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# The PID-5, Everyday Sadism, And Parental Attachment Predict Sexual Aggression

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THE PID-5, EVERYDAY SADISM, AND PARENTAL ATTACHMENT PREDICT  
SEXUAL AGGRESSION

by

Tiffany Dawn Russell  
Bachelor of Arts, University of Central Oklahoma, 2013

A Thesis

Submitted to the Graduate Faculty

of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

Master of Arts

Grand Forks, North Dakota

May  
2016

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This thesis, submitted by Tiffany Dawn Russell in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.

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Alan King (Chairperson)

---

Heather Terrell

---

Karyn Plumm

This thesis is being submitted by the appointed advisory committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

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Wayne Swisher  
Dean of the School of Graduate Studies

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Tiffany Dawn Russell  
April 27, 2016

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## ABSTRACT

This study attempted to replicate and expand the Confluence Model of Sexual Aggression (Malamuth et al., 1991) in an online survey of national ( $n = 512$ ) and university ( $n = 100$ ) men. Overall, 28.8% of men (national = 29.5%; university = 25%) reported perpetrating sexual aggression against a woman at least once. In the sexually aggressive group, 81.2% reported perpetrating sexual violence more than once, and 40.3% reported six or more acts. It was hypothesized the Confluence Model would be improved by adding everyday sadism, parental attachment, and the Personality Inventory for the *DSM-5* (PID-5). In a structural equation model, hostile masculinity ( $\beta = .44$ ), childhood sexual abuse ( $\beta = .26$ ), juvenile delinquency ( $\beta = .28$ ), and physical everyday sadism ( $\beta = .20$ ) had significant direct effects on sexual aggression. Physical everyday sadism ( $\beta = .26$ ), juvenile delinquency ( $\beta = .14$ ), PID-5 callousness ( $\beta = .30$ ), and anxious attachment ( $\beta = .26$ ) had significant indirect effects on sexual aggression, mediated by hostile masculinity. These predictors accounted for 79% of the variance in the sexual aggression latent variable, which represented considerable model improvement. Unrestricted sociosexuality, misperception of women's sexual intent, and heavy alcohol use were not significant predictors of sexual aggression in this model.

## **CHAPTER I**

### **INTRODUCTION**

Sexual violence against women is alarmingly prevalent. Population-based surveys indicate approximately 1 in 6 US women experience rape in their lifetime (Kilpatrick, Edmunds, & Seymour, 1992; Tjaden & Thoennes, 2000), and less than 20% of survivors report the assault to law enforcement (Kilpatrick et al., 1992; Tjaden & Thoennes, 2006; Wolitzky-Taylor et al., 2011). Sexual violence is more prevalent on college campuses, as 20 to 25% of college women are victimized (Krebs, Lindquist, Warner, Fisher, & Martin 2009). Sexual minority women have an even greater risk. Nearly 3 out of 4 lesbian and bisexual women report adult sexual aggression, with 79% of those assaults perpetrated by men (Hequembourg, Livingston, & Parks, 2013).

Equally alarming are the prevalence rates of men self-reporting sexual violence against women. Up to 58% of men commit an act of sexual aggression while in college or university (Parkhill & Abbey, 2008), and 43 and 59% commit sexual assault in communities (Abbey, Jacques-Tiuri, & LeBreton, 2011; Widman, Olson, & Bolen, 2013). Non-convicted community men and convicted sex offenders do not statistically differ in their rates of self-reported sexual aggression (59% and 68%, respectively; Widman et al., 2013), and men endorsing sexual violence often commit the acts multiple times, with the same and different victims (Abbey & McAuslan, 2004; Mouilso & Calhoun, 2012; Widman et al., 2013).

## **Project Definitions and Scope**

Sexual violence takes many forms, and researchers have used several definitions for these acts. The term *rape* is legal term, described as “sexual activity without consent or against a person’s will,” and the activities constituting rape differ by jurisdiction (Baumeister, Catanese, & Wallace, 2002, p. 93). *Sexual assault* is the term often used in behavioral research, and it can be further defined as using physical force, threatening to use physical force, or using drugs or alcohol to make a person comply with an unwanted sexual act, up to and including oral, vaginal, and anal penetration (Baumeister et al., 2002; DeGue & DiLillo, 2004). *Sexual aggression*, *sexual assault*, *rape*, and *sexual violence* are often used interchangeably (Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001; DeGue & DiLillo, 2004), which will be continued in this project.

*Sexual coercion* is the use of nonphysical means to gain sexual contact. Sexual coercion can include lies, guilt, threats, false promises, and ignoring requests to stop sexual activity. Although seemingly less severe, sexual coercion is victimizing a person by reducing autonomy, resulting in feelings of betrayal, shame, and exploitation (DeGue & DiLillo, 2004; 2005). Sexual coercion survivors often have lower self-esteem, tend to isolate themselves, and may experience higher levels of depression and social anxiety than are reported by victims of physical sexual assault (DeGue & DiLillo, 2004; 2005; Zweig, Barber, & Eccles, 1997). Of incarcerated men not limited to sexual violence, 51% endorsed coercive tactics and 20% endorsed aggressive tactics in perpetrating past sexual assaults. Up to 90% of the inmates endorsing aggression also used coercion in the past, suggesting aggressors and coercion have similar traits and characteristics (DeGue, DiLillo, & Scalora, 2010). In this study, *sexual coercion* or *coercion* will refer to

unwanted, nonphysical sexual contact specifically, and general descriptions of sexual aggression will include coercion unless otherwise indicated.

It is acknowledged sexual aggression occurs between pairs of men, pairs of women, and women can victimize men (Baumeister et al., 2002). These types of assaults are beyond the scope of this study. Pedophilia is also beyond the scope of this project, as it has different etiological and perpetrator characteristics (Carvalho & Nobre, 2013; Gannon, Collie, Ward, & Thakker, 2008; Seto, 2008; Seto & Lalumiere, 2010). The present research focuses solely on men who assault women. Consistent with empirical literature using similar measurement instruments, adults in this study are defined as those over the age of 14 (e.g., Abbey, Jacques-Tiura, & LeBreton, 2011; Koss & Oros, 1982; Koss, Gidycz, & Wisniewski, 1987; Parkhill & Abbey, 2008), with the recognition that the legal age for sexual consent varies by jurisdiction (Baumeister et al., 2002).

This project refers to a number of trait dimensions that are potentially relevant to the development of *pathways* or *constellations* in a sexual aggression model. *Trait* or *factor* identify generalized response tendencies that seem relevant to a contributing path, while actual measures of respective trait dimensions will be referred to as a *predictor variable*, *predictor*, or *scale measure*. *Traits* and *factors* are thus conceptual constructs. *Variables* and *measures* are published methods to quantify and infer the generalized response tendencies (traits) emphasized in models of sexual aggression, and specifically as they apply to the Confluence Model of Sexual Aggression (Confluence Model).

### **The Confluence Model of Sexual Aggression**

A widely used etiological model of sexual aggression is Malamuth and colleagues' Confluence Model (LeBreton, Baysinger, Abbey, & Jacques-Tiura, 2013;

Malamuth, Sockloskie, Koss, & Tanaka, 1991). The Confluence Model is a convergence of several risk factors resulting in the perpetration of sexual aggression (Malamuth, 1986). Specifically, the model theorizes an impersonal sexual orientation (preference for non-committed and unattached sexual partners), hostile masculinity (aggression directed towards women specifically), and situational opportunities disinhibit aggressive sexual behavior. Both motive (i.e., an impersonal sexual orientation) and behavioral disinhibition (e.g., control, domination, conquest) are believed to elevate the risk of sexual aggression in some situations, with their interaction posing special concern (Malamuth, Heavey, & Linz, 1996a). Each pathway independently predicts sexual aggression, but men high on both report the greatest number of acts. The trait structures contributing to the constellations' development appear multifaceted and derived largely through enculturation (Jacques-Tiura, Abbey, Parkhill, & Zawacki, 2007; Malamuth, 2003; Parkhill & Abbey, 2008).

The utility of the Confluence Model is demonstrated in multiple studies, and considerable evidence has emerged in support of hypotheses derived directly from the model. For example, self-reported sexual aggression is higher among individuals reporting juvenile delinquency, early sexual activity, multiple sexual partners, hostility towards women (HTW), adversarial sexual beliefs, rape myth acceptance (RMA), and non-sexual trait aggression (Malamuth et al., 1991). Empathy is a moderator of sexual aggression in the model, and a lack of empathy (i.e., callousness) predicts higher levels of violence (Wheeler, George, & Dahl, 2002). Hostile masculinity and impersonal sexual orientation predicts sexual assault reported by men and their romantic partners (Malamuth, Linz, Heavey, Barnes, & Acker, 1995), and men high on both constellations



seem to misperceive and sexualize the friendliness of female interaction partners (Jacques-Tiura et al., 2007).

### **Hostile Masculinity**

The hostile masculinity constellation is a proximal predictor of sexual aggression in the Confluence Model. It is linked to personality traits such as aggression, callousness, manipulateness, and domination (Malamuth, 2003; Malamuth et al., 1995). Malamuth et al (1991; 1996a) hypothesized hostile masculinity was the result of societies and subcultures encouraging males to express “masculine,” dominant, and competitive qualities, while punishing the expression of “feminine” qualities, such as kindness and empathy. A young male growing up in this environment becomes inimical towards qualities associated with femininity (Malamuth et al., 1991; 1996a). Malamuth et al (1995) also posited anxiousness and fear of rejection drive behaviors in highly hostile and masculine adult males. Aggression relieves these anxieties by allowing men to control and dominate women. By successfully dominating women, men live up to the male superiority expectations entrenched in them since childhood (Malamuth et al., 1995).

Hostile masculinity differs from hypermasculinity. Men high in hostile masculinity tend to direct aggression towards women specifically, whereas hypermasculine men have a more generalized aggressive style. However, hypermasculine men may also have high scores on hostile masculinity measures (Malamuth et al., 1996a).

The hostile masculinity constellation is latent, and it consists of several observed variables. One key variable in the hostile masculinity construct is RMA. In both a prison and university sample, RMA has been linked to psychopathic callous and unemotional traits, as well as exposure to violence in childhood (Debowska, Boduszek, Dhingra, Kola,

Meller-Prunkska, 2015). HTW and sexual dominance are also main predictors in the hostile masculinity constellation that have been predicted by psychopathy-related traits (Parkhill & Abbey, 2008; Malamuth 2003).

### **Unrestricted Sociosexuality**

The impersonal sexual orientation constellation is a proximal predictor of sexual aggression described in the Confluence Model. It consists of a preference for casual sex, rather than long-term, monogamous relationships (Abbey, Jacques-Tiura, & LeBreton, 2011; Malamuth et al., 1991; 1995). Relationship researchers call this individual difference sociosexuality, and they conceptualize it as a dimensional construct with restricted and unrestricted sociosexuality at the poles (Mouilso & Calhoun, 2012; Simpson & Gangestad, 1991). Unrestricted sociosexuality is consistent with the impersonal sexual orientation of the Confluence Model (Malamuth et al., 1995), and using the term *unrestricted sociosexuality* is most conducive to current research trends (e.g., Mouilso & Calhoun, 2012). Unrestricted sociosexuality manifests as emotional detachment, consensual sex at a young age, numerous sexual partners, frequent sexual contact with a person only once (i.e., “one-night-stands”), and believing there will be many sexual partners in the future (Mouilso & Calhoun, 2012; Simpson & Gangestad, 1991). Individuals with an unrestricted sociosexual orientation pursue sex in a non-committal, game-like fashion (Malamuth et al., 1991).

Unrestricted sociosexuality appears related to the development of an avoidant attachment style in childhood (Simpson & Gangestad, 1991). Individuals with indifferent, angry, rejecting, or inaccessible parental figures (e.g., households with abuse and neglect) may distance themselves from parental figures as a means of protection (Crittenden &

Ainsworth, 1989). When some adolescents become avoidant and distance themselves from their parents, the relationship void may be filled with delinquent peers who participate in antisocial activities (Patterson, DeBaryshe, & Ramsey, 1989). In order to impress peers, these adolescents may adopt adult roles at a young age, and sexual conquest, including sexual aggression, becomes a source of status among peers and a way in which adolescents can bolster their self-esteem (Malamuth et al., 1996a). This behavior at an early age may interfere with development of critical interpersonal skills, such as delaying gratification and learning prosocial negotiation tactics (Parkhill & Abbey, 2008).

There have been challenges to unrestricted sociosexuality's role in sexual aggression. For example, Knight and Sims-Knight (2003) constructed a three-component model of sexual aggression, which consists of callousness and unemotionality, sexual drive and preoccupation with sex, and antisocial behavior. They contend that high sexual drive and a compulsive focus on sex is more predictive of sexual aggression than is unrestricted sociosexuality. They also found high sexual drive is predicted by childhood sexual abuse (CSA), and negative masculinity is predicted by childhood physical and verbal abuse (Knight & Sims-Knight, 2003; 2004). Baer, Kohut, & Fisher (2015) found sexual drive interacted with hostile masculinity and unrestricted sociosexuality, and accounted for a substantial amount of variance in coercion. There have also been null results. For example, Bernat, Calhoun, Clum, and Frame (1997) utilized two of the three unrestricted sociosexuality measures used in the present study, and they found no effects of unrestricted sociosexuality in a small rural sample. Knight and Sims-Knight's description of compulsive sexual obsession is consistent with a paraphilia (Kafka, 2003),

which is not the focus of the present research and was not included. However, alternatives to unrestricted sociosexuality, as well as null results found in some studies, should be kept in mind.

Like hostile masculinity, unrestricted sociosexuality is a latent construct requiring multiple measures to capture the constellation (Malamuth et al., 1991; 1995). Consistent with Confluence Model literature, the present study measures casual attitudes about sex and openness to several future sexual partners, the age at first consensual sexual intercourse, and the total number of lifetime sexual partners (Abbey et al., 2001; DeGue et al., 2010; Malamuth, 1991).

### **Childhood Victimization and Juvenile Delinquency**

Childhood victimization and juvenile delinquency are included in the original Confluence Model as distal predictors (Malamuth et al., 1991; 1995). Childhood abuse and neglect, witnessing violence (e.g., aggression between caregivers), and having antisocial role models are hypothesized ways in which individuals vicariously learn violent behavior and treating women as objects (Abbey et al., 2011; Felson & Lane; 2009; Malamuth et al., 1991; 1995). Indeed, childhood maltreatment relates to adult sexual assault perpetration in incarcerated, university, and community populations (e.g., Abbey, Parkhill, BeShears, Clinton-Sherrod, & Zawacki, 2006; Abbey & Jacques-Tiura, 2011; DeGue & DiLillo, 2004; Logan-Greene & Davis, 2011; Parkhill & Abbey, 2008).

Juvenile delinquency is hypothesized as a way in which individuals escape inaccessible caregivers at an early age (Patterson et al., 1989). This interaction between neglectful caregivers and delinquent peers may encourage the adoption of adult roles, including sexual roles, at a young age, which interferes with development of

interpersonal skills (Malamuth et al., 1996a; Parkhill & Abbey, 2008). Malamuth et al (1991; 1995; 1996a) found juvenile delinquency had a direct path to unrestricted sociosexuality, as well as a direct path to a latent variable called Attitudes Supporting Violence (Malamuth, Heavey, & Linz, 1996b). In a Confluence Model replication and expansion study, Abbey et al (2011) found juvenile delinquency directly related to unrestricted sociosexuality, psychopathy-related traits, and sexual assault perpetration.

### **Contemporary Revisions to the Confluence Model**

#### **Misperception of Women's Intent**

Since Malamuth et al (1991)'s original conception of the Confluence Model, other research teams have found additional factors in the framework of the model. A tendency to misperceive women's sexual intentions was explored as a proximal situational factor in the Confluence Model (Abbey & Jacques-Tiura, 2011; Abbey et al., 2011). It appears sexually aggressive men have a suspicious cognitive schema causing them to believe women's overt communications are disingenuous (Malamuth & Brown, 1994). This schema distorts reality, and the men believe women are sexually teasing them by rejecting sexual advances. They also perceive ordinary actions like smiling and making eye contact as flirtatious, which they believe justifies their relentless pursuit (Abbey et al., 2001). As women's negative reactions become clearer and seemingly unambiguous, these men believe she is "protesting too much," and she is still sexually interested (Malamuth & Brown, 1994, p. 708). In support of this cognitive distortion, individuals with high levels of primary and secondary psychopathy appear to misread others' feelings and intentions, suggesting they are not purposely disregarding others' overt and covert communications (Vonk, Zeigler-Hill, Ewing, Mercer, and Noser, 2015).

Abbey et al (2011) found misperception of women's intent had a direct effect on sexual aggression, as well as a positive relationship with hostile masculinity and unrestricted sociosexuality. Wegner and Abbey (2016) found narcissism had an indirect effect on misperception of women's intent, mediated by hostile masculinity. Additionally, they found unrestricted sociosexuality and impulsive sensation seeking (a psychopathic trait) had direct and indirect effects on misperception of women's intent (Wegner & Abbey, 2016).

### **Alcohol**

Approximately 50% of sexual assaults include alcohol consumption, either on the part of the victim, the perpetrator, or both (Parkhill & Abbey, 2008; Testa, 2002; Zawacki, Abbey, Buck, McAuslan, & Clinton-Sherrod, 2003). Malamuth et al (1995) included questions about alcohol use in their original conception of the Confluence Model, but limited it to underage drinking contributing to juvenile delinquency (Malamuth et al., 1995). Parkhill & Abbey (2008) included situational alcohol use as a proximal risk factor, and they found a positive correlation between general drinking behaviors and hostile masculinity, unrestricted sociosexuality, and situational alcohol use. Increased levels of situational alcohol use also predicted intoxicated sexually aggressive acts (Parkhill & Abbey, 2008). In a latent profile analysis of community men, individuals with high levels of unrestricted sociosexuality, hostile masculinity, and sexual assault averaged more than six drinks per day. This level of alcohol consumption was not seen in any other profile (Logan-Greene & Davis, 2011).

## **Narcissistic and Psychopathic Personality Traits**

Narcissism- and psychopathy-related traits have been extensively linked to sexual aggression and the Confluence Model (e.g., Malamuth, 2003; Mouilso & Calhoun, 2012; Wheeler et al., 2002). While Narcissistic Personality Disorder (NPD) is a diagnosable condition in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*, psychopathy is only a specifier for Antisocial Personality Disorder (ASPD) in the third section of the *DSM-5*, which is an experimental section proposing a dimensional conceptualization of personality disorders (American Psychiatric Association, 2013). Although psychopathy is not commonly used in clinical applications, researchers are quite familiar with the construct, as psychopathy has been described as the “most heavily researched, well-validated, and well-established personality disorder” (Hare, Neumann, & Widiger, 2012, p. 478).

The contemporary conceptualization of psychopathy is derived from the works of Cleckley (1976) in his *Mask of Sanity* writings. The *Mask of Sanity* descriptions are generally related to personality styles, not behaviors like criminality. The Cleckley psychopath was described as callous, unemotional, and superficially charming (Cleckley, 1976). Hare (1991) operationalized this construct of psychopathy, and he described it as a combination of two factors. Factor 1 consists of interpersonal and affective characteristics (e.g., glibness, callousness, lack of empathy), and Factor 2 consists of lifestyle and antisocial behaviors (e.g., irresponsibility, impulsivity, stimulation seeking; Hare, 1991). Clinical ASPD descriptions contain many of the behavioral characteristics making up Factor 2, but Factor 1’s interpersonal and affective traits are relegated to the section describing associated features supporting diagnosis (American Psychiatric Association,

2013; Hare et al., 2012). However, clinical narcissism descriptions are consistent with Hare (1991)'s psychopathy Factor 1 traits. Grandiosity, entitlement, manipulation, lack of empathy, and glibness describe some features of both psychopathy's Factor 1 and NPD (Abbey et al., 2011; American Psychiatric Association, 2013; Baumeister et al., 2002; Hare, 1991; Zeigler-Hill, Enjaian, & Essa, 2013). There are two forms of narcissism described in current literature, and this project refers to grandiose narcissism rather than vulnerable narcissism. Grandiose narcissism is most consistent with psychopathy's Factor 1 traits, as well as being the type generally implicated in sexual assault (Pincus & Lukowitsky, 2010; Wright et al., 2013; Zeigler-Hill et al., 2013).

The seemingly similar descriptions of psychopathy's Factor 1 and narcissism resulted in a hypothesis that psychopathy is a heterogeneous construct, and narcissism is just one of several psychopathy subtypes. Other subtypes included borderline, antisocial, and sadistic psychopathy (Murphy & Vess, 2003). However, a separate line of investigation revealed narcissism and psychopathy, as well as Machiavellianism, a manipulative personality focused on long-term planning for instrumental gain, were overlapping but distinct constructs. These malevolent traits were called the Dark Triad, and subclinical (non-pathological or "normal") levels of the traits were found to be measurable, predictive personality dimensions (Furnham, Richards, & Paulhus, 2013; Paulhus & Williams, 2002).

Subsequent investigations found the *dark core* of the Dark Triad is manipulateness and callousness, as all three personalities contain those two traits. Thus, the dark core is the overlapping, intercorrelated portion of the Triad (Jones & Figueredo, 2013). For example, the dark core predicts dispositional aggression, but each personality



type predicts a different type or level of aggression. Psychopathy predicts physical aggression, narcissism inversely relates to hostility, and Machiavellianism positively predicts hostility (Jones & Neria, 2015). Grouping these variables together has also resulted in several other empirical findings. It was learned the Dark Triad's malevolent features appear evolutionarily maladaptive (Jonason, Li, Webster, & Schmidt, 2009), and people can distinguish members of the Dark Triad based on facial characteristics, suggesting a prepared danger cue (Gordon & Platek, 2009; Holzman, 2011). The Dark Triad also has adaptive traits. Dark Triad members often have many sexual partners, which is an aspect of an unrestricted sociosexual orientation (Jonason et al., 2009; Jonason, Luevano, & Adams, 2012). Dark Triad members, particularly psychopaths, tend to poach mates from others, and they are often poached from their mates, ensuring reproductive success (Jonason, Li, & Buss, 2010). Empirical analyses have also uncovered possible expansions of the malevolent personalities.

In a study relating the Dark Triad and sadism to juvenile delinquency, Chabrol, Van Leeuwen, Rodgers, and Séjourné (2009) proposed adding sadism to the group and renaming the cluster the Dark Tetrad. They found the Dark Tetrad personality styles were all moderately intercorrelated (Pearson's  $r$  ranging from .27 to .37), which is similar to the intercorrelation between the original Dark Triad. They also found sadism independently predicted juvenile delinquency in boys, demonstrating the Dark Tetrad had overlapping and distinctive traits like the Dark Triad (Chabrol et al., 2009). Support for including subclinical (everyday) sadism in the cluster of dark personalities is growing (Buckels, Jones, and Paulhus, 2013; Paulhus, 2014); however, there are no known studies investigating everyday sadism's role in sexual aggression or the Confluence Model.

