

NARCISSISM AND PSYCHOPATHY EXPLAIN THE RELATIONSHIP BETWEEN
SOCIOSEXUALITY AND SEXUAL ASSAULT PERPETRATION

by

Emily Renee Mouilso

(Under the direction of Karen S. Calhoun)

ABSTRACT

The present study suggests that personality traits play a larger role in sexual assault perpetration in college samples than was once believed. Specifically, perpetrators report more willingness to engage in sexual relations without closeness or commitment (i.e., less restricted sociosexuality), and the present study suggests that higher levels of trait narcissism and trait psychopathy mediate this association. A large ($N = 355$) sample of college men self-reported their levels of trait narcissism, trait psychopathy, sociosexuality, sexual assault perpetration, and Five Factor Model (FFM) traits. Results suggested perpetrators reported higher levels of trait psychopathy and the grandiose, but not the vulnerable, type of trait narcissism. Disagreeableness partially mediated the relationship between sexual assault perpetration and both grandiose narcissism and psychopathy. Finally, measures of grandiose narcissism and psychopathy partially mediated the relationship between sociosexuality and sexual assault perpetration.

INDEX WORDS: Sexual assault, Perpetration, Narcissism, Psychopathy, Sociosexuality,
Five factor model, Personality, College men,

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DEDICATION

To my parents, with all my love.

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CHAPTER 1

INTRODUCTION

Large and well-replicated prevalence studies of rape on college campuses report that approximately 15–20% of female students have experienced forced intercourse (Brener, McMahon, Warren, & Douglas, 1999; Fiebert & Osburn, 2001; Fisher, Cullen, & Turner, 2000; Forbes & Adams-Curtis, 2001; Koss, Gidycz & Wisniewskii, 1987; Resnick et al., 1993). In fact, college women are at greater risk for rape than women of comparable age in the general population (DeKeseredy & Schwartz, 1998; Koss, 1988). College men consistently report committing acts that meet the legal definition of rape at a rate of 5–15% and acts of sexual assault at a rate of 15–25% (Koss et al., 1987; Malamuth, Sockloskie, Koss, & Tanaka, 1991). A national survey conducted by Koss et al., (1987) revealed that 1 in 12 college men reported having committed acts that met the legal definition of rape and of those, 84% did not consider their actions to be illegal.

One of the most consistent findings in the literature on sexual assault perpetration is the link between sociosexuality and perpetration of sexual assault. Sociosexuality refers to one's willingness to engage in sexual relations without closeness or commitment (Gangestad & Simpson, 1990; Simpson & Gangestad, 1991). Sociosexuality is characterized as either unrestricted (i.e., having sex earlier in relationships, having more than one concurrent sexual relationship, having had sex with many different partners, having had sex with partners on only one occasion, foreseeing many different partners in the future) or restricted (i.e., likely to insist on the development of closeness and commitment before engaging in sex).

Terms such as “mating effort” (Lalumiere & Quinsey, 1996; Landolt, Lalumiere & Quinsey, 1995), “hypersexuality” (Ryan, 2004), and “sexual preoccupation” (Finkelhor & Yllo, 1985) have been used to refer to perpetrators’ attitudes and decisions related to sex, yet results are remarkably consistent. Perpetrators report having started dating at an earlier age (Byers & Eno, 1991) and having a greater number of sexual partners (Byers & Eno, 1991; Gold & Clegg, 1990; Kanin, 1985; Koss & Dinero, 1988; Koss, Leonard, Beezley, & Oros, 1985) than men without a history of perpetration. Sexual assault perpetrators also report a greater preference for partner variety, uncommitted sex, and less intimate relationships (Comett & Shuntich, 1991) as well as a desire to have a greater amount of sexual activity in general (Kanin, 1983; 1985). Finally, perpetrators report that they talk about sex with their friends more often than do non-perpetrators (Lisak & Roth, 1988).

Certainly most humans are motivated to engage in sexual relations. Why should less restricted sociosexuality be related to an increased likelihood of sexual assault perpetration? One answer is simply that each new sexual encounter and each new sexual partner represents an opportunity to perpetrate sexual assault. Yet, if a man does not perpetrate in one sexual encounter or with one partner, is it logical to believe that he will do so given more opportunity? Rather than a question of opportunity, the present study proposes that the relation between sociosexuality and sexual assault perpetration is better explained by personality traits, such as psychopathy and narcissism. We believe that men who are more psychopathic or narcissistic have less restricted sociosexuality. These men are also more likely to have perpetrated a sexual assault because of the affective, interpersonal, and behavioral characteristics associated with

narcissism and psychopathy. The present study argues that personality has been undervalued and understudied in relation to sexual assault perpetration.

Importance of Personality

We believe that it is important to examine personality because personality may explain the troubling consistency of rates of sexual assault perpetration over time (Fiebert & Osburn, 200; Koss et al., 1987). Although rates of perpetration have remained consistent, college campuses and communities across the country have made efforts to increase public awareness of sexual assault and to develop and implement sexual assault prevention programs (Roze & Koss, 2001). The majority of prevention programs focus on changing attitudes related to sexual assault, such as hostile attitudes towards women and rape myth acceptance (Anderson & Whiston, 2005). Existing programs are effective in at least temporarily reducing attitudes related to perpetration; however, they appear to be largely ineffective at producing lasting behavior change (for reviews see Anderson & Whiston, 2005; Flores & Hartlaub, 1998). Perhaps interventions targeting attitude change have been ineffective because personality plays a larger role in sexual assault perpetration than was once believed.

Personality has been defined as “a dynamic organization, inside the person, of psychophysical systems that create the person’s characteristic patterns of behavior, thoughts, and feelings” (p. 48; Allport, 1961). Many comprehensive theories of normal personality exist; however, the Five-Factor Model (FFM) is one of the most widely accepted and well studied (Costa & McCrae, 1992). The FFM includes five overarching personality traits: 1) Neuroticism or individual’s tendency to experience negative affect; 2) Extraversion, including sociability, activity level, and cheerfulness; 3) Openness or an individual’s openness to experiences, ideas, and values; 4) Agreeableness, including altruism, sympathy, compliance, and trust; and 5)

Conscientiousness, which includes need for achievement, organization, competence, and self-discipline.

FFM traits explain variance in sexual assault perpetration. For example, relative to men from the general population, sex offenders consistently report higher levels of Neuroticism (Dennison, Stough, & Birgden, 2001; Lehne, 2002), and they may also be lower on Extraversion and Conscientiousness (Dennison et al., 2001). To date, only one study has assessed FFM traits among college sexual assault perpetrators. Voller and Long (2010) reported that perpetrators were less Agreeableness, Conscientiousness, and Extroverted than non-perpetrators. While more research is clearly necessary, the extant literature suggests that variation in basic personality traits offers insight into the nature of sexual assault perpetration. Intriguingly, recent longitudinal findings suggest that, while a moderate percentage of college men self-report some sexually aggressive behavior, it is the small sub-set of men who perpetrate consistently across time and situation who are responsible for the vast majority of sexual assaults (Abbey & McAuslan, 2004; Hall et al., 2006). Because personality exerts a stable influence on attitudes and behaviors, personality traits may account for the consistency of some men's sexually aggressive behavior (Hall & Hirschman, 1991).

Inconsistent (i.e., men who perpetrate only once) and consistent (i.e., men who perpetrate multiple times) perpetrators seem to differ significantly across important personality dimensions. Abbey and McAuslan (2004) reported that inconsistent perpetrators (31%), relative to consistent perpetrators (9%), were more likely to feel remorse for their actions, to say that they had learned from their experience, and to hold their victims less responsible. Consistent perpetrators, in contrast, appeared unconcerned with their victims' feelings and appeared to have acted in a more deliberate manner. Taken together, results suggest that consistent, but not inconsistent

perpetrators, display feelings of entitlement, willingness to exploit others, deficient empathy, callousness, and a lack of remorse. These traits are remarkably similar to the emotional, interpersonal, and behavioral characteristics of individuals with the Diagnostic and Statistical Manual of Mental Disorders 4th edition (DSM-IV; American Psychiatric Association, 1994), Cluster B personality disorders, specifically Narcissistic Personality Disorder (NPD) and psychopathy¹.

According to the DSM-IV (APA, 1994), NPD is characterized by an exaggerated sense of self-importance and uniqueness, an unreasonable sense of entitlement, an intense need for admiration, a willingness to exploit others, deficient empathy, and arrogance. In order to understand this constellation of symptoms it is necessary to note that there is evidence that narcissistic traits may be a defense against underlying self-doubt. Specifically, narcissists' self-reported high self-esteem tends to occur with implicit, presumably unconscious, low self-esteem (Jordan et al., 2003; Zeigler-Hill, 2006). As a result, narcissists' high self-esteem tends to be unstable and particularly susceptible to injury in response to negative evaluation or perceived rejection (Rhodewalt, Madrian, & Cheney, 1998).

Many of the symptoms of NPD also figure prominently in the conceptualization of psychopathy. Though psychopathy is not actually a DSM-IV personality disorder, there is a great deal of overlap between the pattern of affective, interpersonal, and behavioral symptoms that makes up psychopathy and Antisocial Personality Disorder (ASPD; Hare, Cooke, & Hart, 1999). In fact, ASPD and psychopathy were once considered to be synonymous (Kosson, Kelly, & White, 1997). As part of the revision of the DSM-III (APA, 1987), criteria for ASPD were

¹ Although not diagnosable within the DSM nomenclature, psychopathy is thought to overlap with personality style that characterizes antisocial personality disorder (Hare et al., 1999).

altered to emphasize a history of social deviance, and the current conceptualization of ASPD is thought to be a broad and more heterogeneous construct than psychopathy (Hare et al., 1999).

