responses to the MSES-P were examined in order to identify perpetrator and nonperpetrators groups. Perpetrators were classified as those men who reported having

engaged in rape or sexual assault using Abbey and McAuslan's (2004) definitions. Rape was defined as perpetrating attempted or completed vaginal or anal intercourse, oralgenital contact, and/or object penetration by use of force, use of threat of force, or use of drugs or alcohol. Nonperpetrators of rape were those individuals who have not reported engaging in any of the above acts. Thirty-eight men (7.30%) in the present sample reported perpetrating rape, whereas 457 did not. Sexual assault incorporated those men who have completed intercourse, oral-genital contact, and/or object penetration by use of continual arguments or pressure or misuse of authority, but who have not committed rape; sexual assault also included men who have perpetrated completed fondling through the use of force, threat of force, or drugs or alcohol. Nonperpetrators of sexual assault were those who have not reported any of the above acts (i.e., rape or sexual assault). Thirty-three men (6.67%) reported perpetrating sexual assault; 424 men did not report perpetrating sexual assault or rape. Twenty-six additional men did not provide enough information on the MSES-P to be accurately classified.

Perpetrator groups (both rape and sexual assault) and nonperpetrators were compared on several demographic variables, including age, socioeconomic status, race, and sexual orientation. Rape perpetrators and nonperpetrators differed on whether they belonged to the majority or non-majority race groups. The majority race was defined as being European American, whereas the non-majority race included African Americans, Latinos, Hispanics, Latin Americans, Native Americans, Asian/Asian Americans, or those who placed themselves in the "other" category. Members of a non-majority race group were more likely than expected to report having perpetrated rape, $\chi^2(1, N = 492) = 5.68$, p = 0.02. More specifically, 6.4% (n = 26) of the majority race group reported

perpetrating rape, whereas 14.0% (n = 12) of the non-majority race group reported perpetrating rape. No other group comparisons met conventional levels of significance (all p > .05).

Given that differences were found between rape perpetrators and nonperpetrators on race, the relationships between this demographic factor and scores on the NEO-PI-R and PPI-R were examined. Results showed that members of the majority race group reported lower scores than the non-majority race groups on vulnerability (M = 10.79, SD = 4.32; M = 11.97, SD = 4.88; respectively), t(505) = 2.27, p = .02, and higher scores on openness to ideas (M = 20.98, SD = 5.78; M = 19.21, SD = 5.19; respectively), t(505) = 2.66, p = .008, and competence (M = 20.62, SD = 3.91; M = 19.26, SD = 4.12; respectively), t(505) = 2.95, p = .003. No significant group differences were found for any other NEO-PI-R facet. In addition, members of the majority race group reported higher scores than the non-majority race groups on the Fearlessness (F) content scale (M = 38.99, SD = 7.81; M = 37.05, SD = 6.95; respectively), t(497) = 2.13, p = .03, and lower scores on the Blame Externalization (BE) content scale (M = 31.22, SD = 7.02; M = 33.20, SD = 7.44; respectively), t(497) = 2.36, p = .02. No significant group differences were found for the PPI-R total score or any other content scales.

Given the significant relationships between race and rape, and between race and the vulnerability, openness to ideas, and competence facets of the NEO-PI-R, analyses examining rape and these facet scores included majority race as a covariate. Similarly, given the significant relationships between race and rape, and between race and the F and BE content scale scores, analyses examining rape and either the F or BE content scales included majority race as a covariate.

Psychopathy Scores for Rape Perpetrators and Nonperpetrators

To test the hypothesis that rape perpetrators would report higher levels of overall psychopathy than nonperpetrators, an Analysis of Variance (ANOVA) was conducted with rape status serving as the independent variable and the PPI-R total score serving as the dependent variable. Results revealed a significant effect for rape status (p = .01; see Table 3 for group means and ANOVA statistics). Consistent with hypotheses, rape perpetrators had higher scores on the PPI-R total score when compared to nonperpetrators, although effect sizes were rather small.

To test the hypothesis that perpetrators would report higher levels than nonperpetrators on the Machiavellian Egocentricity (ME), Carefree Nonplanfulness (CN), Social Influence (SOI), and Coldheartedness (C) subscales, a Multivariate Analysis of Covariance (MANCOVA) was conducted. Rape status served as the independent variable and the eight content scales from the PPI-R [ME, CN, CN, SOI, C, Rebellious Nonconformity (RN), Blame Externalization (BE), Fearlessness (F), and Stress Immunity (STI)] served as the dependent variables; participant's majority race status served as a covariate. A significant effect was found for rape status, Pillai's Trace F(8, 476) = 4.79, p =.0001. This significant MANCOVA was followed by univariate analyses of covariance (ANCOVAs). Significant results for rape status were produced for the content scales of CN (p = .0001), C (p = .001), and STI (p = .02), and a trend was found for RN (p = .08); see Table 3 for group means and results of univariate tests). More specifically, consistent with hypotheses, rape perpetrators had greater scores on CN and C when compared to nonperpetrators; rape perpetrators also had significantly lower scores on STI, and there was a trend for them to have higher scores on RN as compared to nonperpetrators.

Inconsistent with hypotheses, no significant differences were found for ME or SOI.

Again, while significant results were found, effect sizes were quite small.

Psychopathy Scores for Sexual Assault Perpetrators and Nonperpetrators

To examine the issue of sexual assault perpetration, the analyses were duplicated using sexual assault perpetrator status as the independent variable rather than rape status. An ANOVA was conducted with sexual assault status serving as the independent variable and the PPI-R total score serving as the dependent variable. Contrary to expectations, there was no significant effect for sexual assault status (p = .65; see Table 4 for group means and ANOVA statistics).

A Multivariate Analysis of Variance (MANOVA) was conducted with sexual assault status serving as the independent variable and the eight content scales from the PPI-R (ME, CN, CN, SOI, C, RN, BE, F, and STI) serving as the dependent variables. No significant main effect was found for sexual assault status, Pillai's Trace F(8, 440) = 0.81, p = .60. Group means and standard deviations, as well as follow up univariate ANOVA results, can be found in Table 4.

Prediction of Rape Perpetration by Psychopathy and Five-Factor Model Facets

To test the hypothesis that additional personality traits beyond psychopathy are

important in predicting reports of perpetration, a hierarchical logistic regression analysis was conducted with rape perpetration status serving as the criterion. Majority race status was entered in the first step as a covariate, participants' PPI-R total score was entered as a predictor in the second step, and to test the hypothesis that the FFM personality characteristics can predict perpetration above and beyond psychopathy, the facets of

depression, vulnerability, warmth, positive emotions, openness to feelings, openness to ideas, and competence were entered as predictors in the third step. Results indicated that, consistent with previous univariate ANOVA results, psychopathy significantly predicted rape perpetration status controlling for race majority status, $\chi^2(2, N = 486) = 10.70, p = .005$. The Nagelkerke pseudo R^2 indicated that the model including majority race status and psychopathy accounted for 5% of the total variance in rape perpetration, accurately classifying 92.2% of individuals. Odds ratios indicated that an increase of one point on the PPI-R total score increases the odds of reporting rape perpetration by 1.01 times, controlling for race majority status. Results of the Wald's test indicate that the PPI-R total score was a significant predictor (p = .02), and these numbers suggest that psychopathy is minimally effective in discriminating between rape perpetrators and nonperpetrators in this sample. Table 5 presents the regression coefficients (B), the Wald statistics, significance levels, odds ratios, and 95% confidence intervals of the odds ratio for each predictor.

The final step of the analysis included the FFM facets as predictors. Results indicated that normal personality features significantly predicted rape perpetrator status controlling for both majority race status and psychopathy, χ^2 (9, N = 484) = 49.97, p = .0001. Consistent with hypotheses, the Nagelkerke pseudo R^2 indicated that the model now including the FFM facets accounted for 24% of the total variance in rape perpetration. More specifically, the FFM facets of vulnerability, openness to feelings, and competence were all significant predictors of rape perpetration (p = .05, .03, and .05, respectively). The influence of vulnerability was the strongest such that for each single point increase in the vulnerability score, there is a 1.11 times greater likelihood of being

classified as a rape perpetrator controlling for majority race status and psychopathy. See Table 5 for details of the logistic regression analysis. The model including majority race status, psychopathy, and the FFM facets accurately classified 93.2% of participants, but was still more effective in classifying nonperpetrators (99.8%) as compared to perpetrators (11.1%).

Prediction of Sexual Assault Perpetration by Psychopathy and Five-Factor Model Facets

To examine the role of psychopathy and the FFM facets in predicting reports of sexual assault perpetration, a second hierarchical logistic regression analysis was conducted with sexual assault perpetration status serving as the criterion. Participants' PPI-R total score was entered as a predictor in the first step and the facets of depression, vulnerability, warmth, positive emotions, openness to feelings, openness to ideas, and competence were entered as predictors in the second step. Results indicated that, consistent with previous univariate ANOVA results, psychopathy did not significantly predict sexual assault perpetration status, $\chi^2(1, N = 449) = 0.21$, p = .65. The Nagelkerke pseudo R^2 indicated that the model including psychopathy accounted for 0.001% of the total variance in sexual assault perpetration, accurately classifying 93.1% of individuals. Odds ratios indicated that an increase of one point on the PPI-R total score did not increase the odds of reporting sexual assault perpetration. Results of the Wald's test indicate that the PPI-R total score was not a significant predictor (p = .65), and these numbers suggest that psychopathy is not effective in discriminating between sexual assault perpetrators and nonperpetrators in this sample. Table 6 presents the regression coefficients (B), the Wald statistics, significance levels, odds ratios, and 95% confidence intervals of the odds ratio for each predictor.

The final step of the analysis included the FFM facets as predictors. Results indicated that overall, normal personality features did not significantly predict sexual assault perpetrator status after controlling for psychopathy, χ^2 (8, N = 449) = 11.17, p = .19. The Nagelkerke pseudo R^2 indicated that the model including the FFM facets accounted for 6% of the total variance in sexual assault perpetration. Interestingly, inspection of individual predictor tests did suggest that the FFM facet of depression was a significant predictor of sexual assault perpetration (p = .02). For each single point increase in the depression score, there is a 1.11 times greater likelihood of being classified as a sexual assault perpetrator controlling for psychopathy. See Table 6 for details of the logistic regression analysis. The model including psychopathy and the FFM facets accurately classified 93.1% of participants, but was only effective in classifying nonperpetrators (100%) as compared to perpetrators (0%), consistent with the overall model's failure to reach conventional levels of significance.

CHAPTER V

CONCLUSION

The purpose of the present study was to investigate what role psychopathy plays in rape and sexual assault perpetration by college men, and whether individual facets of the Five-Factor model (FFM) of personality can explain even more differences between perpetrators and nonperpetrators of sexual aggression. The aim was to examine the complex interrelationships among pathological and normal personality traits, in a typical college population, and determine whether they provide additional insight into the nature of rape and sexual assault perpetrators. First, it was expected that perpetrators would differ from nonperpetrators on a broad measure of psychopathy, the PPI-R, which was designed for use within college samples. Second, based on previous findings, it was expected that a select group of FFM facets (i.e., depression, vulnerability, warmth, positive emotions, openness to feelings, openness to ideas, and competence) would explain differences above and beyond that which can be explained by psychopathy. While results showed notable differences between perpetrators and nonperpetrators, not all were consistent with expectations. Interestingly, more differences were found when comparing rape perpetrators to nonperpetrators, than when comparing sexual assault perpetrators to nonperpetrators. Indeed, findings indicated that perpetrators of sexual assault were not remarkably different from nonperpetrators on the personality dimensions evaluated in this study.