Psychopathy-related traits have been applied to expansions of the Confluence Model (Abbey et al., 2011; LeBreton et al., 2013; Malamuth, 2003). Malamuth (2003) suggested psychopathy-related traits are distal factors in sexual aggression that predict hostile masculinity. This was supported in a community sample, as psychopathy-related traits were mediated by hostile masculinity and heavy alcohol use (Abbey et al., 2011). Additionally, negative attitudes towards women were related to interpersonal manipulation (psychopathy Factor 1) and narcissistic entitlement, and impersonal sexual attitudes were related to an erratic, impulsive, and sensation-seeking lifestyle (psychopathy Factor 2; LeBreton et al., 2013). Empathy, a trait that is often lacking in psychopathy, appears to moderate hostile masculinity and unrestricted sociosexuality in the Confluence Model. For example, in a sample of university men, individuals with low levels of empathy and high levels of hostile masculinity and unrestricted sociosexuality reported the most sexually aggressive acts. Conversely, individuals with high levels of empathy, hostile masculinity, and unrestricted sociosexuality reported violence rates similar to males with moderate scores on all factors (Wheeler et al., 2002). This suggests empathy may be a sexual aggression “protective factor” (Wheeler et al., 2002, p. 769).

There is also empirical support for conceptualizing psychopathy as a dimensional construct with psychopathy and subclinical psychopathy nearest the pathological pole (Coid & Ullrich, 2010; Skeem, Poythress, Edens, Lilienfeld, & Cale, 2003; Vachon et al., 2013). Subclinical psychopaths differ from clinical psychopaths quantitatively, not qualitatively, and having high levels of psychopathy is not a prerequisite for violence or harm (Hare, 1999; Hare et al., 2012). Subclinical psychopaths may demonstrate lower levels, intensities, or frequencies of the qualities that constitute psychopathy, but the

same qualitative criteria are present (Gustafson & Ritzer, 1995; LeBreton, Binning, & Adorno, 2006).

Narcissism's relationship to sexual aggression has also been empirically tested. Individuals with narcissistic traits are more likely to believe women are flattered by their attention. They often feel entitled to sexual access, are unable to take a woman's perspective in sexual scenarios, become punitive when denied sex, and are motivated to impress others with tales of their sexual conquests (Baumeister et al., 2002; Bushman, Bonacci, van Dijk, & Baumeister, 2003). Psychological reactance, or an increased desire for something forbidden, may be related to sexual aggression in narcissistic men, as narcissists are particularly reactive when denied something. This reaction seems to occur because of narcissistic feelings of entitlement and an underlying sense of insecurity (Baumeister et al., 2002; Bushman et al., 2003; Zeigler-Hill et al., 2013). Narcissistic entitlement predicts trait anger, negative attitudes towards women, sexual dominance, and impersonal sexual behavior (LeBreton et al., 2013). Additionally, narcissistic entitlement and a willingness to exploit others is positively associated with sexual aggression, and items tapping narcissistic entitlement rage (e.g., "I typically get very angry when I'm unable to get what I want") are positively associated with sexual aggression (Zeigler-Hill et al., 2013). There are positive relationships between narcissism and unrestricted sociosexuality, as narcissistic men often view sex as an individual pursuit, placing more importance on outcomes tied to themselves rather than their partners (Foster et al., 2006). In a Confluence Model study, direct and indirect paths (mediated through unrestricted sociosexuality) were found from narcissism to sexual aggression (Mouilso & Calhoun, 2012). Like psychopathy, narcissism may be

conceptualized as dimensional, and subclinical narcissism and NPD differ quantitatively, not qualitatively (Foster, Shrira, & Campbell, 2006; Mouliso & Calhoun, 2012; Paulhas & Williams, 2002).

### **Expanding the Model: The Present Study**

#### **Everyday Sadism**

As previously described, no known studies have investigated subclinical (everyday) sadism's role in sexual aggression. Considering sadism's emergence in the Dark Tetrad of personality (Paulhus, 2014), the present study includes everyday sadism. From a clinical perspective, there is not a personality disorder related to sadism. Sadistic Personality Disorder (SPD) appeared in the 1987 *DSM-III R* appendix as a diagnosis requiring further study, only to be removed from future *DSM* editions (Millon, 2011). SPD was described as a pattern of cruel aggression, exemplified by humiliating and demeaning others, taking pleasure in their suffering, and being fascinated with violence (American Psychiatric Association, 1987). The relatively low prevalence rate of the full-blown personality disorder was one reason it did not appear in revisions of the *DSM* (Millon, 2011). Additionally, sadistic tendencies seemed to occur predominantly in men, and the personality disorders work group was concerned an SPD diagnosis would legally excuse cruel, physically abusive behavior (Millon, Grossman, Millon, Meagher, & Ramnath, 2004). Sexual Sadism Disorder does appear as a paraphilia in the *DSM-5*, described as a "recurrent and intense sexual arousal from the physical or psychological suffering of another person" (American Psychiatric Association, 2013, p. 695). This sexual arousal in Sexual Sadism Disorder is what distinguishes it from a sadistic personality type, as sexual arousal is not required for the personality type (American

Psychiatric Association, 1987; 2013; Hagger-Johnson & Egan, 2010). Thus, this project focuses on the personality aspects of sadism, not the paraphilia.

The sadistic tendencies referred to in this study are a common, everyday sadism manifesting as an enjoyment of violence. The violence may take the form of watching violent sports (e.g., MMA), watching and participating in the brutal treatment of prisoners or criminals, or bullying. For example, everyday sadists were the only dark personality to prefer bug killing to disgusting or painful tasks, and they reported increasing levels of post-task pleasure as the number of bugs killed increased. Everyday sadism was also the only dark personality predicting time and energy spent aggressing against an innocent person in a computer game paradigm (Buckels et al., 2013). Everyday sadism is a relatively new construct, so there is a paucity of research on this specific concept. However, the studies utilizing everyday sadism have found it predicts some types of violence, such as violent video game preferences (Greitemeyer, 2015), seeking conflict with other internet users on social media websites (i.e., “trolling” behavior; Buckels, Trapnell, & Paulhus, 2014; Virkar, 2014), and using personal resources to punish cooperative individuals in social dilemma situations (“antisocial punishment”; Pfattheicher & Schindler, 2015). Additionally, everyday sadism shares the callous and manipulative dark core with the Dark Triad psychopathic, narcissistic, and Machiavellian personality types (Paulhus, 2014).

Considering the empirical advancement of the Dark Tetrad, a current project goal is the explication of any relationship between everyday sadism and sexual aggression. As described, two dark personalities, narcissism and psychopathy, are commonly associated with impulsive sexual aggression. Machiavellians are long-term strategists, which relates

to grooming and trapping sexual victims, as in pedophilia (Thornton, 2003). One goal of this research is to find if everyday sadism has a place alongside its dark narcissistic and psychopathic brethren in the perpetration of sexual aggression.

### **Parental Attachment Style**

Attachment theory is an evolutionary approach for explaining lasting, affectionate attachment relationships in humans (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1973). According to attachment theory, infants develop either a secure or insecure attachment style when they interact with their primary caregiver (Bretherton, 1992). The attachment style developed in childhood often continues to influence friendships, family interactions, and romantic relationships in adulthood (Hazen & Shaver, 1987).

Infants developing secure attachments learn their caregiver is a secure base from which they can experience the autonomy necessary to explore their surroundings. When scared, the child can return to his or her safe haven where care and comfort are provided by the parents. This ability to return to safety reduces fear and anxiety, and it helps the individual develop an inner working model of self as confident and worthy of love, as well as a model of others as predictable and trustworthy (Kenny & Selcuk, 2006; Kirkpatrick & Hazan, 1994).

When infants lack a secure base and safe haven, there is a risk of developing an insecure attachment style. From an evolutionary perspective, these insecure attachments are adaptive in that they keep parental figures close in dangerous environments while keeping the child safe from parental reactions. However, the insecure individuals develop internal working models of self as unlovable, and models of others as unpredictable, dangerous, or untrustworthy (Brennan, Clark & Shaver, 1998). These internal

representations skew perceptions of self and others, and cause problematic interpersonal relationships in adulthood (Hazen & Shaver, 1987). Insecure attachments may be classified as anxious or avoidant.

Anxiously attached children often have preoccupied caregivers, and acting loud and puerile attracts parental attention and keeps parents nearby (Mikulincer & Florian, 2001). In adulthood, anxiously attached individuals may become overly attached, or enmeshed, with friends and romantic partners. They can become obsessed with finding and keeping a romantic partner who will tolerate their high levels of jealousy and need for continuous emotional support and reassurance (Crittenden & Ainsworth, 1989; Rholes & Simpson, 2004).

An avoidant attachment often develops when caregivers are neglectful or non-responsive to an infant's needs and emotions. Behaviorally, these caregivers foster a negatively punishing environment, which causes the children to detach and become self-reliant to avoid upsetting the caregiver. Basic needs may not be met in these homes, and avoidant adults sometimes continue denying themselves basic needs and comforts (Bretherton, 1991). Avoidant adults may also have trouble finding and maintaining romantic relationships, as they often prefer the perceived safety of solitude (Hazen & Shaver, 1987).

Generalized insecure attachment styles, which are those that do not distinguish between anxious and avoidant types, have been integrated into sexual aggression research. One investigation of attachment and depression in the Confluence Model found insecure attachment had an indirect effect on sexual aggression through the hostile masculinity constellation. Notably, attachment insecurity did not have a relationship with

unrestricted sociosexuality, which is contrary to some Confluence Model hypotheses (Nguyen & Parkhill, 2014). Another study including many Confluence Model variables (e.g., HTW, juvenile delinquency) found attachment insecurity discriminated between sexual aggressors (both non-physical and physical) and non-perpetrators (Abbey, Parkhill, Clinton-Sherrod, & Zawacki, 2007).

Specific insecure attachment styles have also been investigated in sexual aggression, and an avoidant attachment style has been implicated in the formation of juvenile delinquency. It is hypothesized juvenile delinquency manifests when children detach from inattentive caregivers and associate with delinquent peers (Malamuth et al., 1991; 1995; Patterson et al., 1989). An avoidant attachment style has also been related to an unrestricted sociosexual orientation (Simpson & Gangestad, 1991). In one university sample, avoidantly attached men endorsed coercive sexual aggression more than controls (Smallbone & Dadds, 2001). In another, avoidant attachment mediated the relationship between childhood domestic violence (i.e., violence between parents) and a preference for “hooking up” (i.e., one-night-stands). There was also an indirect effect on sexual aggression through the “hooking up” latent variable (Sutton & Simons, 2015).

Anxious attachment has also been associated with anger and sexual aggression, and it appears related to the development of sexually aggressive personality traits. For example, individuals with maladaptive personality traits had high levels of attachment anxiety and interpersonal aggression (Crawford, Shaver, Cohen, & Pilkonis, 2006). High levels of attachment anxiety were positively associated with the development of an angry temperament, and anxious attachment had an indirect effect on need to control dating partners (Follingstad, Bradley, Helff, & Laughlin, 2002). Attachment anxiety also



discriminated between sex offenders and non-sex offenders in an inmate population (Lyn & Burton, 2005). Thus, when considering attachment's role in a sexual aggression model, it appears an avoidant style is most related to sexually aggressive motives (i.e., unrestricted sociosexuality), and an anxious style is most related to sexually aggressive personality traits (i.e., hostile masculinity).

### **Personality as a Dimensional Construct**

A proposal for conceptualizing maladaptive personality traits as dimensional symptom clusters was included in the experimental section of the *DSM-5* (American Psychiatric Association, 2013). Traditionally, the *DSM* conceptualized personality disorders as categorical, and these categories often originated with theoretical writings and clinical reports. Contemporary research strategies, particularly factor analysis, have allowed empirical consideration of dimensional, rather than categorical, personality traits. The model proposed in the *DSM-5* could represent the beginning of a paradigm shift in personality disorder diagnosis, as the *DSM* task force called for systematic research of dimensional conceptualizations of maladaptive personality traits (Russell, Veith, & King, 2015). This hybrid model of personality is based on the five-factor model utilized by several researchers, and the new domains are consistent with five fundamental personality domains (detachment versus extraversion, negative affectivity versus emotional stability, antagonism versus agreeableness, psychoticism versus lucidity, and disinhibition versus conscientiousness; American Psychiatric Association, 2013).

To stimulate investigation of this dimensional model, the *DSM* task force provided an open source instrument called the Personality Inventory for the *DSM-5* (PID-5; Krueger, Derringer, Markon, Watson, & Skodol, 2012). The hybrid personality model

and the PID-5 include 25 lower-order trait facets, which reside in five higher-order domains (Table 1). The utility of the PID-5 lies in its ability to measure a broad array of personality traits in a bipolar, nuanced fashion (Krueger & Markon, 2014). It also appears to be superior to existing five-factor instruments in examining maladaptive personality dimensions. This is due to the PID-5's ability to capture extreme ranges of basic personality dimensions, whereas traditional five-factor instruments assess only middle ranges of these dimensions (Noser et al., 2015; Samuel, Simms, Clark, Livesley, & Widiger, 2010; Thomas et al., 2013). PID-5 research is still in its infancy, but it appears to have considerable potential for personality research (e.g., Holden, Roof, McCabe, & Zeigler-Hill, 2015; Hopwood, Thomas, Markon, Wright, & Krueger, 2012; Strickland, Drislane, Lucy, Krueger, & Patrick, 2013).

Factor structures of traditional measures of maladaptive personality traits and the PID-5 have been investigated to determine if common personality constructs are captured by the instrument (e.g., Anderson, Sellbom, Wygant, Salekin, & Krueger, 2014; Gore & Widiger, 2013; Strickland et al., 2013). The dimensional model seems to account for a considerable amount of variance in traditional measures of ASPD, as well as psychopathy (Anderson et al., 2014; Strickland et al., 2013). Accounting for psychopathy is not common in the *DSM*, even though it seems inextricably linked to ASPD in research (Hare et al., 2012; Strickland et al., 2013). This demonstrates a way the new dimensional personality model could integrate empirical findings, which is an improvement from the categorical *DSM* model. In investigations of narcissism and the PID-5, grandiose narcissism seems well represented by elevations on the PID-5 (Hopwood et al., 2012; Wright et al., 2013). However, there are conflicting opinions regarding one traditional

measure's ability to capture vulnerable narcissism (Pathological Narcissism Inventory; PNI; Miller, Lynam, & Campbell, 2014; Wright, 2016), so the validity of the PID-5 in this area is difficult to verify.

Table 1. PID-5 Domains and Facets

Domain	Facet
Negative Affectivity (vs. Emotional Stability)	Emotional Lability Anxiousness Separation Insecurity Submissiveness Hostility Perseveration (Lack of) Restricted Affectivity
Detachment (vs. Extraversion)	Withdrawal Intimacy Avoidance Anhedonia Depressivity Suspiciousness
Antagonism (vs. Agreeableness)	Manipulativeness Deceitfulness Grandiosity Attention Seeking Callousness
Disinhibition (vs. Conscientiousness)	Irresponsibility Impulsivity Distractibility Risk Taking (Lack of) Rigid Perfectionism
Psychoticism (vs. Lucidity)	Unusual Beliefs and Experiences Eccentricity Cognitive and Perceptual Dysregulation

*Note:* Items in parenthesis are the domain's polar opposite

Considering this study does not include traditional measures of psychopathy and narcissism to compare to the PID-5 facets and domains, it would be inappropriate to assign these descriptions to PID-5 profile configurations, as the PID-5 is still too new for a consensus to have been reached in that regard. In the few published PID-5 studies of psychopathy and narcissism, the antagonism and disinhibition domains predicted both narcissism and psychopathy (Anderson et al., 2014; Hopwood et al., 2012; Strickland et al., 2013; Wright et al., 2013). In support of those findings, antagonism and disinhibition negatively predicted individualized moral concerns (“sensitivity to harm and fairness”; Noser et al., 2014). Antagonism also had a positive relationship with violent mate retention strategies (“cost-inflicting mate retention”; Holden et al., 2015).

There are no known studies relating the PID-5 to sexual aggression. Hostile masculinity appears related to personality traits (e.g., Malamuth, 2003), so it is expected to mediate any indirect PID-5 effects on sexual aggression. Considering empathy is a moderator in sexual aggression (Wheeler et al., 2002), PID-5 callousness (a lack of empathy) should have a direct effect on sexual aggression and hostile masculinity. However, callousness is also one of the two core traits of the Dark Tetrad (with manipulativeness); thus, everyday sadism should account for the majority of unique variance that would be associated with PID-5 callousness and manipulativeness.

### **Large, Online, Nationwide Sampling Method**

Confluence Model research disproportionately represents university convenience samples and incarcerated populations. Almost all of the seminal studies cited in the present manuscript (e.g., Abbey et al., 2001; 2005; 2006; 2007; 2011; Abbey & Jacques-Tiura, 2011; Malamuth et al., 1991; 2003; Parkhill & Abbey, 2008; Widman et al., 2013) were conducted in-person with a local population of community or incarcerated men, or they were administered to college men in laboratories or on university websites. Logan-Greene and Davis (2011)'s Confluence Model research is one of the few nationwide, online studies, but they performed latent profile analyses instead of the recommended SEM (Malamuth et al., 1991), and their sample size was less than half that of the present study ( $n = 289$  vs. 612). Baer et al (2015) recruited participants via Facebook, and their results generally supported Confluence Model findings. No other studies were found in this population. Therefore, one important goal of this research is to increase the generalizability of the Confluence Model by using a relatively large sample size in an online, nationwide population of men.

## Hypotheses

The main hypotheses in this project relate to replication and the addition of the PID-5, everyday sadism, and attachment to the Confluence Model. Abbey et al (2011) is one of the most recent full Confluence Models publications, and they suggested their model be tested in different populations. This project will attempt to replicate their path analysis before adding new variables to an SEM. While the present research included several variables similar to Abbey et al. (2011), some were slightly different (but still measured the same constructs). Thus, some paths may not be fully replicated in this project. However, consistent with Confluence Model literature, it is predicted hostile masculinity, unrestricted sociosexuality, and misperception of women's intent will be proximal predictors, demonstrated by significant direct paths to the sexual aggression outcome. Malamuth et al (1991) stressed a key factor of the Confluence Model is the synergistic effect between hostile masculinity and unrestricted sociosexuality. Therefore, it is hypothesized an interaction between high levels of hostile masculinity and unrestricted sociosexuality will predict an increase in the number of self-reported sexually aggressive acts. It is also predicted heavy alcohol consumption, CSA, psychopathy-related traits (PID-5 antagonism), and juvenile delinquency will be significant distal predictors of the proximal variables (Abbey et al., 2011).

It is hypothesized the Confluence Model framework will be improved by the addition of everyday sadism, parental attachment, and the PID-5, as well as be improved by rigorous statistical analyses of common Confluence Model variables prior to their inclusion in the new expanded model. These improvements can be operationalized as the amount of sexual aggression variance accounted for by the model. Abbey et al (2011)

reported accounting for 26% of the variance in their Confluence Model, and Knight and Sims-Knight (2003) accounted for 33% of sexual coercion variance in their three-component model. Thus, it is predicted the present study will account for more sexual aggression variance than 26% overall, and 33% in sexual coercion.

Of the three types of everyday sadism (verbal, vicarious, and physical), physical sadism is expected to emerge as the strongest everyday sadism variable. Physical sadism involves directly causing physical pain or harm, whereas verbal and vicarious sadism do not. Therefore, it is anticipated physical sadism will have a direct path to hostile masculinity and sexual aggression. If verbal and vicarious sadism are predictors of sexual violence, it is expected the effects will be related to hostile masculinity rather than directly predicting sexual aggression. Avoidant attachment is expected to have a direct path to unrestricted sociosexuality, or anxious attachment will have a path to hostile masculinity. There is more empirical support for an avoidant attachment in sexual aggression; therefore, it is hypothesized avoidant attachment will be a significant distal predictor in the model, mediated by unrestricted sociosexuality.

It is hypothesized the PID-5 facets in the antagonism and disinhibition domains will emerge as predictors of hostile masculinity and unrestricted sociosexuality. Anecdotally, the antagonism facets (callousness, manipulateness, deceitfulness, grandiosity, and attention seeking) seem consistent with narcissism- and psychopathy-related traits (psychopathy Factor 1), which have predicted hostile masculinity and sexual aggression in past research (e.g., LeBreton et al., 2013). The PID-5 disinhibition domain (irresponsibility, impulsivity, distractibility, risk taking, and lack of rigid perfectionism) seems consistent with psychopathy Factor 2, and it is predicted these facets will relate to

unrestricted sociosexuality and sexual aggression, as psychopathy Factor 2 associated with sociosexuality in the past (LeBreton et al., 2013).

Finally, sexual aggression rates are expected to increase incrementally with the number of high-scoring risk factors. “High-scoring risk factors” is operationalized as the top 25% of scores on each risk factor predictor remaining in the final SEM. The total number of risk factor high scores will be calculated and analyzed in a simple risk analysis, consistent with Malamuth et al (1991). If sexual aggression increases with total high scoring risk factors, then there will be support for sexual aggression being a confluence of risk factors. Further, if everyday sadism and attachment contribute to elevation of risk (sexual aggression totals continue to climb after accounting for traditional Confluence Model variables), then the inclusion of those predictors in a Confluence Model would be supported.

## **CHAPTER II**

### **METHODS**

#### **Participants**

This sample ( $N = 612$ ) was comprised of both college students ( $n = 100$ ) and national respondents ( $n = 512$ ). The national cohort was recruited through Amazon Mechanical Turk (MTurk), an online crowdsourcing website that recruits individuals in exchange for financial compensation. MTurk provides a diverse, community-based sample, and it allows rapid recruitment of participants (Paolacci, Chandler, & Ipeirotis, 2010). MTurk is economical, and the data quality obtained is equal to, and often more valid than, data obtained through traditional research methods (Buhrmester, Kwang, & Gosling, 2011; Paolacci et al., 2010; Shapiro, Chandler, & Mueller, 2013). The MTurk site allowed access to be limited to adults from the United States. Respondents received \$0.50 for participation. The college sample was recruited from a flagship state institution in the Midwest through an online psychology department participant pool managed by Sona Systems. Like MTurk, Sona is economical and the data quality can be equal to, or even better than, traditional pen and paper survey methods, even when questions are sensitive in nature (e.g., Gamblin, Winslow, Linday, Newsom, & Kehn, 2016).

#### **Participant Exclusion Criteria**

Participation was restricted to men who answered at least 50% of the sexual aggression questions (37 exclusions). Table 2 details the study's measures.



