

PREDICTING SEXUAL AGGRESSION AMONG COLLEGE MEN: THE ROLE OF MALE
PEER GROUPS AND SEXUALIZED MEDIA

BY

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DISSERTATION

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Abstract

The purpose of this study was to examine various components of the confluence model (Malamuth et al., 1991) of sexual aggression with a population of contemporary college men. The confluence model is the theory most commonly used to predict sexual assault perpetration among college men and is composed of two intercorrelated pathways: hostile masculinity and impersonal sex. Hostile masculinity is composed of negative attitudes and beliefs towards women while impersonal sex is characterized by engaging in sexual relationships that lack emotional closeness. This study investigated various components of the confluence model as predictors of sexual aggression among college men. The potential influence of membership in male socialization peer groups, such as fraternities and athletic teams, and their impact on sexual aggression was examined. In addition, the present study aimed to add to the existing literature by specifically investigating the effects of modern forms of sexualized media on various predictors in the confluence model. Hierarchical regression analyses revealed partial support for components of the confluence model. Significant mediating and moderating effects of confluence model variables were present. Contrary to hypotheses, the level of consumption of sexualized media did not moderate any of the pathways to sexual aggression. Membership in a fraternity was associated with higher levels of reported sexual aggression. This finding may highlight the importance of certain male peer group membership as one factor in sexual aggression among college men. Limitations and future directions are discussed.

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Chapter 1

Introduction

Research has revealed sexual assault to be a pervasive problem in the United States. Sexual assault can be defined as unwanted sex or sexual contact obtained by threat, force, or the physical attack of a victim who does not consent or is incapable of consenting (Littleton & Henderson, 2009). In the academic literature, sexual aggression, sexual coercion, sexual offence and sexual assault are often used interchangeably to refer to a continuum of intimate sexual behavior in which one person, the perpetrator, engages in such behavior against the will of another, the victim. In this study the words “sexual aggression” will be used, defined as any form of behavior directed towards engaging another person in sexual contact against that person’s will. Sexual aggression can include attempted or completed rape or acts of sexual assault or coercion.

Rape statistics demonstrate the pervasiveness of this problem. Early reports of rape prevalence indicate that approximately 20% of adult women in the United States have been victims of rape (Koss, 1993). More recent statistics have indicated similar prevalence rates. According to the United States Department of Justice document *Criminal Victimization in the United States*, there were an overall 164,240 female victims of rape or sexual assault reported in 2008 (Rand, 2010). A publication from the National Center for Injury Prevention and Control of the Centers for Disease Control and Prevention, *The National Intimate Partner and Sexual Violence Survey: 2010 Summary Report*, indicated that nearly 1 in 5 women (18.3%) in the United States have been sexually assaulted at some time in their lives, including completed forced penetration, attempted forced penetration, or alcohol/drug facilitated completed penetration (Black, et al., 2011).

Research has linked victimization by sexual assault to subsequent mental health concerns and long-term emotional effects. Referrals for psychological evaluation and counseling services as well as follow-up medical assessment and care have been routinely recommended after the forensic exam to meet the victim's mental health care needs and to identify and provide interventions to prevent the negative health consequences of sexual assault (Hampton, 1995; Koss, 1993). Victims of sexual assault often experience depression, anxiety, and loss of sexual interest, among other consequences (Nauert, 2010). Sexual trauma has been associated with depression, anxiety, aggression, isolation, poor self-esteem, self-harm, suicidal behavior, relationship difficulties, trust and sexual issues, trauma diagnoses, dissociative disorder, antisocial behavior, substance use, maladaptive eating patterns, psychosis, and/or personality disorders (Herman, 2001). Direct medical costs and lost earnings for rape total approximately \$33 million each year in the United States, and costs including physical and psychological injury total more than \$85,000 for each rape. These costs are probably considerably underestimated given that sexual assault incidents are usually underreported (Waters, Hyder, Rajkotia, Basu, & Butchart, 2005). The prevalence of incidents and related negative effects indicate that sexual assault is a national health problem.

While these national rates of sexual assault are alarming, the rates of sexual assault among U.S. college women have been reported to be two to three times that of the general population. Researchers have consistently reported that between one-fifth to one-quarter of college women are raped during the course of their college careers (Fisher & Cullen, 2000; Koss, Gidycz, & Wisniewski, 1987). Other estimates state that between 15 to 30% of women on college campuses report being victims of rape (Mills & Granoff, 1992). Moreover, during the course of an academic year, approximately 2–3% of college women experience forcible rape

(Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004). The rates of sexual assault are even higher when considering a broader definition with 54 to 77% of college women stating they have experienced some form of sexual aggression (Wheeler, George, Dahl, 2002).

While these statistics are alarming, equally disturbing are the statistics concerning male aggressors. Pioneering research by Koss and Oros (1982) reported that 23% of college males admitted to having sex with a woman against her will. Koss and colleagues (1987) later found that 25% of college males reported being involved in some sort of sexual aggression. A longitudinal survey with college men found that 14% reported perpetrating sexual aggression in the previous year (Abbey & McAuslan, 2004). Some perpetrators physically force women, or threaten them with physical force, to engage in sexual activity. Other perpetrators prefer victims who are unable to legally consent to sexual acts because of incapacitation from voluntary and/or excessive use of alcohol and/or drugs. In another type of sexual assault, the perpetrator surreptitiously gives the victim a substance without her knowledge or consent to incapacitate her. Still, other perpetrators use verbal coercion to sexually aggress (Schwartz & DeKeserdy, 1997; Warkentin & Gydyzc, 2007).

The rates of college sexual assault incidents is alarming, but the seemingly normative nature of these acts being perpetrated by college men is perhaps more disturbing. Malamuth's (1981) original work discovered that 35% of college men expressed some probability of raping a woman if they knew they would not be caught. A more recent study found that 48% of college men acknowledged some likelihood of assaulting a woman, and 19% admitted it would be likely or very likely if they knew there would be no penalty or consequences for committing sexual assault (Burgess, 2007). In a survey of 264 college men across 22 universities, 90% of respondents noted that they had acted in sexually aggressive ways in bar or party contexts,

leading the researchers to conclude that sexual aggressiveness appears to be normative in particular settings (Thompson & Cracco, 2008). The influence of male peer groups on college men's behavior has been widely studied in the literature. Some researchers assert that the support and influence of male peer groups can encourage and even legitimize aggressive behaviors (DeKeseredy & Kelly, 1995). Membership in certain all-male groups, such as fraternities and athletic teams, has been associated with increased rates of sexual aggression (Koss & Gaines, 1993; Bleeker & Murnen, 2005).

Numerous other risk factors for sexual assault perpetration by college men have been identified in the literature. Among them are early risk factors such as family violence, child abuse, delinquency, hostile attitudes towards women, impersonal sexual behaviors, a host of personality characteristics such as empathy and narcissism, fraternity membership, athletic affiliation, and consumption of pornography, among others (Bleeker & Murnen, 2005; Malamuth; 1986; Malamuth, Linz, Heavey, Barnes, & Acker, 1995; O'Sullivan, 1991). One area that has remained relatively understudied is the impact of other types of sexual media. A number of studies have analyzed general sex-related content in the mainstream mass media (Greenberg & Hofschire, 2000). Other researchers have looked specifically at sexual assault-related content in the mainstream media (Greenberg & Busselle, 1996), yet there is a dearth of studies that link this content to college men's beliefs about sexual assault. Malamuth and colleagues' earlier research examined the consumption of sexual media labeled as pornography as a predictor of sexual aggression. Pornography in these studies was limited to pornographic videos and magazines (Malamuth, 1986; Malamuth et al., 1995). There is relatively little research that addresses the impact of consumption of other forms of sexual media, such as the internet, in sexual aggression in college men.

Research has indicated that approximately 50% of college students report viewing pornography on the Internet (Boies, 2002; Goodson, McCormick, & Evans, 2001). Goodson and colleagues (2001) examined Internet pornography use among 506 college students and found that 56% of men and 35% of women reported using the Internet for pornographic material. Boies (2002) examined Internet pornography use among 1,100 university students and found that 72% of men and 24% of women reported using the Internet to view pornography, with 11% of users viewing sexually explicit materials once a week or more. It is evident that the internet is one form of media in which college students view sexually explicit material. Given the growing prevalence and impact of internet pornography use among college students, it is important to capture an accurate picture of sexual media consumption among this population by utilizing a broader definition of sexual media.

In light of these findings, the current study will aim to investigate numerous risk factors for sexual aggression in college men by examining aspects of the confluence model of sexual aggression, including mediation and moderation effects of the study variables. One goal of this research is to extend the confluence model by examining the potential moderating effects of both male peer groups and sexualized media in the pathways to sexual aggression. This study will integrate theories of male peer socialization and sexualized media into the confluence model to determine if these constructs will improve the model's predictive power of highlighting risk factors for sexual aggression in college men.

Chapter 2

Literature Review

Sexual Assault in College

Definitions of rape and sexual assault. The terms “rape” and sexual assault” are often used interchangeably. However, important distinctions exist between the two terms. Rape is legally defined as attempted or completed vaginal, anal, or oral sex, either through the use of force or threat of force, or through the administration of a drug or intoxicant (Abbey, Parkhill, BeShears, Clinton-Sherrod, & Zawacki, 2006). Sexual assault is a broader umbrella term that encompasses a range of behaviors and strategies used to obtain sex. This can include unwanted kissing, touching, or fondling, the use of verbal pressure, or even verbal coercion such as lying and making promises to acquire sex (Abbey & McAuslan, 2004). The difference is important to note as any rape or attempted rape is a sexual assault, however not every sexual assault can be considered an attempted or completed rape. The most commonly used conceptual approach views sexual assault as a continuum ranging from sexually aggressive contact, such as kissing or touching, to verbally coerced intercourse to attempted rape and completed rape (Koss & Oros, 1982, Brecklin & Ullman, 2002).

Clear definitions are important for accurate reporting. The consistent dearth of reporting of sexual assault on college campuses is found to be directly related to victims not having a clear definition of sexual assault. The lack of a clear understanding of what constitutes sexual assault causes victims to not see themselves as being victims of the crime (Fisher, Daigle, Cullen, & Turner, 2003). For example, the National Sexual Victimization of College Women study surveyed 4,446 college women and found that almost 9% of the women experienced unwanted sexual contact within an academic year, whereas nearly 3% experienced rape (Fisher, Cullen, &

Turner, 2000). These reports are all comprised under the larger definition of sexual assault. For purposes of this paper, the terms sexual assault and sexual aggression will be used interchangeably and will include the full range of unwanted sexual behaviors from verbally and physically coerced sexual contact to the use of force to engage in sexual intercourse.

Prevalence of sexual assault. Sexual assault on college campuses is a widespread and significant problem. Researchers have noted the alarming prevalence rates of both sexual assault perpetration and victimization on college campuses for nearly thirty years (Koss et al., 1987; Malamuth et al., 1991; Carr & VanDeusen, 2004). In response, many colleges now provide various services to respond to survivors, such as crisis intervention and counseling. Additionally, the federal government mandated that all higher education institutions receiving federal funds must provide rape prevention programs (McMahon, 2010). Unfortunately, even with added education and prevention efforts, the prevalence rates have not diminished over time and college women remain at particularly high risk for becoming victims of sexual assault.

Determining accurate prevalence rates is problematic given that many victims do not report the crime to the police. Rape is one of the most underreported of all crimes, making it difficult to count the number of incidents (Bachar & Koss, 2001). Many young women do not define the incident as sexual assault, fear retaliation, or are concerned that their claims may not be taken seriously by either the legal system or campus administration (Davis & Lidell, 2002). The Bureau of Justice Statistics (BJS) reports that the majority of rapes and sexual assaults perpetrated against women and girls in the United States between 1992 and 2000 were not reported to the police. They cite only 36 percent of rapes, 34 percent of attempted rapes, and 26 percent of sexual assaults were reported (Rennison, 2002). As a result, it is likely that actual incidents of college sexual assault may be higher than statistical reports.

Early research in this area indicated that one in four college women will be victims of sexual assault before they leave college (Koss et al., 1987). More broadly, Finley and Corty (1993) estimated that as many as one third of female students will be victims of a sexual assault by their senior year. This figure has been established numerous times in similar studies. Fisher and Cullen (2000) reported that 3% of college women are raped during the 9-month academic year period and 20 to 25% of all women experience a completed or attempted rape during their 4-to-5-year college careers. A recent study of sexual experiences among undergraduates at four universities showed that 27% of women reported unwanted or uninvited sexual attention and 5% of women reported unwanted sexual contact in adulthood. Importantly, during the 2-month span between study phases, 5% of the women in the study reported receiving unwanted or uninvited sexual attention and 1% reported being sexually assaulted (Frazier et al., 2009).

Women often perceive that the risk of being raped by a stranger is higher than being raped by an acquaintance, date, or partner. However, nearly three-quarters of sexual assaults for all women are perpetrated by someone known to the victim (Tjaden & Thoennes, 2000). For college women, most rapes are also committed by someone the victim knows. Fisher, Cullen, and Turner (2000) reported that 9 of 10 attempted or completed campus rapes were acquaintance rapes. It is disturbing to note that these numbers may be even higher as underreporting for this population is particularly common. Due to many societal attitudes and belief systems that prohibit both men and women to accurately label sexual assault, many women do not label the experience as rape or want to identify their attacker, especially if he is an acquaintance (Davis & Liddell, 2002; Fisher et al., 2000).

From the perpetrator side, the number of reported sexual assault incidents is equally alarming. Thirty years of research have indicated steady or increasing prevalence rates of sexual

assault perpetration among college men. Rapaport and Burkhart (1984) found 15% of college men in their sample admitting to forcing sexual intercourse on a woman at least once, while Koss and Oros (1982) found 23% admitting to having sex with a woman against her will. Koss and colleagues (1987) later found that 25% of men from their nationally representative sample of college students had forced a woman into some type of sexual activity against her wishes. Recent studies with male college students have established rates ranging from 14% to 61% (Loh, Orchowski, Gidycz, & Elizaga, 2007; Lyndon, White, & Kadlec, 2007; Warkentin & Gidycz, 2007; Wheeler, George, & Dahl, 2002). Zawacki and colleagues (2003) found that over half of their sample (58%) committed some type of sexual assault, with 18% either attempting or completing rape. In Wheeler et al. (2002), 61% of male college student participants reported that they had perpetrated some form of sexual aggression. Abbey et al. (2006) found that 64% of the men in a representative community sample of young adult men in one metropolitan area reported that they had perpetrated sexual assault. The use of alcohol and other drugs in sexual assault is also common. Fifty-eight percent of male college students acknowledged that they had made a woman have sex with them who had made her lack of consent clear or who was unable to consent. Of the men who had perpetrated a sexual assault, fifty-two percent committed at least one act when intoxicated.

The increasing prevalence rates of sexual assault perpetration are disturbing. Research in this area has brought attention to the national problem of sexual assault on college campuses. As a result, there are more prevention and education efforts aimed at informing college students about sexual behavior. Many of these programs are particularly aimed at college men in an effort to decrease prevalence rates. Although these numbers indicate that many college men do perpetrate sexually aggressive behavior, it is important to consider that not all college men

sexually assault. Therefore, it is critical to assess specific risk factors associated with sexually aggressive behavior among this population. Greater understanding of these factors may benefit the focus and direction of sexual assault prevention efforts in the future.

Sexual Aggression

Characteristics of perpetrators. Sexual aggression is examined from many theoretical viewpoints. This section will detail some of the individual characteristics of perpetrators studied in the literature that led to the development of the multifactorial confluence model. Researchers have identified physiological, cognitive, personality, and developmental motivational precursors to sexual aggression (Hall & Hirschman, 1991; Hall & Barongan, 1997; Malamuth et al., 1995). These precursors have been explored in both naturalistic and laboratory settings.

Sexual arousal was thought to be one physiological factor influencing sexually aggressive behavior. The penile tumescence rape index, a ratio of sexual arousal to rape portrayals compared with arousal to consenting sex portrayals, is the most widely studied physiological response used to distinguish rapists from non-rapists (Malamuth, 1986). If a man's tumescence to rape is similar to or greater than his tumescence to consenting portrayals, then he is thought to have proclivity to rape. Malamuth assessed the ability of penile tumescence rape index to predict laboratory aggression against female and male targets. One week after their penile tumescence was assessed, the same subjects participated in what they believed was a totally unrelated experiment. Subjects were first angered by a female confederate of the experimenter. They could later choose to aggress against her via the administration of aversive noise and other responses. Men's attitudes facilitating aggression and their sexual arousal to rape significantly predicted the amount of laboratory aggression against the woman. Laboratory aggression was

again measured in a similar procedure in which the researcher found some men to show sexual arousal patterns comparable to those of convicted rapists (Malamuth, 1986).

Similarly, Barbaree and Marshall (1991) found sexually aggressive men's sexual arousal in response to deviant stimuli (e.g. rape depictions, sexual violence) equaled or exceeded their arousal to non-deviant stimuli (e.g. consensual sex between peers). From this line of research, it appears that some men's physiological arousal may serve as a motivational precursor for sexually deviant behavior. It is important to note, however, that much of sexual aggression does not occur as a function of sexual preference for sexually aggressive behavior and this is only one potential risk factor (Hall & Barongan, 1997).

Other aggressors of sexual assault are characterized by cognitive motivations, often in the form of attitudes and beliefs about women. Early studies found that sexually aggressive males have more stereotypical views of gender roles, more traditional attitudes towards women, a strong belief in rape myths, acceptance of interpersonal violence against women, and adversarial sexual beliefs (Burt, 1980; Koss; 1985; Fisher, 1985). Rape myth acceptance is consistently associated with sexually aggressive behavior in both university and community samples (Bohner et al., 2005; Lonsway & Fitzgerald, 1994; Malamuth et al., 1995). High rape myth acceptance, in college populations in particular, is associated with acquaintance rape which is the most common type of rape (Koss, et al., 1987).

Research finds that sexually aggressive men tend to believe that men and women are essentially sexual adversaries in their relationships with each other. They believe that sexual relationships with women are deceptive, manipulative, and exploitative. These men tend to hold more traditional sex-role beliefs and endorse antagonistic sexual roles for men and women (Hines, 2007). Men who are sexually aggressive are also likely to accept violence towards

women (Briere & Malamuth, 1983; Koss & Gidycz, 1985; Malamuth et al., 1995). In Burt's (1980) original study, the strongest single predictor of sexual aggression was acceptance of interpersonal violence, defined as the notion that force and coercion are legitimate ways to gain compliance, and specifically that they are legitimate in intimate relationships.

