THE ROLE OF THE BIG FIVE PERSONALITY TRAITS IN THE SEXUAL ASSAULT PERPETRATION BY COLLEGE MALES

By

EMILY KAY VOLLER

Bachelor of Arts in Psychology

Saint Cloud State University

Saint Cloud, Minnesota

2004

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE May, 2007

THE ROLE OF THE BIG FIVE PERSONALITY

TRAITS IN THE SEXUAL ASSAULT

PERPETRATION BY

COLLEGE MALES

Thesis Approved:

Patricia J. Long, Ph.D.

Thesis Adviser

Maureen A. Sullivan, Ph.D.

Jennifer L. Callahan, Ph.D.

A. Gordon Emslie, Ph.D. Dean of the Graduate College

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	

II. REVIEW OF LITERATURE

The Problem	7
Ecological Model	11
Microsystem Factors	
Individual Factors	
Broad Measures of Personality	
Five Factor Model of Personality	
Revised NEO Personality Inventory	
Statement of Purpose and Hypotheses	

III. METHODLOGY

Participants Measures	45
Procedure	
IV. FINDINGS	51
V. CONCLUSION	59
REFERENCES	70
TABLES	
APPENDIX	96

LIST OF TABLES

Table	Page
I.	Group means and results of analyses of Variance or Covariance for Sexual Assault Status
II.	Group means and results of analyses of Variance or Covariance for Rape Status

LIST OF FIGURES

Figure		Page
I.	The Ecological Model	12

CHAPTER I

INTRODUCTION

Sexual violence is a distressing problem in our society. The FBI (2003) estimated that 93,433 forcible rapes occurred nationwide in 2003. 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.

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 (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 make an individual more likely to perpetrate. 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). They also demonstrate more psychopathic traits such as impulsivity (Lisak & Roth, 1988), aggressiveness (Petty & Dawson, 1989), and manipulativeness (Hersh & Gray-Little, 1989). Moreover, sexual assault perpetrators lack social conscience, and are more immature and irresponsible when compared to nonperpetrators (Rapaport & Burkhart, 1984). Finally, 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. Much of the research examining overall personality has utilized the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1967). Results have been inconsistent, but generally show that sexual offenders tend to be more depressed, irritable, angry, hostile, and have limited ability to communicate and empathize (Rader, 1977). Other studies have used the Edwards Personal Preference Schedule (EPPS; Edwards, 1959), the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975), or the Sixteen Personality Questionnaire (16PF; Cattell, Eber, & Tatsuoka, 1970). Findings have demonstrated differences among types of sex offenders on characteristics such as introversion, abasement, aggression, deference, and nurturance (Levin & Stava, 1987).

Based on the difficulty interpreting the results of the aforementioned studies, it would be worthwhile to understand how 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 encompasses such a view is the five-factor model (FFM). This widely accepted model includes the Big Five personality traits of Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A), and Conscientiousness (C). Researchers agree that the FFM is a robust, adequate, and comprehensive taxonomy of personality (e.g., Digman, 1990). It is no surprise then that researchers often assess personality in terms of the FFM.

The Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992) is a well-developed, widely used measure that assesses 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. The domain of N 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. E 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, O, 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. A 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 C 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).

Although the FFM is the most widely accepted approach to understanding and describing personality, few researchers have utilized it in the study of sexual assault perpetration. Based on the utility and comprehensiveness of the NEO-PI-R, it would make sense that it be used to investigate whether variation in personality traits provides additional insight into those men who are more prone to perpetrate sexual assault. To date, only a few studies have examined the role of the Big Five in sexual offending. In one study conducted by Dennison and colleagues (2001), the NEO-PI-R was given to a sample of men incarcerated for committing sexual offenses against children. They found that perpetrator groups could accurately be distinguished from nonperpetrators groups; specifically, sex offenders scored higher on N and lower on E and C when compared to non-offender groups. Lehne (2002) used the FFM to examine sex offenders undergoing forensic evaluation; results indicated that sex offenders were higher on all facets of N and one facet of E, pointing to the idea that there are common personality factors associated with sexual offending. Finally, Forbes and Adams-Curtis (2001) explored the role of the Big Five factors in the experience of sexual aggression in college men. They found no relationships between any of the personality traits and sexual aggression. However, in addition to a small sample size, the authors used a narrow definition of sexual aggression and employed a less adequate measure of the five factors. Thus, it should not be concluded that the FFM plays no role in the experience of sexual aggression.

The results of these studies demonstrate that research on the personality characteristics of sexual perpetrators is likely to show significant differences. Furthermore, given the importance of the topic and the current state of the literature, further investigation into the role of personality variables in explaining sexual aggression seems warranted. It was the purpose of this study to explore whether variation in personality traits in a normal, college population provides additional insight into the nature of sexual assault perpetrators. Based on the comprehensiveness of the FFM, it was believed that it was well-suited for this purpose. 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 93,433 forcible rapes occurred nationwide in 2003 (FBI, 2003). 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 underestimate the problem. Other studies point to the enormity of sexual assault by broadening the definition and accounting for assaults that go unreported. 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 a more recent national survey, 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 3.6-30% 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 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).

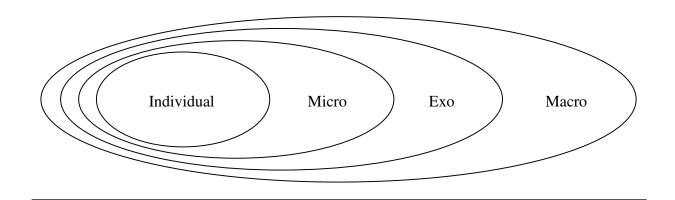


Figure 1.The Ecological Model Adapted from Heise (1998).

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. While research has been done on attitudes and beliefs (e.g., Burt, 1980; Lonsway & Fitzgerald, 1995), less is known about what aspects of a person's personality makes him more likely to perpetrate. And while several researchers have looked at specific characteristics such as impulsivity and aggressiveness (e.g., Hersh & Gray-Little, 1998), less has been done to understand the overall personality constellation of perpetrators. The purpose of this study is to examine how the Big Five broad dimensions of personality traits explain differences in those men who are most prone to perpetrate sexual assault. Before discussing specifics of this model, factors that have been previously related to perpetration will be reviewed with special focus on aspects of personality characteristics of perpetrators.

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 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 affects 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. More recently, 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. 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 selfreported 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 macho personality and marital rape, Sullivan and Mosher (1990) found that macho men selfreported 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 metaanalysis 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.

Psychopathy. It is evident that men with hostile attitudes and beliefs about women are more likely to feel entitled to callous sex, hold a stronger desire to dominate and control women, and thus are more likely to perpetrate sexual assault. A growing body of literature has revealed that psychopathy also plays an important role in sexual aggression (for review, see DeGue & DiLillo, 2005). Because psychopathic individuals are more impulsive, manipulative, irresponsible, antisocial, and lack empathy (Hare, 1993), it makes sense that these characteristics are related to sexual aggression. Indeed, studies 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. Further, Rapaport and Burkhart

(1984) found that 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.