Table 2. Domains, Measures, and Sources for All Study Instruments

Domain	Measure	Source
Juvenile Delinquency	Juvenile Delinquency Scale	Tremblay et al., 1995
Parental Attachment	Experiences in Parental Relationships Scale-Mother and Father Version (EPR)	Limke & Mayfield, 2011
Childhood Sexual Abuse	Single Response: "I believe I was sexually abused" (prior to age 16)	N/A
Personality Trait Indices	Personality Inventory for the DSM-5 (PID-5)	Krueger et al., 2011
Hostility Towards Women	Revised Hostility Toward Women Scale (RHTW)	Lonsway & Fitzgerald, 1995
Rape Myth Acceptance	Rape Myth Scale (RMS)	Lonsway & Fitzgerald, 1995
Sexual Dominance	Sexual Dominance Scale of the Sexual Functions Inventory (SDS)	Nelson, 1979
Sociosexual Attitude	Brief Sexual Attitudes Scale-Permissiveness Subscale (BSAS)	Hendrick et al., 2006
Number of Sex Partners	Open-Ended Question: "How many sexual partners have you had in your lifetime?"	Malamuth, 1991
First Sex Age	Open-Ended Question: "How old were you the first time you had sexual intercourse?"	Malamuth, 1991
Misperception of Intent	Four Open-Ended Questions: "How many times have you misperceived a (woman's; acquaintance's; friend's; romantic partner's) friendliness as a sexual come-on?"	Abbey et al., 2011
Heavy Alcohol Use	Drinking Calendar	Collins, Parks, & Marlatt, 1985
Sadism	Comprehensive Assessment of Sadistic Tendencies (CAST)	Buckels & Paulhus, 2013
Sexual Aggression	Sexual Experiences Survey—Short Form (SES)	Koss et al., 2006

## Materials

### Juvenile Delinquency

Childhood and adolescent delinquency was assessed using an adaptation of Tremblay, Pagani-Kurtz, Masse, Vitaro, and Pihl (1995)'s juvenile delinquency scale (Appendix G). The 14-item scale was rated on a 6-point Likert scale (1 = *Never*; 6 = *5 Times or More*). Zero was substituted for missing scores. The scale's previous and current alphas were high ( $\alpha = .85$  and  $.89$ , respectively).

## **Parental Attachment**

Attachment to mother and father was assessed with the Experiences in Parental Relationships Scale (EPR; Limke & Mayfield, 2011; Appendix D). The scale was included twice so there was a scale for each parental figure. The 22-item scale was rated on a 7-point Likert scale (1 = *Disagree Strongly*, 4 = *Neutral/mixed*, 7 = *Agree Strongly*). Missing values were assigned zero. The EPR includes 2 subscales per parent (4 total), which are anxious (to mother or father) and avoidant (to mother or father). In the present study, anxious to mother and anxious to father were combined into anxious attachment to parent. Avoidant attachment was combined in the same manner. Previous research had high internal consistency for all four EPR subscale ( $\alpha > .84$ ; Limke & Mayfield, 2011). In the present study, the four traditional scales' alphas were .88 (avoidant-mother), .92 (anxious-mother), .87 (avoidant-father), and .93 (anxious-father). The alphas were .95 and .89 for anxious and avoidant attachment, respectively.

## **Childhood Sexual Abuse**

Childhood sexual abuse was measured with a single response item, which was an adaptation of a single response sexual abuse question from the National Comorbidity Survey (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). The original survey was a dichotomous (yes/no) question, as well as questions for several types of childhood maltreatment (Kessler et al., 1995). This study's single question required a dimensional response on a 5-point Likert scale (1 = *Never True*, 3 = *Sometimes True*, 5 = *Very Often True*). The question stated, "I believe I was sexually abused." Instructions asked participants to limit their responses to the time prior age 16. Missing values were assigned zero.

## Personality Inventory for the DSM-5

The Personality Inventory for the DSM-5 (PID-5; Krueger et al., 2012; Appendix A) is a 220-item instrument assessing five dimensional trait personality domains (negative affectivity vs emotional stability; detachment vs extraversion; antagonism vs agreeableness; disinhibition vs conscientiousness; & psychoticism vs lucidity), as well as their 25 constituent facets. Items are rated on a 4-point Likert scale (1 = *Very False or Often False*; 4 = *Very True or Often True*), with 16 item reversals. Trait scores are not calculated if more than 25% of the contributing items are left blank. Missing scores within this exclusion criterion are assigned the average of the completed items. The five domain scores are only calculated when scores for all of their contributing facet dimensions are available.

To date, the PID-5 psychometric properties include acceptable construct validity (Wright, Pincus et al., 2012), convergent and discriminant validity (Ashton, Lee, de Vries, Hendricks, & Born, 2012; Wright, Thomas, et al., 2012), and it accounts for personality disorder variance (Hopwood et al., 2012). The PID-5 was internally consistent in the present study, and Table 3 presents the domain alphas and zero order correlations.

Table 3. Alphas and Zero Order Correlations for the PID-5 Domains

Index	1	2	3	4
1 Antagonism ( $\alpha=.96$ )				
2 Detachment ( $\alpha=.96$ )	.65			
3 Disinhibition ( $\alpha=.86$ )	.66	.58		
4 Negative Affectivity ( $\alpha=.96$ )	.73	.63	.78	
5 Psychoticism ( $\alpha=.96$ )	.71	.60	.73	.77

Note: All correlations significant at  $p < .001$

### **Hostility towards Women**

The Revised Hostility towards Women Scale (HTW; Lonsway & Fitzgerald, 1995; Appendix B) is a 10-item instrument measuring hostility and mistrust of women on a 7-point Likert scale. Missing values were assigned zero. HTW had strong internal consistency in the original scale validation ( $\alpha = .83$ ; Lonsway & Fitzgerald, 1995), and the present study ( $\alpha = .90$ ).

### **Rape Myth Scale**

The Rape Myth Scale (RMS; Lonsway & Fitzgerald, 1995; Appendix C) measures attitudes about rape that are generally false, but often widely and persistently held. The RMS is a 19-item measure with ratings on a 7-point Likert scale. Missing values were assigned zero. Internal consistency was strong in scale development ( $\alpha = .89$ ; Lonsway & Fitzgerald, 1995), and the present study ( $\alpha = .95$ ).

### **Sexual Dominance**

The Sexual Dominance Subscale of the Sexual Functions Inventory (Nelson, 1979; Appendix E) assesses motivation for sexual dominance. The measure is an 8-item assessment rated on a 4-point Likert scale (1 = *Not Important at All*; 4 = *Very Important*). Missing values are assigned zero. The measure has demonstrated good internal consistency in past studies, with alphas ranging from .80 (Malamuth et al., 1995) to .86 (Parkhill & Abbey, 2008). Cronbach's alpha was .91 in the present study.

### **Sociosexual Attitudes**

The Brief Sexual Attitudes Scale-Permissiveness Subscale (BSAS; Hendrick, Hendrick, & Reich, 2006; Appendix F) measures attitudes about casual sex. Items on the BSAS are rated on a 5-point Likert scale (1 = *Strongly Agree*; 5 = *Strongly Disagree*).

Internal consistency was strong during scale development ( $\alpha = .93$ ; Hendrick et al., 2006), and in the present study ( $\alpha = .93$ ).

### **Number of Sex Partners**

An open-ended question regarding the number of lifetime sexual partners was included, consistent with Malamuth et al (1991). Missing items were coded zero. The question was recoded into an 11-item scale (0 = 0, 1 = 1 to 5; 10 = 51 or more; Malamuth, 1991).

### **First Sex Age**

An open-ended question assessing age at first sexual intercourse was included. Individuals who skipped the question or denied ever having sexual intercourse were recoded into their current age. The question was recoded into a 6 item scale (1 = 35 and older; 6 = 14 and younger; Malamuth, 1991).

### **Misperception of Intent**

Four open-ended questions assessed misperception of women's sexual interest. The first question asked how many times the participant has misperceived a woman's friendliness as a sexual come-on. The other three questions asked how many times the participant has misperceived a friend, acquaintance, and romantic partner's friendliness as a sexual come-on. Previous versions of these questions had an internal consistency of .76 (Abbey et al., 2011), and the present study's internal consistency was .78.

### **Alcohol Use**

Alcohol use was measured with a modified drinking calendar (Collins, Parks, & Marlatt, 1985). Participants answered an open-ended questions regarding how many alcoholic beverages (a beer, glass of wine, or shot of liquor) they drink each day of the

week (e.g., “How many alcoholic beverages (a beer, glass of wine, or shot of liquor) do you drink on a typical Friday?”). The responses were recoded into a 6-item scale (0 = 0; 1 = 1 to 3; 5 = 15 or more; Wheeler et al., 2002). Internal consistency for earlier versions of the drinking calendar were acceptable ( $\alpha = .81$ ; Logan-Greene & Davis, 2011), and the present study had high internal consistency ( $\alpha = .90$ ).

### **Sadism**

The Comprehensive Assessment of Sadistic Tendencies (CAST; Buckels & Paulhus, 2013; Appendix G) assesses a dispositional tendency to hurt others or take pleasure in their pain. The instrument includes 18 items rated on a 5-point Likert scale (1 = *Strongly Disagree*; 5 = *Strongly Agree*). Missing values were assigned zero. The measure includes three scales: verbal, vicarious, and physical everyday sadism. The scale had strong internal consistency overall ( $\alpha = .89$ ), and for physical ( $\alpha = .83$ ), verbal ( $\alpha = .81$ ), and vicarious sadism ( $\alpha = .82$ ) during development (Buckels & Paulhus, 2013). In the present study, the scale had strong overall ( $\alpha = .87$ ), physical ( $\alpha = .85$ ), and verbal ( $\alpha = .81$ ) internal consistency. Vicarious sadism ( $\alpha = .76$ ) was acceptable.

### **Sexual Experiences (Outcome)**

The outcome variable is the Revised Sexual Experiences Survey-Short Form Perpetration (SES; Koss et al., 2006; Appendix J), a 10-item (75-response), instrument assessing sexual aggression since age 14 (Koss et al., 2007; Koss & Oros, 1982). Participants indicate the frequency of behaviors, which range from unwanted kissing to rape. Reliability and validity have been extensively established (e.g., Abbey, Parkhill, & Koss, 2005; Koss & Gidycz, 1985; Koss et al., 2007). The SES is the most widely used sexual assault instrument in college samples (Thompson, Swartout, & Koss, 2013).

The original SES (Koss & Oros, 1982) was updated in 2007 to include behaviorally specific acts and tactics (Koss et al., 2007). The full SES assesses unwanted sexual contact (e.g., frothterism and removing clothing without consent), attempted rape, and completed rape. Within each of these behaviorally specific questions, five tactic questions are asked, which include coercion, taking advantage of an intoxicated person, threatening physical harm, and using physical force. Respondents indicate if they have performed each of the acts 0, 1, 2, or 3+ times. Missing values are assigned zero. Participants are also asked, “Do you think you may have ever raped someone?” at the end of the SES (Koss et al., 2007; Thompson et al., 2013).

To reduce the length of the present survey, minor changes were made to the SES. The full SES asks participants to respond twice to all questions—once for the number of times the behavior has occurred in the last 12 months, and once for the number of times since age 14. The 12-month question was removed. Additionally, the SES asks separate questions for vaginal and anal penetration. Those were combined into one question in this survey (i.e., “...I tried to put my penis, my fingers, or objects into someone’s vagina or butt without their consent.”). The final dichotomous (yes/no) rape question was presented alone and on a separate webpage from the rest of the SES to prevent participants from changing earlier, behaviorally specific responses based on this question.

The SES may be scored several ways, including calculating the total number of acts, and ranking participants based on the act severity. In the present study, five domain scales were created: Frothterism (which includes unwanted kissing and fondling, as well as unwanted clothing removal), Attempted Coercion, Completed Coercion, Attempted Rape, and Completed Rape (see Table 4 for scale descriptions). An aggregate scale, All Sexual

Assault, was also computed. A mutually exclusive variable (Aggression Type) was created, which classified participants based on the most severe sexually aggressive act (frotterism, attempted coercion, coercion, attempted rape, completed rape, respectively). Additionally, sexually aggressive participants were classified as Aggressors and Coercers. Aggressors were individuals who used physical means to gain sexual contact, and Coercers used non-physical means to gain sexual contact (DeGue et al., 2010). Individuals were classified as Aggressors if they reported any physical behavior on the Frotterism, Attempted Rape, and Completed Rape Scales. Participants were classified as Coercers if they reported any behavior on Attempted Coercion, Completed Coercion, and non-physical aggression in Frotterism. These classifications were not mutually exclusive.

A notable difference between the present research classifications and DeGue et al (2010)'s Aggressors and Coercers was DeGue et al (2010) asked an additional question to determine if participants deliberately gave victims alcohol or drugs to attain sexual contact. That question was not asked in this study. DeGue et al (2010) classified individuals endorsing that question as Coercers unless they had committed a more serious act of physical aggression secondary to purposeful intoxication. Thus, they used the question to delineate between those providing intoxicants to attain sexual contact, which they conceptualized as a non-physical (coercive) act, and those who took advantage of an already intoxicated individual, conceptualized as a physical act. In the present study, taking advantage of an intoxicated individual was categorized as a physical act, consistent with the survey authors' recommendations and scoring protocol (Koss et al., 2007). There was acceptable to strong internal consistency on the SES in the present research. Cronbach's alpha for the All Sexual Assault, Frotterism, Attempted Coercion,



Completed Coercion, Attempted Rape, and Completed Rape Scales were .96, .80, .90, .88, .89, and .90, respectively.

Table 4. Sexual Experiences Survey, Short Form-Perpetrator (SES) Scales, Question Descriptions, and Tactics

Scale	SES Questions	Description	Tactics Included (a through e)
Frotterism	1	Nonconsensual fondling, kissing, rubbing against someone's body, and/or removing victim's clothing	a. Telling lies; making threats; verbal pressure b. Showing displeasure; criticizing attractiveness, anger without physical force c. Taking advantage of intoxicated person d. Threatening physical harm against victim or someone close to victim e. Using force; holding with body weight; pinning arms; having weapon
Attempted Coercion	4 and 5	Attempted nonconsensual oral sexual contact; attempted nonconsensual penetration with penis, fingers, or other objects	a. Telling lies; making threats; verbal pressure b. Showing displeasure; criticizing attractiveness, anger without physical force
Completed Coercion	2 and 3	Completed nonconsensual oral sexual contact; completed nonconsensual penetration with penis, fingers, or other objects	a. Telling lies; making threats; verbal pressure b. Showing displeasure; criticizing attractiveness, anger without physical force
Attempted Rape	4 and 5	Attempted nonconsensual oral sexual contact; attempted nonconsensual penetration with penis, fingers, or other objects	c. Taking advantage of intoxicated person d. Threatening physical harm against victim or someone close to victim e. Using force; holding with body weight; pinning arms; having weapon
Completed Rape	2 and 3	Completed nonconsensual oral sexual contact; completed nonconsensual penetration with penis, fingers, or other objects	c. Taking advantage of intoxicated person d. Threatening physical harm against victim or someone close to victim e. Using force; holding with body weight; pinning arms; having weapon
Aggressors	1, 2, 3, 4, 5	Frotterism, Attempted Rape, and Completed Rape Scales (Participant Classification)	c. Taking advantage of intoxicated person d. Threatening physical harm against victim or someone close to victim e. Using force; holding with body weight; pinning arms; having weapon
Coercers	1, 2, 3, 4, 5	Attempted Coercion, Completed Coercion (Participant Classification)	a. Telling lies; making threats; verbal pressure b. Showing displeasure; criticizing attractiveness, anger without physical force

## Procedure

Participants signed up for the study on either the MTurk or the Sona website. The study was limited to users in the United States, and participants' Internet Protocol (IP) addresses were recorded and screened as an additional location verification. The

university study was offered to adult students on the university Sona website; therefore, all participants were university students located in the upper Midwest region of the United States. The university is in close proximity to Canada, so IP addresses were recorded and screened.

After accepting the task on the respective website, participants were redirected to the informed consent page on Qualtrics (a survey-hosting website; [www.qualtrics.com](http://www.qualtrics.com)). After reading and giving informed consent, participants completed the survey online through Qualtrics. The scale presentation order was counterbalanced to control for question order effects, except for the demographics questionnaire, which always appeared first. The 220 questions on the PID-5 were also counterbalanced. Only one instrument was presented per webpage, and the pages were designed to ensure the Likert scales were always visible during administration. When national sample participants finished, they received a code to enter on the MTurk website for payment (\$0.50). When university participants finished, an interface assigned them a participant number and recorded their participation for class credit. All participants were allowed to skip questions, and reaching the final page was the only requirement to receive payment or credit. The survey lasted approximately 30 minutes.

## CHAPTER III

### RESULTS

#### Descriptive Statistics and Sexual Aggression Rates

The overall sample of men ( $N = 612$ ) was predominantly Caucasian (83%), with a roughly similar distribution between the remaining ethnicities (Table 5). The national sample ( $n = 512$ ) and the university sample ( $n = 100$ ) had similar ethnic distributions. The national men had a more diverse spread of ages and was older in years ( $M = 34.8$  years; range = 18 to 73) than the university sample ( $M = 20.3$ ; range = 18 to 38).

Table 5. Descriptive Statistics by Sample

	Mean Age ( <i>SD</i> )	Caucasian	African American	Latino	Asian	Bi-Racial	Other	Aggressor <i>n</i> (Sample %)	Coercer <i>n</i> (Sample %)	Endorsed "Rape" <i>n</i> (Sample %)
National ( $n = 512$ )	34.81 (11.04)	83%	5%	5%	4%	2%	1%	110 (21.5%)	102 (19.9%)	15 (2.9%)
University ( $n = 100$ )	20.34 (2.86)	85%	2%	3%	3%	1%	6%	19 (19.0%)	21 (21.0%)	4 (4%)
Total ( $N = 612$ )	32.88 (11.44)	84%	4%	5%	3%	2%	2%	129 (21.1%)	123 (20.1%)	19 (3.1%)

*Note.* Aggressors had scores greater than zero on the Fraternity, Attempted Rape, and Completed Rape Sexual Experiences Survey (SES) scales. Coercers had scores greater than zero on the Attempted and Completed Coercion SES scales. "Endorsed Rape" are participants who answered "Yes" to the questions, "Do you think you may have ever raped someone?"

Table 6 details participants classified as Aggressors (physical sexual aggression) and Coercers (non-physical sexual aggression), along with the percentage of sexually aggressive participants in each classification. Aggressors and Coercers were not mutually exclusive classifications. Overall, 28.8% of men reported perpetrating some type of sexually aggressive behavior, which was 29.5% of the national sample and 25% of the university sample. Of the sexually aggressive participants, 40.4% of the national sample

and 60% of the university sample (43.2% overall) were classified as both Aggressors and Coercers, suggesting coercion and aggression often co-occurs (national  $r = .72$ ; university  $r = .87$ ; overall  $r = .74$ ); however, the temporal order of the acts cannot be inferred here.

Table 6. Coercers and Aggressors by Sample

	<b>Coercer</b>			
	No		Yes	
	<b>Aggressor</b>		<b>Aggressor</b>	
	No	Yes	No	Yes
National <i>n</i> = 151	361	49 (32.5%)	41 (27.2%)	61 (40.4%)
University <i>n</i> = 25	75	4 (16%)	6 (24%)	15 (60%)
Total <i>n</i> = 176	436	53 (30.1%)	47 (26.7%)	76 (43.2%)

*Note.* % of sexually aggressive participants in parentheses

Participant endorsement of the dichotomous rape question was a low base rate event, as only 3.1% (19 total participants) answered “Yes” (“Rape” Endorsed; Table 5). Overall, 1.3% of the participants (8 total) were classified as an Aggressor, Coercer, and Rape Endorser. Of participants reporting any sexually aggressive behavior, 4.6% were categorized as an Aggressor, Coercer, and a Rape Endorser (4% national; 8% university).

The total number of reported acts was analyzed to expand upon the previously detailed Aggressors and Coercers co-occurrence rates. Overall, 5.4% of participants reported one act of sexual aggression, and 4.6% reported two sexually aggressive acts. Three or more acts of sexual aggression were reported by 18.7% of participants, with 11.6% reporting six or more sexually aggressive acts. Of individuals reporting any type of sexual aggression, 18.8% reported one act of sexual aggression, and 15.9% reported two acts. Three or more acts were reported by 65.3% of the sexually aggressive sample, with 40.3% reporting six or more sexually aggressive acts. Thus, individuals who

reported perpetrating any type of sexual aggression in this study were more likely to endorse multiple acts of sexual aggression (top of Table 7).

Table 7. Number of Sexually Aggressive Acts and Most Severe Acts Reported in Each Sample

	<b>Number of Sexually Aggressive Acts</b>					
	1	2	3	4	5	6 +
<b>National <i>n</i></b>	<b>27</b>	<b>24</b>	<b>18</b>	<b>15</b>	<b>7</b>	<b>60</b>
Overall %	5.3%	4.7%	3.5%	2.9%	1.4%	11.7%
Aggressive %	17.9%	15.9%	11.9%	9.9%	4.6%	39.7%
<b>University <i>n</i></b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>11</b>
Overall %	6%	4%	0%	3%	1%	11%
Aggressive %	24%	16%	0%	12%	4%	44%
<b>Total <i>N</i></b>	<b>33</b>	<b>28</b>	<b>18</b>	<b>18</b>	<b>8</b>	<b>71</b>
Overall %	5.4%	4.6%	2.9%	2.9%	1.3%	11.6%
Aggressive %	18.8%	15.9%	10.2%	10.2%	4.6%	40.3%
	<b>Most Severe Sexually Aggressive Act Reported</b>					
	No Sexual Aggression	Frotterism	Attempted Coercion	Completed Coercion	Attempted Rape	Completed Rape
<b>National <i>n</i></b>	<b>361</b>	<b>44</b>	<b>9</b>	<b>17</b>	<b>12</b>	<b>69</b>
Overall %	70.5%	8.6%	1.8%	3.3%	2.3%	13.5%
Aggressive %	--	29.1%	6%	11.3%	8%	45.7%
<b>University <i>n</i></b>	<b>75</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>13</b>
Overall %	75%	8%	1%	1%	2%	2%
Aggressive %	--	32%	4%	4%	8%	52%
<b>Total <i>N</i></b>	<b>436</b>	<b>52</b>	<b>10</b>	<b>18</b>	<b>14</b>	<b>82</b>
Overall %	71.2%	8.5%	1.6%	2.9%	2.3%	13.4%
Aggressive %	--	29.6%	5.7%	10.2%	8%	46.6%

*Note.* National Overall Sample *n* = 512; University Overall Sample *n* = 100; Total Overall Sample *N* = 612  
National Aggressive Sample *n* = 151; University Aggressive Sample *n* = 25; Total Aggressive Sample *n* = 176

Participants were also classified into a mutually exclusive variable based on the most severe sexually aggressive act committed. Severity was determined by the SES authors, and the order of severity was non-perpetrator, frotterism, attempted coercion, completed coercion, attempted rape, and completed rape (Koss et al., 2006). The lower portion of Table 7 details participants' most severe act by sample type. Notably, nearly half (46.6%) of the sexually violent participants reported rape was their most severe act.

## Predictor and Outcome Descriptive Statistics

Missing data analyses were conducted, and less than 5% was missing on each scale. Table 8 presents descriptive statistics for the variables in the study, and Table 9 presents descriptive statistics for the PID-5 domains and facets. In sample sizes greater than 300, an absolute skewness value equal to or less than 2, and an absolute kurtosis value equal to or less than 7, is considered normally distributed (Kim, 2013). Therefore, all predictor variables were normally distributed with the exception of CSA, which was positively skewed, and misperception of women's intent, which was leptokurtic. All of the outcome variables were positively skewed and leptokurtic. Sexual aggression scales represented the number of self-reported sexual assault incidents in each scale.