Hostile attitudes towards women are another attitudinal motivation for sexual aggression that has been well documented in the literature (Hall & Barongan, 1997; Lonsway & Fitzgerald, 1994; Malamuth et al., 1991; Malamuth et al., 1995). Hostility towards women is described as general hostility, except hostility that is directed specifically towards women. It is also described as an enduring attitude toward women, in which the individual ruminates over previous negative experiences (Check, et al., 1988). Consequently, this set of attitudes is assumed to drive a person's behavior when the goal of aggression is to cause harm. Hostile attitudes toward women have been conceptualized as the primary motivating factor in both sexual and physical aggression against women (Parrot & Zeichner, 2003; Check, Malamuth, Elias, & Barton, 1985).

Burt (1980) identified these attitudes as psychological neutralizers that allow potential rapists to turn off social prohibitions against injuring or using others when they want to commit an assault. Men who hold these types of beliefs often believe that sexual aggression has a benign effect on the victim. These types of beliefs are held by men who generally have permissive attitudes towards rape and are much more likely to attribute blame to the victim (Lackie & de Man; 1997; Lonsway & Fitzgerald, 1994). It is clear that these attitudes may motivate sexual aggression as well. It is hypothesized that these beliefs form an attitudinal structure that may lead to participation in sexually aggressive behavior. Thus, these types of attitudes and faulty beliefs can underscore cognitive distortions and create a rape supportive attitudinal belief system that allows some men to perpetuate sexual aggression.

Along with attitudes and beliefs, some men display particular personality characteristics that place them at higher risk for engaging in sexual assault. Some of these characteristics include empathy, narcissism, and psychopathy. Empathy is important to prosocial, or altruistic, behavior and has been investigated in the role of sexual aggression. Empathy is the quality to identify with another individual's feelings or situation. Sexually aggressive men are thought to have deficits in their ability to express empathy. The lack of empathy is an important aspect of sexual offending. Other studies have used general measures of empathy to discriminate sex offenders from non sex offenders (Marshall, Jones, Hudson, & McDonald, 1993). In a study of 209 heterosexual male undergraduates, empathy was concluded to moderate both pathways of the confluence model in predicting sexual aggression. High-risk males with low empathy reported higher rates of sexual aggression than all other males (Wheeler et al., 2002).

Studies investigating narcissism also indicate an association with sexual aggression. Narcissism is a personality style characterized by tendencies toward exploiting others, a general lack of empathy for others, a pervasive pattern of grandiosity, and an excessive need for admiration (Baumeister, Cantanese, & Wallace, 2002). Narcissistic personality types are high-risk for perpetrating sexual aggression for several reasons. Narcissists are likely to show lower levels of empathy and higher levels of hostility. This type of affect may allow perpetrators to sexually aggress against victims. Individuals with this type of personality respond more negatively to rejection in general, and are likely to respond negatively to sexual rejection as well. Narcissists also often have inflated, but distorted, views of self that enable them to believe that victims may want or desire their sexual advances even when a victim protests (Baumeister, 2007; Baumeister, Bushman, & Campbell, 2000). Similarly, psychopathy has been associated with sexually aggressive behavior. The Minnesota Multiphasic Personality Inventory (MMPI) has

been used to examine pathology in convicted sex offenders and to distinguish between categories of sex offenders. The psychopathic/schizophrenia profile is common to aggressive criminals, including rapists (Coxe & Homes, 2009). Other researchers have noted that sexual aggression is part of a general antisocial style that is characterized by both a general antisocial stance and a misogynistic attitudinal structure (Hersch & Gray-Little, 1998).

Developmental antecedents of sexual aggression have also been investigated. Malamuth and colleagues (1991) explored early family violence (e.g. parental violence and child abuse) and overall delinquent behavior as precursors to sexually aggressive behavior in a national sample of college students. In a follow-up study of the Confluence model, child sexual abuse was added to the model as an early risk factor (Malamuth et al., 1995). Both factors were significantly associated with sexual aggression later in life. Other analyses have examined psychosocial deficits (e.g. depression and anxiety) in the pathway to sexual aggression (Dean & Malamuth, 2007; Rapaport & Burkhart, 1984). They cite both direct physical and sexual victimization of the developing child and early exposure to inappropriate violent and sexual stimuli as damaging to cognitive, emotional, and social functioning. These victimizations may serve as models of inappropriate behaviors that lead to delinquent behaviors and later diminish the child's ability to establish healthy peer relationships (Hunter, Figueredo, & Malamuth, 2010).

The risk factors that have been identified are some of the most commonly discussed in the current literature. New lines of research may undoubtedly uncover other potential factors. Historically, researchers have investigated various combinations of these factors in attempts to predict sexual aggression. Malamuth, Sockloskie, Koss and Tanaka (1991) postulated that it was the confluence of several of these factors that best predicted sexually aggressive behavior. The confluence model was the first empirically derived and tested model of sexual aggression and

was based on a nationally representative sample of male college students. This model investigates the convergence of multiple risk factors to create two distinct pathways leading to sexual aggression: sexual promiscuity and hostile masculinity.

Confluence Model of Sexual Aggression

The confluence model of sexual aggression, originally proposed by Malamuth and colleagues (1991), was designed to predict risk factors for sexually aggressive behavior in men. Much of the earlier research on the causes of male sexual aggression against women examined individual risk factors that subsequently predict aggression (Malamuth, 1983, Malamuth, 1986). As research developed in this area over the past three decades, an emergent need for multifactorial approaches gained support, with early researchers proposing both additive and interactive multifactorial approaches.

Development of the confluence model was characterized by the convergence of several individual risk factors into two distinct constellations of traits and behaviors—the sexual promiscuity path and the hostile masculinity path (see Figure B1). These proximal risk factors are thought to work both independently and synergistically. Men with high scores on either factor are at higher risk for displaying sexually aggressive behavior. However, men with high scores on both factors are deemed to be at highest risk for displaying sexually aggressive behavior as the theory hypothesizes it is the interactive effects, or confluence, of these risk factors that places men at greatest risk for aggressing (Malamuth, et. al, 1991). Malamuth and colleagues (1995) later extended their model by conducting a 10-year follow-up with the original sample. The updated model (see Figure B2) included slightly different risk factors and conceptual operationalization than those used in the original model. The structural pathways were successfully replicated, and an additional path (from early risk factors to sexual aggression)

was added to better account for the covariation in the data. As was hypothesized, there was a direct relationship between sexual aggression perpetrated by college men and conflict with women (measured by sexual aggression, nonsexual aggression, and relationship distress) 10 years later. This is evidence of the predictive validity of the confluence model.

The model is both developmental and sociocultural in nature in that it encompasses childhood experiences, peer groups, and cultural systems. Within the context of the model, early life experiences included the convergence of parental violence and child abuse in the family of origin. These experiences are thought to cause an increase in delinquent behavior in adolescence, which in turn leads to aggression through two pathways. In an environment where there is violence between parents or child abuse, the child's cognitive and behavioral development may be negatively impacted. As a result, male-female relationships may be viewed as hostile or adversarial. In addition, these individuals may self-protect through anger or control due to feelings of inadequacy or shame, which increases the risk of behaving aggressively with women (Burt, 1980; Check, et al, 1985). Another consequence of abusive or violent early developmental processes is that the child may have difficulty tolerating frustration or engaging in prosocial behaviors, such as sharing and helping. These children frequently are involved with delinquent peers and engage in antisocial behaviors. The learning of developmental tasks such as dealing with frustration, forming a prosocial identity, and learning to negotiate may be greatly diminished (Malamuth et al., 1991). These influences may result in children adopting adult behaviors, especially sexual behavior, without the developmental capacities to effectively deal with them. As a result, there is a tendency to use coercive and domineering behavior to obtain the desired outcomes and to have more impersonal sexual encounters.

Impersonal sex. The first pathway in the confluence model is that of impersonal sex. This pathway is characterized by a willingness to engage in sexual relations without emotional closeness or commitment (Malamuth et al., 1995). The Impersonal Sex construct has also been characterized by a manipulative, non-committal, game-playing orientation towards sexual relations (Wheeler et al., 2002). This path may develop from the presence of delinquent peers who are more likely to encourage casual sex than non-delinquent peers (Malamuth et al., 1991). Men with high scores in this domain prefer relationships that are casual and uncommitted. These men tend to view sex as a function of physical gratification rather than as part of an intimate and emotional relationship. Previous research using the confluence model has postulated that early family and peer influences may impact the development of an individual's social negotiation skills. Men with impaired development in this area may show interpersonal deficits in building and maintaining intimate relationships, especially in sexual relationships with women (Malamuth et al., 1991; Malamuth et al., 1995). It is also characteristic for these men to view sexual relations from a sexual conquest viewpoint in which they also integrate their peer status and feelings of self-worth into their view of sexuality (Kanin, 1984; Wheeler et al., 2002).

The concept of impersonal sex is also closely related to the construct of sociosexuality. Sociosexuality refers to an individual's willingness to engage in sexual activity with a variety of partners outside of a romantic relationship (Yost & Zurbriggen, 2006). Individuals who score high on measures of sociosexuality are thought to have an unrestricted sexuality. According to Simpson & Gangestad (1992), unrestricted individuals report having sex at earlier ages, having sex at earlier points in their relationships, having more than one concurrent sexual partner, having many different sexual partners, having sex with partners on one occasion, and foreseeing many different partners in the future. In contrast, restricted individuals tend to establish

emotional closeness and commitment prior to engaging in sexual activity. The unrestricted sexuality type does not necessarily indicate that an individual is promiscuous or has a heightened sex drive. It is representative, however, of a particular impersonal orientation to sex.

Numerous researchers have noted that this impersonal orientation is linked to sexual aggression. One reason cited is that men who engage in impersonal sex are more likely to misperceive women's cues and intentions about sexual behavior. Men with this orientation tend to have more dating partners and thus there are more opportunities for sexual misperceptions to occur. These men are inclined to make decisions about women based on stereotypes about women's verbal and nonverbal cues, which also allow for misperceptions to occur (Jacques-Tiura et al., 2007, Malamuth et al., 1995; Dean & Malamuth, 1997). Another reason that aggressive behavior is demonstrated from men with an impersonal orientation to sex is the adherence to coercive sexual attitudes. Yost and Zurbriggen (2006) concluded that men with an unrestricted sociosexual orientation exhibited higher levels of rape myth acceptance and adversarial sexual beliefs, more conservative attitudes towards women, higher levels of power motivation and lower levels of intimacy motivation, and past use of sexual aggression. Similarly, Malamuth and colleagues (1995) concluded that sexual aggression appeared to be partly the result of the impersonal orientation to sex. They further explained that such an orientation enables gratification from coercive sex, particularly because men in this orientation are able to dismiss their partner's choices and feelings.

Hostile masculinity. The second pathway, hostile masculinity, appears to be the result of the convergence between delinquency and attitudes which are supportive of violence (Malamuth et al., 1991). According to the model's logic, early childhood experiences of hostile, chaotic, or abusive family environments may foster the development of adversarial or hostile concepts about

male-female relationships (Malamuth et al., 1995; Wheeler, 2002). Individuals with these experiences may seek out delinquent peer groups which may foster aggression, dominance, and hostility. The hostile masculinity path is described as a personality profile focusing on dominance and hostility towards women by combining two interrelated components: a) an insecure, defensive, hypersensitive, and hostile-distrustful orientation, particularly towards women, and b) gratification from controlling or dominating women (Dean & Malamuth, 1997; Hall, Howard, & Boezio, 1986; Koss & Dinero, 1988; Malamuth, 1986; Malamuth et al., 1991, 1995; Malamuth & Thornhill, 1994; Muelenhard & Linton, 1987). This construct can be further conceptualized as encompassing hostile attitudes, beliefs, and behaviors towards women (Malamuth et al., 1991).

Hostility towards women has been found to be correlated with sexual aggression in a number of studies (Malamuth et al., 1991; Malamuth et al., 1995). Support has also been established for hostility against women as a motivating factor in aggression (Malamuth, et al., 1991). According to Malamuth and colleagues' research, men who feel relatively low hostility towards women may be inhibited by a woman's resistance and suffering. However, men who feel relatively high hostility towards women may actually be reinforced by a woman's suffering and be encouraged to further aggress. Men with high hostility towards women have been shown to find depictions of rape and other sexually violent media more stimulating than non-hostile men (Malamuth, 1993). An earlier study concluded that men who responded with high levels of arousal to sexual force (self-report) were more sexually aroused by aggressive depictions of sexual behavior such as rape (self-reports and penile tumescence). These researchers also found that men with high levels of adherence to sex-role stereotypes demonstrated high arousal to depictions of rape, especially acquaintance rape. The arousal levels were indistinguishable from

a group of rapists (Malamuth & Check, 1983). Men with high scores in the hostile masculinity domain often view women as sexual adversaries. In addition, numerous researchers have noted that men who sexually aggress tend to hold stronger traditional sex role-beliefs, stronger sexual dominance motives, and are more likely to believe various rape myths (Abbey et al., 2006; Jacques-Tiura et al., 2007; Malamuth et al., 2002; Wheeler et al., 2002). Men with high hostility towards women scores are also more likely to accept interpersonal violence against women (Check & Malamuth, 1983; Hunter et al., 2010).

The combination of these attitudes and beliefs is what constitutes the hostile masculinity profile. These men both consciously and subconsciously hold negative views towards women. Research in this area has further indicated that men who view women as sexual adversaries and hold hostile views towards women are more likely to sexually aggress than men who hold more neutral or positive views towards women (Dean & Malamuth, 1997; Hunter et al., 2010; Malamuth et al., 1991; Malamuth et al., 1995).

Both the hostile masculinity pathway and impersonal sex pathways involve components that set the stage for the likelihood of sexual aggression. Men who exhibit qualities of both pathways are likely to be dismissive of women's feelings and concerns, less emotionally attached to their partners, hold attitudes that allow for stereotypical beliefs about women to be acted out, and more likely to legitimize aggression and the use of force in their sexual encounters. The combination of these factors forms a psychological structure that can engender sexually aggressive behavior.

The confluence model has garnered much empirical support. Malamuth and colleagues have conducted a series of studies in which the convergence of hostile masculinity and impersonal sex predicted sexual aggression (Dean & Malamuth, 1997; Malamuth et al., 1991;

Malamuth, et al., 1995; Malamuth, Addison, & Koss, 2000). The model has successfully differentiated sexually aggressive men from non-aggressive men (Lim & Howard, 1998; Malamuth et al., 1991). The confluence model has also successfully predicted the presence of sexually aggressive behavior in men from a 10-year follow-up study (Malamuth et al., 1995). The model has been tested within a variety of ethnic groups in the United States (Abbey, et al., 2006; Jacques-Tiura, Abbey, Parkhill, & Zawacki, 2007) and in several other countries (Lim & Howard, 1998; Martin, Vergeles, Acevedo, Sanchez, & Visa, 2005).

The confluence model has also been replicated in numerous studies. The impact of alcohol use, pornography, empathy, misperception of sexual intent and early sexual experiences are just a few of the variables that have been investigated using the confluence model's theoretical framework (Parkhill & Abbey, 2008; Malamuth, 1993; Dean & Malamuth, 1997; Jacques-Tiura et al., 2007; Malamuth et al., 1995; Wheeler et al., 2002). Parkhill & Abbey (2008) expanded the understanding of alcohol's role in sexual aggression. They replicated and extended the confluence model by including alcohol as a predictor in Malamuth et al.'s (1991, 1995) earlier model and by separately examining the predictors of sexually aggressive acts perpetrated when intoxicated and sober. Hostile masculinity and impersonal sex were both positively related to frequency of committing sexually aggressive acts when sober and when intoxicated. Alcohol use in sexual situations was also positively related to frequency of committing sexually aggressive acts when intoxicated. The researchers hypothesized that men who consume alcohol in sexual situations may feel justified focusing on their own sexual desires, rather than the woman's signals of distress (Parkhill & Abbey, 2008). Misperception of sexual intent was investigated by Jacques-Tiura et al. (2007) in a sample of college men as a further application of the confluence model. In this research, hostile masculinity and impersonal sex

predicted men's frequency of misperception. Greater levels of misperception of sexual intent are associated with higher frequency of sexual aggression. Empathy was tested as a moderator in the confluence model (Wheeler et al., 2002) in a sample of male undergraduates. In this study, empathy moderated both the hostile masculinity and impersonal sex pathways in the model. The results indicated that men who scored high on hostile masculinity and impersonal sex and low on empathy reported the highest rates of sexual assault of the entire sample. These findings supported the addition of variables as moderators in the confluence model. Pornography use has been investigated in the confluence model as well. Vega and Malamuth (2007) found pornography use in the form of pornographic magazines to be a significant predictor of sexual aggression in a sample of college men. Similarly, Hald, Malamuth, and Yeun (2010) conducted a meta-analysis that found a significant relationship between pornography and attitudes supporting violence towards women, an important component of the confluence model. These replications of the confluence model suggest the strong predictive power of the model. It is a stable and empirically sound model that allows for replication by modifying variables along one or both pathways. The present study will focus on two additional possible contributing factors to sexual aggression: male peer group relationships and sexualized media.

Male Peer Support

The concept of male peer support has generally dominated the study of college men (e.g., DeKeseredy, 1990; Humphrey & Kahn, 2000; Martin & Hummer, 1989). College men are much more likely than college women to view sexually aggressive behavior as acceptable (Choate, 2003). Thus, separate investigations into the processes behind college males' thoughts and attitudes may provide information into this phenomenon. Kanin's (1957) Reference Group Theory provides a rationale for male peer group behavior. His theory reports several pathways

that allow for aggressive male peer group formation. First, some men come to college with a history of sexual aggression or the desire to participate in sexual aggression. Second, sexually aggressive men will seek out male friends who are supportive of maintaining sexually exploitive behavior. Third, men who are interested in sexually aggressing women self-select fraternities with reputations for this type of behavior. It is important to note that Kanin's theory does not state that certain peer groups, such as fraternities and athletic groups, are the cause of sexual aggression. The theory does not explain the ways in which men locate peer groups or explain the types of peer pressure that take place within them and therefore, a claim of causality cannot be made.