More recently, Hersh and Gray-Little (1998) sought to identify psychopathic personality traits associated with sexual aggression in college men. Results showed those who engaged in unwanted sexual intercourse were more manipulative and sensationseeking; men who engaged in any coercive or aggressive behavior (e.g., kissing or touching a female partner when she did not want to) were more manipulative and impulsive, and less empathetic than those in consensual relationships. In a larger sample of 378 college men, Kosson and Kelly (1997) used the Psychopathy Checklist—Revised (PCL-R; Hare, 1991) to examine the relationship between psychopathy and sexual misconduct. Those men with higher scores on the PCL-R reported committing more acts of sexual aggression; specifically, sexual aggression was most strongly related to Factor 1 of the PCL-R, which assesses callousness, manipulativeness, egocentricity, and lack of remorse (Kosson & Kelly, 1997). This finding is consistent with Porter and colleagues (2000) who found elevated Factor 1 scores in a large sample of incarcerated sex offenders. Furthermore, psychopathy also appears to be a risk factor for sexual recidivism (e.g., Hanson & Bussiere, 1998; Hildebrand, de Ruiter, & de Vogel, 2004). Thus, there is evidence that in incarcerated and college populations alike, psychopathic personality traits are associated with sexual aggression.

Empathy. It was mentioned previously that lack of empathy is a central component of the psychopathic personality, and 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) gound 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 and beliefs, psychopathy, and 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). Sometimes called the Big Five, 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 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 five-factor model 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.

Revised NEO Personality Inventory

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. By looking at an individual's standing on each of the broad domains, we can create a comprehensive picture that summarizes his or her emotional, interpersonal, experiential, attitudinal, and motivational styles; 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.

One factor likely relevant to sexual perpetration is N, which measures the tendency to experience negative affect. More importantly, individuals who score high in N are prone to have irrational ideas and to be less able to control their impulses. The six facets that underlie N include anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability. One facet that might be related to sexual assault perpetration is angry hostility, which represents the tendency to experience anger and associated states such as frustration and bitterness. (Costa & McCrae, 1992). As previously reviewed, past research has shown that sexual assault perpetrators demonstrate greater hostility toward women than do nonperpetrators (Koss & Dinero, 1988; Lonsway & Fitzgerald, 1994). Furthermore, Rando, Rogers, and Brittan-Powell (1998) demonstrated that men who adhered to more gender stereotyped beliefs also had higher levels of hostility toward women and sexual aggression. It makes sense that a man who feels entitled to sex might develop angry hostility toward a woman who declines his advances, resulting in sexual aggression. Thus, elevation on this facet of the N domain might be seen. Another facet of the N domain that might be related to perpetration includes impulsivity, or the inability to control cravings and urges. Studies have demonstrated that sexual assault perpetrators appear to be more impulsive (Lisak & Roth, 1988; Petty & Dawson, 1989; Spence, Losoff, & Robbins, 1991). Therefore, an elevated score on this facet might also be expected of perpetrators.

Another factor that might be related to sexual perpetration is E, which in addition to sociability, also measures facets of warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions (e.g., happiness, joy, and love). Research has demonstrated that sexual assault frequently occurs at parties and/or when alcohol is

consumed (Abbey, McAuslan, & Ross, 1998; Muehlenhard & Linton, 1987). It seems likely that people who score high on E are also individuals who are more likely to participate in these types of social activities, thus increasing their exposure to those situations associated with sexual aggression. Furthermore, it is possible that the facet of assertiveness is related to perpetration. People who score high on this facet tend to be dominant and forceful (Costa & McCrae, 1992). The literature reviewed previously demonstrated that the need for power and dominance were important constructs related to sexual aggression. Muchlenhard and Falcon (1990) showed that college men who accepted male sexual dominance were more likely to have engaged in sexual coercion and forceful rape. Anderson, Cooper, and Okamura (1997) showed that dominance strongly predicted acceptance of rape. Thus, it seems reasonable to expect that perpetrators would score higher on this facet of E. Another facet of E that might be implicated in sexual aggression is that of excitement-seeking; high scorers on this scale crave excitement and stimulation (Costa & McCrae, 1992). It has been shown that men who are more sexually active and have many consensual sexual partners are more likely to commit sexual assault (for review, see Abbey et al., 2004). It might be that these men crave the excitement and stimulation of sexual pursuits and conquests. Moreover, results of Hersh and Gray-Little (1998) showed that men who engaged in unwanted sexual intercourse were more sensation-seeking. Again, it seems reasonable to expect elevated scores on the excitement-seeking facet of the E domain.

Finally, the other factor that could possibly be associated with perpetration is A, which is a dimension of interpersonal tendencies; it measures the degree to which a person is altruistic and sympathetic to others. Facets measured in this domain include

trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. One facet that could be implicated in sexual assault is straightforwardness; individuals who score low on this scale are more willing to manipulate others through a variety of tactics, and to view these tactics as necessary social skills (Costa & McCrae, 1992). Studies have demonstrated that sexual assault perpetrators appear to be more manipulative than nonperpetrators (Christopher, Owens, & Stecker, 1993; Hersh & Gray-Little, 1998; Kosson & Kelly, 1997). Compliance is a facet that might also be associated with sexual aggression. Low scorers on compliance tend to be aggressive and are not disinclined to express anger (Costa & McCrae, 1992). It makes sense that individuals who are sexually aggressive might show lower scores on this facet, as well. Lastly, tender-mindedness is another facet under A that could be associated with sexual aggression; this facet assesses sympathy and concern for others (Costa & McCrae, 1992). Although results have been equivocal, some researchers maintain that a lack of empathy is an important component in sexual perpetration (Lindsey, Carlozzi, & Eells, 2001; Lisak & Ivan, 1995). If this is truly the case, a low score on tender-mindedness might be evidenced.

It is uncertain how the other two factors of O and C might be implicated in sexual aggression. O facets assess areas or aspects of experience to which an individual is open; these scales include openness to fantasy, aesthetics, feelings, actions, ideas, and values. One of these facets that could possibly be related is that of values. Individuals who score low on this facet tend to honor tradition and are generally more conservative. Since men's beliefs and attitudes surrounding traditional gender roles have been associated with sexual aggression (Betz & Fitzgerald, 1993), it is possible that these individuals might score lower on openness to values. Facets under the C domain include competence, order,

dutifulness, achievement, self-discipline, and deliberation. Dutifulness examines an individual's adherence to ethical principles and moral obligations (Costa & McCrae, 1992). Since perpetrators have been shown to be irresponsible and lacking in social conscience (Rapaport & Burkhart, 1984), it is possible that they will show slightly elevated scores on to this particular facet of C.

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 maladaptive 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 FFM model to examine personality traits of adults incarcerated for committing sexual offenses against children. They employed the NEO-PI-R in a sample of 64 men who had been convicted and incarcerated for 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 N, and lower on E and C when compared to non-offender groups and population norms. Moreover, the non-offender 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 five-factor model 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 tend to be sexually compulsive with multiple offenses, and who were charged or convicted of at least one sex offense. Thus, while the results are promising, use of a normal, college population might reveal other important relationships between the five factors and perpetration.

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 used just 24 adjectives to produce a brief measure of the Big-Five personality factors. Participants rated themselves on these traits using a 7-point scale ranging from never or almost never true (1) to always or almost always true (7). 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 and the Big-Five personality traits. Thus, it should not be assumed that the five-factor model plays no role in the experience of sexual aggression and coercion.

