Dating Violence and Sexual Assault Among College Men:
Co-Occurrence, Predictors, and Differentiating Factors

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ABSTRACT

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The present study was designed to test a modified model of sexual aggression in general, and verbal abuse and physical violence in a dating relationship. In addition, it examined the co-occurrence rates of aggressive behaviors, and the cumulative effect of risk factors on the likelihood of engaging in violent behavior. Finally, the present study looked at which predictor variables could successfully differentiate between the various forms of aggression, and between those who engage in one or two forms of aggression and those who engage in all three forms of aggression. Participants included 514 college men who completed surveys assessing for history of sexual aggression, history of dating violence, family violence, adolescent delinquency, sexual and dating experiences, hostile attitudes toward women, gender role strain, psychopathy, sensation seeking, empathy, narcissism, depression, self-esteem, substance use, and social desirability. A path analysis was conducted to predict perpetration of sexual aggression, and verbal abuse and physical violence in a dating relationship. Significant paths included family violence, adolescent delinquency, hostile masculinity, sexual promiscuity, and heavy alcohol use. Problem drinking behaviors emerged as the most influential variable in the path, predicting each form of aggression. Analyses were also conducted to examine the co-occurrence of aggression, and it was notable that there was no significant relationship between
perpetration of sexual aggression and perpetration of physical violence, and no participants reported having engaged in both forms of violence. Several of the predictor variables were able to differentiate between men who engaged in various forms of violence, including adolescent delinquency, problem drinking, hostile attitudes toward women, and psychopathy. Implications for future research and prevention programming are also addressed.

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CHAPTER 1: REVIEW OF THE LITERATURE

Overview

Violence against women remains a serious and ongoing problem, despite numerous preventative efforts. On college campuses, substantial attention has been paid to the alarmingly high rates of sexual assault documented since the 1980s, and yet incidence rates remain virtually unchanged (Campbell & Wasco, 2005). Though a variety of theoretical models exist to explain sexual aggression, none have been able to effectively identify the critical avenues through which lasting behavior change can be attained (Campbell & Wasco, 2005). Dating violence among college students has also received increasing attention from researchers; however, the lack of consistency in this research has hindered prevention efforts (Lewis & Fremouw, 2001).

For the most part, sexual assault and dating violence have been examined independently; however, in recent years there has been a shift to also examine the relationship between these forms of aggression (i.e., Gidycz, Warkentin, & Orchowski, 2007; Sears, Byers, & Price, 2007). Considering the significant psychological and social costs of interpersonal violence, and the relative inefficiency of prevention programs targeting sexual aggressors, it is particularly important that researchers continue efforts to better understand the nature of sexual aggression and dating violence, and the characteristics of those who perpetrate it.
Definitions of Rape and Sexual Assault

Though often used interchangeably, there are important differences between the terms “rape” and “sexual assault.” The former generally refers to a legal definition, such as the Ohio state law, which defines rape as the penetration of the vagina, mouth or anus, either through the use of force or the administration of a drug or intoxicant (Ohio Revised Code §§28907.01-2907.02, 1998). The latter is a broader term, more frequently used by researchers. The term “sexual assault” includes a range of other behaviors such as unwanted sexual touching or fondling and the use of arguments or pressure to coerce a woman into having sexual intercourse, in addition to the legal definition of rape.

Koss and Oros’ (1982) conceptual approach, which views sexual assault as occurring on a continuum ranging from sexually aggressive contact (e.g., kissing or touching) to verbally coerced intercourse to attempted rape and rape, is the most commonly used classification among researchers. Other researchers, however, have chosen more narrow definitions of sexual assault. For example, in the National Violence Against Women Survey (NVAWS), women were considered victims of sexual assault if they “had ever in their lifetime been forced or threatened by a man or woman to have anal, oral or vaginal intercourse,” thus excluding instances of sexual coercion or the use of drugs or alcohol to obtain sexual intercourse (p. 58; Brecklin & Ullman, 2002). For the purposes of the present study, the terms sexual assault and sexual aggression will be used interchangeably, and will include the full range of unwanted sexual behaviors from forced sexual contact to the use of force to engage in sexual intercourse.
Rates of Sexual Assault

Determining an accurate prevalence rate of sexual assault has been difficult not only because victims often do not report the crime to the police, but also because they themselves may not define the act as a sexual assault. The Uniform Crime Report defines forcible rape as “carnal knowledge of a female forcibly and against her will,” and states that 92,455 forcible rapes were reported in the year 2006, or about 60.9 forcible rapes per 100,000 female inhabitants (FBI, 2006). This represents a 2.9% decrease from 2005, in which there were 62.7 forcible rapes per 100,000 female inhabitants (FBI, 2006). It should be noted, however, that these numbers include only those cases that are reported to the police or other authorities, and it has been estimated that only 16% of rape cases are ever reported (Kilpatrick, Edmonds, & Seymour, 1992).