Overall, consistent with hypotheses, perpetrators of rape were found to report greater levels of global psychopathy when compared to nonperpetrators. However, contrary to expectation, no differences were found between sexual assault perpetrators and nonperpetrators on global psychopathy. In addition, specific hypotheses were made for four of the eight content scales provided by the PPI-R. Specifically, perpetrators were expected to report higher scores on the Machiavellian Egocentricity, Carefree Nonplanfulness, Social Influence, and Coldheartedness scales. Consistent with hypotheses, rape perpetrators reported higher levels of Carefree Nonplanfulness and Coldheartedness when compared to nonperpetrators; they also reported lower levels of Stress Immunity when compared to nonperpetrators. Contrary to expectation, no differences were found for either the Machiavellian Egocentricity or Social Influence content scales. Again, inconsistent with hypotheses, no differences were found between sexual assault perpetrators and nonperpetrators on any of the content scales.

The finding that perpetrators of rape endorsed higher levels of overall psychopathy when compared to nonperpetrators was consistent with hypotheses and suggests that rape perpetrators may be more likely to match features of the prototypic psychopathic individual as described by Cleckley (1941, 1976) and Hare (1991a, 2003). More specifically, there is a greater probability that the perpetrators of rape in this sample have a tendency to be more guiltless, callous, dishonest, manipulative, self-centered, and impulsive. A growing body of literature has revealed that a psychopathic personality plays an important role in sexual aggression (for review, see DeGue & DiLillo, 2005), but this has primarily been demonstrated with incarcerated populations. Results from the

present study suggest that a psychopathic personality may also play a role in rape perpetration by noninstitutionalized, college men.

In order to determine the basis of rape perpetrators' higher global psychopathy score, it is useful to examine differences found among the content scale scores. The differences expected across content scales were only partially supported by the data and were rather small. First, it was expected that perpetrators of rape would endorse higher levels of Carefree Nonplanfulness when compared to nonperpetrators and support for this hypothesis was found. That rape perpetrators were higher on this scale suggests that they lack forethought and have a tendency to act without thinking. This is consistent with previous findings that perpetrators of rape report lower levels of the FFM facet of deliberation, indicating that they have a tendency to act without considering the consequences (Voller & Long, 2007). Second, it was expected that perpetrators would report higher levels of Coldheartedness when compared to nonperpetrators and support for this hypothesis was also found. The Coldheartedness scale measures the absence of feelings of guilt and empathy (Lilienfeld & Widows, 2005). Although findings have been somewhat inconsistent (Jolliffe & Farrington, 2004), some researchers have found that perpetrators of sexual aggression have lower levels of empathy compared to nonperpetrators (e.g., Lindsey, Carlozzi, & Eells, 2001). Results of this study may lend further support to this conclusion.

That there were no differences found between perpetrators of rape and nonperpetrators on Machiavellian Egocentricity was inconsistent with hypotheses. This content scale measures an individual's propensity for exploiting and manipulating others for his or her own personal gain. Previous research has shown that perpetrators of sexual

aggression tend to be more manipulative (Christopher, Owens, & Stecker, 1993), though results from the present sample did not support this finding. However, in addition to a tendency to manipulate others, Machiavelleian Egocentricity also assesses individuals' beliefs that they are superior to others. Previous results from this sample indicated that perpetrators of sexual aggression reported higher levels of vulnerability (Voller & Long, 2007), which suggests they have more difficulty coping with stress and may be more likely to become dependent and hopeless. This conclusion would therefore be inconsistent with high levels of Machiavelleian Egocentricity. Moreover, research has shown that hypermasculinity, and a need for power and dominance, are often characteristic of perpetrators of sexual violence (Malamuth et al., 1991). It is possible that a man's sense of vulnerability may be an underlying impetus for such need and subsequent aggressive behavior.

That perpetrators of rape did not endorse higher levels of Social Influence was also contrary to expectations. Social Influence measures individuals' perceptions of themselves as self-confident, charming, and skilled at influencing others. Because perpetrators of sexual assault often engage in nonphysical tactics such as verbal coercion and deceit (Degue & Delillo, 2005), and because they have a tendency to be less straightforward than nonperpetrators (Voller & Long, 2007), it was expected that rape perpetrators would evidence higher levels of Social influence; results of the present study did not support this hypothesis. However, an examination of previous findings may provide insight into this unexpected outcome as well. For example, that perpetrators have evidenced a greater level of vulnerability (Voller & Long, 2007) suggests that they may not perceive themselves as self-confident and socially skilled. In addition, previous

research has found that perpetrators of rape report lower levels of conscientiousness, which describes a person's ability to plan and carry out tasks successfully (Costa & McCrae, 1992). Manipulating or coercing someone to have sex without the use of physical force or drugs would likely take more planning and persistence than would using or threatening physical force (i.e., the definition of rape in this study). This may partially explain the lack of differences seen on this scale for perpetrators of rape.

Although no specific hypotheses were made regarding the Stress Immunity content scale, that rape perpetrators endorsed lower levels is interesting. The Stress Immunity content scale generally assesses an individual's lack of anxiety and tendency to remain calm in threatening or stressful situations. Again, higher levels of vulnerability may help explain this finding, as individuals who score higher on this facet tend to have more difficulty coping with stress (Costa & McCrae, 1992). Seeing as an absence of anxiety is often considered a feature of the prototypic psychopath (Cleckley, 1941), it is likely that one would see higher levels of Stress Immunity within an incarcerated sample of offenders where levels of psychopathy are higher. Thus, findings from the present study may suggest that anxiety, or a lack thereof, plays a different role in a sample of nonincarcerated perpetrators.

The finding that perpetrators of sexual assault did not differ from nonperpetrators on any psychopathy dimension was contrary to expectation and somewhat notable.

Sexual assault as it was defined in the present study incorporated men who had completed intercourse, oral-genital contact, and/or object penetration by use of continual arguments and pressure and/or misuse of authority, as well as fondling through use of force, threat of force, or drugs or alcohol, but did not include those individuals who had

used force, threat of force, or drugs or alcohol to obtain intercourse, oral-genital contact, and/or object penetration (i.e., rape). Since rape is considered to be a more serious sexual offense, it follows that these individuals would exhibit higher levels of psychopathy than those who are only willing to use coercive tactics, or only willing to force lower level activities (e.g., fondling). That is, it is probable that psychopathic personality features would be more likely to lead someone to use physical force or threat of force to obtain sex. This is consistent with previous research showing that psychopathy predicted the use of force and threats in a sample of college sexual perpetrators (Kosson, Kelly, & White, 1997).

The second aim of this study was to investigate whether aspects of normal personality as measured by the FFM would explain differences in perpetration above and beyond that which can be explained by a psychopathic personality. Preliminary investigations suggest that variations in the FFM can help explain differences in men who are more prone to committing acts of sexual violence. More specifically, Voller and Long (2007) found that perpetrators of sexual aggression revealed higher levels of depression and vulnerability from Neuroticism, lower levels of all but two facets from Agreeableness, lower levels of warmth, excitement-seeking, and positive emotions from Extraversion, lower levels of openness to feelings and ideas from Openness, and lower levels of dutifulness and deliberation from Conscientiousness. Although researchers have identified certain facets of the FFM model that can describe psychopathy (see Table 2), there are several FFM facets considered unrelated to psychopathy that have been shown to distinguish perpetrators from nonperpetrators. Based on Voller and Long's (2007) findings, it was expected that the facets of depression, vulnerability, warmth, positive

emotions, openness to feelings, openness to ideas, and competence would explain differences above and beyond that which can be explained by psychopathy. Results partially supported hypotheses, particularly for perpetrators of rape. The model including these facets accounted for an additional 19% of the variance in rape perpetration, and vulnerability, openness to feelings, and competence significantly predicted rape perpetration above and beyond psychopathy. These findings suggest that while psychopathy may be an important construct related to the perpetration of rape, variation in normal personality traits may be more useful in distinguishing perpetrators from nonperpetrators in a typical college population. More specifically, men's levels of vulnerability, openness to feelings, and competence may be particularly useful.

It has already been discussed how a heightened sense of vulnerability may explain a propensity for rape perpetration. With regard to openness to feelings, results suggest that perpetrators of rape are less attentive to inner feelings and believe emotional states to be unimportant (Costa & McCrae, 1992). Individuals who score low on openness to feelings also tend to experience shallow, undifferentiated emotions, and have a tendency and motivation to discount feelings altogether (Costa & McCrae, 1992). It may be that rape perpetrators fail to experience or attend to those inner feelings (e.g., guilt, shame, sympathy) that might deter them from committing acts of sexual aggression against another human being. With regard to competence, that rape perpetrators evidenced lower levels suggests that sexual aggressors tend to perceive themselves as less capable, prudent, and sensible (Costa & McCrae, 1992). It may be theorized that perpetrators of sexual violence lack forethought and are reckless in their interactions with women.

Furthermore, a misperception of sexual cues is another risk factor associated with sexual

assault (e.g., Abbey, Zawacki, & Buck, 2005). Low competence may translate into a perpetrator being less receptive to a woman's actual intentions, and consequently being more likely to misperceive her behavior as sexual interest. Overall, findings from the present study suggest that these aspects of normal personality may be important to consider when examining rape perpetration on college campuses.

However, it should be noted that although the overall model was significant in predicting rape perpetration, it is still accounting for just 24% of the total variance and it is far more effective in predicting nonperpetrators than perpetrators. Indeed, results of the regression indicated that nonperpetrators can be fairly accurately classified even with no predictor information. When considering the low base rate of perpetration overall, however, it was expected that successful prediction would be difficult. Additionally, the odds ratios for each variable are quite small, indicating that they are not substantial predictor variables. Thus, it can be concluded that while the personality traits evaluated in this study may be important in understanding rape perpetration, it is necessary to recognize that they represent just a small piece of a much larger puzzle.

With regard to the FFM facets' ability to predict sexual assault perpetration above and beyond psychopathy, results demonstrated that the model overall did not account for differences between perpetrators and nonperpetrators. Including the FFM facets accounted for just 6% of the variance in sexual assault perpetration. However, it should be noted that despite the nonsignificance of the overall model, depression was a significant predictor. Therefore, this trait may be somewhat useful in distinguishing perpetrators of sexual assault from nonperpetrators. This is somewhat consistent with recent research that is evidencing a relationship between sexual offending and affective

disorders, namely depression and anxiety, in incarcerated samples (Ahlmeyer, Kleinsasser, Stoner, & Retzlaff, 2003; Stinson, Becker, & Tromp, 2005). However, it is uncertain whether a higher level of depression may lead to or be a consequence of sexual assault perpetration; it is possible that if an individual uses coercion or continual arguments and pressure to obtain sex, he may feel shameful, discouraged, and dejected as a result. Overall, men's levels of depression may be a construct to consider when examining the issue of sexual assault perpetration.