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 seemed warranted. As mentioned previously, few studies have investigated the overall personality constellation of perpetrators, especially in normal, college populations. Even fewer studies have utilized the most widely accepted approach to understanding and describing normal personality, the Five-Factor Model. The NEO-PI-R allows for a comprehensive evaluation of adult personality using the five factors, and has demonstrated its utility in research settings. The scales were developed and improved through decades of factor analytic methods, and it has been the subject of intensive research on clinical and normal adult samples (Costa & McCrae, 1992). It was the purpose of the present study to examine whether variation in personality traits, in a normal, college population provides additional insight into the nature of sexual assault perpetrators. Because of its scope, utility, and empirical support, it was believed the NEO-PI-R was well-suited for this purpose.

The hypotheses for the proposed study were based on the premise that sexual assault perpetrators would differ from nonperpetrators on the Big Five broad dimensions of personality as measured by the NEO-PI-R. 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 is a more inclusive term and incorporates those men who have perpetrated rape, as well as men who have completed intercourse, oral-genital contact, and/or object penetration by use of continual arguments or pressure or misuse of authority; sexual assault also includes men who have perpetrated completed fondling through the use of force, threat of force, or drugs or alcohol.

It was hypothesized that perpetrators would evidence greater levels of Neuroticism when compared to nonperpetrators. More specifically, because perpetrators demonstrate greater hostility toward women (Koss & Dinero, 1988; Lonsway & Fitzgerald, 1994: Rando, Rogers, & Brittan-Powell, 1998), it was expected that they would show higher levels of angry hostility in the Neuroticism domain. In addition, because studies have showed that perpetrators appear to be more impulsive (Lisak & Roth, 1988; Petty & Dawson, 1989; Spence, Losoff, & Robbins, 1991), it was also expected that perpetrators would show higher levels of impulsivity than nonperpetrators. Extraversion was also predicted to distinguish perpetrators from nonperpetrators, with perpetrators endorsing higher levels than nonperpetrators. Specifically, because research has shown that a need for dominance and power are central constructs related to sexual assault (Muehlenhard & Falcon, 1990; Anderson, Cooper, & Okamura, 1997), it was anticipated that perpetrators would reveal higher levels of assertiveness in the Extraversion domain. Additionally, since men who are more sexually active are more likely to commit sexual assault (for review see Abbey, et al., 2004), it was anticipated that they would reveal higher scores on excitement-seeking as well. Finally, it was hypothesized that Agreeableness would be associated with sexual perpetration;

specifically, it was expected that perpetrators would endorse lower levels than nonperpetrators. In particular, given that perpetrators appear to be more manipulative than nonperpetrators (Christopher, Owens, & Stecker, 1993; Hersh & Gray-Little, 1998; Kosson & Kelly, 1997), it was hypothesized that perpetrators would demonstrate lower levels of straightforwardness in the Agreeableness domain. Furthermore, because individuals who score low on the compliance facet tend to be aggressive, it was expected that sexually aggressive individuals would be lower on this facet than non-sexually aggressive individuals. Lastly, seeing as some research maintains that a lack of empathy is an important component in sexual aggression (Lindsey, Carlozzi, & Eells, 2001; Lisak & Ivan, 1995), it was predicted that perpetrators would be distinguished from nonperpetrators on the tender-mindedness facet of Agreeableness. While no specific hypotheses with regards to Openness and Conscientiousness were made, exploratory analyses were conducted to see what, if any, role these domains play in distinguishing perpetrators from nonperpetrators.

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, 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 theoretically 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).

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). These 6 questions were maintained. 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. Phrasing of questions regarding alcohol and drug use was modified and modeled after those used by Muehlenhard, Powch, Phelps, and Giusti (1992).

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 0.97.

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, MSES-P, and another instrument not included in this study. 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

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 if the victim was unable to give consent due to the use of drugs or alcohol. Nonperpetrators of rape were those individuals who had not reported engaging in any of the above acts. Thirty-eight men (7.30%) reported perpetrating rape, whereas 457 did not. Sexual assault incorporated those men who had perpetrated rape, as well as men who had completed intercourse, oral-genital contact, and/or object penetration by use of continual arguments or pressure or misuse of authority; sexual assault also included men who had perpetrated completed fondling through the use of force, threat of force, or drugs or alcohol. Nonperpetrators of sexual assault were those who had not reported any of the above acts. Seventy-one men (13.60%) reported perpetrating sexual assault, whereas 424 did not. 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. Differences were found between sexual assault perpetrators and nonperpetrators for age. Sexual assault perpetrators (M=20.94, SD=3.65) were older than

nonperpetrators (M=20.13, SD=2.69), t(492) = 2.23, p=.03. 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 nonmajority race included African Americans, Latinos, Hispanics, Latin Americans, Native Americans, Asian/Asian Americans, or those who placed themselves in the "other" category. Rape perpetrators were somewhat more likely than expected to be of a nonmajority race as compared to nonperpetrators, $\chi^2(1, N$ =492) = 5.68, p = 0.02. No other group comparisons met conventional levels of significance (all p > .05).

Given that differences were found between perpetrator groups and nonperpetrators on age and race, the relationships between these demographic factors and scores on the NEO-PI-R were examined. Results showed that age was significantly correlated with the Openness (O) domain, r(509)=.11, p=.01, but was not significantly correlated with any other domain. In addition, members of the majority race group reported higher scores than the non-majority race groups on the Extraversion (E) (M=114.04, SD=19.22; M=109.15, SD=19.43; respectively), t(505) = 2.18, p=.03, and O domains (M=112.40, SD=20.66; M=107.36, SD=18.11; respectively), t(505) = 2.13, p=.03. No significant group differences were found on the other domains.

Given the significant relationships between age and sexual assault, and between age and the O domain scores, analyses examining sexual assault and the O domain included age as a covariate. Similarly, given the significant relationships between race and rape, and between race and the E and O domain scores, analyses examining rape and either E or O domains included majority race as a covariate.

Big-Five Domain Scores for Sexual Assault Perpetrators and Nonperpetrators

To test the hypothesis that sexual assault perpetrators would report different personality profiles than nonperpetrators, a multivariate analysis of covariance (MANCOVA) was conducted with sexual assault status serving as the independent variable, and the five domains of the NEO-PI-R [Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A), and Conscientiousness (C)] serving as dependent variables; participant's age served as a covariate. A significant effect was found for sexual assault status, Pillai's Trace F(5, 484) = 3.00, p=.01. This significant MANCOVA was followed by univariate analyses of covariance (ANCOVAs). Significant results for sexual assault status were produced for the domains of N (p=.02), O (p=.05), and C (p=.002), and a trend was found for E (p=.10). More specifically, consistent with hypotheses, sexual assault perpetrators had greater scores on N as compared to nonperpetrators. Sexual assault perpetrators also had lower scores on O and C when compared with nonperpetrators. In addition, there was a trend for sexual assault perpetrators to have lower levels of E as compared to nonperpetrators, which was inconsistent with hypotheses (See Table 1 for group means and results of univariate tests).