Psychopathy is traditionally measured using the Psychopathy Checklist-Revised (PCL-R; Hare, 1991). The PCL-R psychopathy construct is comprised of two distinct, yet moderately correlated factors (Harpur, Hare, & Hakstian, 1989). Factor 1 describes the affective and interpersonal features of psychopathy, including shallow affect, callousness, lack of remorse, lack of empathy, egocentricity, interpersonal glibness, superficial charm, willingness to con or manipulate others, and feelings of grandiosity (Hare, 1991). Factor 2 reflects an unstable and antisocial lifestyle characterized by impulsivity, irresponsibility, and a history of antisocial behavior (Hare, 1991). Certainly there is a great deal of overlap in the criteria for narcissism and psychopathy, so much so that it has been suggested that narcissism is central to Factor 1 (Nestor, 2002). Given the similarity of their symptom profiles, it is not surprising that both constructs have been linked to similar behavioral tendencies, including the tendency to behave aggressively.

Relation of Personality Traits to General and Sexual Aggression

Narcissism has been consistently linked to a tendency towards many forms of aggression. In laboratory studies, trait narcissism has been associated with aggression in response to negative evaluation and interpersonal rejection (Baumeister, Bushman, & Campbell, 2000; Bushman & Baumeister 1998; Miller et al., 2009). Narcissism was also associated with greater hostility and a tendency to seek vengeance (Brown, 2004; Raskin, Novacek, & Hogan, 1991; Raskin & Novacek, 1989; Raskin & Terry, 1988; Rhodewalt & Morf, 1995; Wink, 1991). In addition, narcissism was associated with higher rates of domestic violence perpetration (Beasley & Stoltenberg 1992; Craig, 2003; Ryan, Weikel, & Sprechini, 2008; Simmons, Lehmann, Cobb, & Fowler, 2005) and domestic violence recidivism (Hamberger & Hastings, 1990).

Beyond the connection to general aggression, narcissism has also been theoretically related to sexual assault perpetration. Baumeister, Catanese, and Wallace (2002) proposed the Narcissistic Reactance Theory of sexual assault. According to the theory, narcissism is a risk factor for sexual assault perpetration due to the propensity for self-serving interpretations, low empathy, and inflated sense of entitlement that is often associated with high levels of trait narcissism. Specifically, narcissistic individuals' inflated sense of entitlement makes them more likely to believe that women "owe" them sexual favors, and their low empathy guarantees that they will not be deterred by concern for the victim's suffering. Finally, their interest in gaining the admiration of others motivates them to increase their number of sexual "conquests."

Empirical findings have been supportive of the Narcissistic Reactance Theory of sexual assault. Trait measures of narcissism were associated with greater acceptance of rape-myths (i.e., beliefs about rape, rape victims, and rapists found to be related to an increased likelihood of perpetration, see Burt, 1980), less empathy for rape victims, greater enjoyment of a film depicting rape, and aggression toward a female who refused to read a sexually arousing excerpt (Bushman, Bonacci, van Dijk, & Baumeister, 2003). To date, the only study that has assessed levels of trait narcissism in a large sample of college sexual assault perpetrations concluded that high trait narcissism was associated with perpetration of sexual assault (Kosson et al., 1997). Although theory and research have suggested that narcissism is related to sexual assault perpetration, more research is clearly needed.

Clear and convincing links have also been found between psychopathy and general aggression. Psychopaths comprise 20–30% of the general prison population (Harpur & Hare, 1994) and level of psychopathy has been found to be a significant predictor of criminal recidivism (Hanson & Bussiere, 1998; Walters, 2003), particularly violent recidivism (Salekin,

Rogers, & Sewell, 1996). Recently there has been growing interest in assessing the role of psychopathy in predicting aggressive behavior in non-incarcerated, non-clinical (i.e., community) samples (Paulhus & Williams, 2002). Certainly some individuals with high trait psychopathy manage to function in society, for at least a period of time, without entering the criminal justice system. In fact, the personality traits underlying psychopathy are distributed dimensional, rather than being taxonic in nature (Harris, Rice, & Quinsey, 1994) and, therefore, should exist throughout society.

Unfortunately, research on psychopathy in community samples is still in its infancy (Nicholls, Ogloff, Brink, & Spidel, 2005). That being said, results to date suggest that a small portion of the general population displays some degree of trait psychopathy (Nicholls et al., 2005). Consistent with incarcerated samples, individuals with relatively high scores on measures of psychopathy in community samples reported a general attraction to violent media (Williams & Paulhus, 2004), a pattern of antisocial behavior (Frick, Kimonis, Dandreaux, & Farell, 2003; Lynam, 1998; Williams & Paulhus, 2004; Williams, Paulhus, & Hare, 2007), and being more physically and relationally aggressive in the context of romantic relationships (Coyne et al., 2010). Zagon and Jackson (1994) assessed the affective and interpersonal aspects of psychopathy in a community sample and found that individuals with level of trait psychopathy reported significantly fewer feelings of unease or anxiety in response to the discomfort of others, a tendency to exploit others, and endorsed feelings of superiority and arrogance.

In parallel to the work on general criminality, psychopathy has been extensively examined in relation to sexual aggression, especially among incarcerated rapists. It is important to note that, even among incarcerated populations, the psychopathic rapist is probably the exception rather than the rule (Fernandez & Marshall, 2003). Compared to non-incarcerated

samples, incarcerated rapists were more antisocial and hostile (Armentrout & Hauer, 1978; Quinsey, Arnold, & Pruesse, 1980; Raider, 1977), and less empathic (Rice, Chaplin, Harris, & Coutts, 1994). However, these differences disappeared when incarcerated rapists were compared to the general prison population (Lalumiere & Quinsey, 1996). While rapists are probably no more psychopathic than the average prisoner, within rapists, psychopathy predicted sexual recidivism (Harris et al., 1994; Serin, Mailloux, & Malcolm, 2001). Intriguingly, Seto and Barbaree (1999) reported on results from a relapse-prevention program with incarcerated rapists. Men who were higher on trait psychopathy were rated as showing greater treatment improvement and change by their therapists and were more than 5 times as likely to commit a new serious offense.

Although less evidence exists on psychopathy among non-incarcerated sexual assault perpetrators, the extant evidence suggests that psychopathy provides predictive power in this realm as well. Sexual assault perpetrators were more likely to report antisocial behavior and a history of general delinquency (Petty & Dawson, 1989; Rapaport & Burkhart, 1984). Hersh and Gray-Little (1998) measured several traits associated with psychopathy (e.g. manipulateness, impulsivity, sensation-seeking, and lack of empathy) in a college sample. Findings suggested that men who reported a history of more severe acts of sexual assault perpetration were more manipulative and sensation-seeking than the men who engaged in less severe acts. Furthermore, men who engaged in any coercive or aggressive behavior were more manipulative, impulsive, and less empathic, than those reporting no sexual assault perpetration. Kosson et al., (1997) also examined the relationship between psychopathy and sexual assault perpetration in college men. The authors suggested that sexual aggression (i.e., self-reported perpetration by use of force or threats) was associated with trait psychopathy. Finally, Williams et al., (2009) investigated the

role of psychopathy as a moderator between aggressive sexual fantasies and perpetration of sexual assault. Men with aggressive sexual fantasies tended to act on their fantasies only in the presence of high trait psychopathy.

Psychopathy has also been linked to sexually aggressive tendencies by recent behavioral genetics research. For years investigators have been exploring the possible existence of genetic effects on general antisocial behavior and aggression (Johansson et al., 2008). Consensus suggests that 30-50% of the variance in antisocial behavior results from additive genetic effects (Mason & Frick, 1994; Miles & Carey, 1997; Rhee & Waldman, 2002) with more severe manifestations being more influenced by genes (Mason & Frick, 1994). Johansson et al., (2008) conducted the first study examining the possible effect of genes on sexually aggressive behavior. An additive genetic effect accounted for 28% of the variance in sexual assault perpetration while non-shared environmental effects made up the remainder. Johansson et al., (2008) also proposed a common latent factor that was highly heritable (i.e., additive genetic effects accounting for 85% of the variance) and influenced the variation of trait psychopathy and sexual coercion. The common factor explained 38% of the variance in psychopathy and 15% of the variance in sexual assault perpetration. Johansson et al., (2008) explained the latent factor as a general tendency towards antisocial behavioral. Results, though preliminary, represent a compelling argument for the importance of psychopathy in predicting perpetration of sexual assault in both incarcerated and community samples.

To summarize, both trait narcissism and trait psychopathy have been related theoretically and empirically to perpetration of aggression in general and sexual assault in particular. Both constructs, but particularly narcissism, have yet to be examined in a large sample of non-incarcerated sexual assault perpetrators. One goal of the current study is to address this particular

gap in the literature. Another goal is to examine the extent to which trait measures of narcissism and psychopathy explain the link between sociosexuality and perpetration, given that both traits have been found to be related to less restricted sociosexuality.

Relation of Personality Traits to Sociosexuality

Narcissism was associated with having more sexual partners and a preference for shorter relationships (Jonason, Gregory, Webster, & Schmitt, 2009). Individuals with high trait narcissism found it easier to start new relationships (Bradlee & Emmons, 1992), but were less committed to and interested in continuing existing relationships (Campbell, Foster, & Finkel, 2002; Foster, Shira, & Campbell, 2006; Jonason, Li, & Buss, 2010). These individuals also reported higher levels of infidelity (Campbell et al., 2002; Wiederman & Hurd, 1999) and narcissistic men, but not women, had more illegitimate children (Rowe, 1995).