In an effort to include those women who do not report their assaults to the police, and thus determine more accurate estimates of prevalence rates, additional studies have been conducted at the national and local levels. The NVAWS involved the administration of telephone interviews between 1995 and 1996 to a randomly chosen national sample of 8,000 women aged 18 years and older (Brecklin & Ullman, 2002). Their findings revealed that 18.1% of the women reported an incidence of attempted or completed rape occurring after the age of 14 years (Brecklin & Ullman, 2002). Similarly, the 1991 National Study of Health and Life Experiences of Women surveyed 1,099 females aged 21 years or older and found that 22% of respondents reported experiencing an unwanted sexual experience after the age of 18 years (Ullman & Brecklin, 2000).
The prevalence of rape on college campuses is even higher than that among the general population. In a national study of university students, Brener, McMahon, Warren, and Douglas (1999) found that 20% of female respondents reported having sex forced on them against their will at some point during their lives. This rate actually represents an increase from earlier rates reported almost 20 years ago, in which approximately 15% of undergraduate women reported experiencing a completed rape at some point during their lives (Koss, Gidycz, & Wisniewski, 1987; Muehlenhard & Linton, 1987).

Perpetrator reports of sexual assault, however, deviate significantly from victim reports. In their national study, Brener and colleagues (1999) found that only 4% of college men reported forcing a woman to have sexual intercourse, and an almost identical reporting rate has been found by studies focusing on high school students (4.3%; Coker, McKeown, Sanderson, Davis, Valois, & Huebner, 2000). Recent studies of undergraduate men at Ohio University have found the lifetime prevalence of engaging in any form of sexual aggression ranges between 17.7% (Gidycz et al., 2007) and 31.2% (Loh & Gidycz, 2006), while rapes or attempted rapes were reported by between 3.7% (Loh & Gidycz, 2006) and 5.9% (Gidycz et al., 2007) of college men. Again, these reporting rates are almost identical to reports of rape found in earlier studies, which ranged from 4.4% (Koss et al., 1987) to 7.1% (Muehlenhard & Linton, 1987).

Also significant is the incidence at which perpetrators report engaging in sexual aggression over time. An incidence rate of 17.4% has been found over a 3-month period (Loh & Gidycz, 2006), with a 14.2% rate over a 1-year interim (Abbey & McAuslan, 2004), and a rate of 34.5% over 4 years (White & Smith, 2004). When only examining
acts that constitute rape, researchers have found a 3-month incidence rate of between 2.6% (Gidycz et al., 2007) and 3.7% (Loh & Gidycz, 2006), and a 1-year incidence rate of 4.5% (Abbey & McAuslan, 2004).

The discrepancy between victim and perpetrator reports of sexual aggression are more likely due to the underreporting on the part of the perpetrators rather than over reporting on the part of victims for several reasons. First, in Koss and colleagues’ (1987) national study of university students, an examination of the number of acts reported by both victims and perpetrators revealed “virtually identical” reporting rates, leading the authors to conclude that the discrepancy is due more to perpetrators underreporting their behavior, than to a few extremely active men sexually assaulting a large number of women (p. 169). Second, approximately 35% of male college students have reported that they would commit rape if they could be assured they would not be caught (Malamuth, 1988), indicating that the proclivity to engage in such sexually aggressive behaviors exists in far more men than actually report such behaviors. Finally, researchers (e.g., Koss et al., 1987) have noted that asking participants to report a victimization experience has different implications than reporting an act that might be against the law, leading to a greater reluctance on the part of the perpetrator to self-disclose his behaviors.

Thus, sexual assault remains prevalent in both the community and on college campuses, despite increased efforts to prevent such victimization. Though rates reported by perpetrators are noticeably lower than those reported by victims, this does not necessarily mean that a small group of men are engaging in sexual aggression with a
large number of women. Rather, perpetrators may be less likely to endorse having engaged in such behavior.