Notably, however, the lack of differences seen between sexual assault perpetrators and nonperpetrators on aspects of pathological and normal personality and the inability of these factors to predict perpetration is important. These findings suggest that the personality of individuals who perpetrate sexual assault, but not rape, may not be entirely different from those who do not commit sexual offenses. Thus, it appears that examining differences in personality characteristics may not be as important or as useful for distinguishing those who perpetrate sexual assault from those who do not engage in any sexual aggression. It is possible that for these individuals investigating other risk factors such as situational context, use of alcohol and drugs, or peer influences may be more important.

Several theoretical models have been proposed to understand the causes of sexual violence. As the ecological model suggests, the occurrence of sexual violence can be understood as a complex interaction of many factors, including those involved at the individual, microsytem, exosystem, and macrosystem levels. Results of the present study demonstrated that psychopathic and normal personality profiles may help distinguish rape perpetrators from nonperpetrators, lending further support to the importance of

considering the individual level, at least with respect to rape perpetration. However, less support was found to support the importance of studying the personality features of those who commit sexual assault, but not rape.

Further, it is worthwhile to consider how the individual level interacts with the other three ecological levels in predicting a person's propensity to sexually aggress. For example, a certain personality trait may only be displayed in certain situations. An individual might have psychopathic personality features, but these features may only truly manifest when he or she is surrounded by a delinquent peer group or is in an environment where alcohol and drugs are available. It may be that a college man's level of psychopathy only leads to a greater risk of perpetrating sexual aggression under these types of circumstances. In addition, it may also be worthwhile to consider that the development of an individual's personality is influenced by the other three levels of the ecological model. Perhaps family structure, peer groups, and other aspects of one's environment shape the development of certain personality traits. Additionally, it may be that the overarching beliefs, values, and attitudes of the culture contribute to the development of one's overall personality. Clearly sexual violence is a complex problem of which there is no single cause. Thus, it remains important that the interrelationships among the many factors involved continue to be examined.

Results of the present study offer clear contributions to the literature by providing insight into the pathological and normal personality features of perpetrators of sexual aggression. Findings indicated that psychopathy may play a role in rape perpetration on college campuses, but that variation in normal personality traits may be more useful in distinguishing rape perpetrators from nonperpetrators. A strength of the current study is

its use of a large sample of non-institutionalized, college men. As noted previously, few studies have examined psychopathy's role in college men's perpetration and even fewer have utilized a broad measure of psychopathy. It should be noted, though, that psychopathy in this study is being measured as a trait dimension and it is possible that few men in this sample would meet the cutoff for a true "psychopath." However, research has shown that at least some psychopathic individuals have been able to adjust to society somewhat successfully and refrain from chronic involvement in antisocial behavior (Hall & Benning, 2006). Results from the present study show that psychopathic personalities are prevalent in so-called "normal" college populations and future research on the "successful psychopath" may benefit from examining these populations. Furthermore, demonstrating differences in psychopathic personality profiles in a "normal" population of college educated men has important implications for the identification and prevention of sexual violence on college campuses. Additionally, those perpetrators who have been "undetected" are likely different from those convicted and serving time in prisons. It is possible that some of these differences may be related to variations in "normal" personality traits. Findings here provide insight into those individuals who are successful at avoiding successful prosecution and perhaps even at avoiding prosecution at all.

Additional strengths of the study include the use of both broad and restricted definitions of sexual aggression. Previous studies have narrowed their measurement to those incidents which meet the legal definition of rape. Including a broader, more inclusive definition of sexual assault lessens the chances of underestimating the scope of the problem. Although considered a less severe sexual offense, sexual assault is still very much outside of what would be considered acceptable behavior. Incorporating it in this

study provided important insight into those individuals who are perhaps not willing to commit rape, but are willing to use other tactics and even force to obtain acts other than intercourse. Other strengths include the use of standardized, reliable, and valid measures for assessment of the constructs of interest.

There are also limitations of the present study that should be considered. First, the use of self-report instruments can be viewed as somewhat of a limitation, as the retrospective nature of self-report measures may carry various types of bias. For example, men may have purposely underreported or overreported perpetration due to selfpresentation issues or due to distorted recall. Thus, self-report is limited in that it only provides an individual's subjective report of perpetration and not his actual behavior; this issue is also relevant to the self-reporting of psychopathic behaviors and attitudes. It may be that participants' personalities influence their willingness to be forthright and admit to perpetrating acts of sexual aggression and/or psychopathic features. There are also issues with the present sample that limit the strength and generalizability of the findings. First, previous researchers have found that up to 58% of men admitting to some form of sexual assault (Zawacki et al., 2003) and the rates of perpetration in this study are substantially lower. This may partly be explained by the generally young age of the participants. This sample was selected from an introductory undergraduate course and the average age was 20.24 years. It is possible that the young men in this study have yet to be confronted with the right circumstances or "opportunity" to sexually aggress (e.g., parties, peer groups). Therefore, it is possible that the nonperpetrator group identified in this study includes some men who may perpetrate in the future. Moreover, since it has been established that alcohol is often involved in the occurrence of sexual violence (Abbey, McAuslan, &

Ross, 1998; Abbey et al., 1996; Koss, 1988; Mohler-Kuo et al., 2004), it is possible that these men have been less exposed to this additional risk factor. That is, being under the legal drinking age and not having easy access to alcohol may serve as a temporary protective factor for these men. An additional limitation of this college sample is that it is relatively homogenous which restricts the generalizability of the findings. However, it has been established that sexual violence is highly prevalent on college campuses (Koss, Gidycz, & Wisniewski, 1987), and so examining the problem with this particular population is important. Finally, as mentioned previously, sexual violence is a complex problem and not all relevant factors were examined in the present study. While investigating personality characteristics can provide some additional insight, our conclusions are limited because it is still just one piece of the complexity. Additional factors at all levels of the ecological model should be addressed.

In spite of these limitations, results from this study provide important implications and create new directions for prevention, intervention, and future research. First, this study provides implication for the prevention of sexual violence on college campuses. With regard to rape perpetration, exploring both pathological and normal personality styles seems important in the identification of men prone to committing such acts. Understanding what roles psychopathy and the Five-Factor Model play may provide additional insight into the nature of these perpetrators and help identify those at risk. Perhaps identifying men with certain personality profiles is one way to target subsets of men who would benefit from special education on the prevention of sexual violence. However, it is important to remember that not all men with specific personality traits perpetrate and sole reliance on these profiles would be imprudent. What is also important

is that for perpetrators of sexual assault (but not rape), personality appears not be a good indicator of those at risk. Results of this study suggest that the personalities of men who commit sexual assault, but not rape, are remarkably similar to nonperpetrators. Thus, despite the belief that perpetrators of sexual violence represent a select subset of "psychopaths," perpetrators of sexual assault may actually appear to be average, seemingly "normal" individuals. For these individuals, as well as for perpetrators of rape, it is important to remember that individual characteristics are just one of the many complex factors involved in an individual's propensity to sexually aggress; additional benefit would come from examining a person's risk more broadly. For instance, in addition to matching certain personality traits, those who are involved in peer groups (e.g., fraternities, athletic teams) or who use alcohol or drugs could also be targets for prevention education.

With regard to clinical implications, the PPI-R is time-efficient and provides valid and clinically useful information in the assessment of psychopathy in college samples (Lilienfeld & Widows, 2005). Knowing that a person tends to be manipulative, superficially charming, dishonest, and lacks insight would have important implications for individuals working with him or her (e.g., intervention or prevention work).

Moreover, it has been found that psychopathy is an important predictor of violent and sexual recidivism (e.g., Douglas, Vincent, & Edens, 2007; Hanson & Bussiere, 1998).

Thus, individuals with psychopathic personality features may require special attention, in clinical or legal settings, in order to prevent such recidivism. In addition, there are multiple ways the NEO-PI-R can be utilized in clinical settings. First, by understanding an individual's attitudinal, interpersonal, emotional, and motivational styles, clinicians

are in a better position to develop more comprehensive and effective treatment options. For example, it has been suggested that individuals with low Extraversion may respond better to medications than interpersonal therapy, while the reverse may be true for high levels of Extraversion (Costa & McCrae, 1992). Unconventional approaches are welcomed by individuals with high levels of Openness, but low Openness individuals tend to prefer emotional support and common sense advice (Costa & McCrae, 1992). Thus, clinicians can use this information to tailor individual treatments. Furthermore, if clients perceive they are truly understood, they may appreciate the skills of the clinician and rapport can develop more quickly; this would be particularly useful if treatment were required (i.e., court mandated sex offender treatment). Additionally, the NEO-PI-R can provide valuable information on prognosis and probable response to therapy. For instance, individuals with low levels of Agreeableness may expect the clinician to prove her or his competence and may be uncooperative (Costa & McCrae, 1992). Understanding these traits can alert clinicians and allow them to take preventative steps.

Regarding future research, results here suggest that considering both pathological and overall normal personality profiles when examining sexual perpetration may be important. Moreover, although the effects were rather small, differences found for psychopathy as well as traits of the Five-Factor Model suggest that these measures may be useful in distinguishing perpetrators from nonperpetrators. Future research should extend these findings to other populations, including community samples and other age groups (e.g., adolescents, middle-aged men). It would also be useful to examine differences in convicted rapists and prison populations. Perhaps there are similarities between incarcerated offenders and college men that might lead to predictions about who

might be more likely to sexually aggress, as well as what factors may have served to protect them from getting caught. Future projects should also consider the use of longitudinal designs to determine what value these personality profiles have in predicting sexually aggressive behavior. Finally, these findings lend additional support to the ecological model. It is evident that personality plays an important role in distinguishing rape perpetrators from nonperpetrators. Future research should examine other levels of the ecological model in conjunction with overall personality profiles. Understanding that psychopathic and normal personality provides additional insight into the nature of sexual perpetrators is just one piece of a much larger puzzle. It will therefore be useful to understand the interaction of these findings with those of microsystem, exosystem, and macrosystem factors.

REFERENCES

- Abbey, A. (1991). Acquaintance rape and alcohol consumption on college campuses:

 How are they linked? *Journal of American College Health*, 39, 165-169.
- Abbey, A. (2005). Lessons learned and unanswered questions about sexual assault perpetration. *Journal of Interpersonal Violence*, 20, 39-42.
- Abbey, A., & Harnish, R. J. (1995). Perception of sexual intent: The role of gender, alcohol consumption and rape supportive attitudes. *Sex Roles*, *32*, 297-313.
- Abbey, A., & McAuslan, P. (2004). A longitudinal examination of male college students' perpetration of sexual assault. *Journal of Consulting and Clinical Psychology*, 72, 747-756.
- Abbey, A., McAuslan, P., & Ross, L. T. (1998). Sexual assault perpetration by college men: The role of alcohol, misperception of sexual intent, and sexual beliefs and experiences. *Journal of Social and Clinical Psychology, 17*, 167-195.
- Abbey, A., McAuslan, P., Zawacki, T., Clinton, A. M., & Buck, P. O. (2001). Attitudinal, experiential, and situational predictors of sexual assault perpetration. *Journal of Interpersonal Violence*, 16, 784-807.
- Abbey, A., Ross, L. T., McDuffie, D., & McAuslan, P. (1996a). Alcohol and dating risk factors for sexual assault among college women. *Psychology of Women Quarterly*, 20, 147-169.