Table 8. Variable Means, Standard Deviations, and Ranges

Variable	<i>M</i>	<i>SD</i>	Range
<i>Childhood Variables</i>			
Juvenile Delinquency	12.86	12.58	1 – 87
Anxious Attachment	30.38	12.30	1 – 72.5
Childhood Sexual Abuse	1.39	.97	1 – 5
<i>Hostile Masculinity</i>			
Hostility Towards Women	29.64	12.13	5 – 68
Rape Myth Acceptance	37.74	20.67	17 – 123
Sexual Dominance	2.03	.81	.75 – 4
<i>Unrestricted Sociosexuality</i>			
Sociosexual Attitudes	3.14	1.13	.90 – 5
Number of Sex Partners	2.61	2.61	0 – 10
First Sex Age	4.79	.88	1 – 6
<i>Remaining Predictors</i>			
Misperception of Intent	.74	1.15	0 – 11
Heavy Alcohol Use	.92	1.04	0 – 5
Physical Sadism	7.49	3.83	3 – 25
<i>Sexual Aggression Outcomes</i>			
Frotterism	.90	2.15	0 – 14
Attempted Coercion	.45	1.64	0 – 12
Completed Coercion	.45	1.57	0 – 12
Attempted Rape	.53	2.00	0 – 18
Completed Rape	.60	2.08	0 – 18

Table 9. PID-5 Means, Standard Deviations, and Ranges

Facet or Domain	<i>M</i>	<i>SD</i>	Range
Antagonism	1.82	.56	1 – 3.44
Callousness	1.59	.60	1 – 3.36
Manipulativeness	1.96	.78	1 – 4.00
Deceitfulness	1.80	.67	1 – 3.70
Grandiosity	1.80	.66	1 – 3.83
Attention Seeking	1.86	.73	1 – 3.75
Hostility	1.90	.68	1 – 3.70
Detachment	1.91	.59	1 – 3.42
Withdrawal	2.09	.82	1 – 4.00
Anhedonia	1.99	.73	1 – 4.00
Intimacy Avoidance	1.60	.69	1 – 4.00
Suspiciousness	2.02	.65	1 – 4.00
Depressivity	1.68	.74	1 – 4.00
Disinhibition	2.08	.46	1 – 3.19
Irresponsibility	1.63	.63	1 – 3.71
Impulsivity	1.77	.64	1 – 3.33
Distractibility	1.86	.75	1 – 4.00
Risk Taking	2.21	.62	1 – 3.93
Rigid Perfectionism	2.95	.80	1 – 4.00
Negative Affectivity	1.99	.52	1 – 3.49
Emotional Lability	1.74	.73	1 – 3.86
Anxiousness	2.14	.82	1 – 4.00
Separation Insecurity	1.72	.74	1 – 4.00
Submissiveness	2.08	.73	1 – 4.00
Perseveration	1.86	.68	1 – 3.78
Restricted Affectivity	2.07	.75	1 – 4.00
Psychoticism	1.75	.63	1 – 3.49
Unusual Beliefs/Experiences	1.67	.66	1 – 3.63
Eccentricity	2.02	.81	1 – 4.00
Perceptual Dysregulation	1.57	.61	1 – 3.50

Table 10 presents the correlation matrix for the predictor variables by sample type. The differences between the correlation coefficients were tested to determine if the samples were significantly different from one another. Most predictors were not

significantly different ( $p > .05$ ; 2-tailed); however, there were significant differences found between the samples on some predictors. The difference between juvenile delinquency and sexual dominance in the national ( $r = .10$ ) and university ( $r = .39$ ) sample was significantly different ( $p = .005$ ). The difference between anxious attachment and first sex age in the national ( $r = -.03$ ) and university ( $r = .28$ ) sample was also significantly different ( $p = .02$ ). Four correlations in Sexual Abuse were significantly different between the samples: antagonism (national  $r = .18$ ; university  $r = .39$ ,  $p = .04$ ), RMA (national  $r = .19$ ; university  $r = .43$ ,  $p = .02$ ), sexual dominance (national  $r = .03$ ; university  $r = .33$ ,  $p = .01$ ), and physical sadism (national  $r = .27$ ; university  $r = .62$ ,  $p < .001$ ). The difference between sexual dominance and antagonism in the national ( $r = .24$ ) and university ( $r = .62$ ) sample was significantly different ( $p < .001$ ). The difference between misperception of sexual intent and antagonism in the national ( $r = .11$ ) and university ( $r = .34$ ) sample was also significantly different ( $p = .03$ ). RMA and sexual dominance (national  $r = .26$ ; university  $r = .48$ ,  $p = .02$ ) was different between the samples, as was RMA and physical sadism (national  $r = .41$ ; university  $r = .68$ ,  $p < .001$ ). Finally, the difference between physical sadism and first sex age were significantly different between the samples (national  $r = .08$ ; university  $r = .30$ ,  $p = .04$ ). Thus, 11 of the 66 correlations (16.6%) were significantly different between the samples.

### **PID-5 and Sexual Aggression**

The full PID-5 was used in the present research to analyze the role of personality in sexual aggression. Table 11 demonstrates the correlation matrix for the PID-5 facets, domains, and the SES sexual aggression types in the study. Interpretive caution is warranted with these correlations due to the small sample size for each outcome variable



(range = 64 – 173). Although the correlation sizes were in the small to moderate range ( $r$  range = .08 – .35), the correlations were consistent across the individual SES sexual aggression types.

Table 10. Correlation Matrix of Predictor Variables by Sample Type

		<i>Top Diagonal-National Sample (n = 512)</i>												
		<i>Bottom Diagonal: University Sample (n = 100)</i>												
Index		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Juvenile Del.	--	<b>.32</b>	<b>.39</b>	<b>.34</b>	<b>.35</b>	<b>.33</b>	<i>.10</i>	<b>.14</b>	<b>.23</b>	<b>.14</b>	<i>.09</i>	<b>.23</b>	<b>.46</b>
2	Anxious Attachment	<b>.40</b>	--	<b>.28</b>	<b>.28</b>	<b>.34</b>	<b>.34</b>	<b>.21</b>	<i>.02</i>	<i>.04</i>	<i>.03</i>	<i>.00</i>	<i>.01</i>	<b>.32</b>
3	Sexual Abuse	<b>.33</b>	<b>.38</b>	--	<b>.18</b>	<b>.19</b>	<b>.19</b>	<i>.03</i>	<i>.02</i>	<b>.11</b>	<b>.11</b>	<i>.03</i>	<i>.05</i>	<b>.27</b>
4	Antagonism	<b>.38</b>	<b>.47</b>	<b>.39</b>	--	<b>.43</b>	<b>.35</b>	<b>.24</b>	<b>.23</b>	<b>.13</b>	<i>.00</i>	<b>.11</b>	<b>.11</b>	<b>.43</b>
5	Hostile to Women	<i>.23</i>	<b>.32</b>	<b>.32</b>	<b>.44</b>	--	<b>.55</b>	<b>.36</b>	<b>.20</b>	<b>.16</b>	<i>.04</i>	<b>.15</b>	<i>.10</i>	<b>.37</b>
6	Rape Myths	<b>.38</b>	<b>.51</b>	<b>.43</b>	<b>.35</b>	<b>.44</b>	--	<b>.26</b>	<i>.06</i>	<i>.06</i>	<i>.03</i>	<i>.06</i>	<i>.12</i>	<b>.41</b>
7	Sexual Dominance	<b>.39</b>	<b>.37</b>	<b>.33</b>	<b>.62</b>	<b>.42</b>	<b>.48</b>	--	<b>.20</b>	<b>.13</b>	<b>.17</b>	<b>.11</b>	<i>.10</i>	<b>.28</b>
8	BSAS	<b>.26</b>	<i>.23</i>	<i>.01</i>	<b>.41</b>	<i>.23</i>	<b>.27</b>	<b>.32</b>	--	<b>.36</b>	<b>.19</b>	<b>.17</b>	<b>.19</b>	<b>.14</b>
9	Sex Partner #	<i>.14</i>	<i>.09</i>	<i>.01</i>	<i>.10</i>	<b>.34</b>	<i>.09</i>	<i>.22</i>	<i>.22</i>	--	<b>.33</b>	<b>.16</b>	<b>.17</b>	<i>.10</i>
10	First Sex Age	<b>.29</b>	<b>.28</b>	<i>.21</i>	<i>.12</i>	<i>.19</i>	<i>.18</i>	<i>.24</i>	<i>.14</i>	<b>.28</b>	--	<b>.13</b>	<b>.17</b>	<i>.08</i>
11	Misperceive Intent	<i>.11</i>	<i>.13</i>	<i>.17</i>	<b>.34</b>	<i>.19</i>	<i>.12</i>	<b>.16</b>	<i>.20</i>	<i>.10</i>	<i>.03</i>	--	<i>.07</i>	<i>.10</i>
12	Heavy Alcohol	<b>.36</b>	<i>.03</i>	<i>.01</i>	<i>.20</i>	<b>.25</b>	<i>.05</i>	<b>.11</b>	<b>.33</b>	<i>.18</i>	<i>.11</i>	<i>.15</i>	--	<b>.12</b>
13	Physical Sadism	<b>.38</b>	<b>.50</b>	<b>.62</b>	<b>.41</b>	<b>.42</b>	<b>.68</b>	<b>.39</b>	<b>.29</b>	<i>.09</i>	<b>.30</b>	<i>.04</i>	<i>.11</i>	--

Note. Correlations significant at  $p \leq .01$  (2-tailed) are **bolded**.  
Correlations significant at  $p \leq .05$  (2-tailed) are *italicized*.

The PID-5 domains and facets were converted to  $t$ -scores to make them an easily interpreted standard metric for additional analyses. A series of one-way ANOVAs were conducted to determine the main effects of the Aggressor and Coercer scales on the PID-5 domains. These two scales were chosen because they include all of the other SES scales, and they discriminate between physical (Aggressors) and non-physical (Coercers)

means of sexual aggression. Table 12 demonstrates the ANOVA results of the Aggressors Scale on the PID-5 domains and facets. Table 13 demonstrates the ANOVA results of the Coercers Scale on the PID-5 domains and facets.

Table 11. Correlations between PID-5 Facets, Domains, and SES Types for the Overall Sample

	Frotterism	Attempted Coercion	Completed Coercion	Attempted Rape	Completed Rape	Aggressors	Coercers
Antagonism	<b>.30</b>	<b>.27</b>	<b>.30</b>	<b>.28</b>	<b>.28</b>	<b>.30</b>	<b>.30</b>
Callousness	<b>.32</b>	<b>.26</b>	<b>.31</b>	<b>.32</b>	<b>.33</b>	<b>.34</b>	<b>.31</b>
Manipulativeness	<b>.23</b>	<b>.26</b>	<b>.27</b>	<b>.22</b>	<b>.22</b>	<b>.23</b>	<b>.27</b>
Deceitfulness	<b>.25</b>	<b>.21</b>	<b>.22</b>	<b>.20</b>	<b>.19</b>	<b>.21</b>	<b>.24</b>
Grandiosity	<b>.27</b>	<b>.22</b>	<b>.25</b>	<b>.27</b>	<b>.27</b>	<b>.28</b>	<b>.26</b>
Attention Seeking	<b>.18</b>	<b>.17</b>	<b>.19</b>	<b>.17</b>	<b>.17</b>	<b>.18</b>	<b>.19</b>
Detachment	<b>.22</b>	<b>.15</b>	<b>.16</b>	<b>.20</b>	<b>.20</b>	<b>.21</b>	<b>.18</b>
Withdrawal	<b>.14</b>	.10	.10	<b>.14</b>	<b>.13</b>	<b>.14</b>	<b>.12</b>
Anhedonia	<b>.17</b>	.10	.09	<b>.16</b>	<b>.16</b>	<b>.17</b>	<b>.12</b>
Intimacy Avoidance	<b>.20</b>	<b>.16</b>	<b>.20</b>	<b>.19</b>	<b>.20</b>	<b>.20</b>	<b>.20</b>
Suspiciousness	<b>.20</b>	<b>.15</b>	<b>.14</b>	<b>.19</b>	<b>.18</b>	<b>.20</b>	<b>.16</b>
Depressivity	<b>.23</b>	<b>.16</b>	<b>.16</b>	<b>.22</b>	<b>.21</b>	<b>.23</b>	<b>.19</b>
Negative Affectivity	<b>.22</b>	<b>.17</b>	<b>.17</b>	<b>.21</b>	<b>.20</b>	<b>.22</b>	<b>.19</b>
Emotional Lability	<b>.25</b>	<b>.17</b>	<b>.20</b>	<b>.24</b>	<b>.23</b>	<b>.24</b>	<b>.21</b>
Anxiousness	<b>.11</b>	.08	.08	<b>.11</b>	<b>.11</b>	<b>.11</b>	.09
Separation Insecurity	<b>.20</b>	<b>.16</b>	<b>.18</b>	<b>.18</b>	<b>.17</b>	<b>.18</b>	<b>.18</b>
Hostility	<b>.25</b>	<b>.22</b>	<b>.24</b>	<b>.24</b>	<b>.24</b>	<b>.26</b>	<b>.24</b>
Submissiveness	.10	<b>.12</b>	.08	<b>.15</b>	<b>.12</b>	<b>.13</b>	<b>.10</b>
Perseveration	<b>.22</b>	<b>.16</b>	<b>.18</b>	<b>.21</b>	<b>.20</b>	<b>.22</b>	<b>.19</b>
Restricted Affectivity	.10	.08	<b>.11</b>	.09	<b>.11</b>	<b>.11</b>	.10
Psychoticism	<b>.26</b>	<b>.20</b>	<b>.23</b>	<b>.27</b>	<b>.27</b>	<b>.28</b>	<b>.23</b>
Unusual Beliefs	<b>.27</b>	<b>.22</b>	<b>.25</b>	<b>.29</b>	<b>.30</b>	<b>.31</b>	<b>.25</b>
Eccentricity Perceptual	<b>.14</b>	.10	<b>.11</b>	<b>.15</b>	<b>.14</b>	<b>.15</b>	<b>.12</b>
Dysregulation	<b>.31</b>	<b>.25</b>	<b>.28</b>	<b>.32</b>	<b>.32</b>	<b>.34</b>	<b>.29</b>
Disinhibition	<b>.18</b>	<b>.12</b>	<b>.16</b>	<b>.14</b>	<b>.15</b>	<b>.16</b>	<b>.16</b>
Impulsivity	<b>.19</b>	<b>.13</b>	<b>.16</b>	<b>.14</b>	<b>.16</b>	<b>.16</b>	<b>.17</b>
Irresponsibility	<b>.33</b>	<b>.26</b>	<b>.31</b>	<b>.32</b>	<b>.32</b>	<b>.33</b>	<b>.31</b>
Distractibility	<b>.16</b>	.10	<b>.13</b>	<b>.12</b>	<b>.12</b>	<b>.13</b>	<b>.14</b>
Risk Taking	<b>.11</b>	.09	<b>.12</b>	<b>.11</b>	<b>.11</b>	<b>.11</b>	<b>.11</b>
Rigid Perfectionism	<b>.20</b>	<b>.18</b>	<b>.16</b>	<b>.20</b>	<b>.20</b>	<b>.21</b>	<b>.19</b>
Outcome Variable <i>n</i>	154	66	67	64	82	129	123

Note. All correlations are significant at  $p < .05$ ; **Bold** correlations significant at  $p < .01$ .

The domain with the greatest effect size for both the Aggressor and Coercer scales was antagonism (Aggressor's  $d = .54$ ; Coercer's  $d = .62$ ). In the Aggressor scale analysis, callousness (antagonism domain) had the greatest effect size ( $d = .59$ ), followed

by irresponsibility ( $d = .57$ ) in the disinhibition domain. Most other facets had  $d$ s in the range of .30 to .48, and domains ranged from .45 to .54.

The Coercer scale had PID-5 domain group differences, and effect sizes were slightly higher (domain  $d$  range = .43 to .62). The greatest effect size at the facet level was irresponsibility ( $d = .75$ ), followed by perceptual dysregulation (psychoticism domain;  $d = .66$ ), callousness ( $d = .63$ ), unusual beliefs and experiences (psychoticism domain;  $d = .60$ ), and deceitfulness ( $d = .56$ ).

Table 12. ANOVA Main Effects of Aggressors on T-Scores of PID-5 Facets and Domains

	Group Mean Contrasts		F	<i>p</i>	<i>d</i>
	Aggressors	Control			
Antagonism Domain	54.27	48.86	31.32	< .001	.54
Manipulativeness	53.28	49.12	18.10	< .001	.42
Deceitfulness	53.81	48.98	24.68	< .001	.48
Grandiosity	53.44	49.08	19.93	< .001	.44
Attention-Seeking	52.69	49.28	12.05	< .001	.34
Callousness	54.66	48.76	37.62	< .001	.59
Disinhibition Domain	53.78	48.99	24.25	< .001	.48
Impulsivity	52.77	49.26	12.82	< .001	.35
Irresponsibility	54.50	48.80	34.94	< .001	.57
Distractibility	52.41	49.36	9.62	.002	.31
Risk Taking	51.22	49.68	2.43	.119	.15
(Lack of) Rigid Perfectionism	53.23	49.14	17.56	< .001	.41
Detachment Domain	53.83	48.98	24.92	< .001	.49
Withdrawal	52.59	49.31	11.10	.001	.33
Intimacy Avoidance	52.77	49.26	12.81	< .001	.35
Anhedonia	53.43	49.08	19.80	< .001	.44
Depressivity	53.64	49.03	22.34	< .001	.46
Suspiciousness	53.68	49.02	22.89	< .001	.47
Psychoticism Domain	53.51	49.06	20.80	< .001	.45
Unusual Beliefs and Experiences	53.71	49.01	23.32	< .001	.47
Eccentricity	52.29	49.39	8.65	.003	.29
Perceptual Dysregulation	53.78	48.99	24.18	< .001	.48
Negative Affectivity Domain	53.57	49.05	21.48	< .001	.45
Emotional Lability	53.43	49.09	19.78	< .001	.43
Anxiousness	51.79	49.52	5.29	.022	.23
Separation Insecurity	52.39	49.36	9.43	.002	.30
Submissiveness	51.70	49.55	4.72	.030	.22
Hostility	53.73	49.00	23.63	< .001	.47
Perseveration	53.08	49.18	15.87	< .001	.39
(Lack of) Restricted Affectivity	53.00	49.20	15.00	< .001	.38

Note. Aggressors group ( $n = 129$ ) defined by Aggressors Scale scores  $>1$  total incident. Control group ( $n = 483$ ) represent the remainder of the sample. Significant probabilities are **bolded**. All domains and facets are  $t$ -scores,  $M = 50$ ,  $SD = 10$ .

Table 13. ANOVA Main Effects of Coercers on T-Scores of PID-5 Facets and Domains

	Group Mean Contrasts		F	<i>p</i>	<i>d</i>
	Coercers	Control			
Antagonism Domain	54.94	48.76	39.91	< .001	.62
Manipulativeness	53.59	49.10	20.43	< .001	.45
Deceitfulness	54.45	48.88	31.95	< .001	.56
Grandiosity	53.87	49.03	23.95	< .001	.48
Attention-Seeking	53.67	49.08	21.47	< .001	.46
Closeness	55.03	48.74	41.52	< .001	.63
Disinhibition Domain	54.88	48.77	38.97	< .001	.61
Impulsivity	53.94	49.01	24.86	< .001	.49
Irresponsibility	56.01	48.49	60.95	< .001	.75
Distractibility	53.26	49.18	16.78	< .001	.41
Risk Taking	51.70	49.57	4.46	.035	.21
(Lack of) Rigid Perfectionism	53.42	49.14	18.51	< .001	.43
Detachment Domain	53.41	49.14	18.35	< .001	.43
Withdrawal	51.05	49.74	1.70	.193	.13
Intimacy Avoidance	53.22	49.49	16.38	< .001	.37
Anhedonia	52.80	49.30	12.29	< .001	.35
Depressivity	53.66	49.08	21.31	< .001	.46
Suspiciousness	53.82	49.04	23.29	< .001	.48
Psychoticism Domain	54.30	48.92	29.75	< .001	.54
Unusual Beliefs and Experiences	54.78	48.80	37.21	< .001	.60
Eccentricity	52.10	49.47	6.84	.009	.26
Perceptual Dysregulation	55.30	48.67	46.49	< .001	.66
Negative Affectivity Domain	53.93	49.01	24.63	< .001	.49
Emotional Lability	54.54	48.86	33.33	< .001	.57
Anxiousness	51.82	49.54	5.13	.024	.23
Separation Insecurity	54.29	48.92	29.68	< .001	.54
Submissiveness	51.56	49.61	3.77	.053	.20
Hostility	53.89	49.02	24.19	< .001	.49
Perseveration	53.69	49.07	21.67	< .001	.46
(Lack of) Restricted Affectivity	51.31	49.67	2.64	.105	.16

Note. Coercers group ( $n = 123$ ) defined by Coercers Scale scores  $>1$  total incident. Control group ( $n = 489$ ) represent the remainder of the sample. Significant probabilities are *bolded*. All domains and facets are *t*-scores,  $M = 50$ ,  $SD = 10$ .

### Remaining Variable ANOVAs

The remaining variables in the study were converted to *t*-scores to make them an easily interpreted standard metric for these analyses. A series of one-way ANOVAs were analyzed to determine the main effects of sexual aggression type (Aggressors and Coercers) on the variables. The results for Aggressors are presented in Table 14, and the results for Coercers are presented in Table 15.

Table 14. ANOVA Main Effects of Aggressors on Remaining Variables

	Group Mean Contrast		F	<i>p</i>	<i>d</i>
	Aggressors	Control			
Juvenile Delinquency	55.90	48.42	62.67	< . <b>.001</b>	.75
Anxious Attachment	54.03	48.92	27.68	< . <b>.001</b>	.51
Anxious-Mother	54.67	48.75	37.86	< . <b>.001</b>	.59
Anxious-Father	52.50	49.33	10.34	<b>.001</b>	.32
Avoidant Attachment	52.21	49.41	8.05	<b>.005</b>	.28
Avoidant-Mother	52.97	49.21	14.69	< . <b>.001</b>	.38
Avoidant-Father	50.75	49.80	.93	.335	.10
Childhood Sexual Abuse	54.50	48.80	35.00	< . <b>.001</b>	.57
Hostility Towards Women	54.42	48.82	33.57	< . <b>.001</b>	.56
Rape Myth Acceptance	56.05	48.39	66.09	< . <b>.001</b>	.77
Sexual Dominance	53.24	49.14	17.59	< . <b>.001</b>	.41
Sociosexual Attitude	52.18	49.42	7.83	< . <b>.001</b>	.28
Sex Partner #	52.32	49.38	8.87	<b>.003</b>	.29
First Sex Age	50.92	49.76	1.37	.242	.12
Everyday Sadism	54.78	48.72	39.72	< . <b>.001</b>	.61
Physical Sadism	55.83	48.44	60.90	< . <b>.001</b>	.74
Verbal Sadism	53.00	49.20	15.02	< . <b>.001</b>	.38
Vicarious Sadism	53.55	49.06	21.09	< . <b>.001</b>	.45
Misperceive Intent	51.20	49.68	2.37	.124	.15
Heavy Alcohol	51.86	49.50	5.68	<b>.017</b>	.24

*Note.* Aggressors group ( $n = 129$ ) defined by Aggressors Scale scores  $>1$  total incident. Control group ( $n = 483$ ) represent the remainder of the sample. Significant probabilities are **bolded**. All scores are *t*-scores,  $M = 50$ ,  $SD = 10$ .