Facet Level Scores for Sexual Assault Perpetrators and Nonperpetrators

To test the hypothesis that sexual assault perpetrators and nonperpetrators would differ on the facets of each NEO-PI-R domain, a series of MANOVAs was conducted. Sexual assault status served as the independent variable in each MANOVA. The six facets of each domain were included as the dependent variables in each MANOVA. Given the previously described relationships with O, a MANCOVA was conducted

including age as the covariate. In each case, group means as well as results of univariate tests are reported in Table 1.

The first MANOVA examined the six facets of domain N: anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability. Results revealed a significant main effect for sexual assault status, Pillai's Trace F(6, 485) = 3.68, p = .001. Individual analyses of variance (ANOVAs) produced significant results for the facets of depression, p = .004, and vulnerability, p = .0001, and a trend toward significance on anxiety, p = .07. Results indicated that sexual assault perpetrators had higher scores on all three of these facets when compared with nonperpetrators. Contrary to expectations, sexual assault perpetrators did not score significantly higher on the angry hostility or impulsivity facets of N.

The second MANOVA examined the six facets of E: warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions. Results revealed a significant main effect for sexual assault status, Pillai's Trace F(6, 485) = 2.36, p=.03. Individual ANOVAs yielded significant results for the facets of warmth, p=.01, and excitement-seeking, p=.03, and a trend toward significance for positive emotions, p=.06. Inconsistent with hypotheses, sexual assault perpetrators had lower scores on the excitement-seeking facet when compared to nonperpetrators; sexual assault perpetrators also scored lower than nonperpetrators on the other two facets. Results did not support the expected difference on assertiveness.

Although no specific hypotheses were made, a MANCOVA was conducted to explore the six facets of O: fantasy, aesthetics, feelings, actions, ideas, and values, with

age serving as a covariate. There was no main effect for sexual assault status, Pillai's Trace F(6, 483) = 1.73, p=.11.

The fourth MANOVA examined the six facets of A: trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. Results revealed a significant main effect for sexual assault status, Pillai's Trace F(6, 485) = 2.38, p=.03. Individual ANOVAs yielded significant results for the facets of straightforwardness, p=.02, and altruism, p=.02. Consistent with hypotheses, sexual assault perpetrators had lower scores on the straightforwardness facet when compared to nonperpetrators; sexual assault perpetrators also scored significantly lower than nonperpetrators on altruism. Contrary to expectation, sexual assault perpetrators did not indicate significantly lower levels of compliance or tender-mindedness compared to nonperpetrators.

Finally, although no specific hypotheses were made, the fifth MANOVA examined the six facets of C: competence, order, dutifulness, achievement striving, selfdiscipline, and deliberation. A significant main effect for sexual assault status was found, Pillai's Trace F(6, 485) = 4.83, p=.0001. Individual ANOVAs yielded significant results for the facets of competence, p=.0001, and dutifulness, p=.0001. Sexual assault perpetrators had significantly lower scores on both facets when compared to nonperpetrators.

Big-Five Domain Scores for Rape Perpetrators and Nonperpetrators

To examine the issue of rape perpetration, the analyses were duplicated using rape perpetrator status as the independent variable rather than sexual assault status. It was anticipated that differences between rape perpetrators and nonperpetrators would be larger here than when comparing sexual assault perpetrators and nonperpetrators.

A multivariate analysis of covariance (MANCOVA) was conducted with rape status serving as the independent variable, and the five domains of the NEO-PI-R (N, E, O, A, and C) serving as dependent variables; participant's majority race status served as a covariate. A significant effect was found for rape status, Pillai's Trace F(5, 482) = 4.65, p=.0001. This significant MANCOVA was followed by univariate analyses of covariance (ANCOVAs). Significant results for rape status were produced for all domains: N (p=.04), E (p=.004), O (p=.05), A (p=.002) and C (p=.0001). More specifically, consistent with hypotheses, rape perpetrators had greater scores on N and lower scores on A when compared to nonperpetrators. Contrary to expectation, rape perpetrators scored lower than nonperpetrators on E. Rape perpetrators also had lower scores on O and C when compared with nonperpetrators. (See Table 2 for group means and results of univariate tests).

Facet Level Scores for Rape Perpetrators and Nonperpetrators

Analyses were also duplicated to examine whether rape perpetrators and nonperpetrators would differ on the facets of each NEO-PI-R domain. Rape perpetrator status was used as the independent variable and the six facets of each domain were included as the dependent variables in each MANOVA. For E and O, a MANCOVA was conducted including majority race status as the covariate. In each case, group means as well as results of univariate tests are reported in Table 2.

The first MANOVA examined the six facets of domain N: anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability. Results revealed a significant main effect for rape status, Pillai's Trace F(6, 485) = 6.30, p =.0001. Individual analyses of variance (ANOVAs) produced significant results for the facets of vulnerability, p = .0001, a trend toward significance depression, p = .10. Results indicated that rape perpetrators had higher scores on both of these facets when compared with nonperpetrators. Consistent with hypotheses, a trend toward significance was also found for angry hostility, p = .07, with rape perpetrators having higher scores than nonperpetrators. However, contrary to expectation, rape perpetrators did not score significantly higher than nonperpetrators on the facet of impulsivity.

A MANCOVA examined the six facets of E: warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions, with majority race status included as a covariate. A significant main effect was found for rape status, Pillai's Trace F(6, 481) = 5.63, p=.0001. Individual ANOVAs yielded significant results for the facets of warmth, p=.0001, excitement-seeking, p=.0001, and positive emotions, p=.004. Rape perpetrators had significantly lower scores on all three of these facets, which was inconsistent with the hypothesis that rape perpetrators would score higher on the excitement-seeking facet. Also inconsistent with hypotheses was the finding that rape perpetrators did not indicate higher levels of the assertiveness facet when compared to nonperpetrators.

While no specific hypotheses were made, a second MANCOVA explored the six facets of O: fantasy, aesthetics, feelings, actions, ideas, and values, again with majority race status included as a covariate. There was a significant main effect for rape status,

Pillai's Trace F(6, 481) = 4.63, p = .0001. Individual ANOVAs yielded significant results for the facets of feelings, p = .0001, and ideas, p = .04, and a trend toward significance for actions, p = .10. Rape perpetrators had significantly lower scores on feelings and ideas, and tended to score higher on actions.

Next, a MANOVA examined the six facets of A: trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. Results revealed a significant main effect for sexual assault status, Pillai's Trace F(6, 485) = 4.28, p=.0001. Individual ANOVAs yielded significant results for the facets of trust, p=.05, straightforwardness, p=.03, altruism, p=.0001, and tender-mindedness, p=.03, and a trend toward significance for modesty, p=.08. Consistent with hypotheses, rape perpetrators had lower scores on the straightforwardness and the tender-mindedness facets when compared to nonperpetrators; rape perpetrators also scored significantly lower on altruism and trust. Contrary to expectation, rape perpetrators did not indicate significantly lower levels of compliance when compared to nonperpetrators.

Although no specific hypotheses were made, the final MANOVA examined the six facets of C: competence, order, dutifulness, achievement striving, self-discipline, and deliberation. A significant main effect for sexual assault status was found, Pillai's Trace F(6, 485) = 10.79, p = .0001. Individual ANOVAs yielded significant results for the facets of competence, p = .0001, dutifulness, p = .0001, and deliberation, p = .04, and a trend toward significance on achievement-striving, p = .06. Rape perpetrators had significantly lower scores on all four of these facets when compared to nonperpetrators.