- Abbey, A., Ross, L. T., McDuffie, D., & McAuslan, P. (1996b). Alcohol, misperception, and sexual assault: How and why are they linked? In D. M. Buss & N. M. Malamuth. (Eds.), *Sex, Power, and Conflict: Evolutionary and Feminist Perspectives* (pp. 138-161). New York: Oxford University Press.
- Abbey, A., Zawacki, T., & Buck, P. O. (2005). The effects of past sexual assault perpetration and alcohol consumption on men's reactions to women's mixed signals. *Journal of Social and Clinical Psychology*, 24, 129-155.
- Abbey, A., Zawacki, T., Buck, P. O., Clinton, A. M., & McAuslan, P. (2004). Sexual assault and alcohol consumption: What do we know about their relationship and what types of research are still needed? *Aggression and Violent Behavior*, *9*, 271-303.
- Abbey, A., Zawacki, T., & McAuslan, P. (2000). Alcohol's effects on sexual perception. *Journal of Studies on Alcohol, 61,* 688-697.
- Ahlmeyer, S., Kleinsasser, D., Stoner, J., & Retzlaff, P. (2003). Psychopathology of incarcerated sex offenders. *Journal of Personality Disorders*, *17*, 306-318.
- Anderson, K. B., Cooper, H., & Okamura, L. (1997). Individual differences and attitudes toward rape: A meta-analytic review. *Personality and Social Psychology Bulletin*, 23, 295-315.
- Aosved, A. C. (2005). The role of intolerant attitudes, rape myth acceptance, and rape proclivity in perpetration of sexual aggression. Unpublished doctoral dissertation.

 Oklahoma State University, Stillwater, OK.

- Bagely, C., Wood, M., & Young, L. (1994). Victim to abuser: Mental health and behavioral sequels of child sexual abuse in a community survey of young adult males. *Child Abuse and Neglect*, *18*, 683-697.
- Belsky, J. (1980). Child maltreatment: An ecological integration. *American Psychologist*, 35, 320-335.
- Benning, S. D., Patrick, C. J., Hicks, B. M., Blonigen, D. M., & Krueger, R. F. (2003). Factor structure of the Psychopathic Personality Inventory: Validity and implications for clinical assessment. *Psychological Assessment*, *15*, 340-350.
- Betz, N. E., & Fitzgerald, L. F. (1993). Individuality and diversity: Theory and research in counseling psychology. *Annual Review of Psychology*, *44*, 343-381.
- Blader, J. C., & Marshall, W. L. (1989). Is assessment of sexual arousal in rapists worthwhile? A critique of current methods and the development of a response compatibility approach. *Clinical Psychology Review*, *9*, 569-587.
- Boer, D. P., Wilson, R. J., Gauthier, C. M., & Hart, S. D., (1997). Assessing risk for sexual violence: Guidelines for clinical practice. In C. D. Webster and M. A. Jackson (Eds.). *Impulsivity: Theory, assessment, and treatment*. (pp. 326-342). New York: Guilford.
- Brener, N. D., McMahon, P. M., Warren, C. W., & Douglas, K. A. (1999). Forced sexual intercourse and associated health-risk behaviors among female college students in the United States. *Journal of Consulting and Clinical Psychology*, 67, 252-259.
- Briere, J., & Malamuth, N. M. (1983). Self-reported likelihood of sexually aggressive behavior: Attitudinal versus sexual experiences. *Journal of Research in Personality*, 17, 315-323.

- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development.

 *American Psychologist, 32, 513-531.
- Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, *34*, 844-850.
- Brown, S. L, & Forth, A. E. (1997). Psychopathy and sexual assault: Static risk factors, dynamic precursors, and rapist subtypes. *Journal of Consulting and Clinical Psychology*, 65, 848-857.
- Burnam, M. A., Stein, J. A., Golding, J. M., Siegel, J. M., Sorenson, S. B., Forsythe, A.B., et al. (1988). Sexual assault and mental disorders in a community population.Journal of Consulting and Clinical Psychology, 56, 843-850.
- Burt, M. R. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology*, 38, 217-230.
- Calhoun, K. S., Bernat, J. A., Clum, G. A., & Frame, C. L. (1997). Sexual coercion and attraction to sexual aggression in a community sample of young men. *Journal of Interpersonal Violence*, 12, 392-406.
- Caron, S. L., & Carter, D. B. (1997). The relationships among sex role orientation, egalitarianism, attitudes toward sexuality, and attitudes toward violence against women. *Journal of Social Psychology*, *137*, 568-587.
- Cattell, R. B., Eber, H. W., & Tatsuoka, M. M. (1970). *The handbook for the Sixteen Personality Factor Questionnaire*. Champaign, IL: Institute for Personality and Ability Testing.

- Check, J. V. P., & Malamuth, N. M. (1983). Sex role stereotyping and reactions to depictions of stranger versus acquaintance rape. *Journal of Personality and Social Psychology*, 45, 344-356.
- Chiroro, P., Bohner, G., Viki, G. T., & Jarvis, C. I. (2004). Rape myth acceptance and rape proclivity: Expected dominance versus expected arousal as mediators of acquaintance-rape situations. *Journal of Interpersonal Violence*, 19, 427-441.
- Christopher, F. S., Owens, L. A., & Stecker, H. L. (1993). An examination of single men's and women's sexual aggressiveness in dating relationships. *Journal of Social and Personal Relationships*, 10, 511-527.
- Clark, L. A., (1993). *The Schedule for Nonadaptive and Adaptive Personality*.

 Minneapolis, MN: University of Minnesota Press.
- Cleckley, H. (1941). The mask of sanity. St. Louis, MO: Mosby.
- Cleckley, H. (1976). *The mask of sanity* (5th edition). St. Louis, MO: Mosby.
- Cohen, D., & Strayer, J. (1996). Empathy in conduct-disordered and comparison youth.

 *Developmental Psychology, 32, 988-998.
- Coid, J. W., (1992). DSM-III diagnosis in criminal psychopaths: A way forward.

 *Criminal Behavior and Mental Health, 2, 78-94.
- Corcoran, K. J., & Thomas, L. R. (1991). The influence of observed alcohol consumption on perceptions of initiation of sexual activity in a college dating situation. *Journal of Applied Social Psychology*, 21, 500-507.
- Costa, P. T., & McCrae, R. R. (1985). *NEO-Personality Inventory*. Odessa, FL:

 Psychological Assessment Resources, Professional Manual.

- Costa, P. T., & McCrae, R. R. (1988a). From catalog to classification: Murray's needs and the five-factor model. *Journal of Personality and Social Psychology*, *55*, 258-265.
- Costa, P. T., & McCrae, R. R. (1988b). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory.

 Journal of Personality and Social Psychology, 54, 853-863.
- Costa, P. T., & McCrae, R. R. (1992a). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI). Odessa, FL: Psychological Assessment Resources, Professional Manual.
- Costa, P. T., & McCrae, R. R. (1992b). Trait psychology comes of age. In T. B.

 Sonderegger (Ed.). *Nebraska Symposium on Motivation: Psychology and Aging*(pp. 169-204). Lincoln, NE: University of Nebraska Press.
- Costa, P. T., & Widiger, T. A. (2002). Introduction: Personality disorders and the five-factor model of personality. In P. T. Costa & T. A. Widiger (Eds.). *Personality Disorders and the Five-Factor Model of Personality* (2nd ed., pp. 3-14).

 Washington, D.C.: American Psychological Association.
- Crawley, T., & Martin, F. H. (2006). Impulsive-aggression, antisocial behavior, and subclinical psychopathy: Preliminary findings from an undergraduate female sample. *Psychiatry, Psychology, and Law, 13*, 232-242.
- Davis, M. H., (1980). A multidimensional approach to individual differences in empathy.

 ISAS Catalog of Selected Documents in Psychology, 10, 85.

- Dean, K. E., & Malamuth, N. M. (1997). Characteristics of men who aggress sexually and of men who imagine aggressing: Risk and moderating variables. *Journal of Personality and Social Psychology*, 72, 449-455.
- DeGue, S., & DiLillo, D. (2005). "You would if you loved me": Toward an improved conceptual and etiological understanding of nonphysical male sexual coercion.

 *Aggression and Violent Behavior, 10, 513-532.
- DeKeseredy, W., & Kelly, K. (1993). Woman abuse in university and college dating relationships: The contribution of the ideology of familial patriarchy. *Journal of Human Justice*, *4*, 25-52.
- DeMatteo, D., Heilbrun, K., & Marczyk, G. (2005). Psychopathy, risk of violence, and protective factors in a noninstitutionalized and noncriminal sample. *International Journal of Forensic Mental Health*, *4*, 147-157.
- DeMatteo, D., Heilbrun, K., & Marczyk, G. (2006). An empirical investigation of psychopathy in a noninstitutionalized and noncriminal sample. *Behavioral Sciences and the Law*, 24, 133-146.
- Derefinko, K. J., & Lynam, D. R. (2006). Convergence and divergence among self-report psychopathy measures: A personality based approach. *Journal of Personality Disorders*, 20, 261-280.
- Dennison, S. M., Stough, C., & Birgden, A. (2001). The big 5 dimensional personality approach to understanding sex offenders. *Psychology, Crime, & Law, 7*, 243-261.
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Reviews of Psychology*, 41, 417-440.
- Douglas, K. S., Vincent, G. M., & Edens, J. F. (2007). Risk for criminal recidivism: The

- role of psychopathy. In C. J. Patrick (Ed.). *Handbook of Psychopathy* (pp. 533-549). New York: Guilford Press.
- Earl, C. M., & Proulx, J. (1987). The differentiation of Francophone rapists and nonrapists using penile circumferential measures. *Criminal Justice and Behavior*, 13, 419-429.
- Edens, J. F., Poythress, N. G., & Lilienfeld, S. O. (1999). Identifying inmates at risk for disciplinary infractions: A comparison of two measures of psychopathy.

 *Behavioral Sciences and the Law, 17, 435-443.
- Edwards, A. L. (1959). *Edwards Personal Preference Schedule manual*. New York: Psychological Corporation.
- Eysenck, H. J., & Eysenck, B. G. (1975). *Manual of the Eysenck Personality Questionnaire*. London, England: Hodder & Stoughton.
- Federal Bureau of Investigation. (2006). *The Uniform Crime Reports*. Retrieved June 13, 2007, from http://www.fbi.gov/ucr/05cius/documents/forciblerapemain.doc
- Fernandez, Y. M., & Marshall, W. L. (2003). Victim empathy, social self-esteem, and psychopathy in rapists. *Sexual Abuse: A Journal of Research and Treatment, 15*, 11-26.
- Firestone, P., Bradford, J. M., Greenberg, D. M., & Serran, G. A. (2000). The relationship of deviant sexual arousal and psychopathy in incest offenders, extrafamilial child molesters, and rapists. *Journal of the American Academy of Psychiatry and the Law*, 28, 303-308.
- Fisher, G., & Rivlin, E. (1971). Psychological needs of rapists. *British Journal of Criminology*, 11, 182-185.