Individuals high in trait psychopathy also consistently reported a history of short and unstable sexual relationships (Ellis & Ames, 1987). In fact, men with high trait psychopathy reported beginning to have sex at a younger age, marrying younger, being sexually promiscuous, being willing to leave ongoing relationships for new ones, and being unfaithful to their spouses (Jonason et al., 2010; Robins, 1966; Visser, Pozzebon, Bogaert, & Ashton, 2010). In community samples, psychopathy has been positively correlated with having a greater number of sexual partners (Jonason et al., 2009), a preference for short-term sexual relationships (Jonason et al., 2009), a greater number of “one night stands” (Seto et al., 1997), and a history of engaging in sex shortly after meeting (Seto et al., 1997). High trait psychopathy was negatively correlated with age of first intercourse (Seto et al., 1997).

Purpose of the Study and Hypotheses

The purpose of the present study was, in part, to explore the relationship between trait narcissism, trait psychopathy, and sexual assault perpetration. As levels of these personality traits have yet to be well studied in populations of college sexual assault perpetrators, the present study assessed the nature and strength of these relationships for both trait narcissism and trait psychopathy and for FFM traits. First, it was hypothesized that college men with high trait narcissism and trait psychopathy would report more sexual assault perpetration and more frequent perpetration. Second, it was hypothesized that these personality traits would mediate the relationship between sociosexuality and perpetration. Although a mediation hypothesis typically involves the assumption that a causal chain exists from independent variable to mediator variable to dependant variable, we did not hypothesize that less restricted sociosexuality causes individuals to report higher levels of trait narcissism and psychopathy, merely that the association between sociosexuality and perpetration would be explained by these personality traits. Third, the present study assessed the contribution of FFM traits to explaining perpetration status and frequency. It was hypothesized that perpetrators' FFM profiles would differ from those of non-perpetrators.

CHAPTER 2

METHODS

Participants

Participants were 355 men recruited through the UGA research participant pool. The men were on average 19.34 years old ($SD = 1.45$ years), had never been married (98.0%), were exclusively heterosexual (92.1%), and were in their first (48.5%) or second (20.0%) year of college. Participants described their ethnicity as White (81.7%), Black/African-American (6.8%), Asian (6.2%), Hispanic/Latino (1.7%) or other (3.6%). The majority of participants (59.7%) reported that they were not currently involved in a romantic relationship.

Procedure

A questionnaire was presented online using the Survey Monkey program. Participants filled out the questionnaire in groups of up to 15 men. A male experimenter greeted participants and instructed them to read and sign the consent form. Participants were seated, individually, at a computer that was spaced so that they could not read each other's responses. Once the experimenter received the participants' signed consent forms and answered any questions, he directed the participants to access the questionnaire. The Survey Monkey program presented each questionnaire sequentially. Participants had the option to skip any question and continue on to the next question or to the next portion of the survey. The entire session took 30 to 60

minutes. When the participants had completed the questionnaire, they were presented with the electronic debriefing. The experimenter was available to answer any questions, to provide a paper debriefing if requested, and to provide a list of referrals for psychological services if participants report experiencing distress.

Materials

Demographic Questionnaire: A 15-item demographic questionnaire assessed participants' age, ethnicity, year in school, religion, average yearly income of family of origin, fraternity or athletic team affiliation, sexual orientation, current relationship status, number of past sexual partners, age of first "dating" experience, and total number of dating partners.

Sexual Assault Perpetration: Sexual Experiences Survey (SES; Koss & Oros, 1982) is a 10-item self-report measure of sexual assault perpetration since the age of 14. The SES uses behavioral descriptions of various types of perpetration, ranging from unwanted kissing to rape. Sample items include "Have you ever had sex play with a women (fondling, kissing, or petting, but not intercourse) when she didn't want to because you overwhelmed her by your continual arguments and pressure?"; "Have you ever attempted sexual intercourse with a woman (get on top of her, attempt to insert your penis) when she didn't want to by giving her alcohol or drugs, to prevent her from resisting, but intercourse did not occur?"; and "Have you had sexual intercourse with a women when she didn't want to because you threatened or used some degree of physical force (twisting her arm, holding her down, etc.) to make her?" For each item, participants were asked to disclose how many times the situation occurred since the age of 14.

The SES has demonstrated adequate psychometric properties. Internal consistency has been found to be adequate, Cronbach's Alpha of .74 (Koss et al., 1987). The SES was reported to have two-week test-retest reliability (mean item agreement) of 93% (Koss & Gidycz, 1985).

Validity has also been established with strong agreement ($r = .73$) between responses on the SES and disclosure of victimization history in an interview format (Koss, Dinero, Seibel, & Cox, 1988).

Narcissism: Literature on narcissism suggests that it is a multi-dimensional construct, making assessment challenging. The present study assessed narcissism using three different scales, each thought to tap into a slightly different conceptualization. The first was the Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997), a 10-item self-report measure designed to assess vulnerable narcissism. Unlike grandiose narcissism, vulnerable narcissism is associated with conscious low self-esteem, anxiety, and hypersensitivity, accompanied by underlying attitudes of superiority and are revealed in grandiose fantasies and expectations for the self (Wink, 1991; Wright, O'Leary, & Balkin, 1989). Empirical findings suggest that vulnerable narcissism involves the same sense of entitlement, exploitativeness (Hendin & Cheek, 1997) and hostility as grandiose narcissism (Rathvon & Holmstrom, 1996), but is inversely related to self-esteem (Rose, 2002).

The HSNS was developed by retaining the 10 items from Murray's Narcissism Scale (Murray, 1938; as cited by Hendin & Cheek, 1997) that were positively correlated with a composite of two MMPI scales thought to measure vulnerable narcissism (Rose, 2002). Items are rated on a 5-point, Likert scale ranging from 1 (very uncharacteristic or untrue, strongly disagree) to 5 (very characteristic or true, strongly agree). Items include: "My feelings are easily hurt by ridicule or by the slighting remarks of others," "I often interpret the remarks of others in a personal way," and "I feel that I have enough on my hands without worrying about other people's troubles." The HSNS has been reported to yield an internal consistency coefficient of .70 in multiple samples, and the scale correlates negatively with extraversion but positively with

neuroticism (Hendin & Cheek, 1997), a pattern reflecting the nature of covert narcissism. Cronbach's Alpha in the current sample was adequate, .68. Narcissism was also assessed with the 40-item, self-report Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), the most widely used measure of narcissism in the field of social psychology (Miller & Campbell, 2008). The NPI measures a relatively healthy, "emotionally resilient, extraverted form" of grandiose narcissism (Miller & Campbell, 2008, p. 449). High NPI scores were associated with extremely positive self-image, self-aggrandizing attributional style, hostility and low FFM Agreeableness (see Emmons, 1987; Morf & Rhodewalt, 2001). For each item participants are directed to "choose the one that you MOST AGREE with" and are given the choice between two statements describing themselves. Sample items include: "I prefer to blend in with the crowd." or "I like to be the center of attention."; "I find it easy to manipulate people." or "I don't like it when I find myself manipulating people."; and "My body is nothing special." or "I like to look at my body." Factor analytic studies of the NPI have demonstrated an unstable factor structure with solutions of two- (Corry, Merritt, Mrug, & Pamp, 2008), three- (Kubarych, Deary, & Austin, 2004), four- (Emmons, 1987), and seven- (Raskin & Terry 1988) factors reported. Unfortunately, no NPI subscales based on these factor solutions exhibit acceptable levels of internal consistency (del Rosario & White 2005), and thus most recent studies employ only the NPI total score (Pincus & Lukowitsky, 2010). The NPI total score has been found to be stable over time with a 13-week test-retest correlation of 0.81 (del Rosario & White 2005), The total score has also been found to have adequate internal consistency (Cronbach's Alphas between .80 and .83, del Rosario & White 2005; Raskin & Terry, 1988). In the current sample, internal consistency was also found to be adequate (Cronbach's Alpha = .86) for the total score.

The final measure of trait narcissism was the 17-item NPD subscale from the Structured Clinical Interview for DSM Disorders-II Personality Questionnaire (SCID-N; First et al., 1997). The SCID- II Personality Questionnaire was designed to be a self-report screening tool to aid in the administration of the SCID-II. Although the scale was not designed as a stand-alone instrument, Ekselius et al. (1994) reported that its use resulted in personality diagnoses that were similar to those obtained by the SCID-II interview ($\kappa = .78$). Sample items include the following: “Is it very important to you that people pay attention to you or admire you in some way?”; “Do you often have to put your needs above other people’s?”; and “Do you feel that others are often envious of you?”. All items are answered “Yes” or “No.” The NPD subscale of the SCID-II Personality Questionnaire has been found to have somewhat low internal consistency (Cronbach's Alpha = .62, Ball, Rounsaville, Tennen, & Kranzler, 2001) and moderate 12-month test-retest reliability ($\kappa = .59$, Weiss, Najavits, Muenz, & Hufford, 1995). Internal consistency in the current sample was high (Cronbach’s Alpha = .96).