Male Peer Support Theory (DeKeseredy, 1990) was derived from social support theories and discusses the nature of social interactions among male peers. There are two components to the theory, attachments and resources. DeKeseredy asserts that aggressive men attach to or seek out other aggressive men. One part of this component is that men are concerned about maintaining an image for other men, and they may feel stress to uphold traditional male gender roles and behaviors. The second component is resources. This component states that one's social support group offers verbal and emotional support for aggressive behaviors. The mechanisms of encouragement and legitimization for aggressive behaviors are common with this population (DeKeseredy, 1990; DeKeseredy & Schwartz, 1997).

An important model derived from this theory is the male peer support model. DeKeseredy and Kelly's (1995) male peer support model suggests that men engage in sexually predatory behaviors because they belong to male-only peer groups that support and encourage their behavior. Relationship stress is the key component in this model. The assertion is that college men experience stress in heterosexual relationships with women and alleviate this stress

by seeking out other males for support and guidance. They noted a narrow conception of masculinity, group secrecy, and the sexual objectification of women as key factors. The model was later updated by Schwartz and DeKeseredy (1997) with 4 additional important factors added to the original model. In their discussion of male peer support, these researchers examine social and courtship patriarchy and its influences on socialization and male behavior, male support group membership, alcohol consumption, and the absence of dissuasion in the context of social groups.

Numerous studies have incorporated elements of male peer support into theory building and empirically testable frameworks (e.g., DeKeseredy, 1988, 1990; DeKeseredy & Kelly, 1995; DeKeseredy & Schwartz, 1993, 1998, 2002; DeKeseredy, Schwartz, & Tait, 1993; Schwartz & DeKeseredy, 2000; Schwartz, DeKeseredy, Tait, & Alvi, 2001). Schwartz and DeKeseredy (1997) propose male peer support as an empirical model primarily because of the difficulty in testing each of the components and separating the effects of self-selection. It is difficult to accurately determine if male peer groups socialize or “cause” men to be sexually aggressive, or if sexually aggressive men seek out the philosophy exhibited by the peer groups. Each component of the model has been empirically tested, however, there have been no published empirical investigations of the full male peer support model. Schwartz and DeKeseredy (2000) noted that research has established connections between each of the individual components contained in their model and aggression towards women.

A growing body of research has reported direct and indirect empirical relationships between a narrow conception of the masculine gender role and sexual aggression (Mosher & Anderson, 1986; Truman, Tokar, & Fischer, 1996); pornography consumption and rape proclivity (Allen, Emmers, Gebhardt, & Giery, 1995; Boeringer, 1994; Demare, Briere, & Lips,

1988; Vega & Malamuth, 2007); rape supportive social relationships (e.g., fraternity/athletic team membership) and sexual assault perpetration (Boeringer, 1996; Boswell & Spade, 1996; DeKeseredy, 1990; DeKeseredy & Kelly, 1995; Humphrey & Kahn, 2000; Koss & Gaines, 1993; Sanday, 1990; Schwartz & DeKeseredy, 1997); all-male living space and anti-feminine attitudinal outcomes (Bohmer & Parrot, 1993); and alcohol consumption and violence against women (Abbey et al., 1996; Carr & Van Deusen, 2004; Koss & Gaines, 1993; Ullman et al., 1999). This body of research is indicative of the consequences of a rape-supportive culture, in which a male dominated patriarchal society supports and encourages aggressive behaviors among young men.

Researchers have further examined how rape cultures develop. Several factors have been found to be present in a rape culture. These include: 1) the presence of an environment (such as a college campus or a fraternity) or society which in which men are dominant, 2) the presence of courtship practices based on or emphasizing patriarchy, 3) a high level of rape myth acceptance, 4) widely held beliefs in biological and cultural explanations for rape, and 5) a rape supported society. They argue that these factors all create a social environment on college campuses supportive for sexual assault to occur (Bleeker & Murnen, 2005; Murnen & Kohlman, 2007).

The Male Peer Support Group Theory has been used to explain the high prevalence of sexual assault on campuses. In particular, this research has argued that fraternities are an environment conducive to the abuse of women (Boeringer, 1996; Schwartz, et al., 2001). Athletic teams have been found to foster a similar environment (Koss & Gaines, 1993). Fraternity men and athletes are characterized by the traits in the theory. Men belonging to the fraternity or athletic team are believed to learn to degrade women as sexual conquests, and target them as victims of physically coercive sex. These beliefs and behaviors are supported and

encouraged by like-minded men who are also participating in a value-driven social group that boasts superiority in membership status and thus, influences conformity through a participatory “group-think” mentality (Sanday, 1990). In addition, fraternity members and athletic team members are more likely to associate with other men who also engage in coercive or violent behavior (Boeringer et al., 1994). These behaviors are then reinforced in the group. Sexually aggressive behavior has been attributed to the presence of sexually aggressive friends and a general climate of tolerance. Furthermore, male peer support and the presence of sexually aggressive friends have been found to be the best predictors for sexually aggressive behavior (Humphrey & Kahn; 2000). One mechanism through which these groups function is through rape myth acceptance.

Rape Myth Acceptance

The acceptance of rape myths is one way that college men can psychologically legitimize sexual aggression against women. College men are known for adhering to rape myths at very high levels (Burt, 1980; Lonsway & Fitzgerald, 1994; Bohner, et al., 1998). Various definitions of rape myths exist in the literature. Most definitions tend to incorporate three aspects: rape myths (1) are false or biased beliefs, (2) are widely shared, and (3) serve to explain and justify existing “cultural arrangements” (Gerger, Kley, Bohner & Siebler, 2007). Rape myths were originally defined by Burt (1980) as prejudicial, stereotyped, or false beliefs about rape, rape victims, and rapists. According to Lonsway and Fitzgerald (1994), “Rape myths are attitudes and beliefs that are generally false but are widely and persistently held and that serve to deny and justify male sexual aggression against women”. Some researchers have proposed issues with the above definitions in that they do not address specific contents of rape myths, such as attitudes *about X or Y*. Instead, the content has been defined indirectly from the functions of denial and

trivialization that rape myths are assumed to serve (Gerger et al., 2007). Gerger and colleagues (2007) proposed that rape myths should not be defined as false, but rather as “wrong” in an ethical sense. They define rape myths as descriptive or prescriptive beliefs about rape (i.e., about its causes, context, consequences, perpetrators, victims, and their interaction) that serve to deny, downplay or justify sexual violence that men commit against women (Bohner, 1998; Gerger et al., 2007).

Function of rape myths. The general argument surrounding rape myths is that these faulty belief systems promote and support rape and sexually aggressive behavior. Rape myths include suggestions that the victim is lying, deserved the sexual assault, or asked for it because of how she was acting or what she was wearing. Other types of rape myths excuse the perpetrator’s behavior by suggesting that he could not help himself or that he is not the type of individual who would commit a sexual assault (Franiuk, Seefeldt, & Vandello, 2008). Still other rape myths attempt to downplay the seriousness of sexual assault by suggesting that it is a trivial or even natural occurrence (Lonsway & Fitzgerald, 1994). Rape myths such as these can serve to shift blame onto the victim and excuse the perpetrator (Burt, 1980). Individuals who hold rape myth beliefs often feel that they are able to distinguish between “real rape” and other events. Women who do not meet the stringent definitions of behavior required by the rape myths are defined as not being victims of a crime (Schwartz & Nograd, 1996). These types of beliefs allow men to engage in behavior that is otherwise forbidden and then to rationalize and justify the behavior after the event.

Burt (1980) argues that rape myths may be used as psychological releasers or neutralizers, allowing potential rapists to turn off social prohibitions against injuring or using others when they want to commit an assault. Some researchers believe that various techniques of

neutralization from neutralization theory (Sykes & Matza, 1957) serve to justify norm violations under certain conditions. Three of the major techniques that Sykes and Matza discussed are denial of the victim (e.g. they deserved it), denial of injury (e.g. nobody was really hurt), and denial of responsibility (e.g. I was provoked, I couldn't control myself). The theory of neutralization was supported by numerous studies that found positive correlations between self-reported neutralizing beliefs and delinquent behavior or behavioral intentions (Bohner, Reinhard, Rutz, Sturm, Kerschbaum, & Effler, 1998). Researchers of sexual violence have suggested that rape myths may contribute to the prevalence of rape through similar mechanisms.

Rape myths acceptance and sexual aggression. Many studies have linked acceptance of rape myths to sexual aggression and sexual assault in the literature. Many of the models of sexual aggression center on the idea that when rape myths are present, they influence rape proclivity and other sexually aggressive behavior (Bohner et al., 2005; Bohner et al., 1998; Hill & Preston, 1996; Malamuth et al., 1995). Bohner and colleagues used an experimental approach with college men in which they assessed rape myth acceptance on self-reports of likelihood to rape. The researchers varied the order in which the men received questionnaires on rape myth acceptance and rape proclivity in two experiments. In both instances, the correlations between rape myth acceptance and rape proclivity were higher when rape proclivity was assessed after rape myth acceptance. This suggests that the belief in rape myths has a causal influence on men's proclivity to rape (Bohner et al., 1997). Male college students' level of sexual aggression was found to be correlated with rape myth attitudes condoning violence against women (Koss, Leonard, Beezley, & Oros, 1985). Malamuth (1986) found support for rape myth acceptance as a predictor for sexual aggression. Later research produced similar findings. In a 10-year follow-up of his original study of the confluence model, Malamuth and colleagues (1995) were still able

to conclude rape myth acceptance as a predictor of sexual aggression. Several researchers have shown that men's endorsement of rape myths is correlated with their admitted likelihood to commit sexual assault if there are no repercussions (Bohner et al., 1998; Bohner et al., 2005). Other researchers have used correlational research to show associations between belief in rape myths and self-reported sexual aggression (Koss et al., 1985; Locke & Mahalik, 2005).

One of the major problems with rape myths is their ability to protect individuals from uncomfortable realities about victims and perpetrators of sexual assault. Rape myths are widely used by both men and women. When it can be believed that a woman is lying about sexual assault or that she is in some way responsible, individuals are able to protect themselves from the suggestion that they or someone they know could be a victim. By endorsing rape myths, women can believe that they have some control over being sexual assault victims (Burt, 1980). Men who endorse rape myths are able to distance and differentiate themselves from perpetrators of sexual assault. This allows most men to believe that they are not capable of committing such an act (Lonsway & Fitzgerald, 1995). Perpetrators use rape myths to excuse their behavior and reinforce ideas that the woman was sexually inviting (Franiuk et al., 2008). These self-protective factors motivate individuals to accept rape myths. In particular, fraternity men and men in collegiate athletics are two groups who have been shown to endorse rape myths at high rates. In general, studies have found consistent relationships between belief in rape myths and self-reported sexual misconduct among college and community males (Hersh & Gray-Little, 1998; Muehlenhard & Falcon, 1990).

Fraternity and athletic participation. The influence of all male peer groups, such as fraternities and athletic team, on sexual perpetration has been studied extensively. Members of these groups have been found to display significantly more sexually aggressive behaviors and

ideas, such as traditional views of masculinity and high rape myth acceptance, than control groups of college men (Boeringer, 1999; Schwartz & Dekeseredy, 1997). Fraternity membership has been cited as a frequent risk factor for sexual aggression. Some researchers have demonstrated greater rates of coercion and assault among fraternity members than among men not involved in fraternities (Boeringer, Shehan, & Akers, 1991; Koss et al., 1987; Koss & Gaines, 1993). Other studies have established links between fraternity men and rape supportive attitudes, such as more traditional attitudes towards women, stronger male dominance beliefs, and greater acceptance of rape myths (Boeringer, 1999; Bleecker & Murnen, 2005; Lottes & Kuriloff, 1994). There are two viewpoints that arise in the literature. One is that young men enter college with attitudes and belief systems that are associated with sexual aggression and that they seek out male groups, such as fraternities, where these ideas will not be challenged. The other viewpoint is that all-male groups, such as fraternities and athletic groups, create and perpetuate attitudes and behavioral systems associated with sexual aggression (Bleecker & Murnen, 2005; Kanin, 1984; O'Sullivan, 1991).

Researchers have argued that all-male groups support and encourage certain behaviors that promote sexual aggression. Fraternities are often viewed as having an atmosphere where sexual prowess and sexual activity is allowed and reinforced (Koss & Gaines, 1993). O'Sullivan (1991) found that fraternity members committed 55% of the gang rapes reported on college campuses between 1980 and 1990. Several researchers uncovered practices in which men used artifacts, such as life-size inflatable dolls and degrading sexual images of women (e.g. posters, screen savers), in which women were viewed as sexual objects (Bleecker & Murnen, 2005; DeKeserdey & Shwartz, 1998). Sanday (1990) determined that fraternity men were likely to view pornography together. These behaviors are problematic in the sense that they can

strengthen attitudes of male dominance and reinforce stereotypes and erroneous beliefs such as rape myths. Sexual degradation of women may lead to women being viewed as legitimate sexual targets (Murnen, 2000).

Similar to fraternity membership, athletic membership has also been correlated with increased levels of sexual aggression. Athletic teams can be blamed as fostering an atmosphere of elitism and invulnerability. At the same time, these institutions can glorify and positively reinforce domination of others (Koss & Gaines, 1993). In one study, an examination of judicial affairs records reveals that male student-athletes were overrepresented in reports of sexual assault and battering (Crosset, Ptacek, McDonald, & Benedict, 1996). Researchers cite the work of Erkhart and Sandler (1985), which documented 50 group rape incidents that had been reported to university authorities during a 2-year period. Of those reported, 30% involved athletic team members. It is thought that athletic team members involved in gang rapes become indoctrinated into a group phenomenon where their high status group has moral superiority, invulnerability, and consensus (Koss & Gaines, 1993; O'Sullivan, 1991; Sanday, 1990). However, other researchers have failed to find significant relationships between athletic participation and sexually aggressive behavior (Caron, Halteman, & Stacy, 1997). These inconclusive findings exemplify the need for further research in this area.

While there are benefits to being involved in all-male groups, such as fraternities and athletics, these groups may also legitimize and encourage the psychological, physical, and sexual abuse of women. Men can commit criminal acts while not viewing themselves as criminals, but rather maintaining an identity as "regular" and "normal" guys. Sexual victimization of women may be taught and actually encouraged within these systems (DeKeserdey, 1990; Shwartz &

Nogrady, 1996). Since fraternities and athletic teams are two highly visible male peer groups on college campuses, the further study of these populations of college men is warranted.

Sexualized Media

Definitions. The consumption of sexualized media, which is often collectively called pornography, is another component related to sexual aggression. Sexualized media is a broad term that involves two types of media: pornography and embedded sexual content. Pornography can be defined as sexually explicit material such as magazines, videos, and images intended to sexually arouse the consumer. A more elaborate definition states that pornography is defined as “the explicit description or exhibition of sexual activity in literature, films, etc., intended to stimulate erotic rather than aesthetic or emotional feelings” (Allen, 1995). As Bowen (1987) noted, the word pornography’s root meaning describes the lives and behaviors of prostitutes or “female captives.” This definition indicates the notion that pornography is a vehicle for subjugation and aggression against women. Historically, pornography consisted of sexually explicit magazines such as *Playboy* and *Penthouse*, x-rated movies, x-rated television programs on cable channels and sexually explicit books or comics. Embedded sexual content includes references and portrayals of sexual interactions often seen in television shows such as soap operas, music videos, video games, and commercials. In this type of content there may be references to or actual portrayals of sexual interactions, depicting varying degrees of sexual explicitness (Kingston, Malamuth, Federoff, & Marshall, 2009; Lo & Wei, 2005). Aside from these traditional forms of pornography, the relatively new concept of cyberpornography is an additional form of media intended for sexual arousal. Cyberpornography is sexually explicit material used for sexual arousal available on the Internet. As defined by Schneider, cybersex is “the use of digitized sexual content (visual, auditory, or written), obtained either over the Internet

or as data retrieved by a computer, for the purpose of sexual arousal and stimulation” (2000). This may include free or paid websites, chat rooms, and pop-up advertisements. For the purposes of this study, the term sexualized media will include exposure to all types of sexually laden mediums including but not limited to pornographic magazines, videos, and images, television shows, music videos, video games, commercials, Internet websites, and Internet advertisements. Exposure to these mediums may be both intentional and non-intentional.

Prevalence of sexualized media. The presence of sexualized content in today’s media is pervasive. The influence of sexualized media has been studied for decades in the research literature. Many parents, educators, researchers, and even the federal government have been interested in examining the effects of exposure to sexualized media. Most studies support the idea that mass media is contributing to a cultural climate that is more accepting of aggression against women. This is particularly true for susceptible individuals who are predisposed to aggress against women (Malamuth, 1984). This proposed impact is the source of many scientific, political, social, and religious debates over the potential negative effects of exposure to such material. Some researchers argue that the often weak findings of causality of sexualized media on sexual aggression were exaggerated by politicians to address certain agendas (Ferguson & Hartley, 2009). A number of federally funded studies were conducted to further investigate these effects.

Nearly 30 years ago, a federal study of pornography in the United States estimated that the total retail value of pornography was between \$5 million and \$10 million. In 1996, the number of hard-core video rentals had ballooned from 75 million in 1986 to 665 million in 1996 (Fisher & Barak, 2000). The United States has become the world’s largest producer of hard-core videos with more than 150 titles produced per week. Additional revenue is garnered from the

sales of sex magazines, Internet porn, phone sex businesses, peep shows, and adult cable programming. Furthermore, it has been reported that pornography industry grossed eight billion dollars in 1996, which was more than the total of all the Hollywood films' revenue for that year (Stack, Wasserman, Kern, 2004). More recently, *Forbes* magazine has reported that the pornography industry annually totals \$2.6 billion to \$3.9 billion in the United States, and \$56 billion worldwide (Vega & Malamuth, 2003). These numbers represent a sharp and steady increase in the amounts of pornographic consumption.