- Foa, E. B., & Riggs, D. S. (1995). Posttraumatic stress disorder following assault:

 Theoretical considerations and empirical findings. *Current Directions in Psychological Science*, 4, 61-65.
- Fonow, M. M., Richardson, L., & Wemmerus, V. A. (1992). Feminist rape education:

 Does it work? *Gender and Society*, 6, 108-121.
- Forbes, G. B., & Adams-Curtis, L. E. (2001). Experiences with sexual coercion in college males and females: Role of family conflict, sexist attitudes, acceptance of rape myths, self-esteem, and the Big-Five personality factors. *Journal of Interpersonal Violence*, 16, 865-889.
- Forgac, G. E., & Michaels, E. J. (1982). Personality characteristics of two types of male exhibitionists. *Journal of Abnormal Psychology*, *91*, 287-293.
- Fowles, D. C., & Dindo, L. (2006). A dual-deficit model of psychopathy. In C.J. Patrick (Ed.). *Handbook of Psychopathy* (pp. 14-34). New York: Guilford Press.
- Frazier, P. A., (1990). Victim attributions and post-rape trauma. *Journal of Personality* and Social Psychology, 59, 298-304.
- Funder, D. C. (2001). Using personality traits to understand behavior. In D. C. Funder, *The Personality Puzzle*. (2nd ed., pp. 138-175.) New York: W.W. Norton and Company.
- Gendreau, P., Goggin, C., & Smith, P. (2002). Is the PCL-R really the "unparalleled" measure of offender risk: A lesson in knowledge cumulation. *Criminal Justice* and Behavior, 29, 397-426.
- Giacopassi, D. J., & Dull, R. T. (1986). Gender and racial differences in the acceptance of rape myths within a college population. *Sex Roles*, *15*, 63-75.

- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26-34.
- Golding, J. M. (1994). Sexual assault history and physical health in randomly selected Los Angeles women. *Health Psychology*, *13*, 130-138.
- Golding, J. M. (1996). Sexual assault history and women's reproductive and sexual health. *Psychology of Women Quarterly*, 20, 101-121.
- Goodman, L. A., Koss, M. P., & Russo, N. F. (1993). Violence against women: Physical and mental health effects. Part I: Research findings. *Applied and Preventive Psychology*, 2, 79-89.
- Gough, H. F., (1957). *California Personality Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Grauerholz, L. (2000). An ecological approach to understanding sexual revictimization:

 Linking personal, interpersonal, and sociocultural factors and processes. *Child Maltreatment*, 5, 5-17.
- Hall, J. R., & Benning, S. D. (2006). The "successful" psychopath: Adaptive and subclinical manifestations of psychopathy in the general population. In C. J. Patrick (Ed.). *Handbook of Psychopathy* (pp. 459-478). New York: Guilford Press.
- Hamilton, M., & Yee, J. (1990). Rape knowledge and propensity to rape. *Journal of Research in Personality*, 24, 111-122.
- Hanson, R. K., & Bussiere, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66, 348-362.

- Hare, R. D. (1991a). *The Hare Psychopathy Checklist—Revised*. Toronto, ON, Canada: Multi-Health Systems.
- Hare, R. D. (1991b). *The Self-Report Psychopathy Scale-II*. Unpublished test, University of British Columbia, Vancouver, Canada.
- Hare, R. D. (1993). Without conscience: The disturbing world of psychopaths among us.

 New York: Pocket Books.
- Hare, R. D. (1998). Psychopaths and their nature: Implications for the mental health and criminal justice systems. In T. Millon, E. Simonson, M.B. Smith, & R.D. Davis.
 (Eds.). Psychopathy: Antisocial, Criminal, and Violent Behavior. (pp.188-212).
 New York: Guilford Press.
- Hare, R. D. (2003). *The Hare Psychopathy Checklist—Revised* (2nd ed.). Toronto, ON, Canada: Multi-Health Systems.
- Hare, R. D., Clark, D., Grann, M., & Thornton, D. (2000). Psychopathy and the predictive validity of the PCL-R: An international perspective. *Behavioral Sciences and the Law*, 18, 623-645.
- Hare, R. D., Harpur, T. J., & Hemphill, J. F. (1989). Scoring pamphlet for the self-report psychopathy scale: SRP-II. Unpublished document, Simon Fraser University, Vancouver.
- Hare, R. D., & Jutai, J. (1983). Criminal history of the male psychopath: Some preliminary data. In K. T. Van Dusen & S. A. Mednick (Eds.). *Prospective Studies of Crime and Delinquency*. (pp. 225-236). Boston, MA: Kluwer-Nijhoff.

- Harrington, N. T., & Leitenberg, H. (1994). Relationship between alcohol consumption and victim behaviors immediately preceding sexual aggression by an acquaintance. *Violence and Victims*, *9*, 315-324.
- Hart, S. D., & Hare, R. D. (1997). Psychopathy: Assessment and association with criminal behavior. In D. Stoff, J. Breiling, & J. D. Masser (Eds.). *Handbook of Antisocial Behavior*. (pp. 22-35). New York: Wiley.
- Hathaway, S. R., & McKinley, J. C. (1967). *Minnesota Multiphasic Personality Inventory manual*. New York: Psychological Corporation.
- Hayashino, D. S., Wurtele, S. K., & Klebe, K. J. (1995). Child molesters: An examination of cognitive factors. *Journal of Interpersonal Violence*, *10*, 106-116.
- Heise, L. L. (1998). Violence against women: An integrated, ecological framework. Violence Against Women, 4, 262-290.
- Hersh, K., & Gray-Little, B. (1998). Psychopathic traits and attitudes associated with self reported sexual aggression in college men. *Journal of Interpersonal Violence*, *13*, 456-471.
- Hicklin, J., & Widiger, T. A. (2005). Similarities and differences among antisocial and psychopathy self-report inventories from the perspective of general personality functioning. *European Journal of Personality*, 19, 325-342.
- Hildebrand, M., de Ruiter, C., & de Vogel, V. (2004). Psychopathy and sexual deviance in treated rapists: Association with sexual and nonsexual recidivism. *Sexual Abuse: A Journal of Research and Treatment*, 16, 1-24.

- Hill, M. S., & Fischer, A. R. (2001). Does entitlement mediate the link between masculinity and rape-related variables? *Journal of Counseling Psychology*, 48, 39-50.
- Howes, R. J. (1998). Plethysmographic assessment of incarcerated nonsexual offenders:

 A comparison with rapists. *Sexual Abuse: A Journal o of Research and Treatment*, 10, 183-193.
- Huss, M. T., & Langhinrichsen-Rohling, J. (2000). Identification of the psychopathic batterer: The clinical, legal, and policy implications. *Aggression and Violent Behavior*, *5*, 403-422.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *Big Five Inventory: Versions 4a and*54. Berkley: University of California, Berkley, Institute of Personality and Social Research.
- Johnson, B. E., Kuck, D. L., & Schander, P. R. (1997). Rape myth acceptance and sociodemographic characteristics: A multidimensional approach. Sex Roles, 36, 693-707.
- Jolliffe, D., & Farrington, D. P. (2004). Empathy and offending: A systematic review and meta analysis. *Aggression and Violent Behavior*, *9*, 441-476.
- Kanin, E. J. (1985). Date rapists: Differential sexual socialization and relative deprivation. Archives of Sexual Behavior, 14, 218-232.
- Kilpatrick, D. G., Best, C. L., Veronen, L. J., Amick, A. E., Villeponteaux, L. A., & Ruff,G. A. (1985). Mental health correlates of criminal victimization: A randomcommunity sample. *Journal of Consulting and Clinical Psychology*, 53, 866-873.

- Kilpatrick, D. G., Saunders, B. E., Veronen, L. J., Best, C. L., & Von, J. M. (1987).
 Criminal victimization: Lifetime prevalence, reporting to police, and
 psychological impact. *Crime and Delinquency*, 33, 479-489.
- Knight, R. A., & Guay, J. P. (2006). The role of psychopathy in sexual coercion against women. In C.J. Patrick (Ed.). *Handbook of Psychopathy*. (pp. 512-532). New York: Guilford Press.
- Koss, M. P. (1988). Hidden rape: Sexual aggression and victimization in a national sample in higher education. In A. W. Burgess (Ed.). *Rape and Sexual Assault: Vol.* 2. (pp. 3-25). New York: Garland Press.
- Koss, M. P., & Dinero, T. E. (1988). Predictors of sexual aggression among a national sample of male college students. *Annals of New York Academy of Sciences*, *528*, 133-147.
- Koss, M. P., & Gidycz, C. A. (1985). Sexual experiences survey: Reliability and validity. *Journal of Consulting and Clinical Psychology*, 53, 422-423.
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 55, 162-170.
- Koss, M. P., Leonard, K. E., Beezley, D. A., & Oros, C. J. (1985). Nonstranger sexual aggression: A discriminant analysis of the psychological characteristics of undetected offenders. *Sex Roles*, *12*, 981-992.
- Kosson, D. S., Kelly, J. C., & White, J. W. (1997). Psychopathy-related traits predict self-reported sexual aggression among college men. *Journal of Interpersonal Violence*, 12, 241-254.

- Lalumiere, M. L., & Quinsey, V. L. (1994). The discriminability of rapists from non-sex offenders using phallometric measures: A meta-analysis. *Criminal Justice and Behavior*, 21, 150-175.
- Lalumiere, M. L., & Quinsey, V. L. (1996). Sexual deviance, antisociality, mating effort, and the use of sexually coercive behaviors. *Personality and Individual Differences*, 21, 33-48.
- Langevin, R., Bain, J., Ben-Aron, M. H., Coulthard, R., Day, D., Handy, L., et al. (1985).

 Sexual aggression: Constructing a predictive equation. In R. Langevin (Ed.),

 Erotic Preference, Gender Identity, and Aggression in Men: New Research and

 Studies. (pp. 39-62). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Langeving, R., Paitich, D., Freeman, R., Mann, K., & Handy, L. (1978). Personality characteristics and sexual anomalies in males. *Canadian Journal of Behavioral Sciences*, 10, 222-238.
- Lehne, G. K. (2002). The NEO Personality Inventory and the Millon Clinical Multiaxial Inventory in the forensic evaluation of sex offenders. In P. T. Costa & T. A. Widiger (Eds.). *Personality Disorders and the Five-Factor Model of Personality* (2nd ed., pp. 269-282). Washington, D.C.: American Psychological Association.
- Levenson, M. R., Kiehl, K. A., & Fitzpatrick, C. M. (1995). Assessing psychopathic attributes in a noninstitutionalized population. *Journal of Abnormal Psychology*, 95, 257-263.
- Levin, S. M., & Stava, L. (1987). Personality characteristics of sex offenders: A review.

 *Archives of Sexual Behavior, 16, 57-77.

- Lilienfeld, S. O. (1998). Methodological advances and developments in the assessment of psychopathy. *Behavior Research and Therapy*, *36*, 99-125.
- Lilienfeld, S. O., & Andrews, B. P. (1996). Development and preliminary validation of a self-report measure of psychopathic personality traits in noncriminal populations.

 *Journal of Personality Assessment, 66, 488-524.
- Lilienfeld, S. O., & Penna, S. (2001). Anxiety sensitivity: Relations to psychopathy,

 DSM.IV personality disorder features, and personality traits. *Journal of Anxiety*

 Disorders, 15, 367-393.
- Lilienfeld, S. O., & Widows, M. R. (2005). *Psychopathic Personality Inventory—Revised* (*PPI-R*). Lutz, FL: Psychological Assessment Resources, Professional Manual.
- Lindsey, R. E., Carlozzi, A. F., & Eells, G. T. (2001). Differences in the dispositional empathy of juvenile sex offenders, non-sex-offending delinquent juveniles, and nondelinquent juveniles. *Journal of Interpersonal Violence*, *16*, 510-522.
- Lisak, D., & Ivan, C. (1995). Deficits in intimacy and empathy in sexually aggressive men. *Journal of Interpersonal Violence*, *10*, 296-308.
- Lisak, D., & Roth, S. (1988). Motivational factors in nonincarcerated sexually aggressive men. *Journal of Personality and Social Psychology*, *55*, 795-802.
- Long, P. J. (2000). Assessing a history of childhood sexual abuse in adults: The Life Experiences Questionnaire. Manuscript in preparation, Oklahoma State University, Stillwater OK.
- Lonsway, K. A., & Fitzgerald, L. F. (1994). Rape myths: In review. *Psychology of Women Quarterly*, 18, 133-164.