Psychopathy: The Self-Report Psychopathy Scale-III (SRP; Paulhus, Hemphill, & Hare, in press) is a 64-item measure used to assess psychopathic attributes among non-forensic populations. The scale was developed by combining items that discriminated between high and low scoring individuals on the PCL-R (Lilienfeld & Andrews, 1996). Each item is answered using a 5-point, Likert-scale ranging from 1 (Disagree Strongly) to 5 (Agree Strongly). Items include the following: “It tortures me to see an injured animal.”; “I have never attacked someone with the idea of injuring them.”; “I’m a soft-hearted person.”; and “People cry way too much at funerals.” The scale includes a total score as well as the following four subscale scores: 1) Interpersonal Manipulation, 2) Callous Affect, 3) Erratic Life Style, and 4) Antisocial Behavior. The internal consistency of the SRP has been demonstrated to be good (Cronbach’s Alpha

greater than .82; Brinkley, Schmitt, Smith, & Newman, 2001; Warkentin & Gidycz, 2007). The SRP has also been shown to be significantly correlated with the PCL-R, $r(547) = .35, p < .001$ (Brinkley et al., 2001). Internal consistency was found to be adequate in the current sample both for the full-scale (Cronbach's Alpha = .90) and for the subscales (Cronbach's Alphas of .85, .55, .79, and .75 respectively).

FFM Personality: The 60-item NEO Five-Factor Inventory (NEO-FFI) was used to assess participants' FFM traits (Costa & McCrae, 1989). The NEO-FFI was developed to provide a concise measure of the five basic personality factors. Items were drawn from the NEO Personality Inventory (NEO-PI) on the basis of their correlations with the five factors (McCrae & Costa, 1989). All items are rated on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Sample items include: "I laugh easily."; "I work hard to accomplish my goals."; and "I have a lot of intellectual curiosity." Subscales each consist of 12 items and measure 1) Neuroticism, 2) Extraversion, 3) Openness, 4) Agreeableness, and 5) Conscientiousness.

The inventory is one of the most widely used measures of the FFM and has demonstrated good psychometric properties (Pytlik Zillig, Hemenover, & Dienstbier, 2002). Agreement between the NEO-FFI and the NEO-PI-R has been found to be high for all five factors (r ranged from .76 to .91; McCrae & Costa, 2004). Two-week test-retest reliability has been uniformly high, ranging from 0.86 to 0.90 for the five subscales (Robins, Fraley, Roberts, & Trzesniewski, 2001), and internal consistency ranged from 0.68 to 0.86 (Costa & McCrae, 1992; McCrae & Costa, 2004). Scores on the NEO-FFI were found to correlate with self-ratings (correlations range from 0.44 to 0.59) and peer-ratings (correlations range from 0.29 to 0.42) on adjectives related to FFM traits (McCrae & Costa, 2004). The scale also demonstrated good reliability in

the current sample with Cronbach's Alpha of .73 for the total score and Cronbach's Alphas ranging from .64 to .87 for the factors.

Sociosexuality: Participants' sociosexuality was measured using the 7-item Sociosexuality Orientation Inventory (SOI; Simpson & Gangestad, 1991). The SOI assesses sociosexuality with four self-report behavioral items and three attitudinal items. Attitudinal items are measured on 9-point Likert scale from "strongly disagree" to "strongly agree." Sample attitudinal items include: "Sex without love is OK;" and "I would have to be closely attached to someone (both emotionally and psychologically) before I could feel comfortable and fully enjoy having sex with him or her." One behavioral item that assesses sexual fantasy is measured with an 8-point Likert-type scale from "never" to "at least once per day." An open response format is used to assess the remaining behavioral items. Sample behavioral items include the following: "With how many different partners have you had sex (sexual intercourse) within the past year?;" and "With how many partners have you had sex on one and only one occasion?" Higher scores indicated less restricted sociosexuality.

The convergent and discriminate validity of the SOI have been well established (Simpson & Gangestad, 1991). The internal consistency of the SOI tends to be quite variable across samples. For example, across the 48 samples Cronbach's Alphas for the SOI (based on raw scores of all seven items) varied between .31 and .86 (Schmitt, 2005). Much of the variability in SOI scores results from the open response format used for three of the items and the fact that no common metric underlies the items on the scale (Penke & Asendorpf, 2008). Because items cannot simply be summed to a total score, Simpson and Gangestad (1991) suggested the use of factor analysis, z-score standardization, or a weighting formula. The present study computed

sociosexuality factor scores for each participant following the method outlined in Foster et al., (2006). Internal consistency in the current sample was acceptable (Cronbach's Alpha = .81).

CHAPTER 3

RESULTS

Post Hoc Power Analysis

To determine if the current study was adequately powered given the sample size and the observed effect size, a post hoc power analysis was conducted using the G-Power program. Input parameters included the following: linear multiple regression random effects model, two-tailed, $\alpha = .05$, $N = 355$, and 5 predictor variables. Results revealed that the study achieved more than an acceptable level of power, $1-\beta = .99$.

Sexual Assault Perpetration Descriptives

Of the total sample ($N = 355$), 19.4% ($N = 69$) reported having perpetrated some form of sexual assault and 12.4% ($N = 44$) reported committing an act that meets the legal definition of rape (e.g., oral, anal or vaginal penetration without consent). For those men who reported having committed at least one sexual assault, the average frequency of this behavior was 3.54 times ($SD = 3.49$, Range 1 – 20) and the average frequency of rape perpetration was 1.84 times ($SD = 2.48$, Range 0 – 10). Among perpetrations, the most common tactic used was verbal coercion with 76.8% ($N = 53$) of perpetrators reporting having used this method at least once, followed by drugs and alcohol 26.1% ($N = 18$), authority 10.1% ($N = 7$), and force 5.8% ($N = 4$). Perpetrators reported having used verbal coercion an average of 2.51 times ($SD = 2.48$, Range 0 – 10), drugs

and alcohol 0.58 times ($SD = 1.38$, Range 0 – 5), authority 0.23 times ($SD = 1.27$, Range 0 – 10), and force 0.06 times ($SD = .38$, Range 0 – 3).

Relationship among Study Variables

Pearson product-moment correlation coefficients were used to explore the relationship among the measures of trait psychopathy, trait narcissism, and sociosexuality, see Table 1. Among the measures of trait narcissism, there was a positive relationship between scores on the Structured Clinical Interview for DSM Disorders- Narcissism (SCID-N) scale and both Narcissistic Personality Inventory (NPI) and Hypersensitive Narcissism Scale (HSNS) scores. However, no relationship between scores on the NPI and the HSNS was found. There was a positive relationship between SRP scores and all three measures of trait narcissism. Similarly, the HSNS was found to be the only variable not positively associated with Sociosexuality Inventory (SOI).

Pearson product-moment correlation coefficients were also used to assess the relationship between study variables and the frequency of sexual assault perpetration. As predicted, SRP total score, $r = .28$, $p < .001$, was significantly correlated with frequency of perpetration. The HSNS total score was not found to be related to frequency of perpetration, $r = .05$, *ns*. However, the SCID-N total score, $r = .34$, $p < .001$, was found to be related to perpetration frequency. Also consistent with predictions, less restricted sociosexuality was found to be related to more frequent perpetration of sexual assault, $r = .25$, $p < .001$.

To determine if one measure of trait psychopathy demonstrated a stronger association to frequency of perpetration than the other, a test of dependent correlations was conducted (Cohen & Cohen, 1983, pp. 56-57). Results suggested the magnitude of the association is greater for SCID-N than for NPI, $t = 2.11$, $p < .05$. Disattenuating the correlation between SCID-N and NPI

(i.e., adjusting the correlation to estimate the relationship if both measures were perfectly reliable) did not significantly change the association between them, $Z = 1.20$, *ns*. Results suggest that SCID-N total score is more closely associated with perpetration frequency than NPI total score.

Mean Differences

Independent-samples *t*-tests were used to examine the hypothesis that perpetrators of sexual assault would report higher levels of trait psychopathy and trait narcissism and less restricted sociosexuality, see Table 2 for descriptives. Consistent with our prediction, perpetrators reported higher levels of trait psychopathy as measured by the SRP total score, $t(86.12) = 5.62$, $p < .001$ than did men without a history of perpetration. As predicted, perpetrators' NPI total scores, $t(331) = 2.68$, $p < .01$, and SCID-N total scores, $t(89.18) = 5.74$, $p < .001$, were also higher than non-perpetrators. However, perpetrators' level of vulnerable narcissism, as measured by HSNS total score, was not found to differ from men without a perpetration history, $t(340) = 1.94$, *ns*. Also consistent with predictions, perpetrators of sexual assault reported less restricted sociosexuality than did non-perpetrators, $t(326) = 5.18$, $p < .001$, indicating their being more accepting of casual sexual encounters.

Independent-samples *t*-tests were also used to check for differences between the mean level of trait psychopathy, trait narcissism, and sociosexuality for men who reported at least one rape perpetration relative to men who reported only less severe forms of sexual assault perpetration (e.g., unwanted kissing, unwanted fondling). Results indicated that the groups did not differ significantly on any variable, see Table 3 for descriptives. In fact, a power analysis revealed that, given the size of the effect ($d = .16$), a sample of 1,666 perpetrators would have been necessary for the differences to reach significance. One-way ANOVAs were used to assess

for differences in mean levels of trait narcissism and trait psychopathy between perpetrators who reported using different tactics (e.g., coercion, drugs and alcohol, authority, force), and results indicated no significant differences between groups on any variable. Finally, independent samples *t*-tests were used to check for differences in levels of narcissism and psychopathy between men who reported only one sexual assault perpetration and men who reported multiple perpetrations. Again, no differences between groups on any measures were found. Based on these tests, perpetration status was classified as a self-reported history of any type of sexual assault, and no distinctions were made for perpetration severity, type of tactic used, or presence of repeat perpetration.