Over time the types of media that are considered pornographic have shifted dramatically with changing social norms, and altering forms of distribution have at least partially facilitated the rise in sales of pornography. The invention of the VCR and VHS tapes in the 1980s made pornography more widely available, and cable television pornography channels and telephone sex services also saw increases in sales (Ferguson & Hartley, 2009; Vega & Malamuth, 2003). Thus, sexualized media has become more accessible than ever. The invention of the Internet further changed sexualized media consumption in a number of ways.

Sexualized media and the internet. One of the fastest growing sources of sexualized media is the Internet. The Internet and World Wide Web were commercialized and available for public use in 1993 and were quickly popularized. The production and dissemination of pornographic materials on the Internet soon followed (Lo & Wei, 2003). According to Internet World Stats (2009) as of December 2008, 73.2% of the US population had access to the Internet. By 2006 Internet pornography sales had reached \$2.5 billion. Roughly 12% (4.2 million) of websites on the Internet worldwide were pornographic. Often, an individual does not even need to purchase material as they can browse many sites for free. According to Nielsen NetRatings, 17.5 million web surfers visited pornography sites from home in January 2000, a 40% increase

from four months earlier. By October 2000, the number had escalated to 20.7 million consumers, or roughly 23 percent of the web-surfing population in the United States (Vega & Malamuth, 2003). It is been estimated that between 20% to 30% of all Internet users engage in some form of online sexual activity, such as viewing sexually explicit images or sexually explicit chatting. The majority of Internet pornography users appear to access this media on a recreational basis with 43% spending less than one hour per week while 6-10% use it more compulsively, spending six hours or more per week engaged in Internet pornography (Cooper, Delmonaco, & Burgess, 2000). Researchers of internet pornography have speculated that the growth in its popularity is linked to the three “As”: accessibility, affordability, and anonymity (Putnam, 2000). Media that was previously consumed in public venues could now be viewed in the privacy of an individual’s home. As a result, the numbers regarding pornography viewing have increased sharply in recent years. The private nature of viewership may be reflected in underreported statistics. These prevalence numbers indicate that continued research on the role of this type of sexualized media is warranted. Given the astounding volume of sales for pornography across mediums, it is important to assess the effects sexualized media may have on attitudes, beliefs and cognitions particularly as they relate to the risk factors of sexual aggression.

Sexualized media and sexual aggression. The relative influence of sexualized media on attitudes, cognitions, and behaviors has been a long-standing question among researchers in this domain. Research investigating the relationship between sexualized media and sexual aggression has been documented in numerous studies and several meta-analyses (Allen et al., 1995, Demare & Briere, 1993; Oddone-Paolucci et al., 2000; Vega & Malamuth, 2007). The contribution of sexualized material and pornography to deviant sexual behavior, negative attitudes towards women, and the acceptance of aggressive sexual behavior among peers in

clinical and nonclinical adults has been studied for decades. There have been experimental and non-experimental studies that expected to connect the effects of sexualized media to sexual aggression. These studies have generally reported that sexually aggressive behavior and attitudes are elevated for adults who report pornography consumption (Carroll, Padilla-Walker, Nelson, Olson, Barry, & Madsen, 2008; Malamuth et al., 2000; Vega and Malamuth, 2007). In particular, men who are deemed high risk for sexual aggression by having a number of other risk factors seem to be the most affected by frequent pornography consumption. Seto and colleagues (2001) summarized much of the research by stating the underlying theories of sexual aggression can be understood through one of the following causal statements: (a) use of pornography causes sexual offending, through such mediating variables as antisocial personality, physical aggressiveness, offense-supportive attitudes and beliefs, or conditioned sexual responding to cues of non-consent; (b) use of pornography and sexual offending are both caused by third factors such as antisocial personality, hypermasculinity, offense-supportive attitudes and beliefs, or paraphilic interests; or (c) sexual offending is caused by a third factor in conjunction with the use of pornography (e.g., the effect of sexual deviance is potentiated by exposure to arousing pornography). These statements reflect the inconsistency in the literature as to whether consumption of sexualized media is a direct effect, indirect effect, or catalyst in sexual aggression.

Much of the research in this domain began with experimental studies of the effects of pornography on reactions to rape. Typically, these studies have involved exposing college men to violent pornography and then having them interact with a female confederate or completing various measures of attitudes. Research has indicated that the effects of sexualized media portrayals may lead to increased acceptance of rape myths among men. Malamuth (1981)

concluded that exposure to violent pornography can lead men to fantasize about rape while Check and Malamuth (1984) found that the same type of exposure led certain men to believe that some women enjoy being raped. More recently, Barak and colleagues (1999) used an experimental approach to assess effects of exposure to Internet pornography on university men's attitudes toward women. In their study, 24 college men were exposed to varying amounts of Internet pornography via a computer lab set up by the researchers. The researchers controlled the amount of exposure to sexualized media. They assessed attitudes towards women, including rape myth acceptance, and found no correlation. Part two of this study assessed individual characteristics and self-regulated exposure to sexualized media in a sample of 31 college men. They found the individual difference factors, such as levels of hypermasculinity, were found to be related to self-regulated exposure to Internet pornography. However, amount of exposure to Internet pornography had no detectable relationship with measures of attitudes towards women. These contradictory findings indicate the need for further study in this area.

Since some experimental studies have been inconclusive, many researchers have examined sexualized media effects in nonexperimental conditions. Malamuth, Hald, and Yeung (2009) conducted a meta-analysis to determine whether nonexperimental studies revealed an association between men's pornography consumption and their attitudes supporting violence against women. Their results yielded positive correlations between pornography use and attitudes supporting violence against women. This was in contrast to work done by Allen et al. (1995) in which a significant relationship between pornography consumption and attitudes towards violence was not found. A critical review of the literature from Seto, Maric, and Barbaree (2001) proposed that individuals who are already predisposed to sexually offend are the most likely to show an effect of pornography exposure and are the most likely to show the

strongest effects. Men who are not predisposed are unlikely to show an effect. They further noted that if there actually is an effect, it is likely to be transient because these men would not normally seek violent pornography.

These meta-analyses have generally reported that greater exposure to both violent and nonviolent pornography is associated with increased acceptance of violence against women and sexual aggression against women (Vega & Malamuth, 2009). Much of the research done in this area has also further focused on attitudinal effects. Ward (2003) concluded that participants exposed to highly sexual media genres, such as soap operas and music videos, became more accepting of stereotypical attitudes about sex and relationships. A similar study found that greater exposure to soap operas and music videos is associated with more stereotypical sexual attitudes, greater endorsement of dysfunctional relationship models, and greater acceptance of sexual harassment (Kingston et al., 2009).

The relative inconclusiveness among findings of the effects of sexualized media necessitates further study in this area. While the majority of researchers connect exposure to sexualized media to attitudes, cognitions, and behaviors towards women, further research should be examined in this area, particularly for college men populations. In assessing sexualized media effects for a college male population, the Internet is one medium that cannot be overlooked given the prevalence of college men who are exposed to the Internet on a daily basis.

Present Study

Numerous studies have examined the incidence and prevalence of sexual assault on college campuses. The past 30 years of research have drawn particular attention to the pervasiveness of the problem. While many studies have examined the effects of sexual assault on female victims, there is less research on male perpetrators in comparison. The confluence

model of sexual aggression is one theoretical model that has focused specifically on male perpetrators of sexual aggression against women. The model has a number of strengths, yet data from the original sample was taken in the late 1970s and early 1980s. There have been many societal and cultural changes since that time that provide a reason to replicate this study with a contemporary sample of college men. Peer support and pressure, such as fraternity and athletic involvement, and its impact on sexual aggression may function through different mechanisms in today's college men. In addition, there is currently a dearth of literature that examines a broader concept of pornography, or sexualized media, beyond nude magazines and pornographic videos. Most research has focused on pornographic magazines and videos as the source of sexualized media. In their study of pornography and sexual aggression, Vega and Malamuth (2007) acknowledge that there are many other types of media used. They cite magazines as representing only one-third of pornography sales. While earlier studies in this area investigated the impact of pornography on sexual aggression, less attention has been paid to the impact of exposure to sexualized content in mainstream mass media. The current study will investigate the impact of intentional and non-intentional exposure to sexualized media in the pathways to sexual aggression.

The present study will attempt to extend the current research by more closely examining the type and consumption levels of modern types of media (e.g. Internet pop-ups, websites, and video games) among college men. Contemporary college men use the internet for a variety of educational, social, and recreational endeavors. The participants of the original confluence model study pre-dated the invention of the Internet, in particular the invention of internet pornography. One purpose of the current study is to investigate pornography in a broader context such that the role of different types of sexualized media, including internet media, in

sexual aggression can be examined more closely. Another purpose of the present study is to attempt to replicate previous findings of the impact of peer relationships by investigating male college peer groups such as fraternities and athletic teams. This study will investigate various components of the confluence model as predictors of sexual aggression, including mediating and moderating influences. Sexualized media will be examined as a potential moderator in the pathway to sexual aggression.

Hypotheses

The hypotheses that were tested are as follows:

Hypothesis 1: Membership in fraternities and/or athletic groups will be associated with higher levels of self-reported sexual aggression.

Hypothesis 2: The relation between attitudes supporting violence and sexual aggression will be mediated by negative masculinity.

Hypothesis 3: The relation between negative masculinity and sexual aggression will be moderated by attitudes supporting violence.

Hypothesis 4: The relation between delinquency and sexual aggression will be mediated by impersonal sex.

Hypothesis 5: The relation between impersonal sex and sexual aggression will be moderated by delinquency.

Hypothesis 6: The confluence of impersonal sex and negative masculinity will predict higher levels of self-reported sexual aggression.

Hypothesis 7: The relation between impersonal sex and sexual aggression will be moderated by sexualized media.

Hypothesis 8: The relation between negative masculinity and sexual aggression will be moderated by sexualized media.

Chapter 3

Methodology

Participants

Participants were undergraduate men ($N = 177$) over the age of 18 attending a large Midwestern university. The number of participants was determined using guidelines for sample size selection using a power analysis for multiple linear regression. Using a medium effect size ($f = 0.25$), an alpha of 0.05, a power of 0.80, and 14 predictors, the required sample size needed was determined to be at least 135. Therefore, this sample is considered large enough to draw meaningful conclusions. Institutional Review Board approval was granted from the home institution. Participants will be recruited from introductory educational psychology courses and introductory psychology courses and received course credit for their participation. In addition, participants could elect to be entered in a raffle to win one of 5 \$25 gift cards. Five participants were randomly selected and contacted from the information they voluntarily provided on the entry form. Male heterosexual participants were specifically recruited for this study as the existing literature indicates that the majority of sexually aggressive acts are committed by adult males against adult females (Tjaden & Thoennes, 2000). It is widely documented that between 15 to 25 percent of college men report engaging in some type of sexual aggression, in which a man attempts or actually coerces a woman into sexual acts (Fisher, Cullen, & Turner, 2000; Malamuth, Sockloskie, Koss, & Tanaka, 1991; Koss & Oros, 1982). Additionally, college aged women are four times more likely to be sexually assaulted than women in all other age groups, usually by men acquaintances (Thompson & Cracco, 2008). Demographic data including age, sex, sexual orientation, race, year in school, fraternity membership, collegiate sports team membership, and relationship status was also collected.

Measures

The survey included a demographic form and a set of measures assessing the following latent constructs: delinquency and family violence, impersonal sex, hostile masculinity, attitudes supporting aggression, sexual experiences, male peer support, and sexualized media consumption. The measures replicate exact measures used by Malamuth and colleagues (1991; 1995) in the original confluence model studies. A copy of each of the questionnaires is listed in Appendix C. The titles of the surveys were not included in the questionnaires distributed to participants.

Demographic Information

Demographic Questionnaire. A demographic questionnaire was used to collect additional information about participants. Participants answered questions identifying their age, sex, sexual orientation, race, year in school, fraternity membership, collegiate sports participation, relationship status, and length of relationship.

Early Risk Factors

Delinquency. Malamuth and colleagues (1991; 1995) used three measures to assess delinquency. Child and adolescent delinquency was measured by a modified version of the Self-reported Juvenile Delinquency Scale (Tremblay, Pagani-Kurtz, Masse, Vitaro, & Pihl, 1995). This scale measures the same types of behaviors measured in the original studies (Malamuth et al., 1991, 1995). These questions assess delinquent behaviors that occurred before the participant was 18 years old. Behaviors include how often they have lied to parents or teachers, missed school, and stole or damaged property before age 18. Example questions include “Before the age of 18, how often did you stay out all night without your parents’ permission?” and “how often did you take a car or motorcycle for a joy ride?” Responses are made on 6–point scales

with options ranging from *never* (0) to *five or more times* (5). Tremblay et al.'s (1995) original scale demonstrated high internal consistency with a mean alpha of .91. Cronbach's alpha in the current study was .85.

Parental Violence/Child Physical Abuse. The extent to which parents were physically violent with each other and child physical abuse was measured by a 4-item scale. Family violence was assessed by three questions including "How frequently did your parents have fights while you were growing up?" and "While you were growing up how often did your father hit your mother (mother hit father)?" Child physical abuse was assessed by one question asking "How often did you have fights with your parents (or guardians) while growing up?" Participants respond on a 5-point scale, with "1" indicating "never" to "5" indicating "frequently." Malamuth et al. (1995) created these items for use in their follow-up study of the confluence model. Validity for that study was established at .69. In the current study, reliability was established at .60.

Child Sexual Abuse. The presence of sexual abuse that occurred during the participants' childhood was measured by one-item that states, "Please indicate the level of sexual experience you encountered before age 14 with anyone who was five or more years older than you." Malamuth et al. (1995) cite Finkelhor (1986, p. 26) in stating virtually all definitions of sexual abuse recognize that sexual contact even in the absence of coercion constitutes sexual abuse when it involves this type of age discrepancy because children are "deemed to lack the capacity to consent to such relationships." Participants respond on a 3-point scale, with "1" indicating "No sexual experience", "2" indicating "Sexual experience without physical contact," and "3" indicating "Sexual experience with physical contact." This item was used in Malamuth et al.'s (1995) follow-up study of the confluence model and validity was established at .89. In the

current study, 5.6% of participants endorsed childhood sexual contact with physical contact and 5.6% endorsed childhood sexual contact without physical contact.

Impersonal Sex

Impersonal Sex (IS). Impersonal Sex is measured by the composite of two questions which were developed to assess an individual's personal or impersonal orientation towards sex (Malamuth et al., 1995). These two questions showed significant factor loadings on the sexual promiscuity variable in one of the original confluence model's studies. Participants will be asked, "How old were you when you first had consensual sexual intercourse?" The participants' current age was substituted for those who have never had sex. This procedure was utilized in studies of the confluence model was done in order to include as many people as possible in the investigation (Malamuth, Addison & Koss, 2000; Malamuth, 1995). The second item asked, "How many different consensual sexual partners have you had?" Those who have never had a sexual partner ($n = 13$) received a value of zero regarding the number of sexual partners. A mean substitution was performed for those participants missing data from that question. This procedure was implemented by Malamuth and colleagues (1995) in their earlier research. Thus, these questions were utilized in the current study to follow the confluence model as closely as possible.

Hostile Masculinity

The Hostility Towards Women Scale (HTWS). The Hostility Towards Women Scale (Lonsway & Fitzgerald, 1995) measures hostile attitudes directed specifically towards women. The 10-item scale was derived from the 30-item Check, Malamuth, Elias, and Barton (1985) Hostility Towards Women Scale. Lonsway and Fitzgerald (1995) modified the original scale to provide a relatively pure measure of hostility toward women and to investigate attitudinal

antecedents to rape myth acceptance. As a result, it does not contain any items describing appropriate roles or privileges for women and was intended to be reasonably independent of sexist beliefs.

The HTWS was constructed under the assumption that this type of hostility does not differ from general hostility “except that it is directed specifically at women” (Check, Elias, & Barton, 1988). Participants are presented with a series of statements and asked to rate them on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Sample items include “I am easily angered by women”, and “Women are responsible for most of my troubles.” Higher scores indicate greater levels of hostility towards women. Coefficient alpha has been established from .78 to .82 (Lonsway & Fitzgerald, 1995; Parkhill & Abbey, 2008).

The scale’s internal consistency was established at .89 (Check, 1985) and at .83 (Lonsway & Fitzgerald, 1995). Similarly, reliability in the current study was established at .83. Test-retest reliability was established at .83 in a population of college students (Wheeler, 2002). A previous study (Check et al., 1985) established the KR-20 reliability of data from the HTWS at .89. This measure has demonstrated good internal consistency reliability (Lonsway & Fitzgerald, 1995; Wheeler et al., 2002) and has been found to discriminate between perpetrators and non-perpetrators. Wheeler and colleagues’ (2002) study also found that the HTWS exhibited discriminant validity in predicting attitudes relating to violence primarily against women. Convergent validity of the HTWS has been established with other measures of self-reported sexual aggression, including rape, and correlated with reported past use and predictions of future use of sexual aggression (Crossman, 1994). The scale has been found to have a moderate correlation with the Rape Myth Acceptance scale ($r = .45$) (Cohen, 1988; Lonsway & Fitzgerald, 1995). Lonsway & Fitzgerald (1995) noted the Hostility Toward Women Scale scores accounted

for 40% of the variance in men's rape myth acceptance scores in their sample of undergraduate men. This indicates that hostility towards women is an important concept in college men's understanding of rape and sexual assault.

Negative Masculinity Scale. Negative masculinity was assessed from the 8-item Negative Masculinity Scale (Spence, Helmreich, & Holahan, 1979). The Negative Masculinity Scale (NMS) was developed from the 24-item Personal Attributes Questionnaire (PAQ) (Spence & Helmreich, 1978) and includes only those items thought to encompass "negative" and traditionally "masculine" traits. The PAQ (Spence et al., 1978) is a self-report measure of instrumentality and expressiveness and built on a 5-point Likert scale. The M subscale reflects self-assertive and instrumental characteristics (e.g., *independence, self-confidence*). Participants rated each personality trait, namely "arrogant," "boastful," "egotistical," "greedy," "dictatorial," "cynical," "looks out only for self," and "hostile," on a 5-point scale, with "1," indicating "not at all" like those traits, to "5," indicating "very much" like those traits.