- Lonsway, K. A., & Fitzgerald, L. F. (1995). Attitudinal antecedents of rape myth acceptance: A theoretical and empirical reexamination. *Journal of Personality and Social Psychology*, 68, 704-711.
- Lynam, D. R. (2002). Psychopathy from the perspective of the Five-Factor Model of personality. In P.T. Costa and T.A. Widiger (Eds.). *Personality Disorders and the Five-Factor Model of Personality*. (pp. 325-348). Washington, D.C.: American Psychological Association.
- Lynam, D. R., & Derefinko, K. J. (2006). Psychopathy and personality. In C.J. Patrick (Ed.). *Handbook of Psychopathy*. (pp. 133-155). New York: Guilford Press.
- Malamuth, N. M. (1986). Predictors of naturalistic sexual aggression. *Journal of Personality and Social Psychology*, *50*, 953-962.
- Malamuth, N.M. (1989a). The attraction to sexual aggression scale: Part one. *The Journal of Sex Research*, 26, 26-49.
- Malamuth, N. M. (1989b). The attraction to sexual aggression scale: Part two. *The Journal of Sex Research*, 26, 324-354.
- Malamuth, N. M., Linz, D., Heavey, C. L., Barnes, G., & Acker, M. (1995). Using the confluence model of sexual aggression to predict men's conflict with women: A 10-year follow-up study. *Journal of Personality and Social Psychology*, 69, 353-369.
- Malamuth, N. M., Sockloskie, R. J., Koss, M. P., & Tanaka, J. S. (1991). Characteristics of aggressors against women: Testing a model using a national sample of college students. *Journal of Consulting and Clinical Psychology*, *59*, 670-681.

- Marshall, W. L. (1999). Current status of North American assessment and treatment programs for sexual offenders. *Journal of Interpersonal Violence*, *14*, 221-239.
- Marshall, W. L., Hudson, S. M., Jones, R., & Fernandez, Y. M. (1995). Empathy in sex offenders. *Clinical Psychology Review*, *15*, 99-113.
- Marshall, W. L., & Moulden, H. (2001). Hostility toward women and victim empathy in rapists. *Sexual Abuse: A Journal of Research and Treatment*, 13, 249-255.
- Marx, B. P., Van Wie, V., & Gross, A. M. (1996). Date rape risk factors: A review and methodological critique of the literature. *Aggression and Violent Behavior*, 1, 27-46.
- McCrae, R. R. (1991). The five-factor model and its assessment in clinical settings. *Journal of Personality Assessment*, 57, 399-414.
- McCrae, R. R., Costa, P. T., & Busch, C. M. (1986). Evaluating comprehensiveness in personality systems: The California Q-Set and the five-factor model. *Journal of Personality*, *54*, 430-446.
- McCrae, R. R., Costa, P. T., & Piedmont, R. L. (1993). Folk concepts, natural language, and psychological constructs: The California Psychological Inventory and the five-factor model. *Journal of Personality*, 61, 1-26.
- McCrae, R. R., & John. O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175-215.
- Messman-Moore, T. L., & Long, P. J. (2003). The role of childhood sexual abuse sequelae in the sexual revictimization of women: An empirical review and theoretical reformulation. *Clinical Psychology Review*, 23, 537-571.

- Miller, B., & Marshall, J. C. (1987). Coercive sex on the university campus. *Journal of College Student Personnel*, 28, 38-47.
- Miller, J. D., & Lynam, D. R. (2003). Psychopathy and the Five-Factor Model of personality: A replication and extension. *Journal of Personality Assessment*, 81, 168-178.
- Miller, J. D., Lynam, D. R., Widiger, T. A., & Leukefeld, C. (2001). Personality disorders as extreme variants of common personality dimensions: Can the Five-Factor Model adequately represent psychopathy? *Journal of Personality*, 69, 253-276.
- Miller, P. A., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological Bulletin*, 103, 324-344.
- Miner, M. H., West, M. A., & Day, D. M. (1995). Sexual preference for child and aggressive stimuli: Comparison of rapists and child molesters using auditory and visual stimuli. *Behaviour Research and Therapy*, *33*, 545-551.
- Mohler-Kuo, M., Dowdall, G. W., Koss, M. P., & Wechsler, H. (2004). Correlates of rape while intoxicated in a national sample of college women. *Journal of Studies on Alcohol*, 65, 37-45.
- Mosher, D. L., & Anderson, R. D. (1986). Macho personality, sexual aggression, and reactions to guided imagery of realistic rape. *Journal of Research in Personality*, 20, 77-94.
- Mosher, D. L., & Sirkin, M. (1984). Measuring a macho personality constellation. *Journal of Research in Personality*, 18, 150-163.

- Muehlenhard, C. L., & Falcon, P. L. (1990). Men's heterosocial skill and attitudes toward women as predictors of verbal sexual coercion and forceful rape. *Sex Roles*, 23, 241-259.
- Muehlenhard, C. L., Friedman, D. E., & Thomas, C. M. (1985). Is date rape justifiable?

 The effects of dating activity, who initiated, who paid, and men's attitudes toward women. *Psychology of Women Quarterly*, *9*, 297-310.
- Muehlenhard, C. L., & Linton, M. A. (1987). Date rape and sexual aggression in dating situations: Incidence and risk factors. *Journal of Counseling Psychology*, *34*, 186-196.
- Muehlenhard, C. L., Powch, I. G., Phelps, J. I., & Giusti, L. M. (1992). Definitions of rape: Scientific and political implications. *Journal of Social Issues*, 48, 23-44.
- Murnen, S. K., Wright, C., & Kaluzny, G. (2002). If "boys will be boys," then girls will be victims? A meta-analytic review of the research that relates masculine ideology to sexual aggression. *Sex Roles*, 46, 359-375.
- Myers, J. K., & Bean, L. L. (1968). A decade later: A follow up of social class and mental illness. New York: Wiley.
- Neville, H. A., & Heppner, M. J. (1999). Contextualizing rape: Reviewing sequelae and proposing a culturally inclusive ecological model of sexual assault recovery.

 *Applied and Preventive Psychology, 8, 41-62.
- Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes:

 Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology*, 66, 574-583.

- O'Connor, B. P., & Dyce, J. A. (2002). Tests of general and specific models of personality disorder configuration. In P.T. Costa and T.A. Widiger (Eds.), Personality Disorders and the Five-Factor Model of Personality (2nd ed., pp. 3-14). Washington, D.C.: American Psychological Association.
- O'Donohue, W., McKay, J. S., Schewe, P. A. (1996). Rape: The roles of outcome expectancies and hypermasculinity. *Sexual Abuse: A Journal of Research and Treatment*, 8, 133-141.
- Patrick, C. J. (2006). Back to the future: Cleckley as a guide to the next generation of psychopathy research. In C. J. Patrick (Ed.). *Handbook of Psychopathy* (pp. 605-617). New York: Guilford Press.
- Patterson, G. R., DeBaryshe, B. D., Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist*, 44, 329-335.
- Petty, G. M., & Dawson, B. (1989). Sexual aggression in normal men: Incidence, beliefs, and personality characteristics. *Personality and Individual Differences*, 10, 355-362.
- Porter, S., Birt, A. R., & Boer, D. P. (2001). Investigation of the criminal and conditional release histories of Canadian federal offenders as a function of psychopathy and age. *Law and Human Behavior*, *25*, 647-661.
- Porter, S., Campbell, M. A., Woodworth, M., & Birt, A. R. (2002). A new psychological conceptualization of the sexual psychopath. In S.P. Shohov (Ed.). *Advances in Psychology Research*, *Vol. 15.* (pp. 51-65).

- Porter, S., Fairweather, D., Drugge, J., Herve, H., Birt, A., Boer, D. P. (2000). Profiles of psychopathy in incarcerated sexual offenders. *Criminal Justice and Behavior*, 27, 216-233.
- Porter, S., & Porter, S. (2007). Psychopathy and violent crime. In H. Herve & J. Yuille (Eds.). *The Psychopath: Theory, Research, and Practice*. (pp. 287-300). Mahwah, NJ: Erlbaum Associates.
- Poythress, N. G., Edens, J. F., & Lilienfeld, S. O. (1998). Criterion-related validity of the Psychopathic Personality Inventory in a prison sample. *Psychological Assessment*, 10, 426-430.
- Prentky, R. A., & Knight, R. A. (1991). Identifying critical dimensions for discriminating among rapists. *Journal of Consulting and Clinical Psychology*, 59, 643-661.
- Prentky, R. A., Lee, A. F. S., Knight, R. A., & Cerce, D. D. (1997). Recidivism rates among child molesters and rapists: A methodological analysis. *Law and Human Behavior*, *6*, 635-659.
- Quackenbush, R. L. (1991). Attitudes of college men toward women and rape. *Journal of College Student Development*, 32, 376-377.
- Quinsey, V. L., Arnold, L. S., & Pruesse, M. G. (1980). MMPI profiles on men referred for a pretrial psychiatric assessment as a function of offense type. *Journal of Clinical Psychology*, *36*, 410-417.
- Quinsey, V. L., Chaplin, T. G., & Upfold, D. (1984). Sexual arousal to nonsexual violence and sadomasochistic themes among rapists and non-sex-offenders. *Journal of Consulting and Clinical Psychology*, 52, 651-657.

- Quinsey, V. L., Rice, M. E., & Harris, G. T. (1995). Actuarial prediction of sexual recidivism. *Journal of Interpersonal Violence*, *10*, 85-105.
- Rader, C. M. (1977). MMPI profile types of exposers, rapists, and assaulters in a court services population. *Journal of Consulting and Clinical Psychology*, 45, 61-69.
- Rando, R. A., Rogers, J. A., & Brittan-Powell, C. S. (1998). Gender role conflict and college men's sexually aggressive attitudes and behavior. *Journal of Mental Health Counseling*, 20, 359-369.
- Rapaport, K., & Burkhart, B. R. (1984). Personality and attitudinal characteristics of sexually coercive college males. *Journal of Abnormal Psychology*, *93*, 216-221.
- Reilly, M. E., Lott, B., Caldwell, D., & DeLuca, L. (1992). Tolerance for sexual harassment related to self-reported sexual victimization. *Gender and Society*, 6, 122-138.
- Resick, P. A. (1993). The psychological impact of rape. *Journal of Interpersonal Violence*, 8, 223-255.
- Rice, M. E., & Harris, G. T. (1997). Cross-validation and extension of the Violence Risk Appraisal Guide for child molesters and rapists. *Law and Human Behavior*, *21*, 231-241.
- Romano, E., & De Luca, R. (1997). Exploring the relationship between childhood sexual abuse and adult sexual perpetration. *Journal of Family Violence*, *12*, 85-98.
- Ross, S. R., Lutz, C. J., & Bailley, S. E. (2004). Psychopathy and the Five-Factor Model in a noninstitutionalized sample: A domain and facet level analysis. *Journal of Psychopathology and Behavioral Assessment*, 26, 213-223.