Table 15. ANOVA Main Effects of Coercers on Remaining Variables

	Group Mean Contrast		F	<i>p</i>	<i>d</i>
	Coercers	Control			
Juvenile Delinquency	55.62	48.59	52.63	< . <b>.001</b>	.70
Anxious Attachment	55.45	48.63	49.40	< . <b>.001</b>	.68
Anxious-Mother	56.16	48.45	64.36	< . <b>.001</b>	.77
Anxious-Father	53.65	49.08	21.14	< . <b>.001</b>	.46
Avoidant Attachment	51.22	49.70	2.28	.132	.15
Avoidant-Mother	51.76	49.56	4.81	<b>.029</b>	.22
Avoidant-Father	50.29	49.93	.127	.721	.04
Childhood Sexual Abuse	55.09	48.72	42.51	< . <b>.001</b>	.64
Hostility Towards Women	54.70	48.82	36.02	< . <b>.001</b>	.59
Rape Myth Acceptance	56.37	48.40	69.44	< . <b>.001</b>	.80
Sexual Dominance	54.71	48.82	36.15	< . <b>.001</b>	.59
Sociosexual Attitude	52.05	49.48	6.56	<b>.011</b>	.26
Sex Partner #	52.48	49.38	9.59	<b>.002</b>	.31
First Sex Age	52.04	49.49	6.47	<b>.011</b>	.26
Everyday Sadism	55.63	48.58	52.97	< . <b>.001</b>	.71
Physical Sadism	57.05	48.23	87.33	< . <b>.001</b>	.88
Verbal Sadism	53.56	49.10	20.13	< . <b>.001</b>	.45
Vicarious Sadism	54.01	48.99	25.71	< . <b>.001</b>	.50
Misperceive Intent	53.14	49.21	15.53	< . <b>.001</b>	.39
Heavy Alcohol	52.07	49.48	6.65	<b>.010</b>	.26

*Note.* Coercers group ( $n = 123$ ) defined by Coercers Scale scores  $>1$  total incident. Control group ( $n = 489$ ) represent the remainder of the sample. Significant probabilities are **bolded**. All scores are *t*-scores,  $M = 50$ ,  $SD = 10$ .

On the Aggressors scale, RMA ( $d = .77$ ), juvenile delinquency ( $d = .75$ ), physical sadism ( $d = .74$ ), and anxious attachment to mother ( $d = .59$ ) had the greatest effect sizes.

The group differences on the Coercers scale were similar to the Aggressors scale. RMA

( $d = .80$ ), physical sadism ( $d = .88$ ), anxious attachment to mother ( $d = .77$ ), and juvenile delinquency ( $d = .70$ ) had the greatest effect sizes on the Coercers scale.

### **Path Analysis Replication Attempt**

A path analysis consistent with Abbey et al (2011) was conducted in a structural equation framework using AMOS 21.0 (Arbuckle, 2012). Path analyses are superior to several multiple regression analyses, as they decrease the probability of a Type 1 error by reducing the number of inferential tests (Schumacker & Lomax, 2004; Noser et al., 2015). All of the data were not normally distributed, so a maximum likelihood analysis was conducted with bootstrapping (500 draws), which resamples to estimate standard errors. Bootstrapping is optimal in samples sizes  $\geq 200$  (Kline, 2011), and this sample had  $N = 612$ . This robust bootstrap resampling method has a more accurate Type 1 error rate than the single sample methods that assume a normal distribution (Garson, 2012).

Figure 1 demonstrates the attempted replication of Abbey et al (2011) with the present study instruments. The hostile masculinity variable was a standardized aggregate of HTW, RMA, and sexual dominance. The unrestricted sociosexuality variable was a standardized aggregate of BSAS, number of sex partners, and first sex age. Sexual aggression was an aggregate of the five SES scales. Antagonism from the PID-5 best represented the psychopathy-related traits from Abbey et al (2011). The paths in the replication were the same paths that were significant in Abbey et al (2011).

The fit of the model in Figure 1 was poor,  $\chi^2(9, 612) = 79.36, p < .001$ , RMSEA = .114, NFI = .895, CFI = .903. There were several non-significant paths in the attempted replication, and modification indices suggested CSA had a direct path to sexual aggression, and juvenile delinquency had an unspecified path to hostile masculinity.

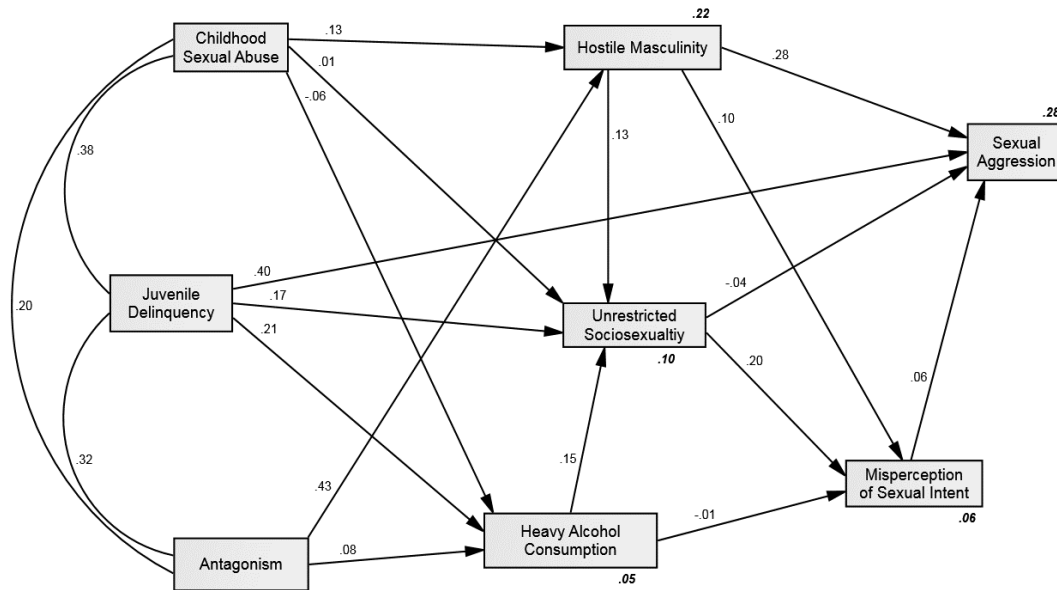


Figure 1. Attempted Replication of Abbey et al (2011)

*Note:* Factor loadings presented are standardized. ***Bold italics*** indicate the percentage of variance accounted for;  $\chi^2(9, 612) = 79.36, p < .001, RMSEA = .114, NFI = .895, CFI = .903$ .

Contrary to Confluence Model literature, unrestricted sociosexuality was a weak predictor in this research. The weakness manifested in the path analysis replication, as well as in the ANOVA analyses (Tables 14 and 15). Misperception of women’s intent and heavy alcohol consumption were also poor predictors in the replication and ANOVAs. Unrestricted sociosexuality, misperception of women’s intent, and heavy alcohol consumption were removed from all subsequent analyses.

### Hostile Masculinity Predictors of Sexual Aggression

The replication model suggested hostile masculinity was a valid proximal predictor of sexual aggression in the present research. A confirmatory factor analysis (CFA) of hostile masculinity and sexual aggression was conducted to verify all of the indicators adequately predicted the latent hostile masculinity and sexual aggression constructs. HTW, RMA, and sexual dominance indicated hostile masculinity, and all five

SES scales indicated sexual aggression. The model was a fair fit to the data,  $\chi^2(10) = 52.49$ ,  $p < .001$ , RMSEA = .083, NFI = .986, CFI = .988, but it is preferable for RMSEA to be less than .08 (Garson, 2015; Kline, 2011). Factor loadings on latent variables should be .60 or higher (Garson, 2015), which was not satisfied by sexual dominance in hostile masculinity (standardized  $\beta = .36$ ). Although sexual dominance had reasonable effect sizes on Aggressors and Coercers in the ANOVA group contrasts (Aggressor  $d = .41$ ; Coercer  $d = .59$ ), when all three variables were simultaneously entered into the full model, sexual dominance did not add enough unique variance to warrant its retention. Thus, sexual dominance was trimmed from subsequent analyses, and the follow-up CFA was an excellent fit,  $\chi^2(4) = 1.925$ ,  $p = .749$ , RMSEA = .000, NFI = .999, CFI = 1.00.

#### **PID-5 Predictors of Hostile Masculinity and Sexual Aggression**

To complete further analyses in an SEM framework, it was necessary to determine which PID-5 traits were valid and unique predictors of variance in hostile masculinity and sexual aggression. Disentangling 25 facets in an SEM would be inefficient and imprecise, so a hierarchical regression was conducted first to determine which facets were key in predicting hostile masculinity and sexual aggression. Table 12 (above) demonstrated the ANOVA main effects of Aggressors on the PID-5 domains and facets. Table 16 (below) is a correlation matrix of the PID-5 domains and facets, RMA, HTW, and sexual aggression.

For the regression analysis, PID-5 domains were organized by ANOVA effect sizes in Table 13 (antagonism, disinhibition, psychoticism, negative affectivity, and detachment), and the facets within each domain were entered into a hierarchical forward stepwise regression model as five different blocks (each domain was a block). The results



indicated seven predictors explained 20.3% of the variance in the aggregated sexual aggression outcome,  $R^2 = .203$ ,  $F(7, 604) = 22.02$ ,  $p < .001$ . Significant predictors of sexual aggression were callousness ( $\beta = 2.85$ ,  $p = .001$ ), grandiosity ( $\beta = 1.30$ ,  $p = .001$ ), withdrawal ( $\beta = -1.35$ ,  $p = .007$ ), perceptual dysregulation ( $\beta = 3.42$ ,  $p < .001$ ), risk taking ( $\beta = -1.86$ ,  $p = .002$ ), irresponsibility ( $\beta = 3.34$ ,  $p < .001$ ), and distractibility ( $\beta = -1.87$ ,  $p < .001$ ).

Table 16. PID-5 Domains and Facets, Hostile Masculinity, and Sexual Aggression Correlations

	Rape Myth Acceptance	Hostile to Women	Sexual Aggression
Antagonism	<b>.35</b>	<b>.41</b>	<b>.32</b>
Callousness	<b>.37</b>	<b>.49</b>	<b>.35</b>
Manipulativeness	<b>.24</b>	<b>.28</b>	<b>.27</b>
Deceitfulness	<b>.25</b>	<b>.36</b>	<b>.24</b>
Grandiosity	<b>.37</b>	<b>.34</b>	<b>.29</b>
Attention Seeking	<b>.22</b>	<b>.24</b>	<b>.20</b>
Hostility	<b>.31</b>	<b>.43</b>	<b>.27</b>
Detachment	<b>.24</b>	<b>.45</b>	<b>.22</b>
Withdrawal	<b>.19</b>	<b>.31</b>	<b>.14</b>
Anhedonia	<b>.13</b>	<b>.35</b>	<b>.16</b>
Intimacy Avoidance	<b>.22</b>	<b>.37</b>	<b>.21</b>
Suspiciousness	<b>.26</b>	<b>.49</b>	<b>.20</b>
Depressivity	<b>.21</b>	<b>.37</b>	<b>.22</b>
Negative Affectivity	<b>.26</b>	<b>.36</b>	<b>.24</b>
Emotional Lability	<b>.24</b>	<b>.33</b>	<b>.25</b>
Anxiousness	<b>.15</b>	<b>.28</b>	<b>.11</b>
Separation Insecurity	<b>.21</b>	<b>.24</b>	<b>.20</b>
Submissiveness	<b>.14</b>	<b>.07</b>	<b>.13</b>
Perseveration	<b>.23</b>	<b>.34</b>	<b>.22</b>
Restricted Affectivity	<b>.12</b>	<b>.23</b>	<b>.11</b>
Psychoticism	<b>.29</b>	<b>.38</b>	<b>.28</b>
Unusual Beliefs	<b>.30</b>	<b>.37</b>	<b>.30</b>
Eccentricity	<b>.17</b>	<b>.28</b>	<b>.15</b>
Perceptual Dysregulation	<b>.34</b>	<b>.40</b>	<b>.34</b>
Disinhibition	<b>.27</b>	<b>.41</b>	<b>.26</b>
Impulsivity	<b>.17</b>	<b>.30</b>	<b>.18</b>
Irresponsibility	<b>.31</b>	<b>.43</b>	<b>.35</b>
Distractibility	<b>.18</b>	<b>.32</b>	<b>.14</b>
Risk Taking	<b>.06</b>	<b>.21</b>	<b>.12</b>
Rigid Perfectionism	<b>.26</b>	<b>.27</b>	<b>.21</b>

Note. **Bold** correlations significant at  $p < .01$ . Sexual Aggression is an aggregate of all five SES scales.

To determine valid and unique predictors of hostile masculinity, the same technique was used for RMA, and five predictors explained 23.5% of the variance in

RMA,  $R^2 = .235$ ,  $F(5,606) = 37.19$ ,  $p < .001$ . Significant predictors of RMA were callousness ( $\beta = 11.32$ ,  $p < .001$ ), grandiosity ( $\beta = 6.00$ ,  $p < .001$ ), anhedonia ( $\beta = -6.24$ ,  $p < .001$ ), perceptual dysregulation ( $\beta = 8.55$ ,  $p < .001$ ), and risk taking ( $\beta = -7.77$ ,  $p < .001$ ). When this technique was used for HTW, four predictors explained 30.4% of the variance in HTW,  $R^2 = .304$ ,  $F(4,607) = 66.33$ ,  $p < .001$ . Significant predictors of HTW were callousness ( $\beta = 8.58$ ,  $p < .001$ ), suspiciousness ( $\beta = 5.85$ ,  $p < .001$ ), intimacy avoidance ( $\beta = 2.21$ ,  $p = .006$ ), and withdrawal ( $\beta = -1.62$ ,  $p = .02$ ).

These analyses suggested 10 PID-5 facets might be significant predictors of hostile masculinity and sexual aggression when all of the facets are entered into one model. Those 10 facets were entered into an exploratory structural model (Figure 2). The alpha level was set to .01 to account for the large sample size and, since the aggregated sexual aggression outcome was used for the regression equations, it was used in this model for consistency. After this analysis, withdrawal, perceptual dysregulation, irresponsibility, anhedonia, and intimacy avoidance were trimmed, as they did not have significant paths in the model ( $p > .01$ ). After these variables were trimmed, distractibility, grandiosity, and risk taking also became insignificant, and they were trimmed. Callousness and suspiciousness were the only remaining significant ( $p < .01$ ) PID-5 facets in the model. Callousness ( $\beta = .48$ ) and suspiciousness ( $\beta = .17$ ) had paths to hostile masculinity.

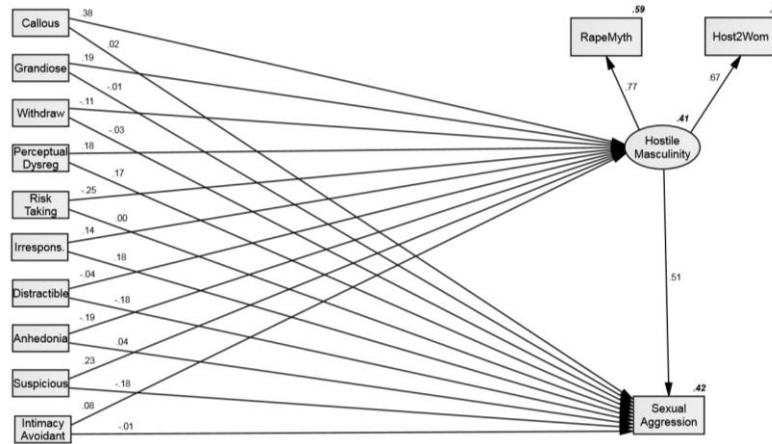


Figure 2. PID-5 Facet Exploratory Structural Model. Factor loadings presented are standardized.

### Everyday Sadism and Attachment Predictors of Hostile Masculinity and Sexual Aggression

The three everyday sadism scales had significant effect sizes in the ANOVA group mean contrasts (Tables 14 and 15), but physical sadism had nearly double the effect size as the other two sadism scales. Therefore, it was determined that regression models with the hostile masculinity and sexual aggression measures should be explored prior to adding everyday sadism to a full structural model. Using the same hierarchical methods described in the PID-5 section, three forward stepwise regression models were constructed to determine unique variance accounted for by everyday sadism variables in the hostile masculinity and sexual aggression outcomes.

In the regression equations, all three variables accounted for 21.1% of the variance in HTW,  $R^2 = .211$ ,  $F(3,608) = 54.22$ ,  $p < .001$ . Physical sadism had the greatest beta weight, ( $\beta = .63$ ,  $p < .001$ ), followed by vicarious sadism ( $\beta = .47$ ,  $p < .001$ ) and verbal sadism ( $\beta = .34$ ,  $p < .001$ ). Physical sadism alone ( $\beta = 2.46$ ,  $p < .001$ ) accounted for 20.7% of RMA,  $R^2 = .207$ ,  $F(1,610) = 158.97$ ,  $p < .001$ . Physical sadism ( $\beta = 1.08$ ,  $p < .001$ ) was also the sole contributor to the aggregate sexual aggression variable,  $R^2 =$

.239,  $F(1,610) = 191.55, p < .001$ . Thus, only physical sadism was retained for further analysis.

The attachment group mean contrast ANOVAs (Tables 14 and 15) suggested anxious attachment would be a valid predictor of sexual aggression (Aggressor  $d = .51$ ; Coercer  $d = .68$ ), but avoidant attachment was considerably weaker (Aggressor  $d = .28$ ; Coercer  $d = .15$ ). Using the same hierarchical methods described above, three forward stepwise regression models were constructed to determine unique variance accounted for by attachment in the hostile masculinity and sexual aggression outcomes. Anxious attachment ( $\beta = .33, p < .001$ ) accounted for 11.2% of the variance in HTW,  $R^2 = .112, F(1,610) = 76.90, p < .001$ . Avoidant attachment was also significant in the second model, but it added less than 2% of unique variance to the equation ( $R^2$  change = .014;  $\beta = .14, p = .002$ ). Anxious attachment ( $\beta = .610, p < .001$ ) was the only significant predictor of RMA,  $R^2 = .133, F(1,610) = 93.90, p < .001$ . Anxious attachment ( $\beta = .206, p < .001$ ) was also the only significant predictor of sexual aggression,  $R^2 = .300, F(1,610) = 60.33, p < .001$ . Thus, anxious attachment was the only attachment variable retained for further analysis.

### **Structural Equation Modeling**

While recent empirical work associated with the Confluence Model relies on path analyses using observed variables, factors such as hostile masculinity and unrestricted sociosexuality were initially conceptualized as latent constructs in an SEM (Malamuth, 1991). SEMs provide an optimal analytic strategy for illuminating the relationships between these complex predictors and outcomes. The failed path analysis replication for this project, as well as the subsequent analyses of hostile masculinity, PID-5 facets,

physical sadism, and anxious attachment, were useful in the construction of a revised model that satisfied the present theoretical objectives (i.e., isolation of trait factors that directly and indirectly elevate sexual aggression) while benefitting from the identified parameter estimates. It must be conceded that this expanded theoretical model capitalized on the observed variable relationships found in these data prior to model development, and the expanded model likely represents the maximum fit that would be achieved in future samples.

The final model was constructed with the variables and paths described in the previous analyses. After initial model construction, PID-5 suspiciousness no longer had a significant path to hostile masculinity ( $p > .01$ ); therefore, suspiciousness was removed. Additionally, anxious attachment did not have a significant direct path to sexual aggression in the full model, but it did maintain the path to hostile masculinity. Figure 3 demonstrates the final SEM.

The final model proved to be a good fit for the data in this sample of male respondents,  $\chi^2(32, 612) = 133.84, p < .001, RMSEA = .07, NFI = .97, CFI = .98$ . Note that a significant chi-square is expected with large sample sizes (Garson, 2015; Kline, 2011). The bold, italic numbers in Figure 3 depict the total variance accounted for in each variable ( $R^2$ ). More than 40% of the variance in the sexual aggression observed outcomes was accounted for by this model ( $R^2$  range .41 to .49), with the exception of Attempted Coercion ( $R^2 = .33$ ), and 79% of the latent sexual aggression construct was accounted for in the model. Table 17 demonstrates the total, direct, and hostile masculinity mediated effects of the distal predictors on sexual aggression. Table 18 demonstrates the unstandardized and standardized regression weights of the latent constructs (hostile

masculinity and sexual aggression) and structural model (all other predictors). Error terms were hidden in Figure 3 for visual efficiency.