Higher scores on the PAQ masculinity subscale reflect characteristics that are socially desirable in both sexes, but more common in men. Cronbach's alpha has been established at .79 for the masculinity subscale in a sample of college students and at .75 in the original sample (Choi, 2004, Spence et al., 1979). Reliability for the present study was established at .76. Data from Buss, Gomes, Higgins, & Lauterback (1987) support using this scale to assess personality characteristics associated with sexual aggression against women.

Attitudes Supporting Violence

Rape Myth Acceptance Scale (RMAS). Burt (1980) devised three scales that are commonly used together to assess attitudes supporting violence. The first, the Rape Myth Acceptance Scale, (Burt, 1980) is a widely utilized instrument used to determine the degree to

which one believes false beliefs about rape and rape victims. The scale consists of 19 items. Participants were asked to indicate how strongly they agree with specific statements about women (e.g., "Any healthy woman can resist a rapist if she really wants to" and "In the majority of rapes, the woman was promiscuous or had a bad reputation") on a 7-point Likert scale ranging from 1 (*strongly agree*) through 7 (*strongly disagree*). Lower scores indicate greater acceptance of rape myths.

Internal consistency has been established at .88 in the original study using a sample of 589 Minnesota adults (Burt, 1980). Malamuth et al. (1991) reported an alpha coefficient of .81 in a nationally representative sample of 2,652 college men. Cronbach's alpha for the present study was .74. Item-total correlations were found to range from .27 through .67. Concurrent validity has been established in studies with adults (Burt, 1980) and college students (Ashton, 1982). Schewe and O'Donahue (1998) found a test-retest correlation of .84. Discriminant validity is supported by a meta-analysis that concluded rape myth acceptance was correlated with sexual aggression (Muernan et al., 2002) and the mean correlation between Burt's Rape Myth Acceptance Scale and Malamuth's Likelihood to Rape measure was found to be .26 across 11 studies. A literature review by Ryan (2004) also found a consistent pattern of associations between rape myth acceptance and rape.

Adversarial Sexual Beliefs. Burt's (1980) second scale is the Adversarial Sexual Beliefs (ASB) scale, a 9-item scale that was designed to measure the degree to which a person believes that sexual relationships are exploitative or adversarial in nature. The items reflect primarily negative beliefs about the manipulateness of women (Lonsway & Fitzgerald, 1994). Participants respond to items on a 5-point scale where "1" indicates "strongly agree" and "5" indicates "strongly disagree." Example items include, "In dating relationships, a woman is

largely out to take advantage of a man”, and “Most women are sly and manipulating when they are out to attract a man.” Lower numbers indicate a greater belief that relationships are adversarial in nature. Cronbach’s alpha for this scale was .80 as reported by Burt (1980) in the original study. Internal consistency for the present study was established at .86. Test-retest reliability was reported at .70 (Malamuth, 1986; Schewe & Donahue, 1998). Evidence for discriminant validity was found in a meta-analysis by Murnen et al. (2002) showing that ASB correlated with sexual aggression.

Acceptance of Interpersonal Violence. Burt’s (1980) third scale, the Acceptance of Interpersonal Violence (AIV) scale, measures the extent to which a person supports the use of force to gain compliance, including the use of force in intimate and sexual relationships. Participants respond to 5 items on a 7-point scale where 1 indicates “strongly disagree” and “7” indicates “strongly agree”. Sample items include “A man is never justified in hitting a woman” and “Being roughed up is sexually stimulating to many women”. Higher scores reflect a greater acceptance of interpersonal violence. Cronbach’s alpha for this scale was .57 as reported by Burt (1980) in the original study. This measure correlated with the Adversarial Sexual Beliefs Scale at .29. For the present study, Cronbach’s alpha for this scale was established at .60 and was correlated with the Adversarial Sexual Beliefs Scale at .45.

Sexual Aggression

Sexual aggression was measured by a modified version of the Informational Support subscale of Dekeseredy & Kelly’s (1995) measure of male peer support. Informational Support refers to guidance and advice that influence men to sexually, physically, and psychologically assault their dating partners. The subscale consists of 7 questions in which participants respond “Yes” or “No.” In the original study, sample items included “*Did any of your male friends tell*

you that...you should respond to your dates' or girlfriends' challenges to your authority by using physical force, such as hitting or slapping?" and *"Did any of your male friends tell you that...your dates or girlfriends should have sex with you when you want?"* Cronbach's alpha in the original study was .70.

For the present study, the instructions were modified so that participants would indicate which behaviors they *engaged in* as a result of being told it was appropriate behavior or behavior encouraged by male peers. Sample items included, "Have you ever responded to your dates' or girlfriends' challenges to your authority by using physical force (e.g., holding her down, twisting her arm, etc.)?" and "Have you ever responded to your dates' or girlfriends' challenges to your authority by insulting them?" To measure this variable, an index was constructed by taking the sum of respondents' scores on seven dichotomous items. For the present study, Cronbach's alpha was established at .67.

Male Peer Support. Male peer support was measured by Dekeseredy and Kelly's (1995) measure. Two variants of male peer support were measured on two subscales. Attachment to abusive male peers was the first variant of male peer support examined in this study. Participants were asked questions that begin with "To the best of your knowledge, how many of your male friends...". Sample items include "have ever made physically forceful attempts at sexual activity with women they were dating which were disagreeable and offensive enough that the women responded in an offended manner such as crying, fighting, screaming or pleading?" and "have ever used physical force, such as hitting or beating, to resolve conflicts with their girlfriends and/or dating partners to make them fulfill some demand?" The response categories are: none; 1 or 2; 3 to 5; 6 to 10; more than 10; and don't know. Chronbach's alpha for this index was .65 in the original study. Reliability was established at .49 in the present study.

As a result of the low alpha, only the second type of male peer support, peer pressure to have sex, was used in the present study.

To measure a second type of male peer support, peer pressure to have sex, respondents were asked "How much pressure did your friends place on you to have sex with your dating partners and/or girlfriends?" The response categories are: a great deal, considerable, moderate, little, and none. Dekeserdey & Kelly (1995) found some associations between the male support variables in varying degrees. Attachment to abusive peers was weakly associated with pressure to have sex at .18.

Sexualized Media

Sexualized Media Consumption. A participant self-report questionnaire that inquired about exposure to different types of media was used in the study. The questionnaire consisted of three subscales, Unwanted Exposure, General Exposure to Sexual Media, and History of Pornography Use. The first subscale was Unwanted Exposure (Mitchell, Finkelhor, & Walok, 2003). This subscale consisted of 3 questions gauging whether or not participants had been exposed to unwanted sexual material while using the Internet. Unwanted exposure to sexual material was defined as, without seeking or expecting sexual material, being exposed to pictures of naked people or people having sex when doing online searches, surfing the Web, and opening e-mail or e-mail links. A sample item included, "In the past year, did you ever receive e-mail or Instant Messages *that you did not want* with advertisements for or links to x-rated Web sites?" Participants responded "Yes" or "No". Validity for this subscale was established at .65 in the current study. The second subscale was General Exposure to Sexual Media. This subscale consisted of 5 questions in which participants indicated the amount in which they are exposed to different types of media each day. Types of media included movies, magazines, television

shows, music videos, and Internet. Validity for the General Exposure subscale was determined to be .67 in the present study. The third subscale was History of Pornography Use. This scale consisted of 2 questions that inquired about frequency of Internet pornography consumption (still images and streaming video). Answer choices were rated on a 6-point scale and included the responses once a month or less, once a week, several times a week, daily, several times daily, or never.

Procedure

Approval to distribute this survey was obtained from the Institutional Review Board at the home institution (the University of Illinois at Urbana-Champaign). Participants were recruited from undergraduate educational psychology courses introductory psychology courses and will receive research credit for their participation. All the survey materials were placed online through Survey Monkey, a website used to collect data. The investigator attended the undergraduate educational psychology courses and introductory psychology courses to introduce the study and provide participants with the web address where they could access the survey. Participating instructors were also emailed a web link to the survey that could be provided to their students. Participants were informed that their participation is voluntary and that they can withdraw at any time without penalty. In order to participate, each participant was required to read and electronically sign a consent form that was presented at the beginning of the survey. The survey did not begin unless participants gave consent. Participants were able to print a copy of the consent form for their records. Upon completion of the survey, participants were presented with a written debriefing form explaining the objectives of the study. In addition, information was presented regarding campus and community resources for participants who may become distressed. Participants were asked to complete the survey on their own time.

Chapter 4

Results

Descriptive Statistics

Descriptive statistics were calculated to examine basic characteristics of the data and bivariate relations among observed variables. These statistics included subscale means, standard deviations, skewness, kurtosis, and bivariate correlations among scales.

The survey was initiated by 398 students. Two participants were removed for not giving consent. Twenty-six participants were removed for not selecting a sex. One hundred twenty-four participants were removed for selecting female as this study only investigated sexual aggression among college men. Sixty-nine participants were removed for ending the survey early. The final number of participants remaining was 177. Therefore, the analyses were conducted using the 177 participants.

Most of the participants in the study were either between the ages 18-20 (79, 44.6%) or 21-24 (78, 44.1%). The majority of the participants were heterosexual (157, 89.2%) while only 12 participants were gay (6.8%) and 6 participants were bisexual (6, 3.4%). Most of the participants were Caucasian (108, 61.0%) followed by African American (25, 14.1%). The college year of the students varied, with the largest group being juniors (52, 29.4%) followed by seniors (39, 22.0%). Most of the students were not on a varsity team (159, 90.3%), not on an intramural sports team (107, 60.5%), nor were they in a fraternity (129, 73.3%). More than half of the students selected that they were single – not dating exclusively (94, 53.1%) followed by single – dating exclusively (59, 33.3%). Most of the students had either been in that relationship status for less than six months (50, 29.1%) or two years to less than five years (40, 23.3%). Frequencies and percentages for participant demographics are presented in Table A1.

Peer group pressure was measured by the Peer Pressure to Have Sex question of the Male Peer Support survey. If the participant selected either little or none, they had low peer group pressure. If the participant selected either moderate, considerable, or great deal, they had high peer group pressure. Over one-third of the participants experienced high peer group pressure (67.37.9%). Ten of the participants had sexual experience without physical contact as a child (5.6%) and ten of the participants had sexual experience with physical contact as a child (5.6%). Thirteen of the participants had never had sex (7.3%). Frequencies and percentages for sexual characteristics questions are presented in Table A2.

Removing the five participants that selected 31+ as their age, the average participant was 21.13 years old ($SD = 2.44$). The age the participants reported first having sex ranged from 11 years old to 28 years old. The average age the participants first had sex was 17.59 years old ($SD = 2.66$). The average number of partners the participants had ranged between 0 and 200, with the average being 7.37 ($SD = 21.19$). However, there were outliers of 100, 150, and 200. After these were removed, the number of partners ranged from 0 to 40, with the average being 4.62 ($SD = 6.12$). Table A3 presents the means and standard deviations, along with skew and kurtosis.

Reliability of Measures

Reliability was conducted on the sexual aggression, negative masculinity, hostility towards women, unwanted exposure, general exposure, parental violence, delinquency, adversarial sexual beliefs, rape myth acceptance, acceptance of interpersonal violence subscales. Table A15 in Appendix A exhibits how each of the subscales were created. Reliability ranged from .60 to .86, which suggests that participants did not answer as reliably on the subscales of

parental violence (.60) and acceptance of interpersonal violence (.60). Table A4 presents the reliability, means and standard deviations for the subscales.

Normality was assessed for by examining the skew and kurtosis of each of the continuous subscales (parental violence, delinquency, number of partners, age at first sex, adversarial sexual beliefs, rape myth acceptance, acceptance of interpersonal violence, negative masculinity, hostility towards women, peer group pressure, unwanted exposure, general exposure, and sexual aggression). Acceptable skew would be in the range of ± 2 , and acceptable kurtosis would be in the range of ± 7 (Kline, 2005). The number of partners extended outside of the acceptable skew range, having a skew of 2.97. Sexual aggression also extended outside of the acceptable skew range, having a skew of -2.03. The number of partners also extended outside the acceptable kurtosis range, having a kurtosis of 10.76. The rest of the subscales fell within the acceptable ranges for skew and kurtosis. Kolmogorov Smirnov (KS) tests were also conducted on the subscales. Parental violence, delinquency, number of partners, age at first sex, rape myth acceptance, unwanted exposure, general exposure, and sexual aggression all were significant, suggesting these subscales did not meet normality. However, since the regressions only assume that the error term of the regressions follow a normal distribution, the subscales will still be used in the regressions (Stevens, 2009). Table A5 presents the skew and kurtosis for the continuous subscales.

Bivariate Correlations

Bivariate correlations were conducted between all the research variables. Age at first sexual experience was positively related to child abuse ($r = .25, p = .002$), delinquency ($r = .24, p = .003$), and unwanted exposure ($r = .20, p = .012$). Age at first sex was negatively correlated with the number of sexual partners ($r = -.37, p = .000$). The number of sexual partners was

positively related to parental violence ($r = .16, p = .046$), and delinquency ($r = .21, p = .009$).

Fraternity membership was positively related to any athletic membership ($r = .18, p = .020$) and adversarial sexual beliefs ($r = .17, p = .023$). Athletic membership was also positively correlated with delinquency ($r = .17, p = .031$), adversarial sexual beliefs ($r = .17, p = .023$), and rape myth acceptance ($r = .16, p = .043$).

Parental violence was positively related to the number of partners ($r = .16, p = .046$), delinquency ($r = .35, p = .000$), and negative masculinity ($r = .20, p = .013$). Child abuse was positively correlated with sexual aggression ($r = .17, p = .025$), and age of first sex ($r = .25, p = .002$). Delinquency was positively related to sexual aggression ($r = .26, p = .001$), the number of partners ($r = .21, p = .009$), parental violence ($r = .35, p = .000$), adversarial sexual beliefs ($r = .17, p = .029$), rape myth acceptance ($r = .20, p = .010$), negative masculinity ($r = .32, p < .000$), hostility towards women ($r = .17, p = .025$), peer group pressure ($r = .20, p = .009$), and if they were on any athletic team ($r = .17, p = .031$). Delinquency was negatively related to age at first sex ($r = -.24, p = .003$), and unwanted exposure ($r = -.18, p = .017$).

Adversarial sexual beliefs was positively related to rape myth acceptance ($r = .32, p < .000$), acceptance of interpersonal violence ($r = .45, p < .000$), negative masculinity ($r = .23, p = .003$), hostility towards women ($r = .60, p < .000$), delinquency ($r = .17, p < .029$), if they were on an athletic team ($r = .17, p = .023$), if they were a member of a fraternity ($r = .17, p = .023$), sexual aggression ($r = .26, p < .000$), and history of pornography use ($r = .31, p < .000$). Rape myth acceptance was positively related to adversarial sexual beliefs ($r = .32, p < .000$), acceptance of interpersonal violence ($r = .22, p < .005$), negative masculinity ($r = .25, p = .001$), hostility towards women ($r = .35, p < .000$), general exposure ($r = .26, p = .001$), if they were on any athletic team ($r = .16, p = .043$), and delinquency ($r = .20, p < .010$).

Negative masculinity was positively related to hostility towards women ($r = .24, p = .000$), adversarial sexual beliefs ($r = .23, p < .003$), rape myth acceptance ($r = .25, p < .001$), sexual aggression ($r = .24, p = .001$), parental violence ($r = .20, p < .013$), delinquency ($r = .32, p < .000$), and history of pornography use ($r = .17, p = .023$). Hostility towards women was positively related to delinquency ($r = .17, p = .025$), adversarial sexual beliefs ($r = .60, p = .000$), rape myth acceptance ($r = .35, p = .000$), acceptance of interpersonal violence ($r = .41, p = .000$), general exposure ($r = .23, p = .003$), history of pornography use ($r = .24, p = .002$), and sexual aggression ($r = .23, p = .002$).

Peer group pressure was positively related to sexual aggression ($r = .22, p = .003$) and delinquency ($r = .20, p = .009$). Unwanted exposure was positively related to age at first sex ($r = .20, p = .012$), and negatively related to parental violence sex ($r = .20, p = .045$), and delinquency ($r = .19, p = .017$). General exposure was positively related to rape myth acceptance ($r = .26, p = .001$), and hostility towards women ($r = .23, p = .003$). History of pornography use was positively related to adversarial sexual beliefs ($r = .31, p = .000$), hostility towards women ($r = .24, p = .002$), and negative masculinity ($r = .17, p = .023$). The correlation matrix is presented in Table A6.

Covariate Assessment

Six analyses of variance (ANOVAs) were conducted to assess the demographic variables (orientation, race, school year, relationship status, and length of relationship,). If the ANOVA was significant, it would demonstrate a significant relationship between the demographic variable and sexual aggression and should thus be used as a covariate. However, none of the ANOVAs were significant, and thus no covariates were used. Table A7 reports the results of the ANOVAs.

A Pearson correlation was conducted between age (removing the 5 31+ participants) and sexual aggression. The results showed that there was no relationship between age and sexual aggression, $r = .10$, $p = .196$, suggesting that age should not be used as a covariate. Therefore no covariates will be used in testing the hypotheses.

Principal Components Analysis

Based on bivariate correlations of the study variables, a principal components analysis was conducted to attempt to reduce the number of variables into components. Principal components analysis requires that there be some correlations greater than 0.30 between the variables included in the analysis. For this set of variables, there are multiple correlations in the matrix greater than 0.30, thus satisfying this requirement. To further assess the appropriateness of using principal components analysis on the data, two indicators, the Kaiser-Meyer-Olkin (KMO; Kaiser 1970) and Tabachnick and Fidell's (2007) measure of sampling adequacy, were used. Specifically, the KMO provided an index between 0 and 1 regarding the proportion of variance among the variables that might be common variance. KMOs near 1.0 support principal component analysis and anything less than 0.5 suggest that the data is not amenable for principal component analysis. Consistent with Kaiser's recommendation, Tabachnick and Fidell (2007) suggest that values greater than .60 are required for principal component analysis. In the present study the KMO index was .71 indicating the sample was appropriate for principal component analysis. Additionally, Barlett's test of sphericity was statistically significant ($p < .01$), thus supporting the use of principal component analysis on this data.