- Scott, R. L. (1982). Analysis of the need systems of twenty male rapists. *Psychological Reports*, *51*, 1119-1125.
- Senn, C.Y., Desmarais, S., Verber, N., & Wood, E. (2000). Predicting coercive sexual behavior across the lifespan in a random sample of Canadian men. *Journal of Social and Personal Relationships*, 17, 95-113.
- Serin, R. C., Mailloux, D. L., Malcolm, P. B. (2001). Psychopathy, deviant sexual arousal, and recidivism among sexual offenders. *Journal of Interpersonal Violence*, *16*, 2234-246.
- Smeaton, G., & Byrne, D. (1987). The effects of R-rated violence and erotica, individual differences, and victim characteristics on acquaintance rape proclivity. *Journal of Research in Personality*, 21, 171-184.
- Spence, J. T., Losoff, M., & Robbins, A. S. (1991). Sexually aggressive tactics in dating relationships: Personality and attitudinal correlates. *Journal of Social and Clinical Psychology*, 10, 289-304.
- Stinson, J. D., Becker, J. V., & Tromp, S. (2005). A preliminary study on findings of psychopathy and affective disorders in adult sex offenders. *International Journal of Law and Psychiatry*, 28, 637-649.
- Sullivan, J. P., & Mosher, D. L. (1990). Acceptance of guided imagery of marital rape as a function of macho personality. *Violence and Victims*, *5*, 275-286.
- Testa, M., & Livingston, J. A. (1999). Qualitative analysis of women's experiences of sexual aggression. *Psychology of Women Quarterly*, 23, 573-589.

- Tjaden, P., & Thoennes, N. (1998). Prevalence, incidence, and consequences of violence against women: Findings from the national violence against women survey.

 Washington, DC: U.S. Department of Justice, Research in Brief (NJC 172837).
- Ullman, S. E. (2003). A critical review of field studies on the link of alcohol and adult sexual assault in women. *Aggression and Violent Behavior*, *8*, 471-486.
- Ullman, S. E., Karabatsos, G., Koss, M. P. (1999). Alcohol and sexual assault in a national sample of college women. *Journal of Interpersonal Violence*, *14*, 603-625.
- Voller, E. K. & Long, P. J. (2007). The role of the Big-Five personality traits in the sexual assault and rape perpetration by college men. Presented at the annual meeting of the Association for Behavior and Cognitive Therapies, Philadelphia, PA.
- Ward, T., Hudson, S. M., Johnston, L., & Marshall, W. L. (1997). Cognitive distortions in sex offenders: An integrative review. *Clinical Psychology Review*, 17, 479-507.
- White, J. W., & Smith, P. H. (2004). Sexual assault perpetration and reperpetration: From adolescence to young adulthood. *Criminal Justice and Behavior*, *31*, 182-202.
- Widiger, T. A., & Lynam, D. R. (1998). Psychopathy and the Five-Factor Model of personality. In T. Millon, E. Simonson, M.B. Smith, & R.D. Davis. (Eds.).
 Psychopathy: Antisocial, Criminal, and Violent Behavior. (pp.171-187). New York: Guilford Press.
- Wilson, G. D., & Cox, D. N. (1983). Personality of pedophile club members. *Personality* and *Individual Differences*, 4, 323-329.

- Woodworth, M., & Porter, S. (2002). In cold blood: Characteristics of criminal homicides as a function of psychopathy. *Journal of Abnormal Psychology*, 111, 436-445.
- Zawacki, T., Abbey, A., Buck, P.O., McAuslan, P., & Clinton-Sherrod, A. M. (2003).

 Perpetrators of alcohol-involved sexual assaults: How do they differ from other sexual assault perpetrators and noperpetrators. *Aggressive Behavior*, *29*, 366-380.
- Zuckerman, M. (1979). Sensation seeking: Beyond the optimal level of arousal. Hillsdale, NJ: Lawrence Erlbaum.

Table 1

Facets underlying each domain as measured by the NEO PI-R

Domain	Facet
Neuroticism	Anxiety Angry Hostility Depression Self-Consciousness Impulsiveness Vulnerability
Extraversion	Warmth Gregariousness Assertiveness Activity Excitement-Seeking Positive Emotions
Openness	Fantasy Aesthetics Feelings Actions Ideas Values
Agreeableness	Trust Straightforwardness Altruism Compliance Modesty Tender-Mindedness
Conscientiousness	Competence Order Dutifulness Achievement Striving Self-Discipline Deliberation

Table 2
Widiger and Lynam's (1998) Translation of the Hare Psychopathy Checklist-Revised (1991a) into the
FFM as measured by NEO Personality Inventory-Revised (Costa & McCrae, 1992a)

PCL-R Trait	NEO-PI-R Facets (Domain)
Glib and superficial charm	Low self-consciousness (N)
Grandiose sense of self-worth	Low modesty (A)
Need for stimulation or proneness to boredom	High excitement-seeking (E), low self-discipline (C)
Pathological lying	Low straight-forwardness (A)
Conning and manipulativeness	Low straightforwardness, low altruism, low tender-mindedness (A)
Lack of remorse or guilt	Low tender-mindedness (A)
Shallow affect	Low warmth, low positive emotions (E), low altruism, low tender-mindedness (A)
Callousness and lack of empathy	Low tender-mindedness (A)
Parasitic lifestyle	Low straightforwardness, low altruism, low modesty low tender-mindedness (A), low achievement-striving, low self-discipline (C)
Poor behavioral controls	High angry hostility (N), low compliance (A), low deliberation (C)
Promiscuous sexual behavior	Low straightforwardness, low altruism, low modesty, low compliance, low tender-mindedness (A), low self-discipline, low deliberation, low dutifulness (C)
Early behavior problems	Low straightforwardness, low altruism, low compliance, low tender-mindedness, low modesty (A), low self-discipline, low deliberation, low dutifulness (C)
Lack of realistic, long-term goals	Low achievement-striving, low self-discipline (C)
Impulsivity	High impulsiveness (N), low deliberation (C)
Irresponsibility	Low dutifulness, low competence (C)
Failure to accept responsibility for own actions	Low straightforwardness, low tender-mindedness (A), low dutifulness (C)

Many short-term marital relationships Low dutifulness (C)

Juvenile delinquency Low straightforwardness, low altruism, low modesty,

low compliance, low tender-mindedness (A), low self-

discipline, low deliberation, low dutifulness (C)

Revocation of conditional release Low straightforwardness, low altruism, low modesty,

> low compliance, low tender-mindedness (A), low competence, low self-discipline, low deliberation, low

dutifulness (C)

Criminal versatility Low straightforwardness, low altruism, low modesty,

low compliance, low tender-mindedness (A), low self-

discipline, low deliberation, low dutifulness (C)

Table 3

Group means and results of analyses of variance or covariance for rape status.

	Rape Perpetrators	Nonperpetrators	df	F	η^2	P		
PPI-R Total Score	M=318.63 SD=28.38	<i>M</i> =306.07 <i>SD</i> =30.45	1, 487	6.03	.01	.01		
PPI-R Content Scale Scores ^a								
Machiavellian Egocentricity	<i>M</i> =45.68 <i>SE</i> =1.44	<i>M</i> =44.72 <i>SE</i> =0.42	1, 483	0.41	.001	.53		
Social Influence	<i>M</i> =46.79 <i>SE</i> =1.40	<i>M</i> =47.63 <i>SE</i> =0.41	1, 483	0.33	.001	.56		
Fearlessness	<i>M</i> =37.35 <i>SE</i> =1.25	<i>M</i> =38.61 <i>SE</i> =0.36	1, 483	0.94	.002	.33		
Rebellious Nonconformity	<i>M</i> =37.36 <i>SE</i> =1.24	<i>M</i> =35.07 <i>SE</i> =0.36	1, 483	3.13	.006	.08		
Coldheartedness	<i>M</i> =38.49 <i>SE</i> =1.13	<i>M</i> =34.51 <i>SE</i> =0.33	1, 483	11.36	.02	.001		
Stress Immunity	<i>M</i> =33.77 <i>SE</i> =1.01	<i>M</i> =36.23 <i>SE</i> =0.29	1, 483	5.41	.01	.02		
Carefree Nonplanfulness	<i>M</i> =45.36 <i>SE</i> =1.39	<i>M</i> =37.86 <i>SE</i> =0.40	1, 483	26.92	.05	.0001		
Blame Externalization	<i>M</i> =33.23 <i>SE</i> =1.15	<i>M</i> =31.36 <i>SE</i> =0.33	1, 483	2.43	.005	.12		

^a Analyses of content scale scores included majority race status as a covariate.

Table 4

Group means and results of analyses of variance for sexual assault status.

	Sexual Assault Perpetrators	Nonperpetrators	df	F	η^2	P			
PPI-R Total Score	M=303.68 SD=29.70	M=306.28 SD=30.52	1, 447	0.21	.0001	.65			
PPI-R Content Scale Scores									
Machiavellian Egocentricity	<i>M</i> =46.03 <i>SD</i> =9.10	<i>M</i> =44.60 <i>SD</i> =8.81	1, 447	0.76	.002	.38			
Social Influence	<i>M</i> =46.65 <i>SD</i> =8.51	<i>M</i> =47.72 <i>SD</i> =8.59	1, 447	0.46	.001	.50			
Fearlessness	<i>M</i> =39.03 <i>SD</i> =7.02	<i>M</i> =38.64 <i>SD</i> =7.80	1, 447	0.07	.0001	.79			
Rebellious Nonconformity	<i>M</i> =33.71 <i>SD</i> =7.10	<i>M</i> =35.18 <i>SD</i> =7.56	1, 447	1.11	.002	.29			
Coldheartedness	<i>M</i> =33.52 <i>SD</i> =6.16	<i>M</i> =34.59 <i>SD</i> =6.94	1, 447	0.70	.002	.40			
Stress Immunity	<i>M</i> =35.84 <i>SD</i> =5.01	<i>M</i> =36.33 <i>SD</i> =6.33	1, 447	0.18	.0001	.67			
Carefree Nonplanfulness	<i>M</i> =37.39 <i>SD</i> =7.33	<i>M</i> =37.88 <i>SD</i> =8.38	1, 447	0.10	.0001	.75			
Blame Externalization	<i>M</i> =31.52 <i>SD</i> =7.51	<i>M</i> =31.32 <i>SD</i> =7.13	1, 447	0.02	.0001	.89			

Table 5

Summary of logistic regression analyses for personality variables predicting rape perpetration controlling for majority race status.

							95% CI	
Step	Variable Entered	В	SE	Wald	p	OR	Lower	Upper
1	Majority Race Status	-0.86	0.37	5.40	.02	0.42	0.20	0.87
2	Psychopathy	.01	0.006	5.32	.02	1.01	1.002	1.03
3	Depression	0.02	0.04	0.22	.64	1.02	0.94	1.11
	Vulnerability	0.10	0.05	3.77	.05	1.11	1.00	1.23
	Warmth	0.0001	0.05	0.0001	1.00	1.00	0.91	1.10
	Positive Emotions	-0.009	0.06	0.03	.87	0.99	0.89	1.10
	Openness to feelings	-0.12	0.05	4.90	.03	0.89	0.80	0.99
	Openness to ideas	0.03	0.04	0.56	.46	1.03	0.95	1.12
	Competence	-0.12	0.06	3.72	.05	0.89	0.79	1.00

Note. Wald = Wald Chi-square statistic; OR = Odds Ratio; CI = Confidence Interval. Rape perpetrators n = 38, nonperpetrators n = 454.