Explaining Perpetration Status

We predicted that both level of trait narcissism and level of trait psychopathy would help to distinguish between men who reported a history of sexual assault perpetration and men who did not. Therefore, a direct logistic regression was performed to assess the impact of these personality traits on perpetration status. The model contained five explanatory variables (SPI, SRP, NPI, SCID-N, and HSNS total scores). All measures were entered simultaneously to determine the relative contribution of each measure. The full model was statistically significant, $X^2(5) = 48.58, p < .001$, indicating that the explanatory variables distinguished between respondents. As a whole, the model explained between 16.0% (Cox and Snell R^2) and 26.6% (Nagelkerke R^2) of the variance in perpetration status and correctly classified 84.4% of cases. As shown in Table 4, three of the explanatory variables made unique contributions to the mode. The magnitude of the relationship was strongest for SOI, recording an odds ratio of 1.83 (CI = 1.18 – 2.84, $p < .01$), followed by the SCID-N total score, recording an odds ratio of 1.26 (CI = 1.07 –

1.48, $p < .01$), and finally by the SRP total score, recording an odds ratio of 1.02 (CI = 1.00 – 1.04, $p < .05$).

To further examine the relation between trait narcissism, trait psychopathy, and perpetration status, a series of exploratory direct logistic regressions were conducted in which subscale scores for the SRP scale were substituted for the SRP total score. Explanatory variables were entered simultaneously to determine the relative contribution of each variable. The response variable was a dichotomous measure of sexual assault perpetration status. The model distinguished men who reported a history of perpetration from those who did not, $X^2(5) = 46.42$, $p < .001$. Between 14.1% (Cox and Snell R^2) and 22.8% (Nagelkerke R^2) of the variance in perpetration status was explained, and 84.0% of cases were correctly classified. Two explanatory variables contributed a significant amount of unique variance in the full model. SOI score had the strongest association, recording an odds ratio of 1.59 (CI = 1.08 – 2.35, $p < .05$), followed by SCID-N with an odds ratio of 1.21 (CI = 1.06 – 1.38, $p < .01$). Results suggest that, although the SRP total score explained significant unique variance in perpetration status, none of the SRP subscales made a unique contribution.

Explaining Frequency of Perpetration

We hypothesized that level of trait narcissism and level of trait psychopathy would also explain significant variance in the self-reported frequency of sexual assault perpetration. Therefore, a linear multiple regression was used to assess the contributions of trait psychopathy and trait narcissism to explaining perpetration frequency (see Table 6). All five explanatory variables were entered simultaneously to assess their relative contributions. The total variance explained by the model was 13.9%, $F(5, 274) = 10.01$, $p < .001$. In the final model, the SOI score (Beta = .14, $p < .05$) and the SCID-N score (beta = .31, $p < .001$) made a statistically significant,

unique contribution to explaining perpetration frequency. Given that the SRP scale did not make a significant unique contribution, no further analyses were conducted.

Mediation Analysis for Narcissism

We hypothesized that trait narcissism would mediate the relationship between sociosexuality and sexual assault perpetration. Baron and Kenny's (1986) four-step approach to testing mediation was used, see Figure 1. Step 1 consisted of a linear regression to test the zero-order relationship between Sociosexuality and perpetration frequency. As predicted, Sociosexuality was related to the frequency of participants' self-reported perpetration, $B = .547$, $p < .001$.

In Step 2, a series of simple regressions was conducted to assess for zero-order relationships between SOI score and the measures of trait narcissism (i.e., NPI, SCID-N, HSNS). Again, SOI score was entered as the explanatory variable and each measure of trait narcissism was entered as the response variable in its own simple regression. SOI score was found to explain significant variance in NPI score, $B = 2.32$, $p < .001$, and in SCID-N score, $B = .83$, $p < .001$. However, SOI score was not related to HSNS score, $B = -.14$, *ns*. If any of the relationships in Steps 1 through Step 3 is found to be non-significant, mediation is not thought to be possible (Baron & Kenny, 1986). Therefore, it was not necessary to continue examining the HSNS for possible mediation.

In Step 3 the zero-order relationships between the remaining measures of trait narcissism (i.e., SCID-N, NPI) and perpetration frequency were examined using linear regressions. Either NPI score or SCID-N score was entered as the explanatory variable, and frequency of perpetration was entered as the response variable. Both SCID-N total score, $B = .239$, $p < .001$,

and NPI total score, $B = .058, p < .001$, were found to be significantly associated with perpetration frequency.

Given that Steps 1 through 3 supported the existence of statistically significant zero-order relationships for both NPI and SCID-N scores, analyses proceeded. Step 4 consisted of multiple regressions with both SOI score and a measure of trait narcissism explaining perpetration frequency. For mediation to be supported in Step 4, the effect of the personality variable on perpetration frequency must be reduced when Sociosexuality is included in the model (Baron & Kenny, 1986). As predicted, with NPI total score in the model, the association between SOI score and frequency of perpetration was reduced, $B = .45, p < .001$, indicating partial mediation. Results suggested that SCID-N total score also partially mediated the relationship between Sociosexuality and Perpetration Frequency, $B = .389, p < .01$.

Following Barron and Kenny (1986), Steps 1 through 4 indicated that, as predicted, level of grandiose narcissism partially mediated the relationship between sociosexuality and perpetration frequency. However, there are potential problems with this approach, including that it does not actually test the indirect pathway (i.e., that SOI score affects perpetration status through the compound pathway of *f* and *g*, see Figure 1) and that it tends to miss some true mediation effects (MacKinnon, Fairchild, & Fritz, 2007). Therefore, the Sobel Approach was also used to calculate and test the significance of the indirect pathway (Sobel, 1982). The test revealed that for NPI total score, the indirect pathway was significant, Sobel test statistic = 3.115, $p < .01$. Similarly, the indirect pathway for SCID-N total score was also significant, Sobel test statistic = 3.98, $p < .001$. Therefore, results are consistent between the two approaches and indicate both SCID-N total score and NPI total score partially mediated the relationship between sociosexuality and frequency of perpetration.

Mediation Analysis with Psychopathy

The above Steps 1 through 4 were repeated to test the hypothesis that level of trait psychopathy mediates the relationship between sociosexuality and perpetration frequency. Results for Step 1 are reported above and indicate a statistically significant zero-order relationship between SOI score and sexual assault perpetration frequency. In Step 2, linear regressions were conducted to assess the relationship between SOI score and level of trait psychopathy. SOI score was entered as the explanatory variable and a measure of trait psychopathy (i.e., SRP) was entered as the response variable. SOI score was found to have a statistically significant relationship with SRP total score, $B = 13.11, p < .001$,

Step 3 assessed the relationship between a measure of trait psychopathy and perpetration frequency, using simple linear regressions. Perpetration frequency was entered as the response variable and SRP was entered as the explanatory variable. There was a significant zero-order relationship between perpetration frequency and SRP score, $B = .02, p < .001$. Having established statistically significant zero-order relationships in Steps 1 through 3, analyses progressed. In Step 4, a linear multiple regression with perpetration frequency as the response variable and both SOI score and SRP total score as the explanatory variables was conducted. Both SOI score, $B = .33, p < .05$, and SRP score, $B = .02, p < .01$, remained statistically significant. Results indicated partial mediation. As above, a Sobel test was used to assess the significance of the indirect pathways. A statistically significant indirect effect was found for SRP total score, Sobel test statistic = 5.00, $p < .001$. Results are consistent with predictions and

suggest that trait psychopathy partially mediates the relationship between sociosexuality and frequency of perpetration.

Five Factor Model and Perpetration

To explore the relationship between basic personality traits and sexual assault perpetration, Independent-samples *t*-tests were used to assess for differences in the mean levels of FFM traits between sexual assault perpetrators and non-perpetrators. Results indicated that perpetrators were less agreeable ($M = 3.34, SD = 0.50$) than non-perpetrators ($M = 3.59, SD = 0.51$), $t(349) = -3.56, p < .001$. There was also a trend suggesting that perpetrators were more neurotic ($M = 2.82, SD = 0.68$) than non-perpetrators ($M = 2.65, SD = 0.71$), $t(349) = -1.90, p = .058$. No differences between groups were found on levels of Extraversion, Openness, or Conscientiousness.

A direct logistic regression was used to explore the ability of FFM traits to differentiate between men who self-reported a history of sexual assault perpetration and those who did not, see Table 8. A dichotomous measure of perpetration status was entered as the response variable, and the five subscales of the FFI were entered as explanatory variables. Results indicate that the model explained between 4.8% (Cox and Snell R^2) and 7.7% (Nagelkerke R^2) of the variance in perpetration status, $X^2(5) = 17.26, p < .01$. 80.1% of the cases were correctly classified and only Agreeableness explained a significant amount of unique variance, Odds ratio = .40, CI = .23 - .69, $p < .01$. The negative relationship between Agreeableness and Perpetration Status indicates that less agreeable men were more likely to report having committed a sexual assault.

Finally, a linear multiple regression was used to assess the ability of each of the five factors to explain variance in perpetration frequency, see Table 9. As above, all five factors were simultaneously entered as explanatory variables. Frequency of perpetration was entered as the

response variable. The model explained 5.7% of the variance in perpetration frequency, $F(5, 346) = 5.21, p < .001$. Three factors explained a significant amount of unique variance, with Agreeableness showing the strongest association, $\beta = -.24, p < .001$, followed by Extraversion, $\beta = .15, p < .001$, and Neuroticism, $\beta = .11, p < .05$.