A principal components analysis was conducted on the 10 main variables from the original confluence model to determine the number of potential components to specify from the exploratory analysis. Factors to consider for subsequent analysis included those that had

eigenvalues greater than one (Kaiser, 1958). The scree plot was inspected and factors having eigenvalues greater than one were identified. On the basis of this review, three components emerged. There were four variables (hostility towards women, adversarial sexual beliefs, rape myth acceptance, and acceptance of interpersonal violence) that firmly loaded onto one component. The second component was problematic in that many of the variables crossloaded (items loaded in more than one component). The third component only consisted of one variable (child abuse), which indicated that it was not related to the other variables thought to describe early risk factors (parental violence and delinquency) as in Malamuth, et al.'s (1995) study. Based on the results of the principal components analysis, only the four variables loading onto the first component will be combined for subsequent analyses. These variables were combined into a component named attitudes supporting violence. The Cronbach's alpha for the attitudes supporting violence subscales was .72. Table A8 highlights the results of this procedure.

Hierarchical Regression Analyses

Hypothesis 1

Membership in fraternities and/or athletic groups will be associated with higher levels of self-reported sexual aggression.

To assess hypothesis 1, a multiple linear regression was conducted to assess if athletic and fraternity membership predicted sexual aggression. The assumption of normality was assessed with a Q-Q plot. The results showed strong deviation from normality and thus non-parametric testing was conducted instead. Because athletic and fraternity membership were dichotomous variables, Mann Whitney U tests were conducted instead.

The results of the Mann Whitney U test showed no difference in sexual aggression by athletic membership ($z = -1.70, p = .090$). The Mann Whitney U test showed that those who

were in a fraternity had significantly larger sexual aggression scores ($z = -2.40, p = .016$). Since the alternative hypothesis stated that the membership would result in greater levels of self-reported sexual aggression, the null hypothesis can be rejected in favor of the alternative hypothesis. Results of the Mann Whitney U test are presented in Table A9.

Hypothesis 2

The relation between attitudes supporting violence and sexual aggression will be mediated by negative masculinity.

To determine if mediation was present, hierarchical regression was used. In Step 1 of the mediation model, the regression of attitudes supporting violence on sexual aggression, without the effect of the mediator, was significant, $b = 0.84, t(160) = 2.57, p = .011$. Step 2 showed that the regression of the attitudes supporting violence on the mediator, negative masculinity, was significant, $b = 0.65, t(157) = 4.10, p = .001$. Step 3 of the mediation process showed that the regression of the mediator, negative masculinity, was also significant, $b = 0.47, t(171) = 3.25, p = .001$. Step 4 of the analyses revealed that, controlling for the mediator (negative masculinity), attitudes supporting violence scores was a significant predictor of sexual aggression, $b = .44, t(156) = 2.72, p = .007$, supporting mediation.

Hypothesis 3

The relation between negative masculinity and sexual aggression will be moderated by attitudes supporting violence.

To test for potential moderation effects, a hierarchical multiple regression was conducted. In the first step of the analysis, negative masculinity was entered into the regression equation to determine its effect on sexual aggression. Results indicated that negative masculinity accounted for a significant amount of variance in sexual aggression ($R^2 = 0.62, p < .001$). In the second step

of the analysis, negative masculinity and the interaction term created by the product between negative masculinity and attitudes supporting violence were entered into the regression equation. The interaction effect did not significantly add to the amount of variance in the criterion accounted for, $\Delta R^2 = .025$, $\Delta F(1, 156) = 4.25$, $p = .041$. Thus, no moderation effect was present. Results are presented in Table A10.

Hypothesis 4

The relation between delinquency (early risk factor) and sexual aggression will be mediated by impersonal sex.

To determine if mediation was present, hierarchical regression was used. In Step 1 of the mediation model, the regression of delinquency on sexual aggression, without the effect of the mediator, was significant, $b = 0.32$, $t(168) = 3.50$, $p = .001$. Step 2 showed that the regression of delinquency on the mediator, impersonal sex, was significant, $b = 1.27$, $t(157) = 2.64$, $p = .009$. Step 3 of the mediation process showed that the regression of the mediator, impersonal sex, was not significant, $b = 0.02$, $t(162) = 1.23$, $p = .207$. Step 4 of the analyses revealed that, controlling for the mediator (impersonal sex), delinquency scores were a significant predictor of sexual aggression, $b = 0.33$, $t(156) = 3.57$, $p = .000$, supporting mediation. Results are presented in Table A11.

Hypothesis 5

The relation between impersonal sex and sexual aggression will be moderated by delinquency.

To test for potential moderation effects of delinquency on the relation between impersonal sex and sexual aggression, a hierarchical multiple regression was used. In the first step of the analysis, impersonal sex was entered into the regression equation to determine its effect on sexual aggression. This result was significant ($R^2 = 0.84$, $p < .001$) indicating that

impersonal sex characteristics accounted for a significant amount of the variance in sexual aggression. In the second step of the regression analysis, impersonal sex and the interaction term between impersonal sex and delinquency was entered into the regression equation. This result was not significant indicating that delinquency did not have a moderating effect on the relation between impersonal sex and sexual aggression ($\Delta R^2 = .000$, $\Delta F(1, 155) = .021$, $p = .886$). Results are presented in Table A12.

Hypothesis 6

The confluence between impersonal sex and negative masculinity will predict higher levels of self-reported sexual aggression. To assess hypothesis 6, a multiple linear regression was conducted to assess if impersonal sex and negative masculinity predicted sexual aggression. The assumption of normality was assessed with a Q-Q plot. The plot showed little deviation from normality and the assumption was met. The assumption of homoscedasticity was assessed with a residuals plot. The plot showed little deviation from homoscedasticity and the assumption was met. The assumption of absence of multicollinearity was assessed by viewing variance inflation factors (VIFs). The VIFs were under 10, meeting the assumption.

The results of the regression were significant, $F(2, 157) = 5.84$, $p = .004$, suggesting that the independent variables accounted for (R^2) 6.9% of the variance in sexual aggression. Negative masculinity was a significant predictor, $B = 0.25$, $p = .002$, suggesting that for every one unit increase in delinquency, sexual aggression increased by 0.25 units. Results of the regression are presented in Table A13.

Hypothesis 7

The relation between impersonal sex and sexual aggression will be moderated by sexualized media.

To test for potential moderation effects, a hierarchical multiple regression was conducted. In the first step of the analysis, impersonal sex, unwanted exposure, and general exposure were entered into the regression equation to determine their effects on sexual aggression. Results indicated that none of the predictors sex accounted for a significant amount of variance in sexual aggression. In the second step of the analysis, impersonal sex and the interaction terms created by the product of impersonal sex and sexualized media were entered into the regression equation. The interaction effect did not significantly add to the amount of variance in the criterion accounted for, $\Delta R^2 = .039$, $\Delta F(2, 158) = 2.02$, $p = .140$ for sexualized media. Moderation was not supported. Results are presented in Table A14.

Hypothesis 8

The relation between negative masculinity and sexual aggression will be moderated by sexualized media.

To test for potential moderation effects, a hierarchical multiple regression was conducted. In the first step of the analysis, negative masculinity was entered into the regression equation to determine its effect on sexual aggression. Results indicated that negative masculinity was a significant predictor in sexual aggression. In the second step of the analysis, negative masculinity and the interaction terms created by the product between negative masculinity and sexualized media were entered into the regression equation. The interaction effect did not significantly add to the amount of variance in the criterion accounted for, $\Delta R^2 = .070$, $\Delta F(2, 167) = .005$, $p = .995$. Moderation was not supported. Results are presented in Table A14.

Chapter 5

Discussion

The purpose of the present study was two-fold. The first objective was to replicate and test the strength of a well-documented model of sexual perpetration in men, the confluence model of sexual aggression (Malamuth, et al., 1991; Malamuth, et al., 1995). The confluence model was only minimally supported by the results of this study. One purpose of the replication was to repeat the study in a sample of contemporary college men as the original studies were conducted 30 years ago. Much of the previous research did not necessarily account for some of the characteristics associated with today's college population, such as the increased and pervasive amount of sexual content in mainstream media. The participants in this study have matured in a time in which this type of content was readily present through various media sources, which is in contrast to the participants in the original confluence model studies. The second objective was to examine the effect of two additional variables, male peer group membership and consumption of sexualized media, in the model. It was hypothesized that the possible group-think mentality of male-based peer groups, such as fraternities and athletic groups, and the seemingly normative nature of sexualized content in the media would influence the pathways to sexual aggression.

The confluence model has been widely studied in college populations with results garnering strong support for the predictive power of the model (Malamuth, et al., 1991; Malamuth, et al., 1995; Wheeler, et al., 2002). The model is comprehensive in that it encompasses the influences of childhood experiences, peer groups, and sociocultural systems. There are two pathways in the model. The first pathway is theorized by concluding that childhood experiences with violence, including parental violence and childhood sexual abuse,

increase delinquent behavior. Young adults with delinquent behavior are more prone to be sexually promiscuous, or have large numbers of sexual partners. The increase in promiscuity is then associated with an increase in sexually aggressive behavior. Similarly, in the second pathway, attitudes that measure a more general likelihood towards violence predict an increase in attitudes that measure hostility specifically directed at women. These attitudes that are supportive of hostility towards women are then associated with an increase in the perpetration of sexual aggression.

Impersonal sex pathway. Consistent with the previous research, it was presumed that the current replication data would also provide evidence for the predictive nature of the confluence model. The overall model provided a moderate fit for the data. Early risk factors were the initial components of the first pathway in the confluence model. These early risk factors were comprised of parental violence, childhood sexual abuse, and delinquency. These variables accounted for 9.7% of the variance in sexual aggression in the present study. Child abuse and delinquency, but not parental violence, emerged as significant predictors in the replicated model. This finding is consistent overall with Malamuth and colleagues' (1991; 1995) results in which they concluded that early risk factors a significant predictor of adolescent delinquency and sexual aggression. These results are not surprising given the literature on survivors of childhood abuse. In particular, children who have been subjected to sexual abuse are characterized by greater difficulties with interpersonal functioning and emotion regulation later in life (Cloitre, Cohen, Koenen, 2006). It is not difficult to surmise how difficulties in these domains would facilitate more delinquent behaviors, such as having trouble in school, breaking laws, and getting into fights. Problems with interpersonal functioning may help explain some of the lack of attachment to sexual partners seen in men who are more likely to sexually aggress.

Similarly, difficulties with emotional reactivity, such as not being able to control anger may be another component of behavior that leads to sexual aggression.

Impersonal sex characteristics were a significant factor of sexual assault perpetration. Impersonal sex characteristics were comprised of the number of sexual partners and the age at the first sexual encounter (this was differentiated from childhood sexual abuse). The number of sexual partners was a significant predictor of sexual aggression. As the number of sexual partners increased, so did the propensity to sexually aggress. This finding is in line with previous research on men with more impersonal proclivities to sexual relationships (Malamuth, et al., 1991; Malamuth, et al., 1995, Malamuth, et al., 2000). It is thought that an impersonal nature to sexual encounters creates emotional distance for men from their partners and better facilitates viewing women as objects for sexual gratification rather than as potential mates. Interestingly, the age at the first sexual encounter was not associated with greater reports of sexual aggression.

Although age of first sexual encounter was not a significant predictor of sexual aggression alone in this study, the association with delinquency is important. In the present study, impersonal sex was a significant mediator in the pathway from delinquency to sexual aggression. Delinquency has been associated with early first sexual encounters. One form of delinquent behavior is early sexual experiences which in turn can result in a greater number of sexual partners by the time a young man reaches college age. A greater number of casual sexual experiences can shape an impersonal characterization of sexual encounters with women and a greater propensity to sexually aggress.

Hostile masculinity pathway. The second pathway of the confluence model asserted that endorsement of attitudes supporting violence leads to hostility characteristics, including

particular hostility towards women, which have been associated with greater levels of sexual aggression. Attitudes supporting violence included adversarial sexual beliefs, rape myth acceptance, and acceptance of interpersonal violence. Together these variables were significant predictors of sexual aggression and accounted for an additional 8.8% of the variance in sexual aggression. Adversarial sexual beliefs emerged as a significant predictor in the model. This finding was consistent with previous research which indicated that men who view women as adversaries are more likely to commit sexual aggression. Men who endorse adversarial sexual beliefs are hypothesized to want to assert dominance over women. These men may have a desire to “put down” women and as a result render them less powerful or controlling (Malamuth, et al., 1991). Sexual encounters are one way in which these men can assert their dominance. Interestingly, Malamuth and colleagues (1995) used adversarial sexual beliefs as a manifest indicator of both the attitudes and hostile masculinity latent constructs to effectively partition the variance between the two latent constructs. Adversarial sexual beliefs loaded onto the construct of attitudes supporting violence rather than hostile masculinity.

Hostile masculinity characteristics were also somewhat predictive of sexual aggression in the model. Hostile masculinity was comprised of negative masculinity and hostility towards women. These variables accounted for 6.6% of the variance in sexual aggression. Negative masculinity was a significant predictor. The construct of negative masculinity is a personality attribute of coerciveness in general. This is in contrast to adversarial sexual beliefs and hostility towards women which measure hostility specifically aimed at women. In the present study, negative masculinity served as significant mediator in the pathway from attitudes supporting violence to sexual aggression. Similar studies have indicated that men high in this domain may be characterized by a fear of rejection and anxiety concerning their relationships with women. In

an effort to lessen the feelings of insecurity, the use of force and coercion may be used by these men to help alleviate feelings of rejection and anxiety.

Each of the four components of the pathways in the original models, early risk factors, impersonal sex characteristics, attitudes supporting violence, and hostile masculinity characteristics, added predictive power to the model. However, as predicted in the original model, impersonal sex characteristics and hostile masculinity characteristics act synergistically to provide the most predictive power for sexual aggression. That finding was again replicated in this study. When both impersonal sex characteristics and masculinity characteristics were considered together, those variables accounted for 22.6% of the variance in sexual aggression perpetration in the current study. These findings are in line with previous research on the confluence model in which the greatest predictor of sexual aggression was the number of risk factors endorsed by the men in the study. Malamuth and colleagues (1995) found that men that scored high on 5 risk factors reported a sexual aggression incidence rate of 89%. This was in comparison to men that scored high on 1 risk factor and reported a sexual aggression incidence rate of 32%. These findings highlight the assumption that men with multiple risk factors exhibit the greatest propensity to commit sexual aggression. The need for particular attention and intervention efforts aimed at these college men populations is warranted.

Inclusion of new variables in the model. The new model proposed in this study hypothesized that male peer support and sexualized media would influence the two pathways of the confluence model. Neither of these assumptions was supported by the model. Moderation analyses concluded that male peer support in the form of peer group pressure to have sex did not significantly influence either pathway in the model. This finding indicates that college men may not be greatly influenced by their counterparts as to whether or not to engage in sexual

encounters. It is possible that many men are already sexually active by the time they reach college and therefore this variable is not particularly informative.

Male peer support in other forms was supported by the model. It was hypothesized that fraternity membership and athletic group participation would be associated with the greatest levels of sexual aggression. Support for the influence of fraternity membership was supported by the current model. This study concluded that men with fraternity membership had significantly larger sexual aggression scores than men who did not endorse fraternity membership. This finding supports previous studies that cite fraternity membership as a particular risk factor for sexual aggression (Boeringer, Shehan, & Akers, 1991; Koss et al., 1987; Koss & Gaines, 1993). In particular, research has indicated that men in fraternities are more likely to endorse rape supportive attitudes such as high rape myth acceptance, more traditional views towards women, and more traditional views of masculinity. It is proposed that one of two mechanisms can help explain the greater numbers of reported sexual aggression among this population. One reason is that men who endorse these views seek out membership in groups upon entering college that continue to accept and foster those beliefs. An alternative reason is that men who acquire membership in these groups may develop and strengthen rape supportive attitudes as a function of the male peer supported environment. As causality cannot be assumed from the current study, this finding warrants further research. Longitudinal studies would be more effective at capturing the ideas, beliefs, and attitudinal shifts of college men across their college experience, particularly for those involved in male-dominated peer groups.

There have been conflicting reports of the influence of athletic group participation as a factor in sexual aggression. Some reports have indicated that men in athletic groups have been overrepresented in cases of sexual aggression (Crosset, et al., 1996) while other reports have not

been able to find an association between athletics and sexual aggression (Caron, et al., 1997). Contrary to some earlier research findings, athletic group participation as a factor in sexual aggression was not supported by the present study. One possible explanation for this finding was the self-report nature of the survey questionnaires. Men participating in varsity athletics may be less prone to self-identify as perpetrators of sexual aggression for fear of risking their position on the team or scholarship money as punishment for their acts.

The influence of sexualized media as a moderator was not supported in this study. Moderation analyses concluded that sexualized media in the form of various media forms did not significantly influence either pathway in the model. This finding is important as previous research in this area has intended to illustrate a link between media portrayals of violence and real-life violence. Often, it is surmised that the consumption of media is a correlate, and perhaps even a cause, of violence. The topic has sometimes become political debate with many groups rallying for greater censorship of media programming in an effort to decrease violent acts. The current research did not support this assumption. It is probable that young men are simply not as greatly influenced by sexualized media as previously indicated. One hypothesis is that because the inclusion of sexualized content in mainstream media is so pervasive, young men are normalized to the effects. However, this research indicates that simple consumption of media may not negatively influence young men's behaviors.

Prediction of sexual aggression is of monumental importance. Identifying the characteristics that enable some men to sexually aggress is important and necessary information that will prove valuable in intervention and prevention efforts. These efforts are particularly critical for college populations, where men and women reside in close proximity and often in largely unsupervised quarters.

Limitations

Although the results of this study are promising, there were several limitations to this study that should be addressed. The sample used in this study was largely homogeneous. The sample was a convenience sample of college men from one large Midwestern University. The sample that was used was taken from a population comprised solely of undergraduate college men from introductory and advanced courses in educational psychology and psychology. Since a convenience sample of undergraduate educational psychology and psychology students was used, the results may not generalize to students in other academic majors (e.g., business, engineering), to students attending universities that are in different geographic locations and/or beyond the scope of men attending college. The sample also included a large majority of White participants. Generalizing the present results to other racial and ethnic minority groups should be done with caution until the current results are replicated in those particular groups.