CHAPTER V

CONCLUSION

The purpose of the present study was to investigate the overall personality constellation of perpetrators of sexual aggression using the Five-Factor Model. The aim was to examine whether variation in personality traits, in a normal, college population, provides any insight into the nature of sexual assault and rape perpetrators. It was expected that perpetrators would differ from nonperpetrators on the Big Five broad dimensions of personality as measured by the NEO-PI-R. While results showed interesting differences between perpetrators and nonperpetrators on several personality traits, not all were consistent with expectations. Furthermore, overall personality profiles tended to follow similar patterns for both sexual assault and rape perpetrators, but some notable differences did emerge. Specifically, more differences were found when comparing rape perpetrators to nonperpetrators, than when comparing sexual assault perpetrators to nonperpetrators.

Overall, perpetrators (both sexual assault and rape) were found to report greater levels of Neuroticism, and lower levels of Openness and Conscientiousness when compared to nonperpetrators. In addition, rape perpetrators had significantly lower levels of Extraversion and Agreeableness when compared to nonperpetrators. Consistent with hypotheses, both rape and sexual assault perpetrators reported lower levels of straightforwardness than nonperpetrators, and rape perpetrators endorsed lower levels of

tender-mindedness when compared to nonperpetrators. However, contrary to expectation, perpetrators endorsed significantly lower levels of excitement-seeking. In addition, perpetrators reported higher levels of vulnerability, and lower levels of warmth, feelings, ideas, altruism, competence, and dutifulness. Interestingly, sexual assault perpetrators also revealed higher levels of depression when compared to nonperpetrators, and rape perpetrators revealed lower levels of positive emotions, trust, and deliberation.

The finding that overall, perpetrators (both sexual assault and rape) endorsed higher levels of Neuroticism when compared to nonperpetrators suggests that perpetrators of sexual aggression tend to more often experience negative affect, and the behavioral and cognitive styles that result. This finding was consistent with hypotheses, although the individual components of Neuroticism that were expected to differ were not the ones found to distinguish groups. The traits of anxiety, angry-hostility, depression, selfconsciousness, impulsivity, and vulnerability all underlie the Neuroticism domain. It was expected that perpetrators' higher Neuroticism score would be the result of higher levels of angry-hostility and impulsivity, but support for this hypothesis was not found. Interestingly, the higher Neuroticism scores for perpetrators was largely a function of higher levels of vulnerability and depression. That perpetrators were higher on vulnerability may suggest that they have more difficulty coping with stress and may be more likely to become dependent and hopeless. Moreover, sexual assault perpetrators were found to endorse higher levels of depression. Although not found for rape perpetrators, this finding suggests that perpetrators of sexual assault may be more easily discouraged and dejected (Cost & McCrae, 1992).

While these results were somewhat different than expected, an examination of the literature may provide some insight into why these differences emerged. For instance, with regard to the lack of differences seen on angry-hostility, it may be theorized that perpetrators of sexual aggression are not more hostile than nonperpetrators in the general sense, but that their hostility is directed more specifically at women (Rando, Rogers, & Brittan-Powell, 1998). Further, much of the research examining impulsivity in perpetrators of sexual aggression has defined it as underlying the broader category of psychopathy (Hare, 1993). One reason for the lack of differences in impulsivity in the present study may be its use of a noninstitutionalized sample; it is likely that one would find differences between incarcerated and nonincarcerated perpetrators on this trait.

In addition to the lack of differences seen in angry-hostility and impulsivity, unexpected differences in vulnerability and depression emerged. A look at the literature may provide some insight into this finding as well. For example, 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. The additional finding that sexual assault perpetrators endorsed higher levels of depression than nonperpetrators was also interesting. 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). Altogether, this research could be viewed as consistent with the higher Neuroticism scores found in the present study.

The finding that, overall, perpetrators endorsed lower levels of Extraversion than nonperpetrators was interesting and somewhat unexpected. Contrary to expectation, these results suggest that perpetrators of sexual aggression tend to be less sociable, and more reserved and independent than nonperpetrators. Elements that underlie Extraversion also include an individual's tendency to be assertive, excitement-seeking, warm, and experience positive emotions. It was expected that a differences in Extraversion would largely be the result of greater assertiveness and excitement-seeking. However, no differences were found between perpetrators and nonperpetrators on assertiveness, and the opposite pattern was found for excitement-seeking. This pattern of results would suggest first, that perpetrators of sexual aggression are no more dominant or forceful than nonperpetrators, and second, that sexual aggressors may feel little need for excitement and stimulation in their lives. Both of these findings appear to contradict previous research (e.g., Abbey, McAuslan, & Ross, 1998; Hersh & Gray-Little, 1998). For example, previously reviewed literature has shown that a need for power and dominance is a central construct related to sexual assault, and greater assertiveness as measured in this study would have been consistent with this research. Because of the apparent contradiction, replication of these particular findings seems warranted.

Thus, the lower levels of Extraversion found for perpetrators may have been a function of lower levels of excitement-seeking, as well as lower levels of warmth and positive emotions. Although no specific hypotheses were made regarding the traits of warmth and positive emotions, interesting differences emerged. Specifically, perpetrators of both sexual assault and rape showed lower levels of warmth when compared to nonperpetrators, suggesting that perpetrators of sexual aggression may be less

affectionate and friendly and have greater difficulty forming close attachments to others (Costa & McCrae, 1992). 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.

While no specific hypotheses were made regarding Openness, the finding that, overall, perpetrators endorsed lower levels of Openness when compared to nonperpetrators suggests that perpetrators of sexual violence tend to be more conservative in their outlook, and prefer tradition to novelty (Costa & McCrae, 1992). Traits that underlie Openness include an individual's interests in fantasy and imagination, aesthetics, activities, and attentiveness to feelings, as well as her or his intellectual curiosity and independence of judgment. Interestingly, rape perpetrators demonstrated lower levels of openness to feelings and ideas when compared to nonperpetrators. This suggests that, not only do perpetrators of rape believe emotional states to be unimportant, but they also tend to be less open-minded or willing to consider unconventional ideas. Thus, it may be theorized that conservative attitudes and a preference for tradition, as indicated by low Openness, 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.

Consistent with expectations, perpetrators revealed lower levels of Agreeableness when compared to nonperpetrators. Overall, Agreeableness is considered a dimension of interpersonal tendencies (Costa & McCrae, 1992), and speaks to an individual's

propensity for being helpful and sympathetic to others. Individuals who are low in Agreeableness tend to be more antagonistic, egocentric, competitive and callous in their feelings. Agreeableness also encompasses such traits as trust in others, straightforwardness, altruism, and tender-mindedness. Consistent with hypotheses, 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, 1992). 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 tendermindedness and trust, suggesting that perpetrators of rape tend to be cold and cynical. To the extent that these traits encompass aspects of empathy, this finding could also lend support to the empathy research.

Though no specific hypotheses were made regarding Conscientiousness, the finding that perpetrators reported lower levels of Conscientiousness when compared to nonperpetrators is interesting. Although the ability to control impulses is typically indicative of high Neuroticism, self-control can also be conceptualized as an active process of planning and carrying out tasks, which is the foundation of Conscientiousness. Furthermore, individuals with low Conscientiousness also tend to be "less exacting in moral principles" (Costa & McCrae, 1992, p. 16). Elements of Conscientiousness include a sense of competence, order, dutifulness, achievement-striving, self-discipline, and deliberation. Perpetrators in the present study revealed lower levels of both competence

and dutifulness when compared to nonperpetrators. This finding would suggest 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).