Mediation Analysis with FFM Traits

Given that several FFM traits were associated not only with sexual assault perpetration, but also with narcissism and psychopathy, a series of exploratory analysis were conducted to determine if FFM traits mediated the relationship between narcissism, psychopathy, and sexual assault perpetration. Given that calculating and testing the indirect pathway is the preferred approach to establishing mediation (MacKinnon, Fairchild, & Fritz, 2007), a series of Sobel tests (Sobel, 1982) were used to determine if FFM traits mediated the relationship between trait narcissism and trait psychopathy and sexual assault perpetration.

In Step 1, a series of simple linear regressions was used to determine the magnitude of the association between FFM traits and frequency of perpetration, see Table 6. The association was only significant for Agreeableness, which was found negatively associated with frequency of perpetration, $B = -.80, p < .001$. In Step 2, a series of linear regressions was used to determine the association between measures of trait narcissism and trait psychopathy and FFM Agreeableness. Both the NPI total score, $B = -.03, p < .001$, and SCID-N total score, $B = -.09, p < .001$, were significantly, negatively associated with Agreeableness. Similarly, SRP total score, $B = -.01, p < .001$, was also negatively associated with Agreeableness. Finally, Sobel tests revealed that the indirect pathway through Agreeableness mediated the relationship between perpetration frequency and NPI total score, Sobel test statistic = 3.26, $p < .01$, SCID-N total score, Sobel test statistic = 3.59, $p < .001$, and SRP total score, Sobel test statistic = 3.68, $p < .001$. Results

indicate that the relations between level of trait narcissism and psychopathy and frequency of sexual assault perpetration are partially mediated by FFM Agreeableness.

CHAPTER 4

DISCUSSION

The purpose of the present study was to explore the relations between trait narcissism and trait psychopathy, and sexual assault perpetration. We hypothesized that college men with high levels of trait narcissism and psychopathy would be more likely to report sexual assault perpetration and would report more frequent perpetration. In addition, we hypothesized that these personality traits would mediate the relation between sociosexuality and perpetration. In the present sample of college men, almost 20% reported some type of sexual assault perpetration, and 12% reported perpetrating at least one attempted or completed rape. On average, perpetrators in our sample reported having committed three sexual assaults and one rape. The perpetration rate reported in the current sample is consistent with previous samples of college men (Koss et al., 1987; Malamuth et al., 1991).

Integration with Previous Literature

Perpetrators in our sample self-reported use of verbal coercion as the most common tactic by which they gained access to their victims, followed by incapacitating victims with drugs or alcohol. Very few men reported the use of authority or force to commit a sexual assault. The reliance on verbal coercion and incapacitating substances to perpetrate acts of sexual assault is

also consistent with previous college samples (Koss, 1989; Miller & Marshall, 1987; Petty & Dawson, 1989). Previous findings suggest that verbal coercion is more likely to occur than physical force in established relationships (Lyndon, White, & Kadlec, 2007; Testa & Livingston, 1999), especially when prior consensual sexual activity has occurred (Lyndon et al., 2007). Similarly, the use of alcohol or drug facilitated perpetration also tends to occur in the context of a relationship (e.g., acquaintance, dating partner; Abbey et al., 2002, 2003; Cleveland, Koss, & Lyons, 1999). The use of force is more common among perpetrators who have no relationship to their victims (Cleveland et al., 1999). Therefore, it is likely that the majority of the sexual assaults reported by our sample occurred in the context of relationships (e.g., dating, acquaintance, friendship).

Consistent with our predictions, results indicated that, relative to men without a history of perpetration, sexual assault perpetrators reported higher levels of trait psychopathy and less restricted sociosexuality (i.e., are more willing to engage in sexual relations without closeness or commitment, Gangestad & Simpson, 1990; Simpson & Gangestad, 1991). Less restricted sociosexuality has been consistently documented among college sexual assault perpetrators (Finkelhor & Yllo, 1985; Lalumiere & Quinsey, 1996; Landolt et al., 1995; Ryan, 2004). Trait psychopathy has been much less heavily studied in college samples of sexual assault perpetrators; however, existing studies are consistent with the present findings and suggest that perpetration is associated with higher levels of trait psychopathy (Hersh & Gray-Little, 1998; Kosson et al., 1997).

In the current study, results for trait narcissism are somewhat more complex. The extant literature on narcissism suggests that it is a multi-dimensional construct (see Pincus & Lukowitsky, 2010). Therefore, the present study included three different scales, each thought to

tap into a slightly different conceptualization of narcissism. First, the Narcissistic Personality Inventory (NPI) is the most widely used measure of narcissism in the field of social psychology and is thought to measure an extraverted and relatively healthy form of narcissism (Miller & Campbell, 2008, Pincus & Lukowitsky, 2010). The second measure was the subscale from the SCID-II Personality Questionnaire that assesses Narcissistic Personality Disorder (SCID-N). The SCID-N measures a grandiose and relatively unhealthy form of narcissism (Pincus & Lukowitsky, 2010). Third, the Hypersensitive Narcissism Scale (HSNS) measures vulnerable narcissism, characterized by conscious low self-esteem, anxiety, and hypersensitivity, as well as underlying attitudes of superiority (Wink, 1991; Wright et al., 1989). Levels of both forms of grandiose narcissism (i.e., NPI and SCID-N), but not vulnerable narcissism, were higher among sexual assault perpetrators.

Results suggest that high levels of the grandiose form but not vulnerable form of trait narcissism were associated with a greater likelihood of sexual assault perpetration. The fact that results did not support the role of vulnerable narcissism is consistent with existing literature. Consistently, vulnerable narcissism has been related to higher levels of anger and hostility, but not to aggressive behavior (Bushman et al., 2009; Okada, 2010; Wink, 1991). Individuals high on vulnerable narcissism seem to utilize less direct forms of aggression perhaps because of high levels of anxiety (Lapsley & Aalsma, 2006; Okada, 2010; Wink, 1991).

The current study is one of the first to measure levels of trait narcissism and trait psychopathy in a sample of college sexual assault perpetrators. However, Hersh and Gray-Little (1998) found that college men who reported sexual assault perpetration were more manipulative, impulsive, and less empathic (traits associated with narcissism and psychopathy), than those reporting no perpetration. In addition, men with a history of more severe acts of sexual assault

perpetration were more manipulative and sensation seeking than the men who engaged in less severe acts. Based on these results, we assessed for differences in levels of trait psychopathy and trait narcissism between participants who reported more severe perpetration (e.g., attempted or completed rape perpetration) relative to those who reported less severe perpetration (e.g., unwanted fondling or kissing). Results indicated that the groups did not differ significantly on any measure of trait narcissism or trait psychopathy. The discrepant findings are likely due to the difference between the constructs assessed. While sensation seeking and manipulativeness are certainly related to narcissism and psychopathy, they are only two of many components. Therefore, it is not surprising that these components may be related to perpetration of more severe acts of sexual assault while there may be no difference in overall level of trait narcissism and psychopathy. Clearly, more studies are necessary before firm conclusions can be drawn.

Explaining Perpetration

We predicted that level of trait narcissism and trait psychopathy would explain variance in perpetration status. Consistent with this prediction, trait psychopathy and trait narcissism distinguished between respondents who did report sexual assault perpetration and those who did not. In fact, these personality traits explained a substantial amount of variance in perpetration status (i.e., between 16% and 27%). Consistent with our prediction, both level of trait narcissism, as measured by SCID-N total score, and level of trait psychopathy, as measured by SRP total score, were positively associated with perpetration and explained a significant amount of unique variance. Results suggest that level of psychopathy and level of grandiose narcissism are associated with an increased likelihood that a participant would report having perpetrated a sexual assault. Exploratory analyses suggested that, although the SRP total score explained

significant unique variance in perpetration status, none of the SRP subscales contributed unique variance.

In addition to examining the variables that distinguished between perpetrators and non-perpetrators, the present study also examined the variables that explained variance in the self-reported frequency of perpetration. We hypothesized that level of trait narcissism and level of trait psychopathy would also explain significant variance in the self-reported frequency of sexual assault perpetration. Results were consistent with this prediction. Only the SCID-N score explained a unique amount of variance. As discussed above, results for the SCID-N total score are logical and consistent with existing literature. The fact that the same variable distinguished between perpetrators and non-perpetrators and explained variance in the frequency of perpetration is also sensible.

Mediation Analyses

Consistently, men with less restricted sociosexuality (i.e., who are more accepting of casual sex) are more likely than men with more restricted sociosexuality to perpetrate a sexual assault (Finkelhor & Yllo, 1985; Lalumiere & Quinsey, 1996; Landolt et al., 1995; Ryan, 2004). This relationship has traditionally been explained as a function of less restricted sociosexuality leading to more frequent sexual encounters and more frequent sexual encounters being associated with increased opportunity to engage in perpetration. Yet, if a man does not perpetrate in one sexual encounter or with one partner, is it logical to believe that he will do so given more opportunity? Rather than a question of opportunity, the present study suggests that the relation between sociosexuality and sexual assault perpetration may, at least partially, be explained by personality traits. Given that both narcissism and psychopathy have been found to be associated with sexual assault perpetration (Baumeister et al., 2002; Bushman et al., 2003; Hersh & Gray-

Little, 1998; Johansson et al., 2008; Kosson et al., 1997) and less restricted sociosexuality (Campbell et al., 2002; Jonason, Li, Webster, & Schmitt, 2009; Seto et al., 1997), the current study hypothesized that these personality traits would, at least partially, mediate the relation between sociosexuality and perpetration.