Another limitation with this study was that all measures were self-reports. These findings could be biased as a result. This study specifically inquired whether or not men had committed acts of sexual aggression, which are against the law. Although the men in the study were assured of the confidential nature of the data, it is likely that the findings may not be completely accurate as a result of men underreporting incidences of sexual aggression for fear of legal or university disciplinary action. Therefore, men may not have been completely honest in their responses. Additionally, some of the variables in this study were measured retrospectively, such as child sexual abuse and parental violence. Participants' recollections of these constructs may be subject to recall bias. It has been noted that survivors of abuse may be likely to forget events or aspects of events, categorize the events as non-abusive, or blame themselves for the event (Briere, 1992). Caution should be used when interpreting the findings of these variables as

a result. Future research should possibly attend to alternative ways of collecting data for these variables.

Finally, another limitation that should be noted is the cross-sectional design. This design methodology prohibits being able to make definitive conclusions regarding causality of sexual aggression. Future research in this area would be of great importance in establishing the existence of certain variables prior to the onset of other variables. In this study, and with prior research, there is support for the idea that certain characteristics precede the onset of others. Continued research may be able to highlight the mechanisms through which this takes place and more clearly define them.

Implications/Future Directions

Despite the limitations of the current study, the results suggest that interventions that address particular risk factors of sexual aggression may be useful in both prevention and treatment. The findings of the present study have several implications for prevention programming efforts. This study emphasizes the importance of certain college men's peer groups. The results of this study highlight the need for continued work in the area of prevention interventions in specific all-male peer groups, such as fraternities. It is reasonable that prevention efforts should be aimed at educating college men about rape supportive attitudes in general. It is further warranted that particular interventions should be aimed at fraternities as it is likely that even in light of education efforts some information about these attitudes is taught, strengthened and supported in these environments. It is plausible that these interventions should occur at the onset of college, particularly during freshman orientation or other first contact events of the young man to the college environment. The interventions may be most effective if administered in this way before a young man can develop or strengthen peer relationships that

are supportive of violence against women and rape supportive attitudes. It will be important to focus on peer groups as a whole to capture the collective supportive nature of these groups.

Interventions should also continue to be aimed at the individual risk factors of the confluence model. The original confluence models and the present study support the notion that several identified risk factors provide the greatest risk of perpetration of sexual aggression. The model emphasizes that one of the foundations of sexual aggression can be found in experiences with violence in childhood. The early risk factors of childhood abuse and delinquency greatly influence other components in the model such as impersonal sex and attitudes supporting violence, which in turn leads to hostile masculinity. Efforts aimed at eradicating child abuse should also be a focus of intervention programming.

Conclusions

In conclusion, the confluence model of sexual aggression was partially supported by this study, with adversarial sexual beliefs being the most significant predictor in sexual aggression of young men. This replication study has demonstrated that the confluence model may have some power in predicting sexual aggression. However, the model was not fully supported by the present research. This finding highlights the need to continue to evaluate the components of the model. Further research should be conducted to assess the impact of each of these risk factors in sexual aggression. Although moderation effects of male peer group pressure and sexualized media were not supported in the present study, it is likely that continued research in these domains could uncover potential influences.

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APPENDIX A

Table A1
Frequencies and Percentages for Participant Demographics

Demographic	<i>n</i>	%
Age Group		
18-20	79	44.6
21-24	78	44.1
25-30	15	8.5
31+	5	2.8
Orientation		
Heterosexual	157	89.2
Gay	12	6.8
Bisexual	6	3.4
Other	1	0.6
Race		
Asian	14	7.9
African American	25	14.1
Caucasian	108	61.0
Latino	19	10.7
Native American	2	1.1
Other	9	5.1
Year		
Freshman	31	17.5
Sophomore	33	18.6
Junior	52	29.4
Senior	39	22.0
Other	22	12.4
Varsity		
No	159	90.3
Yes	17	9.7
Intramural		
No	107	60.5
Yes	70	39.5
Fraternity		
No	129	73.3
Yes	47	26.7
Relationship Status		
Single - not dating exclusively	94	53.1
Single - dating exclusively	59	33.3
Living with girlfriend	6	3.4

Table A1 (cont.)

Engaged	3	1.7
Married	7	4.0
Separated	1	0.6
Other	7	4.0
Status Length		
Less than six months	50	29.1
Six months to less than a year	22	12.8
One year to less than two years	31	18
Two years to less than five years	40	23.3
Five years or more	29	16.9

Table A2
Sexual Characteristics Questions

Characteristic	<i>n</i>	%
Peer group pressure		
Low	110	62.1
High	67	37.9
Child sexual contact		
None	157	88.7
Sexual experience without physical contact	10	5.6
Sexual experience with physical contact	10	5.6
Had sex		
Never	13	7.3
At least once	164	92.7

Table A3
Means, Standard Deviations, Skew and Kurtosis for Participant Characteristics

Characteristic	<i>M</i>	<i>SD</i>	Skew	Kurtosis
Age (removed 31+ participants)	21.13	2.44	1.75	3.52
Age at first sex	17.59	2.66	0.82	1.69
Number of partners	7.37	21.19	7.11	55.84
Number of partners (removed outliers)	4.62	6.12	2.97	10.76

Table A4
Reliability, Mean, and Standard Deviation for Subscales

Subscale	α	Number of items	<i>M</i>	<i>SD</i>
Sexual Aggression	.67	7	0.79	1.23
Negative Masculinity	.76	8	2.37	0.64
Hostility Towards Women	.83	10	3.23	0.75
Unwanted Exposure	.65	3	4.56	1.14
General Exposure	.67	5	2.00	0.58
Parental Violence	.60	4	1.82	0.62
Delinquency	.85	13	1.32	1.00
Adversarial Sexual Beliefs	.86	9	2.94	1.09
Rape Myth Acceptance	.74	11	1.96	0.50
Acceptance of Interpersonal Violence	.60	5	2.39	0.93

Table A5
Skew and Kurtosis for Subscales

Subscale	Skew	Kurtosis	KS test <i>p</i>
Sexual Aggression	2.37	7.47	.001
Negative Masculinity	0.28	-0.33	.105
Hostility Towards Women	0.38	1.05	.615
Unwanted Exposure	-0.13	-1.39	.001
General Exposure	1.72	4.58	.001
Parental Violence	1.18	1.97	.151
Delinquency	0.98	0.61	.025
Adversarial Sexual Beliefs	0.30	-0.53	.236
Rape Myth Acceptance	0.91	0.83	.048
Acceptance Of Interpersonal Violence	0.32	-0.82	.118
Partners	2.97	10.76	.001
Age Sex	0.82	1.69	.003

Table A6
Correlation Table between Subscales

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1:Sexual Aggression	-															
2:Age Sex	-.08	-														
3: Partners	.10	-.37**	-													
4:Fraternity Membership	.11	.16	.00	-												
5:Athletic Membership	.15	-.03	.03	.18*	-											
6:Peer Group Pressure	.22**	-.05	.01	.08	.13	-										
7:Parental Violence	.07	-.07	.16*	.02	-.13	.02	-									
8:Child	.17*	.25**	.14	-.10	.02	.04	-.00	-								
9:Delinquency	.26**	.24**	.21**	.12	.17*	.20**	.35**	-.02	-							
10:Adversarial Sex Beliefs	.26**	-.12	-.01	.17*	.17*	.12	.00	.08	.17*	-						
11:Rape Myth Acceptance	.00	-.04	-.03	.07	.16*	-.07	.02	.04	.20*	.32**	-					
12:Acceptance of Interpersonal Violence	.09	-.11	-.08	.10	.10	.06	-.01	.06	.12	.45**	.22**	-				
13:Hostility Towards Women	.23**	-.15	.04	.14	.13	.12	.10		.17*	.60**	.35**	.41**	-			
14:Negative Masculinity	.24*	.10	.10	.04	.09	.14	.20*	-.00	.32**	.23**	.25**	.14	.27**	-		
15:Unwanted Exposure	-.13	.20*	-.08	-.06	.07	.11	-.20*	-.05	-.18*	-.05	-.14	.09	-.07	-.11	-	
16:General Exposure	.05	-.09	-.09	.13	-.02	-.11	.10	.12	.01	.13	.26**	.10	.23**	.08	-.00	-
17: History of pornography use	.12	-.02	-.03	.04	-.00	.09	.12	.02	.01	.31**	.14	.10	.24**	.17*	-.11	.11

Note. * $p < 0.05$. ** $p < 0.01$.

Table A7
ANOVA Results for Covariate Assessment

Source	SS	df	MS	F	p	Partial η^2
Orientation	5.14	3	1.71	1.13	.337	.02
Error	260.08	172	1.51			
Race	11.51	5	2.30	1.55	.178	.04
Error	254.33	171	1.49			
School year	2.50	4	0.62	0.41	.803	.01
Error	263.35	172	1.53			
Relationship Status	1.68	6	0.28	0.18	.982	.01
Error	264.16	170	1.55			
Status length	6.19	4	1.55	1.01	.404	0.2
Error	255.69	167	1.53			

Table A8
Principal Components Analysis

Variable	Component 1	Component 2	Component 3
Hostility Towards Women	0.764	-0.252	-0.037
Adversarial Sexual Beliefs	0.755	-0.303	-0.119
Rape Myth Acceptance	0.608	-0.209	0.029
Acceptance of Interpersonal Violence	0.597	-0.328	-0.196
Negative Masculinity	0.512	0.050	0.428
Partners	0.237	0.702	-0.283
Age Sex	-0.306	-0.597	0.434
Parental Violence	0.200	0.541	0.489
Delinquency	0.475	0.480	0.423
Child	0.158	0.211	-0.636

Note: Boldface indicates highest component loading or cross-loading.

Table A9
Mann Whitney U Tests for Sexual Aggression by Athletic and Fraternity Membership

	"No" Mean Rank	"Yes" Mean Rank	z	p
Athletic Membership	83.51	95.22	-1.70	.090
Fraternity Membership	83.52	102.18	-2.40	.016

Table A10

Results for Moderation Analyses for Attitudes Supporting Violence

Moderation	Source	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>	<i>P</i>
	Negative masculinity	.444	.164	.22	2.72	.007
	Attitudes supporting violence	.056	.034	.13	1.63	.105
	Negative masculinity*Attitudes supporting violence	.081	.047	.48	1.72	.088

Table A11

Results for Moderation Analyses for Delinquency

Moderation	Source	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>	<i>p</i>
	Impersonal Sex	0.01	.015	.04	0.51	.612
	Delinquency	0.33	.092	.28	3.57	.000
	Impersonal Sex*Delinquency	0.00	.013	.01	0.14	.886

Table A12

Results for Moderation Analyses for Confluence

Moderation	Source	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>	<i>p</i>
	Impersonal sex	.013	.015	.07	.879	.381
	Negative masculinity	.464	.145	.25	3.20	.002

Table A13

Results for Moderation Analyses for Sexualized Media

Moderation	Source	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>	<i>p</i>
1	Impersonal sex	.016	.015	.09	1.09	.276
	Unwanted exposure	-.190	.079	-.19	-2.41	.017
	General exposure	.014	.156	.01	.090	.929
	Impersonal sex*Unwanted exposure	-.023	.012	-.15	-1.92	.056
	Impersonal sex*General exposure	-0.24	.025	-.08	-.962	.337
2	Negative masculinity	.446	.147	.23	3.03	.003
	Unwanted exposure	-.102	.081	-.09	-1.26	.208
	General exposure	.114	.168	.05	.678	.499
	Negative masculinity*Unwanted exposure	-0.00	.131	.00	-.00	.997
	Negative masculinity*General exposure	.026	.271	.01	.095	.924

Table A14

List of Variable Measures

Variable	Sub-variable	Survey	Created by:
Sexual aggression	-	Male Peer Support	Sum of <i>Informational Support</i> Questions 1-7
Membership	Athletic membership	Demographic Information	Responses to Question 6, 7
	Fraternity membership	Demographic Information	Response to Question 8
Negative Masculinity	Negative masculinity	Negative Masculinity	Mean of questions 1-8 (reverse code question 7)
Impersonal Sex Characteristics	Number of sex partners	Impersonal Sex	Question 2
	Age at first sex	Impersonal Sex	Question 1
Peer Group Pressure	-	Male Peer Support	<i>Peer Pressure to Have Sex</i> Question. Little, None = Low. Moderate, Considerable, Great Deal = High
Sexualized Media Consumption	Unwanted Exposure	Sexualized Media Consumption	Unwanted Exposure Sum of Questions 1-3
	General	Sexualized	General Exposure to Sexual Media

Table A14 (cont.)

	Exposure	Media Consumption	Mean of Questions 1-5
Early Risk Factors	History of Pornography Use	Sexualized Media Consumption	History of Pornography Use Mean of Questions 7, 8 (after reverse-scored)
	Parental violence	Family Violence/Child Physical Abuse	Mean of Questions 1-4
	Child abuse	Child Sexual Abuse	Question 1
Attitudes Supporting Violence	Delinquency	Delinquency	Mean of Questions 1-13
	Adversarial Sexual Beliefs	Adversarial Sexual Beliefs	Mean of Questions 1-9
	Rape Myth Acceptance	Rape Myth Acceptance	Mean of Question 1-11
	Acceptance of Interpersonal Violence	Acceptance of Interpersonal Violence	Mean of Question 1-5
	Hostility Towards Women	Hostility Towards Women	Mean of Questions 1-10 (reverse code questions 2, 3)

APPENDIX B

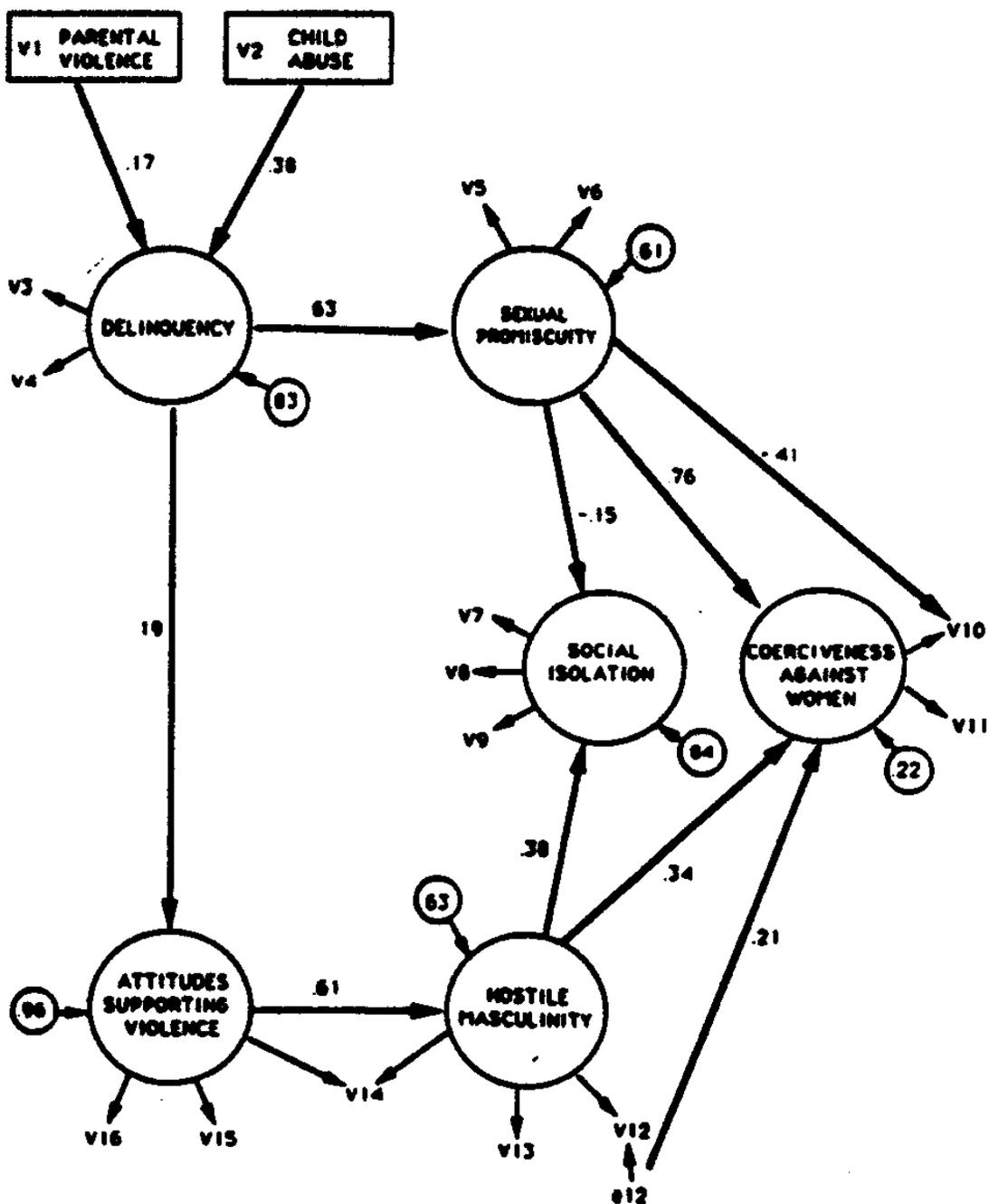


Figure B1. Malamuth et al.'s 1991 confluence model of sexual aggression.