An examination of the literature may provide some clues as to why differences in Conscientiousness were found between perpetrators and nonperpetrators. First, there is some evidence to suggest that individuals low in Conscientiousness are more hedonistic and interested in sex (McCrae, Costa, & Busch, 1986). Thus, it could be argued that this characteristic relates to an individual's likelihood to engage in early and frequent sexual behavior, which has been predictive of sexual aggression (e.g., Abbey et al., 2004; Malamuth et al., 1991; 1995). In addition, considering that perpetrators endorsed lower levels of competence, 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. Finally, the finding that perpetrators endorsed lower levels of dutifulness may support the argument that individuals who perpetrate unwanted sexual activities lack strong ethical and moral standards.

When taken together, a similar pattern of results was found for both sexual assault perpetrators and rape perpetrators. However, some notable differences emerged, especially with regard to the number and size of differences found between rape

perpetrators and nonperpetrators. Given that rape is considered to be a more "severe" sexual offense, it would follow that more pronounced differences were found when comparing this group to nonperpetrators. Furthermore, although there was a relatively small number of rape perpetrators included, somewhat larger effect sizes for this group offset the small sample size.

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 overall personality profiles may help distinguish perpetrators from nonperpetrators, lending further support to the importance of considering the individual level. Further, it is worthwhile to consider how this level interacts with the other three 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 an impulsive personality, but that impulsivity may only present itself 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 the individual's impulsivity 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. Perhaps family structure, peer groups, and other aspects of one's environment shape the exhibition 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 overall personality constellation of perpetrators of sexual aggression using the Five-Factor model. Findings indicated that there were several notable differences in the Big Five personality traits that may help distinguish perpetrators from nonperpetrators. A strength of the current study is its use of a large sample of noninstitutionalized, college men. As noted previously, only a few studies have examined the role of the Big Five in sexual offending; two of the studies used institutionalized offenders, and the other used a relatively small sample size. Demonstrating differences in 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. 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. 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 self-presentation issues or due to distorted recall. Additionally, the use of a relatively homogenous college sample limits the generalizability of our 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 intervention, prevention, and future research. With regard to clinical implications, 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.

This study also provides implications for prevention of sexual assault by college men. Exploring personality styles seems important in the identification of men prone to committing such acts. Understanding what role the Five-Factor Model plays can provide additional insight into the nature of these perpetrators, and help recognize 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. Moreover, it is also important to remember that personality is 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.

69

Regarding future research, results here point to the importance of considering the overall personality profile when examining sexual perpetration. Moreover, the differences found on several traits suggest that the Five-Factor Model 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. 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 perpetrators from nonperpetrators. Future research should examine other levels of the ecological model in conjunction with overall personality profiles. Understanding that personality according to the Five-Factor Model 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.

70

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.
- 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.
- 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.
- 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.
- Cohen, D., & Strayer, J. (1996). Empathy in conduct-disordered and comparison youth. Developmental Psychology, 32, 988-998.

- 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.
- 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.
- 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.
- Earl, C.M., & Proulx, J. (1987). The differentiation of Francophone rapists and nonrapists using penile circumferential measures. *Criminal Justice and Behavior*, 13, 419-429.
- 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. (2003). *The Uniform Crime Reports*. Retrieved March 23, 2005, from http://www.fbi.gov/ucr/cius_03/pdf/03sec2.pdf
- 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.
- 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.

- 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.
- Grauerholz, L. (2000). An ecological approach to understanding sexual revictimization: Linking personal, interpersonal, and sociocultural factors and processes. *Child Maltreatment*, 5, 5-17.
- 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. (1991). *The Hare psychopathy checklist—revised*. Toronto: Multi-Health Systems.
- Hare, R.D. (1993). Without conscience: The disturbing world of psychopaths among us. New York: Pocket Books.

- 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.
- 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.
- 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.

- 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 random community 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.
- 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 selfreported 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.
- 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.

- Levin, S.M., & Stava, L. (1987). Personality characteristics of sex offenders: A review. Archives of Sexual Behavior, 16, 57-77.
- 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.
- 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, P.A., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological Bulletin*, *103*, 324-344.
- Miller, B., & Marshall, J.C. (1987). Coercive sex on the university campus. *Journal of College Student Personnel*, 28, 38-47.
- 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.
- 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., 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.
- Prentky, R.A., & Knight, R.A. (1991). Identifying critical dimensions for discriminating among rapists. *Journal of Consulting and Clinical Psychology*, *59*, 643-661.
- 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.
- 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.
- Romano, E., & De Luca, R. (1997). Exploring the relationship between childhood sexual abuse and adult sexual perpetration. *Journal of Family Violence, 12*, 85-98.
- 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.

- 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.
- 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.
- Wilson, G.D., & Cox, D.N. (1983). Personality of pedophile club members. *Personality* and Individual Differences, 4, 323-329.
- 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.

Table 1

	Sexual Assault Perpetrators	Nonperpetrators	df	F	η^2	р
	NE	O-PI-R domain scores				
	<i>M</i> =91.55	<i>M</i> =85.36	1,			
N	<i>SE</i> =2.36	<i>SE</i> =0.94	488	5.92	.01	.02
	<i>M</i> =109.74	<i>M</i> =113.98	1,			
E	<i>SE</i> =2.36	<i>SE</i> =0.94	488	2.77	.006	.10
	<i>M</i> =107.41	<i>M</i> =112.71	1,			
0	<i>SE</i> =2.45	<i>SE</i> =0.98	488	4.05	.008	.05
	<i>M</i> =104.69	<i>M</i> =108.58	1,			
A	SE=2.23	SE=0.89	488	2.62	.005	.11
С	M = 102.66 SE = 2.26	M = 110.08 SE = 0.90	1, 488	9.26	.02	.002
	NEO-PI	-R facet level scores for	r N			
	16.05	16 15 15				
N1: Anxiety	M=16.25 SE=0.56	M=15.15 SE=0.23	1, 490	3.29	.007	.07
-						
N2: Angry Hostility	M=14.33 SE=0.54	M=13.69 SE=0.22	1, 490	1.20	.002	.27
1.2. 7 mgr y 1105unty		52 0.22		1.20	.002	.21
	M = 16.16	M = 14.17	1,	0.61	0.2	0.0
N3: Depression	<i>SE</i> =0.63	<i>SE</i> =0.26	490	8.61	.02	.004

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

M = 15.44*M*=14.66 1, N4: Self SE=0.56SE = 0.23490 1.65 .003 .20 Consciousness *M*=16.86 *M*=16.98 1, 490 SE = 0.50SE = 0.20N5: Impulsivity 0.05 .0001 .82 M = 12.97*M*=10.69 1, SE = 0.53SE = 0.21490 N6: Vulnerability 16.10 .03 .0001

Table 1 (continued)