Results supported this hypothesis for both grandiose narcissism and psychopathy. Although no personality measure fully mediated the relationship between sociosexuality and perpetration frequency, the Baron and Kenny (1986) and the Sobel (1982) approaches indicated partial mediation by NPI, SCID-N, and SRP total scores. Results further reinforce the importance of the vulnerable vs. grandiose narcissism distinction in relation to sexual assault perpetration. Across multiple analyses, vulnerable narcissism was found to have no relation to sexual assault perpetration while both measures of grandiose narcissism were shown to be important. Given that the frequency of sexual assault perpetration behavior is likely determined by many factors both intrinsic (e.g., personality traits, physical attractiveness, perceived social norms, past completed attempts at sexual assault, perceived consequences) and extrinsic (e.g., availability of a potential victim, availability of a suitable location, level of supervision by authority figures) to the individual, it is not surprising that personality traits did not fully mediate the relationship. Likely, future studies will explore the role of many variables that explain variance in this relationship. However, the current results certainly suggest that the association between less restricted sociosexuality and sexual assault perpetration is due to factors beyond an increased opportunity to perpetrate.

FFM Personality Traits and Perpetration

The Five-Factor Model (FFM) represents perhaps the most widely accepted and well-studied theory of normal personality (Costa & McCrae, 1992). Based on previous research

exploring the contribution of FFM traits to explaining variation in sexual assault perpetration, we hypothesized that perpetrators would report a different profile than would non-perpetrators. As predicted, perpetrators were less agreeable, and, perhaps, more neurotic than non-perpetrators. The only other study to assess FFM traits among college men also found that perpetrators were less agreeable (Voller & Long, 2010). Several studies with incarcerated sex-offenders have suggested that, relative to men in the general populations, sex-offenders are more neurotic (Dennison et al., 2001; Lehne, 2002). Our results are, therefore, generally consistent with the existing literature.

In addition to examining mean differences, the present study explored the ability of FFM traits to distinguish between men who self-reported a history of sexual assault perpetration and those who did not. FFM traits explained a significant amount of variance in perpetration status, with Agreeableness explaining a significant amount of unique variance. Consistent with the significant mean difference between perpetrators and non-perpetrators on Agreeableness, the less agreeable a man was, the more likely he was to report having committed a sexual assault. FFM traits also explained significant variance in the reported frequency of perpetration behavior, and Agreeableness was significantly associated with perpetration frequency. Less agreeable men reported more frequent perpetration, as did men who were more extroverted and more neurotic.

Clearly, the present study suggests that being low on Agreeableness is related to sexual assault perpetration among college men. Agreeableness also partially mediated the relationship between level of trait narcissism and trait psychopathy and sexual assault perpetration frequency. The indirect pathway through Agreeableness was found to be significant for both measures of grandiose narcissism and both measures of psychopathy. Results are consistent with existing theoretical and empirical research suggesting that disagreeableness is a primary feature of both

narcissism (Jakobwitz & Egan, 2006; Miller & Campbell, 2008; Paulhus & Williams, 2002) and psychopathy (Williams et al., 2007). In fact, low Agreeableness (i.e., disagreeableness) has been found to be a strong predictor of antisocial behavior (Miller & Lynam, 2001) and aggression (Bettencourt, Talley, Benjamin, & Valentine, 2006).

The dimension of Agreeableness is anchored by characteristics such as interpersonal warmth, compliance, and consideration for others on the high end and characteristics such as antagonism, chronic disregard for others, and stubbornness on the low end (Graziano & Eisenberg, 1997). One theory that has been used to explain these associations suggests that Agreeableness measures the degree to which an individual is motivated to expend effort developing and maintaining prosocial relationships with others (Graziano & Eisenberg, 1997). The implication is that agreeable individuals are motivated to maintain positive interpersonal relations and are, therefore, less likely to engage in behaviors that have the potential to damage relations such as aggression or sexual assault. However, disagreeable individuals are not similarly motivated and are, thus, more likely to engage in behaviors which are detrimental to their relationships, such as being unwilling to forgive (Exline et al., 2004) or to help others (Graziano, Habashi, Sheese, & Tobin, 2007). Consistent with this theory, Agreeableness is negatively correlated with peer rejection and positively correlated with the overall quality of close peer relationships (Scholte, van Aken, & van Lieshout, 1997; Shiner, 2000). Therefore, the relation between Agreeableness and sexual assault may be understood as resulting from a lack of concern for the interpersonal consequences of perpetration behavior among disagreeable men.

Limitations

The current study represents one of the first to measure trait narcissism, including grandiose and vulnerable narcissism, and trait psychopathy in a large sample of college sexual assault perpetrators. In addition, it is one of the first to assess FFM traits among college

perpetrators. The contributions of the current study must be considered in the context of several limitations. The sample size presents a possible limitation because, although the sample size was sufficient to adequately power the analyses, there were very few participants who reported perpetration by authority or force tactics. In order to assess for differences between various types of tactics, a larger sample of men would have been necessary. The cross-sectional nature of the current study is also a limitation. Although we can interpret our results as suggesting that high trait narcissism, high trait psychopathy, and low Agreeableness explained significant variance in sexual assault perpetration; we cannot determine the direction of these relationships or discuss our results in terms of predictive power. In the future, collecting longitudinal data would likely facilitate a deeper understanding of these relationships.

The reliance on self-report measures also represents a limitation. Unfortunately, researchers attempting to investigate sexual aggression are presented with very few, if any, viable alternatives to self-report measures. However, supplementing self-reports with peer-ratings of personality traits and past behavior is one manner in which corroborating evidence may be collected. In the present study, measures were taken to ensure participants' privacy while completing the survey and participants were advised that their responses would be kept confidential. It is encouraging that participants in the current sample reported rates of perpetration that were consistent with the existing literature. For these reasons, although the self-report nature of the data is a limitation, we believe that valid conclusions can still be drawn.

Finally, the fact that our sample was drawn primarily from men in their first and second years of college is also a limitation. Data collection using the Research Participation Pool draws heavily on freshman and sophomore students, and results in samples that may not be

representative of the college population. Ideally, researchers would have access to a random sample of college men in different years and different majors.

Implications and Conclusions

Given the results and the limitations discussed above, several conclusions can be drawn from the current study. The distinction between grandiose and vulnerable narcissism was relevant to understanding the relation between trait narcissism and sexual assault perpetration. Consistent with the results for other measures of overt aggression, high levels of grandiose narcissism, but not vulnerable, narcissism were associated with sexual assault perpetration. Between the two conceptualizations of grandiose narcissism, the unhealthy (i.e., SCID-N) rather than the healthy, resilient type (i.e., NPI) was more closely associated with perpetration of sexual assault. Again, these results are consistent with other measures of negative outcomes such as distress, psychiatric comorbidity, and risk for suicide. High levels of trait psychopathy were associated with sexual assault perpetration in the current sample. Analysis focused on exploring the components of trait narcissism and trait psychopathy that explained unique variance in sexual assault perpetration suggested the importance of grandiose but maladaptive narcissism and a history of general antisocial behavior.

Low Agreeableness was associated both with perpetration status and perpetration frequency, while high Extraversion and high Neuroticism were also associated with more frequent perpetration. Agreeableness partially mediated the relationship between trait narcissism and sexual assault perpetration as well as the relationship between trait psychopathy and sexual assault perpetration. Results are consistent with the idea that Agreeableness constrains behavior which is harmful to relationships so that individuals low on Agreeableness are less motivated to maintain prosocial relationships and more likely to engage in aggressive or antisocial behavior.

Finally, grandiose expressions of trait narcissism as well as trait psychopathy were found to partially mediate the relationship between sociosexuality and sexual assault perpetration. Results suggest that a preference for casual sex among sexual assault perpetrators is partially explained by higher levels of trait narcissism and trait psychopathy. To date, the bulk of the research in the area of sexual aggression has focused on men's attitudes (e.g., towards women, towards violence, towards relationships) and relatively few studies have investigated the impact of personality. Taken together, the current results support the importance of personality traits in distinguishing between men who self-report a history of sexual assault preparation and being associated with more frequent perpetration. The present study is consistent with a small but growing body of research implicating personality traits, specifically FFM traits, and several specific personality traits, grandiose narcissism and psychopathy, in contributing to our understating of sexual assault among college men.

Although preliminary, there are several possible implications of these conclusions. Recent longitudinal examinations of sexual assault behavior among college men have suggested the existence of two distinct types of perpetrators, men who perpetrate consistently across situations and across time and men who are less consistent (Abbey & McAuslan, 2004; Hall et al., 2006). Findings suggest that the small sub-set of men who perpetrate consistently are responsible for the vast majority of sexual assaults (Abbey & McAuslan, 2004; Hall et al., 2006). The extant literature suggests overlap between the attitudes and behaviors of consistent perpetrators and the attitudes and behaviors associated with trait narcissism and trait psychopathy. Because personality exerts a stable influence on attitudes and behaviors, it is likely that personality traits account for some of the observed consistency of these men's perpetration behavior. Future longitudinal studies should include measures of grandiose narcissism and

psychopathy to determine whether these traits are indeed more common among men who self-report consistent perpetration.