Table 6
Summary of logistic regression analyses for personality variables predicting sexual assault perpetration.

							95% CI	
Step	Variable Entered	В	SE	Wald	p	OR	Lower	Upper
1	Psychopathy	-0.003	0.006	0.21	.65	1.00	0.99	1.01
2	Depression	0.11	0.04	5.94	.02	1.11	1.02	1.22
	Vulnerability	-0.06	0.06	0.96	.33	0.94	0.84	1.06
	Warmth	-0.02	0.05	0.12	.73	0.98	0.89	1.09
	Positive Emotions	0.03	0.06	0.33	.57	1.03	0.93	1.15
	Openness to feelings	0.06	0.06	1.28	.26	1.07	0.96	1.18
	Openness to ideas	-0.07	0.04	3.65	.06	0.93	0.86	1.00
	Competence	-0.02	0.07	0.06	.81	0.98	0.87	1.12

Note. Wald = Wald Chi-square statistic; OR = Odds Ratio; CI = Confidence Interval. Sexual assault perpetrators n = 31, nonperpetrators n = 418.

APPENDIX A

Oklahoma State University Institutional Review Board

Date:

Monday, March 13, 2006

IRB Application No

AS0659

Proposal Title:

Personality and Life Experiences Survey for College Men

Reviewed and

Expedited

Processed as:

Status Recommended by Reviewer(s): Approved Protocol Expires: 3/12/2007

Principal Investigator(s

Emily K. Voller

Patricia J. Long

Jennifer L. Callahan

215 N. Murray

1950 Third St.

215 N. Muray

Stillwater, OK 74078

La Verne, CA 91750

Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

- Conduct this study exactly as it has been approved. Any modifications to the research protocol
 must be submitted with the appropriate signatures for IRB approval.
- Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
- Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
- Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 415 Whitehurst (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely.

Sue C. Jacobs Pair Institutional Review Board

APPENDIX B

Modified Sexual Experiences Survey—Perpetration Version (MSES-P)

The following questions concern types of sexual experiences. Please answer the following questions regarding experiences you have had **SINCE YOUR 17th BIRTHDAY.**

Throughout our lives we have a variety of experiences. Some are positive and some are negative. The following questions involve engaging in sexual activity with another person **when that other person did not want to**. You will be asked to describe experiences with:

- Sexual contact- kissing, fondling
- Oral-genital contact
- Vaginal or anal intercourse
- Penetration with objects

Please report any incidents whether or not they were reported to the police or discussed with family and friends. Report experiences even if you feel they were not very forceful and even if they involve friends, boyfriends/girlfriends, husbands/wives, or strangers.

For each of the following questions, choose one of the following responses*:

- Never
- Once
- Twice
- Three times
- Four times or more
- 1. Have you ever had sexual contact with someone (kissing or fondling, but not oral, vaginal or anal intercourse) when that person didn't want to by overwhelming him or her with arguments and pressure?
- 2. Have you ever had sexual contact with someone (kissing or fondling, but not oral, vaginal or anal intercourse) by using your position of authority (boss, teacher, camp counselor, supervisor) to make him or her?
- 3. Have you ever **attempted** sexual contact with someone (kissing or fondling, but not oral, vaginal or anal intercourse) when that person didn't want to because he or she

was incapable of giving consent or resisting due to alcohol or drugs, but contact **did not occur**?

- 4. Have you ever had sexual contact with someone (kissing or fondling, but not oral, vaginal or anal intercourse) when that person didn't want to because he or she was incapable of giving consent or resisting due to alcohol or drugs?
- 5. Have you ever **attempted** sexual contact with someone (kissing or fondling, but not oral, vaginal or anal intercourse) when that person didn't want to by threatening or using some degree of physical force (twisting their arm, holding them down, etc.) but contact **did not occur**?
- 6. Have you ever had sexual contact with someone (kissing or fondling, but not oral, vaginal or anal intercourse) when that person didn't want to by threatening or using some degree of physical force (twisting their arm, holding them down, etc.) to make him or her?
- 7. Have you ever had oral-genital contact with someone when that person didn't want to by overwhelming him or her with arguments and pressure?
- 8. Have you ever had oral-genital contact with someone when that person didn't want to by using your position of authority (boss, teacher, camp counselor, supervisor) to make him or her?
- 9. Have you ever **attempted** oral-genital contact with someone when that person didn't want to because he or she was incapable of giving consent or resisting due to alcohol or drugs, but contact **did not occur**?
- 10. Have you ever had oral-genital contact with someone when that person didn't want to because he or she was incapable of giving consent or resisting due to alcohol or drugs?
- 11. Have you ever **attempted** oral-genital contact with someone when that person didn't want to by threatening or using some degree of physical force (twisting their arm, holding them down, etc.) but contact **did not occur**?
- 12. Have you ever had oral-genital contact with someone when that person didn't want to by threatening or using some degree of physical force (twisting their arm, holding them down, etc.) to make him or her?
- 13. Have you ever had vaginal or anal intercourse with someone when that person didn't want to by overwhelming him or her with arguments and pressure?
- 14. Have you ever had vaginal or anal intercourse with someone when that person didn't want to by using your position of authority (boss, teacher, camp counselor, supervisor) to make him or her?
- 15. Have you ever **attempted** vaginal or anal intercourse with someone when that person didn't want to because he or she was incapable of giving consent or resisting due to alcohol or drugs, but contact **did not occur**?
- 16. Have you ever had vaginal or anal intercourse with someone when that person didn't want to because he or she was incapable of giving consent or resisting due to alcohol or drugs?

- 17. Have you ever **attempted** vaginal or anal intercourse with someone when that person didn't want to by threatening or using some degree of physical force (twisting their arm, holding them down, etc.) but contact **did not occur**?
- 18. Have you ever had vaginal or anal intercourse with someone when that person didn't want to by threatening or using some degree of physical force (twisting their arm, holding them down, etc.) to make him or her?
- 19. Have you ever penetrated someone's vagina or anus with an object other than a penis when that person didn't want you to by overwhelming him or her with arguments and pressure?
- 20. Have you ever penetrated someone's vagina or anus with an object other than a penis when that person didn't want you to by using your position of authority (boss, teacher, camp counselor, supervisor) to make him or her?
- 21. Have you ever **attempted** to penetrate someone's vagina or anus with an object other than a penis when that person didn't want you to because he or she was incapable of giving consent or resisting due to alcohol or drugs, but contact **did not occur**?
- 22. Have you ever penetrated someone's vagina or anus with an object other than a penis when that person didn't want you to because he or she was incapable of giving consent or resisting due to alcohol or drugs?
- 23. Have you ever **attempted** to penetrate someone's vagina or anus with an object other than a penis when that person didn't want you to by threatening or using some degree of physical force (twisting their arm, holding them down, etc.) but contact **did not occur**?
- 24. Have you ever penetrated someone's vagina or anus with an object other than a penis when that person didn't want you to by threatening or using some degree of physical force (twisting their arm, holding them down, etc.) to make them?

131

^{*}This survey was administered online in a web-based format with drop down menus from which participants selected the appropriate response for each item.

VITA

Emily Kay Voller

Candidate for the Degree of

Doctor of Philosophy

Dissertation: PERSONALITY VARIABLES IN THE RAPE AND SEXUAL

ASSAULT PERPETRATION BY COLLEGE MEN: PSYCHOPATHY

AND THE FIVE-FACTOR MODEL

Major Field: Clinical Psychology

Biographical:

Education: Graduated from Bismarck High School, Bismarck, North Dakota in May 2000; received Bachelor of Arts degree in Psychology from Saint Cloud State University, Saint Cloud, Minnesota in May 2004; received Master of Science degree with a major in Clinical Psychology from Oklahoma State University, Stillwater, Oklahoma in May 2007. Completed the requirements for the Doctor of Philosophy in Clinical Psychology at Oklahoma State University, Stillwater, Oklahoma in December, 2009.

Experience: Completed clinical practicum at the Psychological Services Center at Oklahoma State University, Department of Psychology, 2004 to present; completed clinical practicum at Oklahoma City Veterans Affairs Medical Center 2007 to present; completed clinical practicum at North Care Center in Oklahoma City, Oklahoma, 2006 to 2007; employed by Oklahoma State University, Department of Psychology, as a teaching assistant 2004-2005 and as a graduate instructor 2005 to present; completed research and teaching assistantships at Saint Cloud State University, Department of Psychology, 2001-2004.

Professional Memberships: American Psychological Association, Association for Behavioral and Cognitive Therapies, Psychology Graduate Students Association, Graduate and Professional Student Government Association

Name: Emily Voller Date of Degree: December, 2009

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: PERSONALITY VARIABLES IN RAPE AND SEXUAL ASSAULT

PERPETRATION BY COLLEGE MEN: PSYCHOPATHY AND THE

FIVE-FACTOR MODEL

Pages in Study: 131 Candidate for the Degree of Doctor of Philosophy

Major Field: Clinical Psychology

Scope and Method of Study: The purpose of this study was to investigate what role psychopathy plays in rape and sexual assault perpetration by college men, and whether the Five-Factor model (FFM) of personality can explain differences between perpetrators and nonperpetrators beyond psychopathy. The aim was to examine the complex interrelationships among pathological and normal personality traits, in a typical college population, and determine if they provide additional insight into the nature of sexual aggression. Participants were 521 men recruited from a research participant pool at Oklahoma State University. Participants completed the Life Experiences Questionnaire, the NEO-Personality Inventory Revised, the Psychopathic Personality Inventory-Revised, and an expanded version of the Sexual Experiences Survey. Men were classified as having perpetrated rape or not, as well as having perpetrated sexual assault (but not rape) or not. Analyses of variance were used to test the hypothesis that perpetrators would report different psychopathy profiles than nonperpetrators. Hierarchical logistic regression was used to test whether additional personality traits beyond psychopathy would be important in predicting perpetration

Findings and Conclusions: Consistent with hypotheses, perpetrators of rape reported greater levels of global psychopathy when compared to nonperpetrators (p = .03). However, no differences were found between sexual assault perpetrators and nonperpetrators. Rape perpetrators reported higher levels of Carefree Nonplanfulness and Coldheartedness (both p<.001) and lower levels of Stress Immunity (p=.01) when compared to nonperpetrators; no differences were found for sexual assault perpetrators. The FFM facets of depression, vulnerability, warmth, positive emotions, openness to feelings, openness to ideas, and competence accounted for an additional 18% of the variance in rape perpetration above psychopathy. Vulnerability, openness to feelings, and competence significantly predicted rape perpetration (all p < .05). However, the FFM facets collectively did not significantly predict sexual assault perpetration. Results suggest that psychopathy may play a role in rape perpetration on college campuses, but that variation in normal personality traits may be more useful in distinguishing rape perpetrators from nonperpetrators. Interestingly, results showed that the personalities of those who perpetrate sexual assault, but not rape, may not be entirely different from those who do not commit sexual offenses.

Advisor's Approval: <u>Maureen Sullivan, Ph.D.</u>