	Sexual Assault Perpetrators	Nonperpetrators	df	F	η^2	р
	NEO-PI	-R facet level scores fo	r E			
E1: Warmth	<i>M</i> =19.88 <i>SE</i> =0.58	<i>M</i> =21.47 <i>SE</i> =0.24	1, 490	6.38	.01	.01
E2: Gregariousness	<i>M</i> =17.80 <i>SE</i> =0.65	<i>M</i> =17.44 <i>SE</i> =0.26	1, 490	0.25	.001	.62
	<i>M</i> =16.07	<i>M</i> =16.60	1,			
E3: Assertiveness	<i>SE</i> =0.54 <i>M</i> =16.94	<i>SE</i> =0.22 <i>M</i> =17.61	490 1,	0.81	.002	.37
E4: Activity	SE=0.49	<i>SE</i> =0.20	490	1.58	.003	.21
E5: Excitement Seeking	M=19.64 SE=0.58	M=21.00 SE=0.23	1, 490	4.76	.01	.03
E6: Positive Emotions	<i>M</i> =18.80 <i>SE</i> =0.55	<i>M</i> =19.92 <i>SE</i> =0.22	1, 490	3.51	.007	.06
	NEO-PI-R fac	et level scores for O				
O1: Fantasy	<i>M</i> =18.68 <i>SE</i> =0.64	<i>M</i> =19.62 <i>SE</i> =0.26	1, 488	1.87	.004	.17
O2: Aesthetics	<i>M</i> =16.74 <i>SE</i> =0.73	<i>M</i> =17.16 <i>SE</i> =0.29	1, 488	0.29	.001	.59
O3: Feelings	<i>M</i> =18.77 <i>SE</i> =0.55	<i>M</i> =20.31 <i>SE</i> =0.22	1, 488	6.84	.01	.009
O4: Actions	<i>M</i> =15.38 <i>SE</i> =0.47	<i>M</i> =15.51 <i>SE</i> =0.19	1, 488	0.07	.0001	.79
O5: Ideas	<i>M</i> =19.20 <i>SE</i> =0.69	<i>M</i> =20.98 <i>SE</i> =0.28	1, 488	5.71	.01	.02
O6: Values	<i>M</i> =18.64 <i>SE</i> =0.56	<i>M</i> =19.13 <i>SE</i> =0.23	1, 488	0.64	.001	.42

Table 1 (continued)

	Sexual Assault Perpetrators	Nonperpetrators	df	F	η^2	р
	NEO-PI	-R facet level scores for	r A			
A1: Trust	<i>M</i> =16.93 <i>SE</i> =0.63	<i>M</i> =17.73 <i>SE</i> =0.25	1, 490	1.40	.003	.24
A2: Straight- forwardness	<i>M</i> =16.17 <i>SE</i> =0.56	<i>M</i> =17.60 <i>SE</i> =0.23	1, 490	5.57	.01	.02
A3: Altruism	<i>M</i> =20.74 <i>SE</i> =0.53	<i>M</i> =22.03 <i>SE</i> =0.21	1, 490	5.14	.01	.02
A4: Compliance	<i>M</i> =15.97 <i>SE</i> =0.54	<i>M</i> =15.61 <i>SE</i> =0.22	1, 490	0.40	.001	.53
A5: Modesty	<i>M</i> =16.46 <i>SE</i> =0.56	<i>M</i> =17.19 <i>SE</i> =0.23	1, 490	1.44	.003	.23
A6: Tender- Mindedness	<i>M</i> =18.26 <i>SE</i> =0.50	<i>M</i> =18.41 <i>SE</i> =0.20	1, 490	0.07	.0001	.79
	NEO-PI	-R facet level scores fo	r C			
C1: Competence	<i>M</i> =18.30 <i>SE</i> =0.47	<i>M</i> =20.71 <i>SE</i> =0.19	1, 490	22.95	.05	.0001
C2: Order	<i>M</i> =16.91 <i>SE</i> =0.53	<i>M</i> =16.94 <i>SE</i> =0.22	1, 490	.002	.0001	.96
C3: Dutifulness	<i>M</i> =18.25 <i>SE</i> =0.51	<i>M</i> =20.34 <i>SE</i> =0.21	1, 490	14.21	.03	.0001
C4: Achievement Striving	<i>M</i> =17.55 <i>SE</i> =0.55	M=18.27 SE=0.22	1, 490	1.46	.003	.23

M=17.86

SE = 0.24

M=15.92 *SE*=0.21 1, 490

1, 490 2.19

2.58

.004

.005

.14

.11

M=16.93

SE = 0.59

M=15.01

SE=0.52

C5: Self-Discipline

C6: Deliberation

Table 2

	Rape Perpetrators	Nonperpetrators	df	F	η^2	р
	NEC	P-PI-R domain scores				
	<i>M</i> =92.74	<i>M</i> =85.84	1,			
N	<i>SE</i> =3.26	<i>SE</i> =0.92	486	4.14	.01	.04
	<i>M</i> =104.31	<i>M</i> =114.03	1,			
Ξ	<i>SE</i> =3.22	<i>SE</i> =0.90	486	8.42	.02	.004
	<i>M</i> =105.33	<i>M</i> =112.21	1,			
)	<i>SE</i> =3.38	<i>SE</i> =0.95	486	3.83	.01	.05
	<i>M</i> =98.85	<i>M</i> =108.75	1,			
1	<i>SE</i> =3.04	<i>SE</i> =0.85	486	9.83	.02	.002
	<i>M</i> =97.74	<i>M</i> =110.00	1,			
	<i>SE</i> =3.09	<i>SE</i> =0.87	486	14.52	.03	.000

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

M = 15.53 M = 15.20 1

	M = 15.53	M = 15.29	1,			
N1: Anxiety	SE=0.77	<i>SE</i> =0.22	490	0.09	.0001	.76
	M = 15.14	M = 13.70	1,			
N2: Angry Hostility	SE = 0.75	SE = 0.21	490	3.41	.01	.07
	<i>M</i> =15.83	<i>M</i> =14.35	1,			
N3: Depression	SE = 0.88	SE=0.25	490	2.66	.01	.10
1						
	<i>M</i> =15.33	<i>M</i> =14.74	1,			
N4: Self	SE=0.78	SE=0.22	490	0.54	.001	.46
Consciousness						
	M = 16.53	M = 16.98	1,			
N5: Impulsivity	SE=0.69	SE=0.19	490	0.40	.001	.53
No. Impuisivity	52-0.07	52-0.17	170	0.40	.001	.55
	<i>M</i> =14.47	<i>M</i> =10.74	1,			
N6: Vulnerability	SE=0.73	SE=0.20	490	24.51	.05	.0001