In the past 30 years there has been an expansion of research related to the primary prevention of sexual assault, and several prevention programs capable of educating participants and changing their attitudes towards sexual violence have been developed (Anderson & Whiston, 2005). However, the attitude change resulting from participation has been relatively short-lived and effects on perpetration behavior have generally not been clinically significant (Anderson & Whiston, 2005). As a result, victimization and perpetration statistics have remained unchanged (Abbey & McAuslan, 2004; Brener et al., 1999). It is likely that the current prevention programs, which focus on attitude change, empathy building, and creating social norms that are less accepting of sexual assault, have less impact on the behavior of men who are low on trait Agreeableness, high on trait narcissism, and high on trait psychopathy. The current study suggests that personality traits are important in predicting outcomes for primary prevention programs and should be included in the assessment of future programs. Thought should also be given to the effect that men with this personality profile may have on the climate of a prevention program and the amount that other men gain from the experience. For example, research on the treatment of incarcerated sex-offenders suggests that men high in trait psychopathy have a negative and disruptive influence on treatment groups (Beech, Fischer, & Beckett, 1999). Future studies could assess for differences in behavioral outcomes between groups who did or did not contain men with this personality profile.

Certainly not all men in the current study who self-reported perpetration also reported high levels of trait narcissism and trait psychopathy and low levels of Agreeableness. However, it has long been known that associating with other men who are accepting of sexual aggression is

a risk factor for perpetration (Kanin, 1985; Martin & Hummer, 1989). Future studies could explore what effect the behavior and attitudes of perpetrators have on their friends and acquaintances. In her work on antisocial behavior among adolescents, Moffit (1993) suggested that mimicry of the behavior of more pathological individuals is an important component of the antisocial behavior of the average adolescent. Similarly, the attitudes and behavior of men who are less agreeable, more narcissistic, and more psychopathic may serve as a template for others' sexually aggressive behavior.

Sexual assault continues to be a fairly common experience for college women in America, and a substantial number of college men consistently report perpetration of sexually aggressive acts. Although there has been a dramatic increase in our understating of the risk and protective factors associated with perpetration in the last 30 years, more research is needed. To date, the majority of studies in this area have focused on attitudinal and behavioral correlates of perpetration and have largely ignored the contribution of personality traits. The current study, along with a small but growing body of existing research, makes a strong case for the inclusion of personality measures in future studies and suggests that personality has been undervalued in the study of sexual aggression. Hopefully, future studies will continue to increase our knowledge and understanding of these issues and allow us to develop more effective methods of preventing sexual assault.

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Table 1

Pearson product-moment correlations between measures of trait psychopathy, trait narcissism, and sociosexuality and Cronbach's Alphas

	1	2	3	4	5	6	7	8
1. SRP	.90	.83*	.84*	.72*	.47*	.50*	.06	.50*
2. SRP Erratic Life Style		.79	.59*	.48*	.38*	.32*	.07	.44*
3. SRP Interpersonal Manipulation			.85	.41*	.50*	.52*	.07	.49*
4. SRP Antisocial Behavior				.75	.27*	.34*	.07	.34*
5. NPI					.86	.49*	-.03	.29*
6. SCID-N						.96	.35*	.27*
7. HSNS							.68	-.03
8. SOI								.81

SRP = Self Report Psychopathy, NPI = Narcissistic Personality Inventory, SCID-N = Structured Clinical Interview of DSM Disorders- Narcissism, HSNS = Hypersensitive Narcissism Scale, SOI = Sociosexuality Inventory, * = $p < .001$

Table 2

Levels of trait psychopathy, trait narcissism, and sociosexuality

Measure	Perpetrators	<i>M</i>	<i>SD</i>	Non-Perpetrators	<i>M</i>	<i>SD</i>
SRP		169.20	27.44		148.55	22.42
NPI		20.02	7.93		17.23	7.19
SCID-N		8.22	3.41		5.70	2.62
HSNS		28.06	5.44		26.65	5.29
SOI		.54	.88		-.13	.91

SRP = Self Report Psychopathy, NPI = Narcissistic Personality Inventory, SCID-N = Structured Clinical Interview of DSM Disorders- Narcissism, HSNS = Hypersensitive Narcissism Scale, SOI = Sociosexuality Inventory

Table 3

Rape perpetrators' and non-rape perpetrators' levels of trait psychopathy, trait narcissism, and sociosexuality

Measure	Rape	<i>M</i>	<i>SD</i>	Non-Rape	<i>M</i>	<i>SD</i>
SRP		170.32	27.12		167.29	28.50
NPI		20.28	7.46		19.55	8.85
SCID-N		8.02	3.64		8.56	2.98
HSNS		27.76	5.33		28.58	5.7
SOI		.68	.85		.32	.89

SRP = Self Report Psychopathy, NPI = Narcissistic Personality Inventory, SCID-N = Structured Clinical Interview of DSM Disorders- Narcissism, HSNS = Hypersensitive Narcissism Scale, SOI = Sociosexuality Inventory

Table 4

Logistic regression with total scores explaining variance in history of sexual assault perpetration

	<i>B</i>	S.E.	Wald	<i>df</i>	<i>p</i>	Odds ratio	95% C. I. for Odds ratio	
							Lower	Upper
			5.35					
SRP	.02	.01		1	.02	1.02	1.00	1.04
NPI	-.05	.03	3.28	1	.07	.95	.90	1.00
SCID-N	.23	.08	7.93	1	.01	1.26	1.07	1.48
HSNS	-.02	.04	0.25	1	.62	.98	.92	1.05
Constant	-5.25	1.53	11.74	1	.00	.01		

SRP = Self Report Psychopathy, NPI = Narcissistic Personality Inventory, SCID-N = Structured Clinical Interview of DSM Disorders- Narcissism, HSNS = Hypersensitive Narcissism Scale

Table 5

Linear regression with total scores explaining variance in frequency of perpetration

	<i>B</i>	<i>S.E.</i>	Beta	<i>t</i>	<i>p</i>
SRP	.01	.01	.07	.93	.35
NPI	.00	.02	-.02	-.22	.83
SCID-N	.21	.05	.31	4.09	.00
HSNS	-.03	.02	-.08	-1.33	.19
SOI	.31	.14	.14	2.24	.03
Constant	-.60	.96		-.63	.53

SRP = Self Report Psychopathy, NPI = Narcissistic Personality Inventory, SCID-N = Structured Clinical Interview of DSM Disorders- Narcissism, HSNS = Hypersensitive Narcissism Scale

Table 6

Logistic regression with Five Factor Model traits explaining variance in history of sexual assault perpetration

	<i>B</i>	S.E.	Wald	<i>df</i>	<i>p</i>	95% C. I. for Odds		
						Odds ratio	Lower	Upper
Neuroticism	.37	.22	2.87	1	.09	1.45	.94	2.22
Extraversion	.46	.30	2.31	1	.13	1.59	.88	2.88
Openness	-.05	.24	.04	1	.84	.95	.60	1.51
Agreeableness	-.92	.28	10.71	1	.00	.40	.23	.69
Conscientiousness	-.22	.25	.74	1	.39	.81	.49	1.32
Constant	.06	1.87	.00	1	.98	1.06		

Table 7

Linear regression with Five Factor Model traits explaining variance in sexual assault perpetration frequency

	<i>B</i>	<i>SE</i>	Beta	<i>t</i>	<i>p</i>
Neuroticism	.33	.16	.11	1.99	.05
Extraversion	.61	.23	.15	2.60	.01
Openness	.30	.18	.09	1.66	.10
Agreeableness	-.95	.21	-.24	-4.35	.00
Conscientiousness	.12	.19	.04	.63	.53
Constant	-.40	1.46		-.28	.78

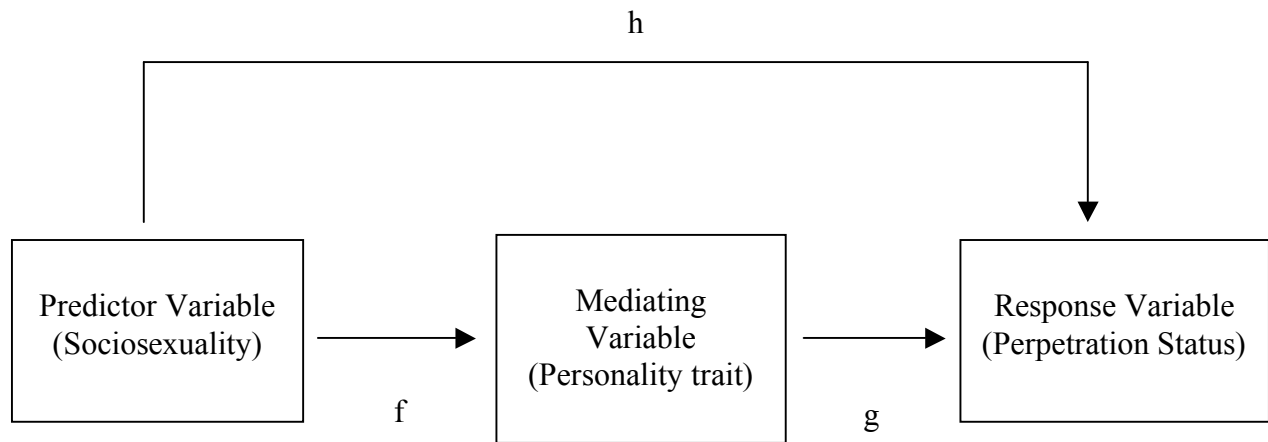


Figure 1

Diagram of mediation analysis