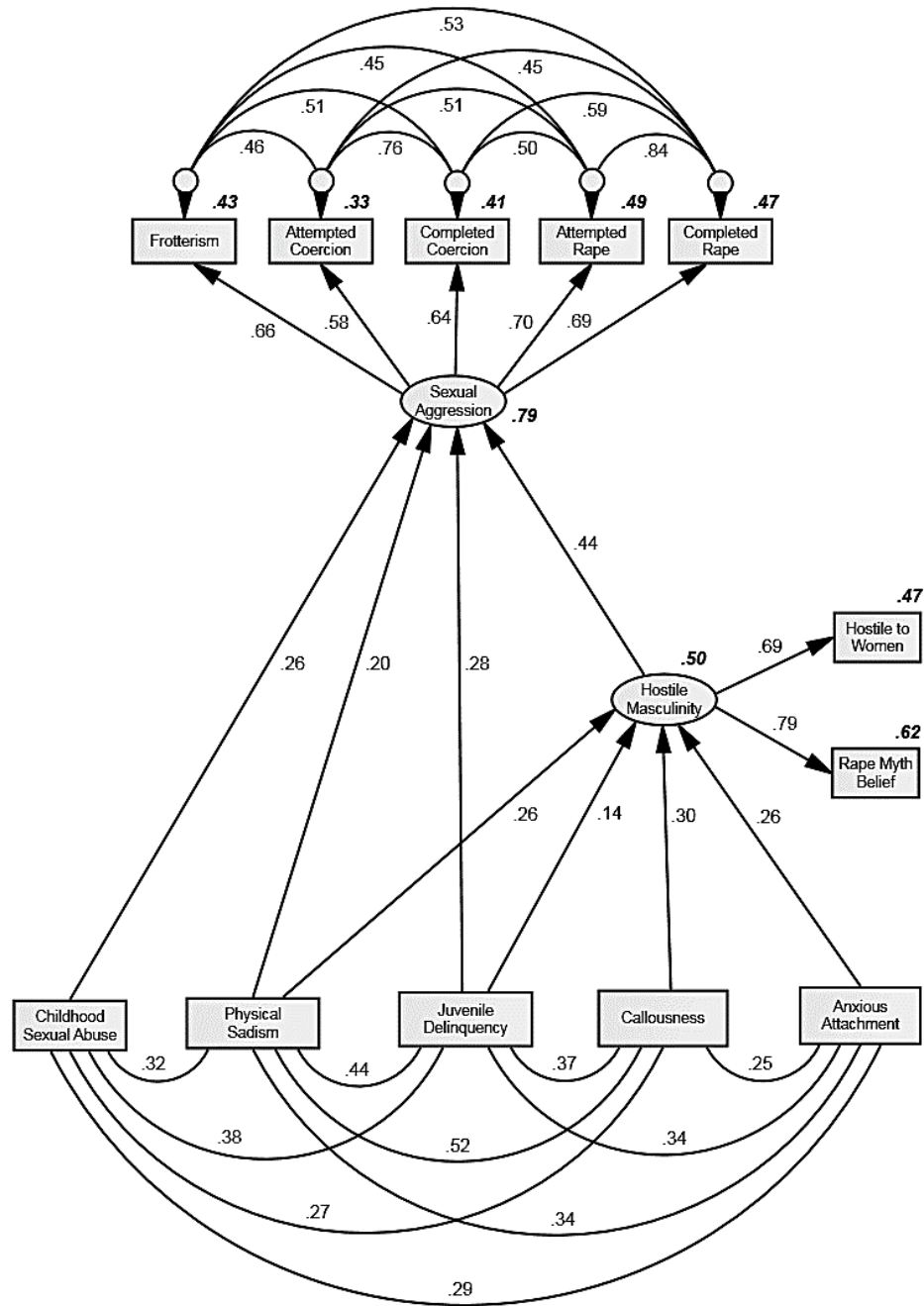


Figure 3. Final Structural Equation Model. Factor loadings are standardized; Error terms are hidden. All error terms were specified parameters (1.00). ***Bold italics*** indicate percentage of variance accounted for;  $\chi^2(32, 612) = 133.84, p < .001$ , RMSEA = .07, NFI = .97, CFI = .98.

Table 17. Standardized Beta Weights for Direct and Mediated Effects on Sexual Aggression in the Structural Equation Model Depicted in Figure 3

<i>Juvenile Delinquency</i>	
Total Effect	.342
Direct Effect	.299
Indirect Effect Mediated by Hostile Masculinity	.206
Percent Mediation (P <sub>M</sub> ) by Hostile Masculinity	.602
<i>Callousness</i>	
Total Effect	.130
Direct Effect	.000
Indirect Effect Mediated by Hostile Masculinity	.130
Percent Mediation (P <sub>M</sub> ) by Hostile Masculinity	1.00
<i>Anxious Attachment to Parent</i>	
Total Effect	.113
Direct Effect	.000
Indirect Effect Mediated by Hostile Masculinity	.113
Percent Mediation (P <sub>M</sub> ) by Hostile Masculinity	1.00
<i>Physical Sadism</i>	
Total Effect	.319
Direct Effect	.204
Indirect Effect Mediated by Hostile Masculinity	.115
Percent Mediation (P <sub>M</sub> ) by Hostile Masculinity	.361
<i>Childhood Sexual Abuse</i>	
Total Effect	.256
Direct Effect	.256
Indirect Effect Mediated by Hostile Masculinity	.000
Percent Mediation (P <sub>M</sub> ) by Hostile Masculinity	.000

Note. All effects are significant ( $p < .01$ ); Hostile Masculinity Total Effect on Sexual Aggression = .44; Percent Mediation (P<sub>M</sub>) = An effect size interpreted as the percent of the total effect accounted for by the indirect effect (indirect effect/total effect).

Table 18. Unstandardized and Standardized Regression Weights for Structural Equation Model in Figure 3

Parameter Estimate	Unstandardized	Standardized
<b>Latent Variable Estimates</b>		
Sexual Aggression → Froterism	1.49 (.095)	.66
Sexual Aggression → Attempted Coercion	1.00 (n/a)	.58
Sexual Aggression → Completed Coercion	1.06 (.047)	.64
Sexual Aggression → Attempted Rape	1.49 (.087)	.70
Sexual Aggression → Completed Rape	1.51 (.094)	.69
Hostile Masculinity → Hostile Towards Women	1.00 (n/a)	.69
Hostile Masculinity → Rape Myth Acceptance	1.95 (.168)	.79
<b>Structural Model</b>		
Anxious Attachment → Hostile Masculinity	.175 (.30)	.26
Callousness → Hostile Masculinity	4.14 (.799)	.30
Juvenile Delinquency → Hostile Masculinity	.09 (.030)	.14
Physical Sadism → Hostile Masculinity	.57 (.107)	.26
Juvenile Delinquency → Sexual Aggression	.02 (.004)	.28
Physical Sadism → Sexual Aggression	.05 (.015)	.20
Childhood Sexual Abuse → Sexual Aggression	.25 (.047)	.26
Hostile Masculinity → Sexual Aggression	.05 (.010)	.44

Note. All paths are significant at  $p < .01$ ; Standard errors are in parentheses

## **Risk Analysis**

Consistent with Malamuth et al (1995) and Abbey et al (2011), an analysis of sexual aggression risk was conducted with the predictors in Figure 3. For each of the factors, the top 25% of participants were categorized as “high risk” for that particular factor. A high risk factor total was then calculated for each participant, and scores ranged from 0 to 7 (*0 = No high risk factors; 7 = All 7 high risk factors*). A regression analysis was conducted, and there was a positive linear relationship between the number of high risk factors and Any Sexual Assault,  $R^2 = .24$ ,  $F(1, 610) = 190.67$ ,  $\beta = .49$ ,  $t = 13.808$ ,  $p < .001$ . Overall, 47.7% of aggressive participants had 3 or more high risk factors.

Figure 4 shows the percentage of participants who endorsed at least some level of sexual aggression as a function of the final seven risk factor groups. It also indicates the number of participants in each grouping. As shown, there is a positive correlation between sexual aggression and number of risk factors. Of the 16 participants with seven risk factors, 12 reportedly engaged in some type of sexual aggression (i.e., 75%). In contrast, of the 188 participants with no risk factors, just 14% reportedly engaged in some type of sexual aggression. Consistent with the concept of sexual aggression being a confluence of risks, there is a clear difference between participants scoring relatively high on six or seven risk factors and the other participants. Moreover, sexual aggression continued to increase beyond the common Confluence Model Factors, demonstrating the new factors were successfully integrated into the Confluence Model framework.



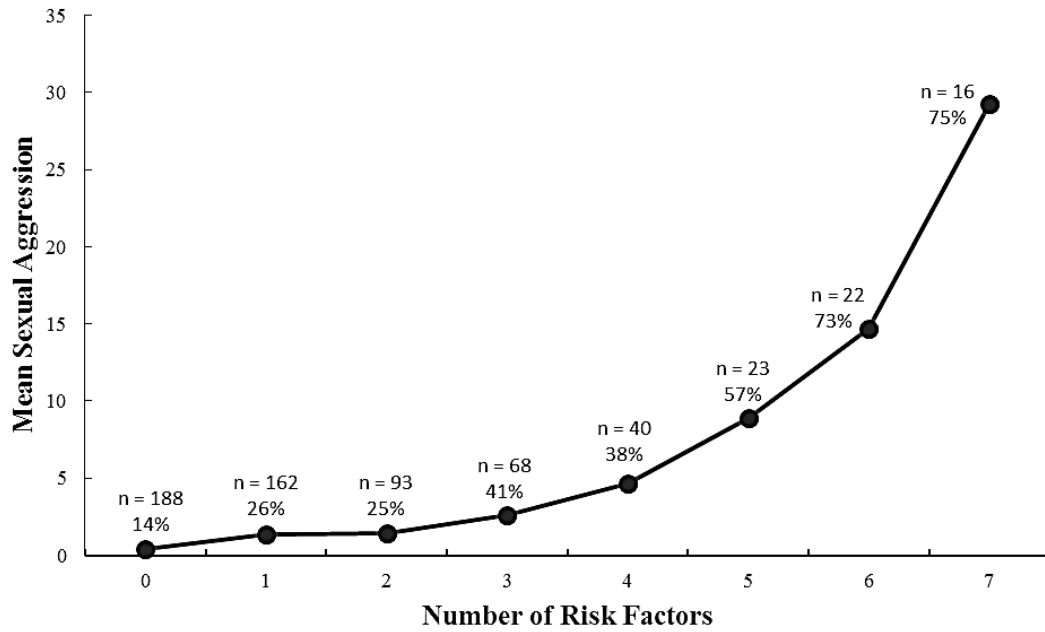


Figure 4. Sexual Aggression as a Function of the Number of Risk Factors. Percentages refer to those who indicated some level of sexual aggression in the respective group, and *ns* represent the number of participants in the risk factor grouping.

## **CHAPTER IV**

### **DISCUSSION**

One goal of this study was to increase the generalizability of the Confluence Model of Sexual Aggression by testing it in a large national sample in an online survey format. An additional goal was to determine if adding everyday sadism, childhood parental attachment, and the PID-5 improved the model. Several predictions were made in pursuit of these goals, and the results were mixed.

The first hypothesis predicted these data would replicate the Abbey et al (2011) model, which was an expanded model including misperception of women's intent and heavy alcohol consumption as proximal predictors. It was expected hostile masculinity, unrestricted sociosexuality, and misperception of women's intent would significantly predict sexual aggression. It was also hypothesized there would be an interaction between high levels of hostile masculinity and unrestricted sociosexuality that increased the number of sexually aggressive acts. Heavy alcohol consumption, CSA, juvenile delinquency, and psychopathy-related traits were expected to be significant distal predictors of sexual aggression, as well.

The path analysis replication of Abbey et al (2011) was a poor fit to the data, so the model was not successfully replicated in this sample. Specifically, misperception of sexual intent, heavy alcohol consumption, and unrestricted sociosexuality were not significantly related to sexual aggression in the replication. However, the hostile

masculinity, CSA, juvenile delinquency, and psychopathy-related traits predictions were supported. The expected interaction between hostile masculinity and unrestricted sociosexuality did not occur due to the failure of unrestricted sociosexuality.

The unrestricted sociosexuality finding is notable and unusual, as hostile masculinity and unrestricted sociosexuality are the two main constellations of the Confluence Model (Malamuth et al., 1991; 1995), and there is substantial support for these concepts. Scrutiny of the correlations and ANOVA analyses revealed all three of the unrestricted sociosexuality variables were weak predictors of other study variables and group mean differences. One possible reason for this finding may be the question type. Number of sex partners and age at first sex were open-ended questions, consistent with Abbey et al (2011). Abbey and colleagues utilized a computerized in-person survey, which may have somehow increased question responsiveness. However, this study's BSAS was not open-ended, and it was also a poor predictor, suggesting not all of the weakness can be attributed to the question type. Missing data analyses were conducted and less than 5% of each variable was missing, which rules out non-responsiveness as a cause for the construct's failure. The survey length could have been problematic, as it was a longer survey; however, the instrument presentation order was counterbalanced, which should have stabilized participant fatigue effects. The population type could also be at fault (e.g., careless or random responding), except other findings, such as the sexual aggression rates, were roughly consistent with past empirical work. Thus, the survey design and instrument composition should have controlled for many study-related flaws that may have caused the failure of unrestricted sociosexuality, and weakness in the model must be considered, as well.

It is possible unrestricted sociosexuality is less generalizable than realized. University convenience samples and incarcerated participants are disproportionately represented in sexual aggression literature, and very few studies have been completed in nationwide, online samples. Thus, it seems possible these measures are not generalizable to online surveys or a nationwide sample of men. In support of this premise, Calhoun et al (1997)'s small community sample of men had no effect of unrestricted sociosexuality, and they utilized the same open-ended survey questions as the present research (i.e., first sex age, number of sex partners). Conversely, Abbey et al (2011) had a large sample of community men in a different (but single) geographical region, and they found reliable effects of unrestricted sociosexuality. Knight and Sims-Knight (2003) argued for sexual drive rather than unrestricted sociosexuality in sexual aggression models. Considering their results and the present findings, it seems reasonable to test sexual drive as an alternative to unrestricted sociosexuality in future research.

Misperception of women's intent and heavy alcohol use were also weak and related to this study's failed replication. These open-ended questions may have suffered for the same reasons as unrestricted sociosexuality, except there were no forced-choice measures to buffer effects of question type, or to compare to the open-ended questions. Forced-choice instruments should be utilized in future online surveys.

Prior to constructing a new theoretical model, CFAs were conducted to examine the validity of construct indicators, and sexual dominance was not a unique source of variance. This finding was unexpected, as this instrument has been included in Confluence Model studies since the model's inception (Malamuth et al., 1991). However, most contemporary models are path analyses, which standardize and aggregate hostile

masculinity and unrestricted sociosexuality. An SEM enters the variables simultaneously but separately, thereby allowing scrutiny of each observed variable. Thus, the SEM may account for the sexual dominance finding. Moreover, like unrestricted sociosexuality, heavy alcohol use, and misperception of women's intent, it is possible sexual dominance is not generalizable to this population of men.

This research included a small university sample, which may provide limited insight into the generalizability question, although the small university sample size warrants interpretive caution. Noteworthy dissimilarities were found between the university and national samples' correlational analyses (Table 10), and in all of the dissimilarities, the university population had greater Pearson's *r*s than the national population. Specifically, 7 of the 11 statistically significant differences between the sample correlations occurred in variables eventually trimmed from the final model. Sexual dominance had the greatest number of statistically significant differences (4 total). Additionally, six moderately sized correlations ( $r_s > .30$ ) in the university sample were not replicated in the national sample ( $r_s < .30$ ), although the differences did not rise to the level of statistical significance. As many Confluence Model studies are conducted in university populations, these sample differences may be harbingers of poor generalizability in some traditional model predictors.

Another study hypothesis was the Confluence Model would be improved by adding everyday sadism, attachment, and the PID-5, as well as by rigorously testing the variables included in the final model. This improvement was operationalized as an increase in the sexual aggression variance accounted for by the model. Abbey et al (2011) accounted for 26% of sexual aggression variance, and Knight and Sims-Knight accounted

for 33% of the variance in sexual coercion. This hypothesized improvement was supported, even without unrestricted sociosexuality in the model. The study's conceptual model accounted for more than 40% of the variance in four of the five sexual aggression outcomes (including Completed Coercion), and it accounted for 33% in Attempted Coercion. The model also accounted for 79% of the variance in the sexual aggression latent variable. Part of the reason for this increase is likely the previously described capitalization on the observed variables in the data set. Another reason may be the use of an SEM, which illuminated each outcome variable in this study rather than relying on an aggregate score. However, Knight and Sims-Knight (2003) used an SEM, and the present model improved upon their coercion findings, as well.

Another study hypothesis was physical sadism would emerge as the strongest everyday sadism predictor, and it would have a direct path to hostile masculinity and sexual aggression. This prediction was supported. Verbal and vicarious sadism did not account for enough variance to be included in the final model, and physical sadism was one of the strongest model predictors.

It was hypothesized either anxious attachment would have a direct path to hostile masculinity, or avoidant attachment would have a direct path to unrestricted sociosexuality. Avoidant attachment was expected to be the most important predictor, but that hypothesis was not supported due to the failure of unrestricted sociosexuality. However, anxious attachment predicted hostile masculinity, consistent with anxious attachment being related to sexually aggressive personality traits. There is empirical evidence supporting avoidant attachment's relationship with unrestricted sociosexuality (e.g., Simpson & Gangestad, 1991), but future sexual aggression studies with stronger

sociosexuality measures will have to consider which attachment style is most important in sexual violence.

The facets from the antagonism and disinhibition domains were expected to predict hostile masculinity and unrestricted sociosexuality, respectively. This prediction was made due to past studies (e.g., LeBreton et al., 2013) demonstrating psychopathic behaviors (psychopathy Factor 2) relate to unrestricted sociosexuality and psychopathic interpersonal traits (psychopathy Factor 1) relate to hostile masculinity. The antagonism domain seems consistent with Factor 1, and disinhibition seems consistent with Factor 2. The antagonism prediction held, but the disinhibition hypothesis did not. Several PID-5 facets predicted hostile masculinity and sexual aggression in the regression analyses; however, when they were entered into the model simultaneously with other predictors, only callousness remained. The disinhibition finding seems linked to the failure of unrestricted sociosexuality. The antagonism domain's callousness facet proved a reliable factor in the development of hostile masculinity.

The inclusion of PID-5 callousness as the sole personality trait in the final model was somewhat unexpected. Callousness can be conceptualized as the absence of empathy, and empathy moderates sexual aggression (Wheeler et al., 2002). Thus, callousness seems an important factor that should have been in the final model. However, the dark core of the Dark Tetrad is callousness and manipulateness, so it seemed likely everyday sadism would account for much of the callousness variance. This was not the case, as both physical sadism and callousness were unique predictors in the final model. This may have occurred for a couple of reasons. First, PID-5 callousness may not measure Dark Tetrad callousness. Because there are no known factor analyses of

everyday sadism and the PID-5, it cannot be assumed the PID-5 version of callousness fully captures the tetrad's dark core. Additionally, it is possible physical sadism only partially accounts for the callous core of everyday sadism and the two excluded everyday sadism scales capture the remaining callousness variance. In support of this premise, callousness had a significant path to hostile masculinity with a beta weight of .48 in the exploratory model. In the full model, the path was maintained, but callousness's beta was reduced to .30. It seems possible the change was due to physical sadism, though this cannot be confirmed from these analyses. A factor analysis of everyday sadism and the PID-5 would provide evidence for this supposition, as well determining if other facets predict sadism's unique contribution to the dark personality grouping, which is taking pleasure in others' pain and suffering.

The final hypothesis was sexual aggression rates would increase incrementally with the number of high-scoring risk factors. This hypothesis was supported, which suggests a confluence of these risk factors predicts sexual aggression. Additionally, the hypothesized sexual violence rate increase with the new PID-5, everyday sadism, and attachment factors was supported. There were seven predictors in the final model, and four of those were traditional Confluence Model variables. As each factor contributed to increased sexual aggression, the new measures seem appropriate in a Confluence Model.

The prevalence rates were analyzed extensively in this research. Notably, 28.8% of men reported perpetrating some form of sexual violence. Consistent with past research (e.g., Abbey & McAuslan, 2004; Mouilso & Calhoun, 2012; Widman et al., 2013), most sexually aggressive men reported multiple acts, and 40% of the aggressive sample reported six or more instances of sexual violence. Although roughly 24% of men self-



reported behaviors that would be illegal in most jurisdictions (i.e., froterism, attempted and completed rape), only 3.1% acknowledged committing rape on the direct rape question. This suggests either the men do not understand what constitutes sexual assault, or they somehow disregard their sexually violent behavior and consider it normal. This issue deserves follow-up, as determining the reason for this discrepancy may prove valuable for education and prevention efforts.

It is troublesome these rates have not improved markedly over the years and decades, even with increased focus on the issue. For example, Kanin (1957) found 20 to 25% of college women reported being sexually assaulted, and 26% of college men reported perpetrating sexual assault. Admittedly, measures of these variables changed substantially over time, so caution is warranted when making comparisons. However, the persistence of these prevalence rates points to the need for a more drastic approach to prevention, as little has changed since the 1950s.

### **Limitations and Strengths**

Conclusions regarding the present failed replication attempt of the Confluence Model are not intended to suggest the inadequacy of the model, and assumptions based on this study should be tempered by recognition of key differences in the samples. One limitation of this research is the divergence from some Confluence Model studies in regards to the combination of the hostile masculinity scales and the addition of the PID-5. Although the hostile masculinity measures in this research have been used in other Confluence Model studies, the combination of the scales was relatively unique and may have had an effect on the outcome. Moreover, the use of the PID-5 restricted traditional measurement of psychopathy and narcissism, which may have affected the model.

The data collection method is another limitation of this research. While online studies are efficient, there is considerably less participant oversight. Only two other online Confluence Model studies were discovered while preparing this manuscript, and they both had reliable unrestricted sociosexuality effects (Baer et al., 2015; Logan-Greene & Davis, 2011), although Logan-Greene & Davis (2011) had smaller effects than anticipated. While there are almost certainly other Confluence Model studies that have been conducted in online nationwide samples, the most influential sources do not include these sample types (e.g., Abbey et al., 2001; 2005; 2006; 2007; 2011; Abbey & Jacques-Tiura, 2011; Malamuth et al., 1991).

Of equal importance to this project was the possibility of expanding the range of direct and indirect contributors for future researchers. A limitation related to this goal is the expanded model capitalized on the observed variable relationships found in these data prior to model development. The observed model fit likely signifies the maximum that would be achieved in future samples, but some of the factors tested represent relatively novel contributors worthy of consideration when expanding Confluence Model literature.

Other limitations of this study are the data type and survey method. All of the data in this study are self-report, which are less reliable than other data types (e.g., physiological data). For example (and like Abbey et al., 2011), this study's participants could only report misperception of women's intent if they recognized they made the error. This suggests a level of insight that cannot be assumed. Correlational data are also problematic, and an SEM presumes a causal order that cannot be substantiated. Thus, alternative sampling procedures should be sought, although it is acknowledged there are few alternatives to self-report sexual assault data. Some alternatives do exist, however,

such as utilizing implicit measures, or designing experimental manipulations to reveal cognitive distortions (Abbey et al., 2011). Finally, the cross-sectional sample is a limitation, and longitudinal studies would be superior to a cross-sectional study.

A strength of this research includes the online survey format (also an acknowledged weakness). While novel in Confluence Model research, online studies provide reliable data, even when questions are sensitive in nature (e.g., Gamblin et al., 2016). Online data collection is efficient (Paolacci et al., 2010), and obtaining large samples is considerably less cumbersome in an online format such as MTurk.

The relatively large sample size was also a study strength, as were the comparisons of a university and nationwide sample. The overall number of participants was greater than most prominent sexual aggression studies, and large sample sizes and nationwide populations are lacking in tests of the Confluence Model. The comparative university sample size was small, but it allowed for some important sample comparisons that may have revealed generalizability issues requiring follow-up. Abbey et al (2011) emphasized the importance of replicating both the Confluence Model overall, as well as their expanded model specifically. A strength of this research is it accomplished both goals.

### **Future Directions**

There are several lines of research stemming from the present study's literature review and data analyses. First, replication of these results is recommended, specifically in regards to unrestricted sociosexuality, misperception of women's intent, sexual dominance, and heavy alcohol use. These variables should be closely scrutinized in a similar national population.