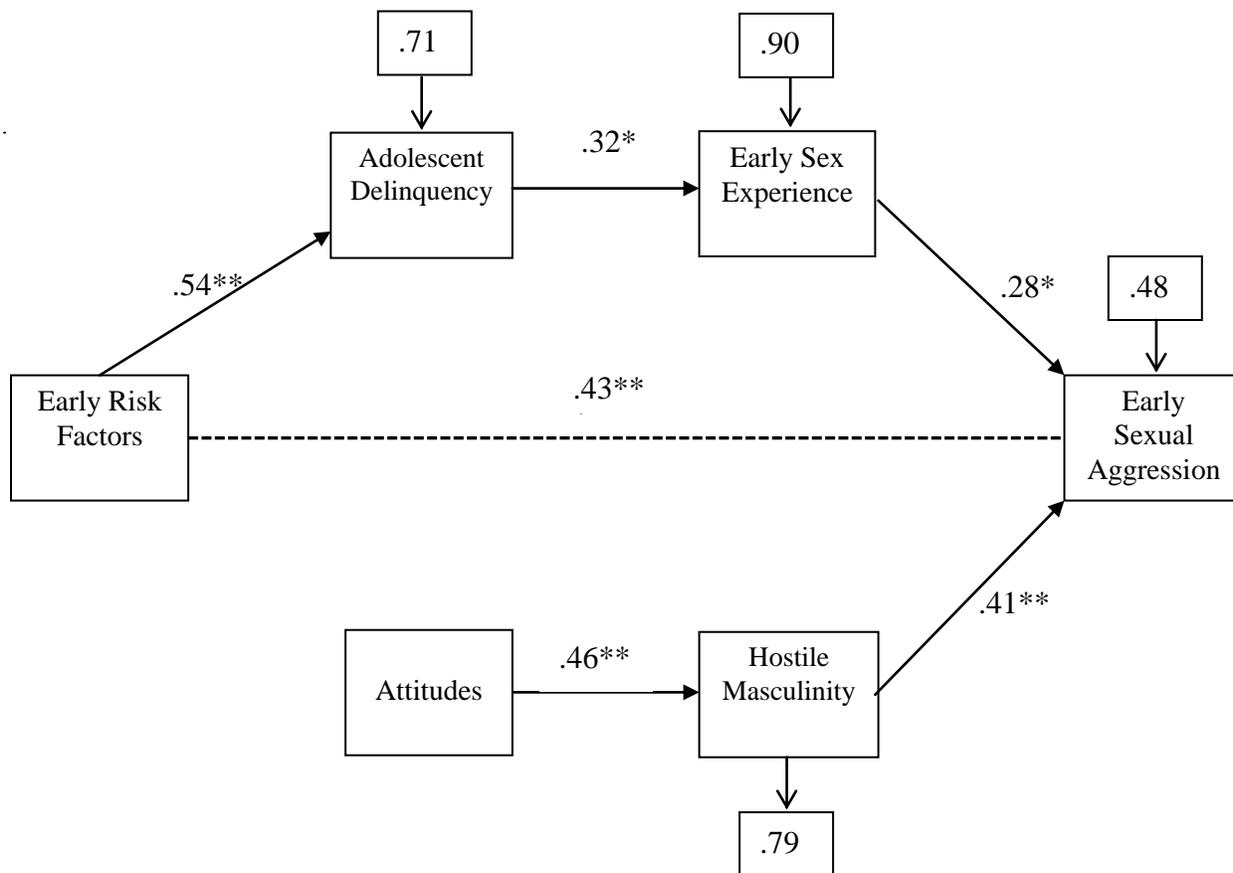


Figure B2. Malamuth et al.'s 1995 confluence model of sexual aggression

APPENDIX C

Informed consent form

You may print a copy of this form to keep for your records.

I am being invited to participate in a study entitled “The Role of Peer Groups and Media in the Sexual Beliefs, Attitudes, and Behaviors of College Men,” the purpose of which is to gather information examining some of the variables that may impact sexual aggression in college men. This study is being conducted by Saroj Hardit, a doctoral student, and Dr. Dorothy Espelage, a faculty member, in the Department of Educational Psychology in the College of Education at the University of Illinois at Urbana-Champaign.

I understand that participation consists of completing a survey packet (approximately 30- 45 minutes in length). In total, I understand my participation will take approximately 50 minutes or less. I certify that I am at least 18 years of age. I understand that I will be asked to give consent to participate in the study. I understand that offering my consent is completely voluntary. I will not suffer any consequences if I decide not to consent. Participation is not expected to cause any harm outside of what is normally encountered in daily life. There are some risks involved. The survey questions ask about beliefs and attitudes towards women. Several questions ask whether or not you have engaged in sexual assault behaviors towards women. I understand that these risks are minimized by the completely anonymous nature of the survey. I understand that I may skip any question I prefer not to answer without penalty. Furthermore, I understand that if I do not consent, my survey will be excluded from the study. I understand that if I do consent, my responses will remain completely anonymous and all surveys will be kept on a locked, secure computer. Finally, I understand that I will be given subject pool participation credit for my participation in the study.

Several safeguards will be taken to protect my identity and confidentiality. My name will not appear on the survey. Further, the web survey materials will be kept in secure locations, accessible only to those directly involved in this project. I understand that if I choose to participate in the drawing for 5 available gift cards, I will complete a separate form with my contact information. This form will in no way be linked to the survey materials and I understand that my survey responses cannot be identified from this material.

I understand that results from this study may be used as part of a doctoral dissertation as well as published in a professional journal or presented as a scholarly presentation, but I will not be identified as an individual.

I understand that I will receive 1 hour of educational psychology subject pool participation credit for my participation in the project. I understand I will receive a completion certificate at the end of the survey that I may need to print and turn in to my instructor in order to receive research credit. I may print a copy of the online consent form for my records.

If I have any questions or concerns about participation in this research, I may contact Saroj Hardit (shardit2@illinois.edu) or the primary investigator, Dr. Dorothy Espelage (217-333-9139; espelage@illinois.edu). If I have any questions regarding my rights as a participant in this study,

I understand I can contact the University of Illinois Institutional Review Board at 217-333-2670 (collect calls will be accepted if you identify yourself as a research participant) or via email at irb@illinois.edu. A campus resource list will appear at the end of the survey. I understand that I may print this list from my web browser or that I may contact the researchers to obtain a copy.

Statement of Consent:

I have thoroughly read and understand this consent letter and voluntarily agree to participate.

Please check on “continue” to give consent and proceed to the survey.

Demographic Information

We would like to begin with some general background questions. It is important to answer all of the questions to the best of your ability. Check the number that corresponds with your response or fill in the blank. If you are unsure of the answer to a question, please give it your best guess. Your name does not appear on this questionnaire and your responses will be kept completely confidential. Thank you.

1. Age: _____
2. Sex: _____

3. Sexual Orientation: (please check one):
 Heterosexual
 Gay
 Bisexual
 Other: Please specify _____

4. Race/Ethnicity: (please check one):
 Asian-American
 African-American
 Caucasian
 Hispanic
 Native American
 Other: Please specify _____

5. Year in School: (please check one)
 Freshman
 Sophomore
 Junior
 Senior
 Other: Please specify _____

6. Do you play a varsity sport?
 Yes
 No

7. Do you play an intramural sport?
 Yes
 No

8. Are you a member of a fraternity?
 Yes
 No

9. What is your current relationship status?
 Single - not dating exclusively
 Single - dating exclusively
 Living with a girlfriend
 Engaged

- Married
- Separated
- Divorced
- Widowed
- Other (please describe) _____

10. How long has this been your relationship status?

- Less than six months
- Six months to less than one year
- One year to less than two years
- Two years to less than five years
- Five years or more

Delinquency

The following set of questions refers to things you may have done before age 18. Please remember that your name is not on the questionnaire and no one will know how you answered the questions.

Using the scale below, please answer the questions as accurately as you can.

0	1	2	3	4	5
Never	Once	Twice	Three times	Four times	Five or more times

Before age 18, how often did you:

- 1) Take little things that didn't belong to you? _____
- 2) Skip school without a valid excuse? _____
- 3) Sneak in somewhere (theater, etc.) without paying admission? _____
- 4) Take money from your parents without telling them? _____
- 5) Damage public or private property that did not belong to you just for fun? _____
- 6) Lie to your parents about where you have been? _____
- 7) Take something of value from a store without paying for it? _____
- 8) Stay out all night without your parents' permission? _____
- 9) Damage school property on purpose (library books, musical instruments, gym equipment, walls, or lockers)? _____
- 10) Lie to your teachers or to the principal to cover up something that you did? _____
- 11) Trespass someplace you were not supposed to go, like an abandoned house or restricted area? _____
- 12) Take a car or motorcycle for a joy ride? _____
- 13) Set fire to something? _____

Family Violence/Child Physical Abuse

Using the scale below, please respond to how often the following behaviors occurred in your family.

1 2 3 4 5
Never sometimes frequently

- 1) While you were growing up how often did your father (or male guardian) hit your mother (or female guardian)? _____
- 2) While you were growing up how often did your mother (or female guardian) hit your father (or male guardian)? _____
- 3) How frequently did your parents (or guardians) have fights while you were growing up?

- 4) How often did you have fights with your parents (or guardians) when you were growing up? _____

Child Sexual Abuse

Please complete the following items regarding your childhood experiences up through 14 years of age. Please answer as completely and as honestly as you can, as your name is not on this survey.

1	2	3
no sexual experience	sexual experience without physical contact	sexual experience with physical contact

1) Using the scale above, please indicate the level of sexual experience you encountered before age 14 with anyone who was four or more years older than you. _____

Impersonal Sex

The following questions concern your consensual sexual experiences with a woman/women. Remember that your responses are confidential and will be not be shared with anyone.

1) How old were you when you first had sexual intercourse?

____ years old

or

____ I've never had sex

2) How many different consensual sexual partners have you had? _____ partners

Hostility Toward Women

The following items inquire about your beliefs about dating and women. Using the scale below, please complete the items as completely and as honestly as you can.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

- 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 by just being around. _____
- 10) Women are responsible for most of my troubles. _____

Negative Masculinity

The items below inquire about what kind of a person you think you are. Each item consists of a *pair* of characteristics, with the numbers 1-5 in between. For example:

Not at all artistic 1.....2.....3.....4.....5 Very artistic

Each pair describes contradictory characteristics-that is, you cannot be both at the same time, such as very artistic and not at all artistic.

The numbers form a scale between the two extremes. You are to choose a number which describes where you fall on the scale. For example, if you think you have no artistic ability, you would choose 1, if you think you are pretty good, you might choose 4. If you are only medium, you might choose 3, and so forth.

1. Not at all arrogant 1.....2.....3.....4.....5 Very arrogant

2. Not at all boastful 1.....2.....3.....4.....5 Very boastful

3. Not at all egotistical 1.....2.....3.....4.....5 Very egotistical

4. Not at all greedy 1.....2.....3.....4.....5 Very greedy

5. Not at all dictatorial 1.....2.....3.....4.....5 Very dictatorial

6. Not at all cynical 1.....2.....3.....4.....5 Very cynical

7. Looks out only for self 1.....2.....3.....4.....5 Looks out only for others

8. Not at all hostile 1.....2.....3.....4.....5 Very hostile

Rape Myth Acceptance Scale Items

Remember, this survey is anonymous, so please answer each of the 16 items honestly by checking the number that corresponds with the answer that best fits your opinion (strongly agree, somewhat agree, agree, somewhat disagree, strongly disagree).

1	2	3	4	5
strongly disagree	somewhat agree	agree	somewhat disagree	strongly agree

1. A woman who goes to the home or apartment of a man on their first date implies that she is willing to have sex.
2. Any female can get raped.
3. One reason that women falsely report a rape is that they frequently have a need to call attention to themselves.
4. Any healthy woman can successfully resist a rapist if she really wants to.
5. When women go around braless or wearing short skirts and tight tops, they are just asking for trouble.
6. In the majority of rapes, the victim is promiscuous or has a bad reputation.
7. If a girl engages in necking or petting and she lets things get out of hand, it is her own fault if her partner forces sex on her.
8. Women who get raped while hitchhiking get what they deserve.
9. A woman who is stuck-up and thinks she is too good to talk to guys on the street deserves to be taught a lesson.
10. Many women have an unconscious wish to be raped, and may then unconsciously set up a situation in which they are likely to be attacked.
11. If a woman gets drunk at a party and has intercourse with a man she's just met there, she should be considered "fair game" to other males at the party who want to have sex with her too, whether she wants to or not.
12. What percentage of women who report a rape would you say are lying because they are angry and want to get back at the man they accuse?

13. " What percentage of reported rapes would you guess were merely invented by women who discovered they were pregnant and wanted to protect their own reputation ?

14. A person comes to you and claims they were raped. How likely would you be to believe their statement if the person were:

 your best friend?

15. an Indian woman?
16. a neighborhood woman?
17. a young boy?
18. a black woman?
19. a white woman?

Adversarial Sexual Beliefs

Using the scale below, please complete the following items that ask about your relationship and sexual attitudes.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

- 1) A woman will only respect a man who will lay down the law to her. _____
- 2) Many women are so demanding sexually that a man just can't satisfy them. _____
- 3) A man's got to show the woman who's boss right from the start or he'll end up henpecked. _____
- 4) Women are usually sweet until they've caught a man, but then they let their true self show. _____
- 5) A lot of men talk big, but when it comes down to it, they can't perform well sexually. _____
- 6) In a dating relationship a woman is largely out to take advantage of a man. _____
- 7) Men are out for only one thing. _____
- 8) Most women are sly and manipulating when they are out to attract a man. _____
- 9) A lot of women seem to get pleasure in putting men down. _____

Acceptance of Interpersonal Violence

Using the scale below, please complete the following items that ask about your relationship and dating attitudes.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

- 1) Being roughed up is sexually stimulating to many women. _____
- 2) Many times a woman will pretend she doesn't want to have intercourse because she doesn't want to seem loose, but she's really hoping the man will force her. _____
- 3) A wife should move out of the house if her husband hits her. _____
- 4) Sometimes the only way a man can get a cold woman turned on is to use force. _____
- 5) A man is never justified in hitting his wife. _____

Male Peer Support

Attachment to Abusive Male Peers

Using the choices below report how many of your male friends engaged in the following three behaviors in dating relationships in the twelve months before this study.

Responses are: none; 1 or 2; 3 to 5; 6 to 10; more than 10; and don't know.

1. Made physically forceful attempts (e.g., holding her down, twisting her arm, etc.) at sexual activity which are disagreeable and offensive enough that the woman responds in an offensive manner such as crying, fighting, screaming, pleading, etc.
2. Resorted to physical force (e.g., holding her down, twisting her arm, etc.) in order to resolve conflicts with their girlfriends or to make them fulfill some demand.
3. Insulted dating partners, swore at them, or withheld affection.

Peer Pressure to Have Sex

Please answer the question below using the following scale: a great deal, considerable, moderate, little, and none.

1. "How much pressure did your friends place on you to have sex with your dating partners and/or girlfriends?"

Sexualized Media Consumption

Unwanted Exposure

Please answer the following questions with “yes” or “no”.

1. “In the past year, when you were doing an online search or surfing the Web, did you ever find yourself in a Web site that showed pictures of naked people or of people having sex when *you did not want to be in that kind of site?*”
2. “In the past year, did you ever receive e-mail or Instant Messages *that you did not want* with advertisements for or links to x-rated Web sites?”
3. “Did you ever *open* a message or a link in a message that showed you actual pictures of naked people or of people having sex *that you did not want?*”

General Exposure to Sexual Media

Please indicate the amount in which you view the following types of media each day. Use the following scale:

- (1) I don’t view this type of media daily
- (2) 1-2 hours per day
- (3) 3-4 hours per day
- (4) 5-6 hours per day
- (5) 7-8 hours per day
- (6) More than 8 hours per day

4. Movies
5. Magazines
6. Television Shows
7. Music Videos
8. Internet

History of Pornography

9. How often do you view *Internet* pornography (*still images*)?
 - a. Once a month or less
 - b. Once a week
 - c. Several times a week
 - d. Daily
 - e. Several times daily
 - f. Never
10. How often do you view *Internet* pornography (*streaming video*)?

- a. Once a month or less
- b. Once a week
- c. Several times a week
- d. Daily
- e. Several times daily
- f. Never

Sexual Aggression

For each of the seven items listed below, check "yes" or "no" if *you* have engaged in these behaviors even if it was because your male friends encouraged you to do so or told you it was appropriate behavior.

1. Have you ever responded to your dates' or girlfriends' challenges to your authority by using physical force (e.g., holding her down, twisting her arm, etc.)?
2. Have you ever responded to your dates' or girlfriends' challenges to your authority by insulting them?
3. Do you think that it is alright for a man to hit his date or girlfriend in certain situations?
4. Did any of your male friends tell you that if a man spends money on a date, he should receive sexual favors in return?
5. Do you believe your dates or girlfriends should have sex with you when you want?
6. Have you ever responded to your dates' or girlfriends' sexual rejections by employing force (e.g., twisting her arm, holding her down, etc.) to receive sexual rewards?
7. Have you ever physically forced (e.g., twisting her arm, holding her down, etc.) a woman to provide sexual favors?

Debriefing Form

Thank you for participating in this study. This study was designed to assess the relationship of personality and social factors to the occurrence of sexual aggression in a college population. The primary focus is on male against female sexual aggression. Research has shown that many college men are at risk for perpetrating sexual aggression. However, less is known about the impact of male peer support groups and the influence of sexualized media. Understanding the cultural factors and individual personality and emotional factors that are involved in sexual aggression will assist in the development of more effective prevention, intervention, and treatment strategies. The data you have provided for this study will help determine how certain risk factors interact to predict sexual aggression among college men.

All of your responses to the questionnaires used in this study are strictly confidential. The results of this study may be used for a dissertation, scholarly report, journal article, or conference presentation. In any publication or public presentation, you will not be identified as an individual. Results will be reported as group averages. If you have any questions or comments about this study, please feel free to contact the investigators, Saroj Hardit (shardit2@illinois.edu) or Dr. Dorothy Espelage (espelage@illinois.edu; 333-9139).

We realize that some of the issues addressed in this survey are sensitive and can be difficult to deal with. You may be struggling with some of the issues addressed in the survey. Should you become concerned or upset after completing this study, there are several campus resources available to you. Please call or visit on the following locations if you have any further concerns.

Campus Resources

Counseling Center

610 E. John Street
Champaign, IL 61820
(217) 333-3704

Initial Appointments are made on a same-day basis by calling the Counseling Center any time after 7:50 a.m. These appointments tend to fill up quickly, and students are encouraged to call early on the day that they would like to meet with a counselor.

The Counseling Center also provides emergency consultations to students with urgent mental health concerns between 8:00 am and 5:00 pm, Monday through Friday. Please call 333-3704 if you have an immediate need to meet with a counselor. After 5:00 pm and on weekends, please contact the Crisis Line at 359-4141 to speak with a counselor.

McKinley Health Center

1109 S. Lincoln Ave.
Urbana, IL 61801
(217) 333-2705

McKinley's staff of mental health professionals includes psychiatrists, psychologists, a clinical nurse specialist, and social workers. The Mental Health Department at McKinley provides evaluation and consultation for a variety of emotional and behavioral difficulties. Short-term psychotherapy and medication treatment are provided, when indicated.

In Case of Emergency: After hours service is accessed through the Champaign County Mental Health Center Crisis Line: 359-4141.