	Rape Perpetrators	Nonperpetrators	df	F	η^2	р
	NEO-PI-	R facet level scores for	r E			
E1: Warmth	<i>M</i> =18.47 <i>SE</i> =0.80	<i>M</i> =21.46 <i>SE</i> =0.22	1, 486	12.99	.03	.0001
E2: Gregariousness	<i>M</i> =17.57 <i>SE</i> =0.90	<i>M</i> =17.47 <i>SE</i> =0.25	1, 486	0.01	.0001	.92
E3: Assertiveness	<i>M</i> =16.04 <i>SE</i> =0.76	<i>M</i> =16.54 <i>SE</i> =0.21	1, 486	0.41	.001	.53
E4: Activity	<i>M</i> =17.08 <i>SE</i> =0.69	<i>M</i> =17.57 <i>SE</i> =0.19	1, 486	0.47	.001	.49
E5: Excitement Seeking	<i>M</i> =17.56 <i>SE</i> =0.78	<i>M</i> =21.05 <i>SE</i> =0.22	1, 486	18.50	.04	.0001
E6: Positive Emotions	<i>M</i> =17.60 <i>SE</i> =0.77	<i>M</i> =19.94 <i>SE</i> =0.22	1, 486	8.60	.02	.004
	NEO-PI-	R facet level scores for	r O			
O1: Fantasy	<i>M</i> =18.16 <i>SE</i> =0.88	<i>M</i> =19.54 <i>SE</i> =0.25	1, 486	2.28	.005	.13
O2: Aesthetics	<i>M</i> =16.64 <i>SE</i> =1.01	<i>M</i> =17.06 <i>SE</i> =0.28	1, 486	0.16	.0001	.69
O3: Feelings	<i>M</i> =16.81 <i>SE</i> =0.74	<i>M</i> =20.32 <i>SE</i> =0.21	1, 486	20.62	.04	.0001
O4: Actions	<i>M</i> =16.54 <i>SE</i> =0.65	<i>M</i> =15.40 <i>SE</i> =0.18	1, 486	2.80	.006	.10
O5: Ideas	<i>M</i> =18.76 <i>SE</i> =0.94	<i>M</i> =20.80 <i>SE</i> =0.27	1, 486	4.32	.009	.04
O6: Values	<i>M</i> =18.41 <i>SE</i> =0.77	<i>M</i> =19.09 <i>SE</i> =0.22	1, 486	0.72	.001	.40

NEO-PI-R facet level scores for A

Table 2 (continued)

	Rape Perpetrators	Nonperpetrators	df	F	η^2	р
A 1. The set	<i>M</i> =16.00	<i>M</i> =17.76	1,	2.07	000	05
A1: Trust	<i>SE</i> =0.86	<i>SE</i> =0.24	490	3.87	.008	.05
	<i>M</i> =15.78	<i>M</i> =17.52	1,			
A2: Straight- forwardness	<i>SE</i> =0.78	<i>SE</i> =0.22	490	4.66	.009	.03
	<i>M</i> =18.64	<i>M</i> =22.09	1,			
A3: Altruism	SE=0.72	SE=0.20	490	21.30	.04	.0001
	<i>M</i> =15.56	<i>M</i> =15.66	1,			
A4: Compliance	<i>SE</i> =0.74	SE=0.21	490	0.02	.0001	.89
	<i>M</i> =15.78	<i>M</i> =17.19	1,			
A5: Modesty	SE=0.78	SE=0.22	490	3.04	.006	.08
	<i>M</i> =16.97	<i>M</i> =18.49	1,			
A6: Tender- Mindedness	<i>SE</i> =0.69	<i>SE</i> =0.19	490	4.50	.009	.03

NEO-PI-R facet level scores for C

C1: Competence	<i>M</i> =16.78 <i>SE</i> =0.64	<i>M</i> =20.66 <i>SE</i> =0.18	1, 490	34.58	.07	.0001
C2: Order	<i>M</i> =16.56 <i>SE</i> =0.74	<i>M</i> =16.95 <i>SE</i> =0.21	1, 490	0.27	.001	.61
C3: Dutifulness	M=15.97 SE=0.70	<i>M</i> =20.40 <i>SE</i> =0.20	1, 490	37.42	.07	.0001
C4: Achievement Striving	M=16.78 SE=0.76	<i>M</i> =18.27 <i>SE</i> =0.21	1, 490	3.55	.007	.06
C5: Self-Discipline	<i>M</i> =17.42 <i>SE</i> =0.81	<i>M</i> =17.77 <i>SE</i> =0.23	1, 490	0.17	.0001	.68
C6: Deliberation	<i>M</i> =14.33 <i>SE</i> =0.72	<i>M</i> =15.91 <i>SE</i> =0.20	1, 490	4.41	.009	.04

APPENDIX

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 Processed as:	Expedited
Status Recommend	ed by Reviewer(s): Approved Protocol Expires: 3/12/2007
Principal Investigator(s	
Emily K. Voller 215 N. Murray	Patricia J. Long Jennifer L. Callahan 1950 Third St. 215 N. Muray
Stillwater, OK 74078	B La Verne, CA 91750 Stillwater, OK 7407

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.

X 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:

- 1. 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.
- 2. 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
- 4. 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, Mair Institutional Review Board

VITA

Emily Kay Voller

Candidate for the Degree of

Master of Science

Thesis: THE ROLE OF THE BIG FIVE PERSONALITY TRAITS IN THE SEXUAL ASSAULT PERPETRATION BY COLLEGE MEN

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. Completed requirements for the Master of Science degree with a major in Clinical Psychology at Oklahoma State University in May 2007.
- Experience: Completed clinical practicum at the Psychological Services Center at Oklahoma State University, Department of Psychology, 2004 to present; completed clinical practicum at North Care Center in Oklahoma City, Oklahoma, 2006 to present; 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: May, 2007

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study:THE ROLE OF THE BIG FIVE PERSONALITY TRAITS IN THE
SEXUAL ASSAULT PERPETRATION BY COLLEGE MALES

Pages in Study: 96

Candidate for the Degree of Master of Science

Major Field: Clinical Psychology

- Scope and Method of Study: The purpose of this study was to investigate the overall personality constellation of perpetrators of sexual aggression using the Five-Factor model. The aim was to examine whether variation in the Big Five personality traits in a college population provides any insight into the nature of sexual assault and rape perpetrators. Participants were 521 men recruited from a research participant pool at Oklahoma State University. Each participant completed the Life Experiences Questionnaire, the NEO-Personality Inventory Revised (NEO-PI-R), and an expanded version of the Sexual Experiences Survey (MSES-P). Men were classified based on their responses to the SES-P as having perpetrated rape or not, as well as having perpetrated sexual assault (including rape) or not. Multivariate and univariate analyses of variance were used to test the hypothesis that perpetrators would report different personality profiles than nonperpetrators.
- Findings and Conclusions: Both sexual assault and rape perpetrators reported greater levels of Neuroticism, and lower levels of Openness and Conscientiousness when compared to nonperpetrators (all p < .05). Rape perpetrators had lower levels of Extraversion and Agreeableness when compared to nonperpetrators (both p < .01). Consistent with hypotheses, both rape and sexual assault perpetrators had lower scores on straightforwardness (p < .05). Also consistent with hypotheses, rape perpetrators scored lower on tender-mindedness when compared to nonperpetrators (p = .03). Contrary to expectation, sexual assault and rape perpetrators had significantly lower scores on excitement-seeking (p < .05). In addition, both perpetrator groups scored higher on vulnerability, and lower on warmth, feelings, ideas, altruism, competence, and dutifulness (all p < .05). Interestingly, sexual assault perpetrators scored higher on depression when compared to nonperpetrators (p = .004), and rape perpetrators scored lower on positive emotions, trust, and deliberation (all p < .05). Results suggest that individuals who perpetrate sexual offenses differ from nonperpetrators on the Big Five dimensions of personality as measured by the NEO-PI-R. Thus, examining overall personality profiles may be useful in distinguishing perpetrators of sexual aggression from nonperpetrators.