In Knight and Sims-Knight (2003)'s three-component model, they argue for sexual drive as a proximal predictor of sexual coercion rather than unrestricted sociosexuality. Their three factors (sexual drive/preoccupation, antisocial behavior/aggression, callousness/unemotionality) are based on research suggesting childhood maltreatment differentially predicts traits in a sexual coercion model, such that physical and verbal abuse predict negative masculinity, and sexual abuse predicts sexual drive/preoccupation. The callousness/unemotionality construct is consistent with psychopathy Factor 1, whereas the antisocial/aggression construct is consistent with psychopathy Factor 2 (Knight & Sims-Knight, 2003). Evidence in support of sexual drive and preoccupation with sex has accumulated in the literature (e.g., Knight & Sims-Knight, 2004; Lussier, Leclerc, Cale, & Proulx, 2007), and the PID-5 callousness and physical sadism in this study may compliment the personality factors in the three-component model. Knight and Sims-Knight (2003) also postulate variables such as attachment moderate sexual drive, allowing mating strategies other than sociosexuality to be expressed in some individuals (e.g., polygamy, extra-bond mating), curtailing sexual aggression (Knight & Sims-Knight, 2003). These propositions should be tested in an expansion of the present research that includes sexual drive and unrestricted sociosexuality. A test of both unrestricted sociosexuality and sexual drive in a Confluence Model framework could add some clarity to this issue.

Future research should also focus on the PID-5 predictors of hostile masculinity and sexual aggression. The present study included an exploratory model investigating 10 of the 25 facets, but this instrument warrants in depth investigation of possible mediation and moderation effects in sexual aggression. Because aggressors and coercers may

exhibit different traits, the PID-5 should be assessed in both an aggression and coercion model. While the five domains are helpful for descriptive purposes and may adequately capture unique sexual aggression variance, scrutinizing the 25 PID-5 facets could benefit intervention efforts and understanding of offender traits. This study lays the groundwork for such investigation, and replication and expansion is necessary.

A better understanding of everyday sadism is also recommended based on this research, particularly the way in which it relates to the PID-5. Understanding the relationships between everyday sadism and the PID-5 is important to both sexual aggression and Dark Tetrad research. There appear to be serious implications related to the constructs measured by both instruments, and they deserve more extensive investigation than was accomplished here.

### **Conclusion**

The present research contributes a considerable amount of useful information to the corpus of Confluence Model and sexual aggression literature. Learning the prevalence rates of self-reported sexual aggression in a national sample of this size is helpful, as the rates were not as drastic as those that were reported in smaller, localized samples (e.g., Abbey et al., 2011). It is possible the reduced sexual aggression rates are due to education and increased awareness, but it seems more likely the data collection method and sample size accounts for the differences. Thus, this research adds much needed generalizability to sexual aggression research.

This research also found new predictors and measures that seem to fit well in the Confluence Model. RMA and HTW proved their value in the hostile masculinity constellation, and specific interventions targeting these adversarial beliefs should be

investigated. The distal predictors also provide insight into the formation of these hostile masculine beliefs. Attachment anxiety, CSA, juvenile delinquency, physical sadism, and callous personality traits are all areas where early primary prevention programs can intercede to target at-risk youths.

## **APPENDICES**

## Appendix A

### Personality Inventory for *DSM-5*

Very False or Often False	1	Sometimes or Somewhat False	2	Sometimes or Somewhat True	3	Very True or Often True	4
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50 I worry a lot about being alone.  
51 I've missed out on things because I was busy trying to get something I was doing exactly  
52 My thoughts often don't make sense to others.  
53 I often make up things about myself to help me get what I want.  
54 It doesn't really bother me to see other people get hurt.  
55 People often look at me as if I'd said something really weird.  
56 People don't realize that I'm flattering them to get something.  
57 I'd rather be in a bad relationship than be alone.  
58 I usually think before I act.  
59 I often see vivid dream-like images when I'm falling asleep or waking up.  
60 I keep approaching things the same way, even when it isn't working.  
61 I'm very dissatisfied with myself.  
62 I have much stronger emotional reactions than almost everyone else.  
63 I do what other people tell me to do.  
64 I can't stand being left alone, even for a few hours.  
65 I have outstanding qualities that few others possess.  
66 The future looks really hopeless to me.  
67 I like to take risks.  
68 I can't achieve goals because other things capture my attention.  
69 When I want to do something, I don't let the possibility that it might be risky stop me.  
70 Others seem to think I'm quite odd or unusual.  
71 My thoughts are strange and unpredictable.  
72 I don't care about other people's feelings.  
73 You need to step on some toes to get what you want in life.  
74 I love getting the attention of other people.  
75 I go out of my way to avoid any kind of group activity.  
76 I can be sneaky if it means getting what I want.  
77 Sometimes when I look at a familiar object, it's somehow like I'm seeing it for the first  
78 It is hard for me to shift from one activity to another.  
79 I worry a lot about terrible things that might happen.  
80 I have trouble changing how I'm doing something even if what I'm doing isn't going well.  
81 The world would be better off if I were dead.  
82 I keep my distance from people.  
83 I often can't control what I think about.  
84 I don't get emotional.  
85 I resent being told what to do, even by people in charge.  
86 I'm so ashamed by how I've let people down in lots of little ways.  
87 I avoid anything that might be even a little bit dangerous.  
88 I have trouble pursuing specific goals even for short periods of time.  
89 I prefer to keep romance out of my life.  
90 I would never harm another person.  
91 I don't show emotions strongly.  
92 I have a very short temper.  
93 I often worry that something bad will happen due to mistakes I made in the past.  
94 I have some unusual abilities, like sometimes knowing exactly what someone is thinking.  
95 I get very nervous when I think about the future.  
96 I rarely worry about things.  
97 I enjoy being in love.  
98 I prefer to play it safe rather than take unnecessary chances.  
99 I sometimes have heard things that others couldn't hear.  
100 I get fixated on certain things and can't stop.  
101 People tell me it's difficult to know what I'm feeling.  
102 I am a highly emotional person.  
103 Others would take advantage of me if they could.  
104 I often feel like a failure.  
105 If something I do isn't absolutely perfect, it's simply not acceptable.  
106 I often have unusual experiences, such as sensing the presence of someone who isn't

107 I'm good at making people do what I want them to do.  
108 I break off relationships if they start to get close.  
109 I'm always worrying about something.  
110 I worry about almost everything.  
111 I like standing out in a crowd.  
112 I don't mind a little risk now and then.  
113 My behavior is often bold and grabs peoples' attention.  
114 I'm better than almost everyone else.  
115 People complain about my need to have everything all arranged.  
116 I always make sure I get back at people who wrong me.  
117 I'm always on my guard for someone trying to trick or harm me.  
118 I have trouble keeping my mind focused on what needs to be done.  
119 I talk about suicide a lot.  
120 I'm just not very interested in having sexual relationships.  
121 I get stuck on things a lot.  
122 I get emotional easily, often for very little reason.  
123 Even though it drives other people crazy, I insist on absolute perfection in everything I do.  
124 I almost never feel happy about my day-to-day activities.  
125 Sweet-talking others helps me get what I want.  
126 Sometimes you need to exaggerate to get ahead.  
127 I fear being alone in life more than anything else.  
128 I get stuck on one way of doing things, even when it's clear it won't work.  
129 I'm often pretty careless with my own and others' things.  
130 I am a very anxious person.  
131 People are basically trustworthy.  
132 I am easily distracted.  
133 It seems like I'm always getting a "raw deal" from others.  
134 I don't hesitate to cheat if it gets me ahead.  
135 I check things several times to make sure they are perfect.  
136 I don't like spending time with others.  
137 I feel compelled to go on with things even when it makes little sense to do so.  
138 I never know where my emotions will go from moment to moment.  
139 I have seen things that weren't really there.  
140 It is important to me that things are done in a certain way.  
141 I always expect the worst to happen.  
142 I try to tell the truth even when it's hard.  
143 I believe that some people can move things with their minds.  
144 I can't focus on things for very long.  
145 I steer clear of romantic relationships.  
146 I'm not interested in making friends.  
147 I say as little as possible when dealing with people.  
148 I'm useless as a person.  
149 I'll do just about anything to keep someone from abandoning me.  
150 Sometimes I can influence other people just by sending my thoughts to them.  
151 Life looks pretty bleak to me.  
152 I think about things in odd ways that don't make sense to most people.  
153 I don't care if my actions hurt others.  
154 Sometimes I feel "controlled" by thoughts that belong to someone else.  
155 I really live life to the fullest.  
156 I make promises that I don't really intend to keep.  
157 Nothing seems to make me feel good.  
158 I get irritated easily by all sorts of things.  
159 I do what I want regardless of how unsafe it might be.  
160 I often forget to pay my bills.  
161 I don't like to get too close to people.  
162 I'm good at conning people.  
163 Everything seems pointless to me.

164 I never take risks.  
165 I get emotional over every little thing.  
166 It's no big deal if I hurt other peoples' feelings.  
167 I never show emotions to others.  
168 I often feel just miserable.  
169 I have no worth as a person.  
170 I am usually pretty hostile.  
171 I've skipped town to avoid responsibilities.  
172 I've been told more than once that I have a number of odd quirks or habits.  
173 I like being a person who gets noticed.  
174 I'm always fearful or on edge about bad things that might happen.  
175 I never want to be alone.  
176 I keep trying to make things perfect, even when I've gotten them as good as they're likely  
177 I rarely feel that people I know are trying to take advantage of me.  
178 I know I'll commit suicide sooner or later.  
179 I've achieved far more than almost anyone I know.  
180 I can certainly turn on the charm if I need to get my way.  
181 My emotions are unpredictable.  
182 I don't deal with people unless I have to.  
183 I don't care about other peoples' problems.  
184 I don't react much to things that seem to make others emotional.  
185 I have several habits that others find eccentric or strange.  
186 I avoid social events.  
187 I deserve special treatment.  
188 It makes me really angry when people insult me in even a minor way.  
189 I rarely get enthusiastic about anything.  
190 I suspect that even my so-called "friends" betray me a lot.  
191 I crave attention.  
192 Sometimes I think someone else is removing thoughts from my head.  
193 I have periods in which I feel disconnected from the world or from myself.  
194 I often see unusual connections between things that most people miss.  
195 I don't think about getting hurt when I'm doing things that might be dangerous.  
196 I simply won't put up with things being out of their proper places.  
197 I often have to deal with people who are less important than me.  
198 I sometimes hit people to remind them who's in charge  
199 I get pulled off-task by even minor distractions.  
200 I enjoy making people in control look stupid.  
201 I just skip appointments or meetings if I'm not in the mood.  
202 I try to do what others want me to do.  
203 I prefer being alone to having a close romantic partner.  
204 I am very impulsive.  
205 I often have thoughts that make sense to me but that other people say are strange.  
206 I use people to get what I want.  
207 I don't see the point in feeling guilty about things I've done that have hurt other people.  
208 Most of the time I don't see the point in being friendly.  
209 I've had some really weird experiences that are very difficult to explain.  
210 I follow through on commitments.  
211 I like to draw attention to myself.  
212 I feel guilty much of the time.  
213 I often "zone out" and then suddenly come to and realize that a lot of time has passed.  
214 Lying comes easily to me.  
215 I hate to take chances.  
216 I'm nasty and short to anybody who deserves it.  
217 Things around me often feel unreal, or more real than usual.  
218 I'll stretch the truth if it's to my advantage.  
219 It is easy for me to take advantage of others.  
220 I have a strict way of doing things.

**Appendix B**  
**Hostility towards Women Scale**

Strongly Disagree			Neutral			Strongly Agree
1	2	3	4	5	6	7

1. I feel that many times women flirt with men just to tease them or hurt them.
2. I believe that most women tell the truth.
3. I usually find myself agreeing with women.
4. I think that most women would lie just to get ahead.
5. Generally, it is safer not to trust women.
6. When it really comes down to it, a lot of women are deceitful.
7. I am easily angered by women.
8. I am sure I get a raw deal from the women in my life.
9. Sometimes women bother me just by being around.
10. Women are responsible for most of my troubles.

### **Appendix C Rape Myth Scale**

Strongly Disagree    Neutral    Strongly Agree  
1    2    3    4    5    6    7

1. When women talk and act sexy, they are inviting rape.
2. When a woman is raped, she usually did something careless to put herself in that situation.
3. Any woman who teases a man sexually and doesn't finish what she started realistically deserves anything she gets.
4. Many rapes happen because women lead men on.
5. Men don't usually intend to force sex on a woman, but sometimes they get too sexually carried away.
6. In some rape cases, the woman actually wants it to happen.
7. Even though the woman may call it rape, she probably enjoyed it.
8. If a woman doesn't physically fight back, you can't really say that it was rape.
9. A rape probably didn't happen if the woman has no bruises or marks.
10. When a woman allows petting to get to a certain point, she is implicitly agreeing to have sex.
11. If a woman is raped, often it is because she didn't say "no" clearly enough.
12. Women tend to exaggerate how much rape affects them.
13. When men rape, it is because of their strong desire for sex.
14. It is just part of human nature for men to take sex from women who let their guard down.
15. A rapist is more likely to be Black or Hispanic than White.
16. In any rape case, one would have to question whether the victim is promiscuous or has a bad reputation.
17. Rape mainly occurs on the "bad" side of town.
18. Many so-called rape victims are actually women who had sex and "changed their minds" afterwards.
19. If a husband pays all the bills, he has the right to sex with his wife whenever he wants it.

**Appendix D**  
**Experiences in Parental Relationships Scale—Father**

Instructions: This questionnaire lists various attitudes and behaviors of fathers. As you remember your father in your first 16 years, respond to each statement by indicating how much you agree or disagree with it. Use the following rating scale:

Strongly Disagree			Neutral			Strongly Agree
1	2	3	4	5	6	7

1. I preferred not to show my father how I felt deep down.
2. I worried about being abandoned by my father.
3. I was very comfortable being close to my father.
4. I worried a lot about my relationship with my father.
5. Just when my father started to get close to me, I found myself pulling away.
6. I worried that my father did not care as much about me as I cared about him.
7. I did not feel comfortable opening up to my father.
8. I worried a fair amount about losing my father.
9. I felt comfortable sharing my private thoughts and feelings with my father.
10. I needed a lot of reassurance that I am loved by my father.
11. I found it relatively easy to get close to my father.
12. If I couldn't get my father to show interest in me, I got upset or angry.
13. I found it difficult to allow myself to depend on my father.
14. I got frustrated if my father was not available when I need him.
15. I preferred not to be too close to my father.
16. I found that my father did not want to get as close as I would have liked.
17. I usually discussed my problems and concerns with my father.
18. When my father disapproved of me, I felt really badly about myself.
19. I felt comfortable depending on my father.
20. I got frustrated when my father was not around as much as I would have liked.
21. I did not mind asking my father for comfort, advice, or help.
22. I resented it when my father spent time away from me.

**Appendix E**  
**Sexual Functions Inventory—Sexual Dominance Subscale**

Very Important	Pretty Important	Not Too Important	Not Important At All
1	2	3	4

Instructions: People have sexual relations (kissing, oral sex, intercourse) with others for many reasons. The following list includes some reasons others have given for their sexual behavior. Think about the reasons you find sexual behavior important. After considering the reasons for your own sexual behavior, choose the option that best describes your reason for the behavior listed.

1. Because I like the feeling that I have someone in my grasp.
2. Because like many people, I enjoy the conquest.
3. Because it makes me feel masterful.
4. Because I like the feeling of having another person submit to me.
5. Because I like teaching less experienced people how to get off.
6. Because in the act of sex more than any other time, I get the feeling that I can really influence how someone feels and behaves.
7. Because I like it when my partner is really open and vulnerable to me.
8. Because when my partner finally surrenders to me, I get this incredibly satisfying feeling.

**Appendix F**  
**Brief Sexual Attitudes Scale—Permissiveness Subscale**

Strongly Agree		Neutral		Strongly Disagree
1	2	3	4	5

1. I do not need to be committed to a person to have sex with them.
2. Casual sex is acceptable.
3. I would like to have sex with many partners.
4. One-night stands are sometimes enjoyable.
5. It is okay to have ongoing sexual relationships with more than one person at a time.
6. Sex as a simple exchange of favors is okay if both people agree to it.
7. The best sex is with no strings attached.
8. Life would have fewer problems if people could have sex more freely.
9. It is possible to enjoy sex with a person and not like that person very much.
10. It is okay for sex to be just good physical release.



**Appendix G**  
**Comprehensive Assessment of Sadistic Tendencies**

Strongly Disagree                      Neutral                      Strongly Agree  
1                      2                      3                      4                      5

Direct - Verbal

1. I was purposely mean to some people in high school.
2. I enjoy making jokes at the expense of others.
3. I have purposely tricked someone and laughed when they looked foolish.
4. When making fun of someone, it is especially amusing if they realize what I'm doing.
5. Perhaps I shouldn't have, but I never got tired of mocking certain classmates.
6. I would never purposely humiliate someone. (R)

Direct - Physical

1. I enjoy physically hurting people.
2. I enjoy tormenting people.
3. I have the right to push certain people around.
4. I have dominated others using fear.
5. I enjoy hurting my partner during sex (or pretending to).

Vicarious

1. In video games, I like the realistic blood spurts.
2. I love to watch YouTube clips of people fighting.
3. I enjoy watching cage fighting (or MMA), where there is no escape.
4. I sometimes replay my favorite scenes from gory slasher films.
5. There's way too much violence in sports. (R)
6. I enjoy playing the villain in games and torturing other characters.
7. In professional car racing, it's the accidents that I enjoy most.

Fillers can be intermixed to offset negativity.

I'm considered to be a kind person.  
By staying strong, one can better help others.  
I'd do anything – even break the law – for those I love.  
I go out of my way to help family members.  
I have ambitions to make the world a better place.  
My goal is to be a missionary and help others.  
I give money to poor people on the street.  
I'm worried that we have already seriously damaged the Earth.  
I want to spend my life helping sick children.  
I have had some really good friends.  
I am a religious person

## **Appendix H**

### **Juvenile Delinquency Scale**

Read the items below and indicate how often you participated in the behaviors when you were under the age of 18 years.

Never	Once	Twice	3 Times	4 Times	5 Times or More
1	2	3	4	5	6

Before I turned 18, I...

1. Stole something from a store.
2. Stole money from a family member, like my parents or siblings.
3. Stole money from a stranger.
4. Broke into a home or building.
5. Drank alcohol.
6. Consumed marijuana.
7. Consumed “hard drugs” like cocaine or methamphetamine.
8. Intentionally broke items on school property, like a computer or desk.
9. Spray painted my name or other symbols on a building or structure without permission.
10. Intentionally broke something that belonged to a family member.
11. Got into fights (punching, hitting, or kicking someone).
12. Ran away from home for more than 24 hours.
13. Got arrested or taken to the police station.
14. Got suspended from school.

**Appendix I**  
**Sexual Experiences Survey—Short Form Perpetration**

Instructions: The following questions concern sexual experiences. We know these are personal questions, so we do not ask your name or other identifying information. Your information is completely confidential. We hope this helps you to feel comfortable answering each question honestly. Place a check mark in the box  showing the number of times each experience has happened. If several experiences occurred on the same occasion—for example, if one night you told some lies and had sex with someone who was drunk, you would check both boxes a and c. Since age 14 refers to your life starting on your 14<sup>th</sup> birthday and stopping today.

		How many times since age 14?
1.	<b>I fondled, kissed, or rubbed up against the private areas of someone’s body (lips, breast/chest, crotch or butt) or removed some of their clothes without their consent (<i>but did not attempt sexual penetration</i>) by:</b>	0   1   2   3+
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn’t want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force after they said they didn’t want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	c. Taking advantage when they were too drunk or out of it to stop what was happening.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	d. Threatening to physically harm them or someone close to them.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2.	<b>I had oral sex with someone or had someone perform oral sex on me without their consent by:</b>	0   1   2   3+
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn’t want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force after they said they didn’t want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	c. Taking advantage when they were too drunk or out of it to stop what was happening.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	d. Threatening to physically harm them or someone close to them.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

		How many times since age 14?			
		0	1	2	3+
3.	<b>I put my penis, my fingers, or objects into a woman's vagina or butt without her consent by:</b>				
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force after they said they didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Taking advantage when they were too drunk or out of it to stop what was happening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d. Threatening to physically harm them or someone close to them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<b>Even though it did not happen, I TRIED to have oral sex with someone or make them have oral sex with me without their consent by:</b>				
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force after they said they didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Taking advantage when they were too drunk or out of it to stop what was happening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d. Threatening to physically harm them or someone close to them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	<b>Even though it did not happen, I TRIED put in my penis, my fingers, or objects into a woman's vagina or butt without their consent by:</b>				
	a. Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force after they said they didn't want to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Taking advantage when they were too drunk or out of it to stop what was happening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d. Threatening to physically harm them or someone close to them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e. Using force, for example holding them down with my body weight, pinning their arms, or having a weapon.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Do you think you may have ever raped someone? Yes  No

## REFERENCES

- 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., & Jacques-Tiura, A. J. (2011). Sexual assault perpetrators' tactics: Associations with their personal characteristics and aspects of the incident. *Journal of Interpersonal Violence, 26*(14), 2866-2889.
- Abbey, A., Jacques-Tiura, A.J., & LeBreton, J.M. (2011). Risk factors for sexual aggression in young men: An expansion of the confluence model. *Aggressive Behavior, 37*(5), 450-464.
- 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., Parkhill, M. R., BeShears, R., Clinton-Sherrod, A. M., & Zawacki, T. (2006). Cross-sectional predictors of sexual assault perpetration in a community sample of single African American and Caucasian men. *Aggressive Behavior, 32*(1), 54-67.
- Abbey, A., Parkhill, M. R., Clinton-Sherrod, A. M., & Zawacki, T. (2007). A comparison of men who committed different types of sexual assault in a community sample. *Journal of Interpersonal Violence, 22*(12), 1567-1580.

- Abbey, A., Parkhill, M.R., & Koss, M.P. (2005). The effects of frame of reference on responses to questions about sexual assault victimization and perpetration. *Psychology of Women Quarterly*, 29, 364-373.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment: Assessed in the Strange Situation and at home. Hillsdale, NJ: Erlbaum.
- American Psychiatric Association (1987). *Diagnostic and statistical manual of mental disorders*, (3<sup>rd</sup> edition). American Psychiatric Association: Arlington, VA.
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders*, (5<sup>th</sup> edition). American Psychiatric Association: Arlington, VA.
- Anderson, J. L., Sellbom, M., Wygant, D. B., Salekin, R. T., & Krueger, R. F. (2014). Examining the associations between DSM-5 Section III antisocial personality disorder traits and psychopathy in community and university samples. *Journal of Personality Disorders*, 28(5), 675.
- Arbuckle, J. R. (2012). *AMOS users guide version 21.0*. SPSS Incorporated: Chicago, IL.
- Ashton, M.C., Lee, K., de Vries, R.E., Hendricks J., Born, M.P. (2012). The maladaptive personality traits of the Personality Inventory for DSM-5 (PID-5) in relation to the HEXACO personality factors and schizotypy/dissociation. *Journal of Personality Disorders*, 26, 641-659.
- Baer, J. L., Kohut, T., & Fisher, W. A. (2015). Is pornography use associated with anti-woman sexual aggression? Re-examining the Confluence Model with third variable considerations. *The Canadian Journal of Human Sexuality*, 24(2), 160-173.

- Baumeister, R. F., Catanese, K. R., & Wallace, H. M. (2002). Conquest by force: A narcissistic reactance theory of rape and sexual coercion. *Review of General Psychology, 6*(1), 92-135.
- Bowlby, J. (1973). Attachment and loss: Vol 2. *Separation: Anxiety and Anger* (2nd ed.). New York: Basic Books.
- Bretherton, I. (1992). The origins of attachment theory. *Developmental Psychology, 28*(5), 759-775.
- Buckels, E. E., & Paulhus, D. L. (2013). *Comprehensive Assessment of Sadistic Tendencies* (CAST). Unpublished measure, University of British Columbia.
- Buckels, E. E., Jones, D. N., & Paulhus, D. L. (2013). Behavioral confirmation of everyday sadism. *Psychological Science, 24*(11), 2201-2209.
- Buckels, E. E., Trapnell, P. D., & Paulhus, D. L. (2014). Trolls just want to have fun. *Personality and Individual Differences, 67*, 97-102.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk a new source of inexpensive, yet high-quality, data?. *Perspectives on Psychological Science, 6*(1), 3-5.
- Bushman, B.J., Bonacci, A.M., van Dijk, M., & Baumeister, R.F. (2003). Narcissism, sexual refusal, and aggression: Testing a narcissistic reactance model of sexual coercion. *Journal of Personality and Social Psychology, 84*, 1027-1040.
- 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*(3), 392-406.

- Carvalho, J., & Nobre, P. (2013). Dynamic factors of sexual aggression: The role of affect and impulsiveness. *Criminal Justice and Behavior, 40*(4), 376-387.
- Chabrol, H., Van Leeuwen, N., Rodgers, R., & Séjourné, N. (2009). Contributions of psychopathic, narcissistic, Machiavellian, and sadistic personality traits to juvenile delinquency. *Personality and Individual Differences, 47*(7), 734-739.
- Cleckley, H. (1976). *The mask of sanity*. St. Louis, MO: Mosby.
- Coid, J., & Ullrich, S. (2010). Antisocial personality disorder is on a continuum with psychopathy. *Comprehensive Psychiatry, 51*(4), 426-433.
- Collins, R. L., Parks, G. A., & Marlatt, G. A. (1985). Social determinants of alcohol consumption: the effects of social interaction and model status on the self-administration of alcohol. *Journal of Consulting and Clinical Psychology, 53*(2), 189-200.
- Crawford, T. N., Shaver, P. R., Cohen, P., & Pilkonis, P. A. (2006). Self-reported attachment, interpersonal aggression, and personality disorder in a prospective community sample of adolescents and adults. *Journal of Personality Disorders, 20*(4), 331.
- Crittenden, P. M., & Ainsworth, M. D. (1989). 14 Child maltreatment and attachment theory. *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect*. Cambridge University Press, New York, NY
- Debowska, A., Boduszek, D., Dhingra, K., Kola, S., & Meller-Prunska, A. (2014). The role of psychopathy and exposure to violence in rape myth acceptance. *Journal of Interpersonal Violence, 30*(15), 2751-2770.



- DeGue, S. & DiLillo, D. (2004). Understanding perpetrators of nonphysical sexual coercion: Characteristics of those who cross the line. *Violence and Victims, 19*, 673-678.
- 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*(4), 513-532.
- DeGue, S., DiLillo, D., & Scalora, M. (2010). Are all perpetrators alike? Comparing risk factors for sexual coercion and aggression. *Sexual Abuse: A Journal of Research and Treatment, 22*(4), 402-426.
- Felson, R. B., & Lane, K. J. (2009). Social learning, sexual and physical abuse, and adult crime. *Aggressive Behavior, 35*(6), 489-501.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics (and sex and drugs and rock 'n' roll)* (4<sup>th</sup> ed.). Thousand Oaks, CA; Sage Publications Inc.
- Follingstad, D. R., Bradley, R. G., Helff, C. M., & Laughlin, J. E. (2002). A model for predicting dating violence: Anxious attachment, angry temperament, and need for relationship control. *Violence and Victims, 17*(1), 35-47.
- Foster, J. D., Shrira, I., & Campbell, W. K. (2006). Theoretical models of narcissism, sexuality, and relationship commitment. *Journal of Social and Personal Relationships, 23*(3), 367-386.
- Furnham, A., Richards, S. C., & Paulhus, D. L. (2013). The Dark Triad of personality: A 10 year review. *Social and Personality Psychology Compass, 7*(3), 199-216.

- Gamblin, B. W., Winslow, M. P., Lindsay, B., Newsom, A. W., & Kehn, A. (2016). Comparing In-Person, Sona, and Mechanical Turk Measurements of Three Prejudice-Relevant Constructs. *Current Psychology*, 1-8.
- Gannon, T. A., Collie, R. M., Ward, T., & Thakker, J. (2008). Rape: Psychopathology, theory and treatment. *Clinical Psychology Review*, 28(6), 982-1008.
- Garson, G.D. (2015) Structural equation modeling. Asheboro, NC: Statistical Associates Publishing.
- Gordon, D. S., & Platek, S. M. (2009). Trustworthy? The brain knows: Implicit neural responses to faces that vary in dark triad personality characteristics and trustworthiness. *Journal of Social, Evolutionary, and Cultural Psychology*, 3(3), 182-200.
- Gore, W. L., & Widiger, T. A. (2013). The DSM-5 dimensional trait model and five-factor models of general personality. *Journal of Abnormal Psychology*, 122(3), 816.
- Greitemeyer, T. (2015). Everyday sadism predicts violent video game preferences. *Personality and Individual Differences*, 75, 19-23.
- Gustafson, S. B., & Ritzer, D. R. (1995). The dark side of normal: A psychopathy-linked pattern called aberrant self-promotion. *European Journal of Personality*, 9(3), 147-183.
- Hagger-Johnson, G., & Egan, V. (2010). Sadistic personality disorder and sensational interests: What is the size and specificity of the association?. *Journal of Forensic Psychiatry & Psychology*, 21(1), 113-120.

- Hare, R.D. (1991). *The Hare Psychopathy Checklist-Revised (PCL-R)*. Toronto, ON: Multi-Health Systems.
- Hare, R.D. (1999). *Without conscience: The disturbing world of psychopaths among us*. Guilford Press: New York, NY.
- Hare, R. D., Neumann, C. S., & Widiger, T. A. (2012). 22 Psychopathy. *The Oxford Handbook of Personality Disorders*, 477-504, Oxford University Press, New York, NY.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52(3), 511.
- Hendrick, C., Hendrick, S. S., & Reich, D. A. (2006). The brief sexual attitudes scale. *Journal of Sex Research*, 43(1), 76-86.
- Hequembourg, A. L., Livingston, J. A., & Parks, K. A. (2013). Sexual victimization and associated risks among lesbian and bisexual women. *Violence Against Women*, 19(5), 634-657.
- Holden, C. J., Roof, C. H., McCabe, G., & Zeigler-Hill, V. (2015). Detached and antagonistic: Pathological personality features and mate retention behaviors. *Personality and Individual Differences*, 83, 77-84.
- Hopwood, C.J., Thomas, K.M., Markon, K.E., Wright, A.G.C., & Krueger, R.F. (2012). *DSM-5 personality traits and DSM-IV personality disorders*. *Journal of Abnormal Psychology*, 121, 424-432.

- Jacques-Tiura, A. J., Abbey, A., Parkhill, M. R., & Zawacki, T. (2007). Why do some men misperceive women's sexual intentions more frequently than others do? An application of the confluence model. *Personality and Social Psychology Bulletin, 33*(11), 1467-1480.
- Jonason, P. K., Li, N. P., & Buss, D. M. (2010). The costs and benefits of the Dark Triad: Implications for mate poaching and mate retention tactics. *Personality and Individual Differences, 48*(4), 373-378.
- Jonason, P. K., Li, N. P., Webster, G. D., & Schmitt, D. P. (2009). The dark triad: Facilitating a short-term mating strategy in men. *European Journal of Personality, 23*(1), 5-18.
- Jonason, P. K., Luevano, V. X., & Adams, H. M. (2012). How the Dark Triad traits predict relationship choices. *Personality and Individual Differences, 53*(3), 180-184.
- Jones, D. N., & Figueredo, A. J. (2013). The core of darkness: Uncovering the heart of the Dark Triad. *European Journal of Personality, 27*(6), 521-531.
- Jones, D. N., & Neria, A. L. (2015). The Dark Triad and dispositional aggression. *Personality and Individual Differences, 86*, 360-364.
- Kafka, M. P. (2003). Sex offending and sexual appetite: The clinical and theoretical relevance of hypersexual desire. *International Journal of Offender Therapy and Comparative Criminology, 47*(4), 439-451.
- Kanin, E. J. (1957). Male aggression in dating-courtship relations. *American Journal of Sociology, 197*-204.

- Kenny, M., & Selcuk, S. (2006). Parental attachment, self-worth, and depressive symptoms among emerging adults. *Journal of Counseling and Development*, 84(1), 61-71.
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, 52(12), 1048-1060.
- Kilpatrick D.G., Edmunds C.N., & Seymour A.K. (1992). *Rape in America: A report to the nation*. Arlington, VA: National Victim Center & Medical University of South Carolina.
- Kim, H. Y. (2013). Statistical notes for clinical researchers: Assessing normal distribution using skewness and kurtosis. *Restorative Dentistry & Endodontics*, 38(1), 52-54.
- Kirkpatrick, L. A., & Hazan, C. (1994). Attachment styles and close relationships: A four-year prospective study. *Personal Relationships*, 1, 123-142.
- Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling*. Guilford Press: New York, NY.
- Knight, R. A., & Sims-Knight, J. E. (2003). The developmental antecedents of sexual coercion against women: Testing alternative hypotheses with structural equation modeling. *Annals of the New York Academy of Sciences*, 989(1), 72-85.
- Knight, R. A., & Sims-Knight, J. E. (2004). Testing an etiological model for male juvenile sexual offending against females. *Journal of Child Sexual Abuse*, 13(3-4), 33-55.

- Koss, M.P. Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M.,...& White, J. (2006). The Sexual Experiences Short Form Perpetration (SES-SFP). Tucson, AZ: University of Arizona.
- Koss, M.P., Abbey, A., Campbell, R., Cook, S., Norris, J. Testa, M.,...& White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly*, 31, 357-370.
- Koss, M.P. & Gidycz, C.A. (1985). The sexual experiences survey: Reliability and validity. *Journal of Consulting and Clinical Psychology*, 53, 423-442.
- 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., & Oros, C. J. (1982). Sexual Experiences Survey: A research instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology*, 50(3), 455-457.
- Krebs, C. P., Lindquist, C. H., Warner, T. D., Fisher, B. S., & Martin, S. L. (2009). College women's experiences with physically forced, alcohol-or other drug-enabled, and drug-facilitated sexual assault before and since entering college. *Journal of American College Health*, 57(6), 639-649.
- Krueger, R.F., Derringer, J., Markon, K.E., Watson, D., & Skodol, A.E. (2012). Initial construction of a maladaptive personality trait model and inventory for *DSM-5*. *Psychological Medicine*, 42, 1879-1890.

- Krueger, R. F., & Markon, K. E. (2014). The role of the DSM-5 personality trait model in moving toward a quantitative and empirically based approach to classifying personality and psychopathology. *Annual Review of Clinical Psychology, 10*, 477-501.
- LeBreton, J. M., Baysinger, M. A., Abbey, A., & Jacques-Tiura, A. J. (2013). The relative importance of psychopathy-related traits in predicting impersonal sex and hostile masculinity. *Personality and Individual Differences, 55*(7), 817-822.
- LeBreton, J. M., Binning, J. F., & Adorno, A. J. (2006). Subclinical psychopaths. *Comprehensive Handbook of Personality and Psychopathology, 1*, 388-411.
- Limke, A., & Mayfield, P. B. (2011). Attachment to God: Differentiating the contributions of fathers and mothers using the experiences in Parental Relationships Scale. *Journal of Psychology and Theology, 39*(2), 122.
- Logan-Greene, P. & Davis, K. C. (2011). Latent profiles of risk among a community sample of men: Implications for sexual aggression. *Journal of Interpersonal Violence, 26*(7), 1463-1477.
- 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*(4), 704-711.
- Lussier, P., Leclerc, B., Cale, J., & Proulx, J. (2007). Developmental pathways of deviance in sexual aggressors. *Criminal Justice and Behavior, 34*(11), 1441-1462.
- Lyn, T. S., & Burton, D. L. (2005). Attachment, anger and anxiety of male sexual offenders. *Journal of Sexual Aggression, 11*(2), 127-137.

- Malamuth, N. M. (2003). Criminal and noncriminal sexual aggressors. *Annals of the New York Academy of Sciences*, 989(1), 33-58.
- Malamuth, N.M. (1986). Predictors of naturalistic sexual aggression. *Journal of Personality and Social Psychology*, 50(5), 953-962.
- Malamuth, N.M. & Brown, L.M. (1994). Sexually aggressive men's perceptions of women's communications: Testing three explanations. *Journal of Personality and Social Psychology*, 67(4), 699-712.
- Malamuth, N.M., Heavey, C.L., & Linz, D. (1996a). Predicting men's antisocial behavior against women: The interaction model of sexual aggression. In G.C.N. Hall & R. Hirschman (Eds.), *Sexual Aggression: Issues in Etiology, Assessment, and Treatment* (pp. 63-98). Philadelphia, PA: Taylor & Francis.
- Malamuth, N. M., Heavey, C. L., & Linz, D. (1996b). The confluence model of sexual aggression: Combining hostile masculinity and impersonal sex. *Journal of Offender Rehabilitation*, 23(3-4), 13-37.
- 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(2), 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(5), 670.
- Mikulincer, M., & Florian, V. (2001). *Blackwell handbook of social psychology: Interpersonal processes*. Oxford, UK: Blackwell Publishers.



- Miller, J. D., Lynam, D. R., & Campbell, W. K. (2014). Measures of Narcissism and Their Relations to DSM-5 Pathological Traits A Critical Reappraisal. *Assessment, 1*, 7.
- Millon, T. (2011). *Disorders of personality: introducing a DSM/ICD spectrum from normal to abnormal* (3<sup>rd</sup> ed). Hoboken, NJ: John Wiley & Sons.
- Millon, T., Grossman, S., Millon, C. M., Meagher, S., & Ramnath, R. (2004). *Personality disorders in modern life*. John Wiley & Sons.
- Mouilso, E.R. & Calhoun, K.S. (2012). A mediation model of the role of sociosexuality in the associations between narcissism, psychopathy, and sexual aggression. *Psychology of Violence, 2*(1), 16-27.
- Murphy, C., & Vess, J. (2003). Subtypes of psychopathy: Proposed differences between narcissistic, borderline, sadistic, and antisocial psychopaths. *Psychiatric quarterly, 74*(1), 11-29.
- Nelson, P.A. (1979). *Personality, sexual functions and sexual behavior: An experiment in methodology*. Unpublished doctoral dissertation, University of Florida.
- Nguyen, D., & Parkhill, M. R. (2014). Integrating attachment and depression in the confluence model of sexual assault perpetration. *Violence against women, 20*(8), 994-1011.
- Noser, A. E., Zeigler-Hill, V., Vrabel, J. K., Besser, A., Ewing, T. D., & Southard, A. C. (2015). Dark and immoral: The links between pathological personality features and moral values. *Personality and Individual Differences, 75*, 30-35.
- Paolacci, G., Chandler, J., & Ipeirotis, P. (2010). Running experiments on Amazon Mechanical Turk. *Judgment and Decision Making, 5*, 411-419.

- Parkhill, M. R., & Abbey, A. (2008). Does alcohol contribute to the confluence model of sexual assault perpetration?. *Journal of Social and Clinical Psychology, 27*(6), 529-554.
- Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist, 44*(2), 329.
- Paulhus, D. L. (2014). Toward a taxonomy of dark personalities. *Current Directions in Psychological Science, 23*(6), 421-426.
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*(6), 556-563.
- Pfattheicher, S., & Schindler, S. (2015). Understanding the dark side of costly punishment: The impact of individual differences in everyday sadism and existential threat. *European Journal of Personality, 29*(4), 498-505.
- Pincus, A. L., & Lukowitsky, M. R. (2010). Pathological narcissism and narcissistic personality disorder. *Annual Review of Clinical Psychology, 6*, 421-446.
- Rholes, S. W., & Simpson, J. A. (2004). *Adult attachment: Theory, research, and clinical implications*. New York: Guilford Press.
- Russell, T.D., Veith, A., King, A.R. (2015). Childhood maltreatment predictors of trait impulsivity. In A. Columbus (Ed.), *Advances in Psychological Research (Volume 103)*. Hauppauge, NY: Nova Science Publishers, Inc.
- Samuel, D. B., Simms, L. J., Clark, L. A., Livesley, W. J., & Widiger, T. A. (2010). An item response theory integration of normal and abnormal personality scales. *Personality Disorders: Theory, Research, and Treatment, 1*(1), 5.

- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling* (3<sup>rd</sup> ed.). New York, NY: Taylor and Francis Group LLC.
- Seto, M. C. (2008). *Pedophilia and sexual offending against children: Theory, assessment, and intervention*. American Psychological Association, Washington D.C.
- Seto, M. C., & Lalumiere, M. L. (2010). What is so special about male adolescent sexual offending? A review and test of explanations through meta-analysis. *Psychological Bulletin*, *136*(4), 526.
- Shapiro, D. N., Chandler, J., & Mueller, P. A. (2013). Using Mechanical Turk to study clinical populations. *Clinical Psychological Science*, *1*(2), 213-220.
- Simpson, J.A. & Gangestad, S.W. (1991). Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology*, *60*, 870-883.
- Skeem, J. L., Poythress, N., Edens, J. F., Lilienfeld, S. O., & Cale, E. M. (2003). Psychopathic personality or personalities? Exploring potential variants of psychopathy and their implications for risk assessment. *Aggression and Violent Behavior*, *8*(5), 513-546.
- Smallbone, S. W., & Dadds, M. R. (2001). Further evidence for a relationship between attachment insecurity and coercive sexual behavior in nonoffenders. *Journal of Interpersonal Violence*, *16*(1), 22-35.
- Strickland, C. M., Drislane, L. E., Lucy, M., Krueger, R. F., & Patrick, C. J. (2013). Characterizing psychopathy using DSM-5 personality traits. *Assessment*, *20*(3), 327-338.

- Sutton, T. E., & Simons, L. G. (2015). Sexual assault among college students: Family of origin hostility, attachment, and the hook-up culture as risk factors. *Journal of Child and Family Studies, 24*(10), 2827-2840.
- Testa, M. (2002). The impact of men's alcohol consumption on perpetration of sexual aggression. *Clinical Psychology Review, 22*(8), 1239-1263.
- Thomas, K. M., Yalch, M. M., Krueger, R. F., Wright, A. G., Markon, K. E., & Hopwood, C. J. (2012). The convergent structure of DSM-5 personality trait facets and five-factor model trait domains. *Assessment, 20*(3), 308.
- Thompson, M. P., Swartout, K. M., & Koss, M. P. (2013). Trajectories and predictors of sexually aggressive behaviors during emerging adulthood. *Psychology of Violence, 3*(3), 247-259.
- Thornton, D. (2003). *The Machiavellian sex offender*, In Matravers, A. (Ed.), *Sex Offenders in the Community: Managing and Reducing the Risks*, p. 144-152. Routledge.
- Tjaden, P. G., & Thoennes, N. (2006). *Extent, nature, and consequences of rape victimization: Findings from the National Violence Against Women Survey*. US Department of Justice, Office of Justice Programs, National Institute of Justice. Rockville, MD.
- Tjaden, P., & Thoennes, N. (2000). Prevalence and consequences of male-to-female and female-to-male intimate partner violence as measured by the National Violence Against Women Survey. *Violence Against Women, 6*(2), 142-161.

- Tremblay R., Pagani-Kurtz L., Masse L., Vitaro F., Pihl R.O. (1995). A bimodal prevention intervention for disruptive kindergarten boys: Its impact through mid-adolescence. *Journal of Consulting and Clinical Psychology, 63*(4), 560-568.
- Vachon, D. D., Lynam, D. R., Widiger, T. A., Miller, J. D., McCrae, R. R., & Costa, P. T. (2013). Basic traits predict the prevalence of personality disorder across the life span: The example of psychopathy. *Psychological Science, 24*(5), 698-705.
- Virkar, S. (2014). Trolls Just Want To Have Fun: Electronic Aggression within the Context of e-Participation and Other Online Political Behaviour in the United Kingdom. *International Journal of E-Politics (IJEP), 5*(4), 21-51.
- Vonk, J., Zeigler-Hill, V., Ewing, D., Mercer, S., & Noser, A. E. (2015). Mindreading in the dark: Dark personality features and theory of mind. *Personality and Individual Differences, 87*, 50-54.
- Wegner, R., & Abbey, A. (2016). Individual differences in men's misperception of women's sexual intent: Application and extension of the confluence model. *Personality and Individual Differences, 94*, 16-20.
- Wheeler, J. G., George, W. H., & Dahl, B. J. (2002). Sexually aggressive college males: Empathy as a moderator in the "Confluence Model" of sexual aggression. *Personality and Individual Differences, 33*(5), 759-775.
- Widman, L., Olson, M.A., & Bolen, R.M. (2013). Self-reported sexual assault in convicted sex offenders and community men. *Journal of Interpersonal Violence, 28*(7), 1519-1536.

- Wolitzky-Taylor, K. B., Resnick, H. S., Amstadter, A. B., McCauley, J. L., Ruggiero, K. J., & Kilpatrick, D. G. (2011). Reporting rape in a national sample of college women. *Journal of American College Health, 59*(7), 582-587.
- Wright, A. G. (2016). On the measure and mismeasure of narcissism: A response to “measures of narcissism and their relations to DSM-5 pathological traits: A critical reappraisal”. *Assessment, 23*(1), 10-17.
- Wright, A.G.C., Pincus, A.L., Hopwood, C.J., Thomas, K.M., Markon, K.E., & Krueger, R.F. (2012). An interpersonal analysis of pathological personality traits in DSM-5. *Assessment, 19*, 263-275.
- Wright, A. G., Pincus, A. L., Thomas, K. M., Hopwood, C. J., Markon, K. E., & Krueger, R. F. (2013). Conceptions of narcissism and the DSM-5 pathological personality traits. *Assessment, 20*(3), 339-352.
- Wright, A.G.C., Thomas, K.M., Hopwood, C.J., Markon, K.E., Pincus, A.L., & Krueger, R.F. (2012). The hierarchical structure of DSM-5 pathological personality traits. *Journal of Abnormal Psychology, 121*, 951-957.
- 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 nonperpetrators?. *Aggressive Behavior, 29*(4), 366-380.
- Zeigler-Hill, V., Enjaian, B., & Essa, L. (2013). The role of narcissistic personality features in sexual aggression. *Journal of Social and Clinical Psychology, 32*(2), 186-199.

Zinzow, H. M., & Thompson, M. (2015). A longitudinal study of risk factors for repeated sexual coercion and assault in US college men. *Archives of Sexual Behavior, 44*(1), 213-222.

Zweig, J. M., Barber, B. L., & Eccles, J. S. (1997). Sexual coercion and well-being in young adulthood: Comparisons by gender and college status. *Journal of Interpersonal Violence, 12*(2), 291-308.