**Definitions of Dating Violence**

Differing definitions of dating violence, and the behaviors that are included, has clouded much of the research in this area. Legal definitions of domestic violence (the use of physical violence in a relationship) often focus on the presence of physical injury or threat of injury to an intimate partner (Ohio Revised Code §§3113.33-3113.40, 1998; United States Code, §§2261-2261A, 1996), and do not include the use of verbal aggression by a partner unless there is a threat of physical harm to the victim. Researchers also vary in their definitions of verbal abuse or physical violence, often using the terms aggression, abuse and violence interchangeably. Further complicating the issue is the fact that the majority of studies published on these topics fail to provide a clear definition of how the violence was conceptualized (Jackson, 1999). Some researchers (i.e., Kilpatrick, 2004) have called for the creation of a more universal definition of violence occurring in the context of an intimate relationship, but there is not yet consensus on how broad or narrow such a definition should be. However, Fox (1993) argues that a broader definition effectively trivializes the more severe acts of violence by combining them with acts that are debatably abusive, such as assuming that someone swearing at their partner occurs on the same continuum as someone physically hitting their partner.

Sugarman and Hotaling (1989) presented one of the more commonly used definitions among researchers, which defines dating violence as “the use or threat of
physical force” within a dating relationship, but this clearly ignores the presence of verbal abuse (p. 5). The American Psychological Association (1996) provides a more comprehensive definition, describing partner violence as “physical or psychological maltreatment perpetrated by men against women to gain control, power or authority;” however, the gender specificity of this definition limits its applicability.

Conducting dating violence research with college student samples also provides some additional challenges not often encountered when working with community samples. For example, the operational definition of “partner” often varies depending on the population being sampled. Adolescents tend to engage in intimate relationships that can range from a long-term boyfriend or girlfriend to a casual sexual encounter, whereas research with community samples often focuses on married or co-habitating couples (Hickman, Jaycox, & Aronoff, 2004). For the purposes of the present study, the term verbal abuse will refer to the use of non-physical forms of aggression within a dating relationship, such as insulting or swearing at a partner, or making verbal threats. Physical violence will refer to the use of physical forms of aggression within a dating relationship, such as punching a wall or hitting or shoving a partner. Oftentimes researchers do not differentiate between these two forms of violence in their reporting of results; in these instances, the combination of verbal abuse and physical violence will be referred to as dating violence.

Rates of Dating Violence

Among community samples, physical violence is not uncommon. Studies conducted with community women indicate that approximately 22% have experienced a
physical or sexual assault by an intimate partner at some point in their lives (Tjaden & Thoennes, 1998), and 20% reported the presence of violence in a current or recent relationship (Coker, Smith, McKeown, & King, 2000). Similarly, studies using samples of community men have found rates of perpetrating physical violence against their partner within the previous 12 months ranges from 21.9% (Stets & Henderson, 1991) to 37% (Slep & O’Leary, 2005), while acts of severe physical violence range from 3.4% (Stets & Henderson, 1991) to 13.5% (Slep & O’Leary, 2005).

Among college students, reports of physical violence vary substantially across studies. Approximately 35% of female college students have reported being physically victimized by an intimate partner since they finished high school (Bernard & Bernard, 1983; DeKeseredy & Kelly, 1995; Sugarman & Hotaling, 1989). Conversely, data obtained from male college students indicate that between 10% and 43% of college men perpetrated physical violence against their intimate partner (Barnes, Greenwood, & Sommer, 1991; Luthra & Gidycz, 2006; White & Koss, 1991). However, in a recent study of male undergraduates at Ohio University, only 6.2% of respondents reported engaging in some form of physical violence with their dating partner (Gidycz et al., 2007).

It should also be noted that physical violence appears to begin at early age, with reports emerging in adolescence starting around the ages of 15 to 16 years (Bethke & DeJoy, 1993). Similarly, a sample of community women found the mean age of their first experience with a violent relationship was 22 years, with a standard deviation of 6 years (Coker, Smith et al., 2000), indicating that it is not uncommon for physical violence to begin around the age of 16 years. While more severe levels of physical violence in dating
relationships are less common among adolescents and college students than minor acts of violence (i.e., Barnes et al., 1991; Cate, Henton, Koval, Christopher, & Lloyd, 1982; Deal & Wampler, 1986; DeKeseredy & Kelly, 1995; Riggs, O’Leary, & Breslin, 1990; Sigelman, Berry, & Wiles, 1984; Stets & Pirog-Good, 1987), it is significant that 6.1% of male adolescents in a sample of high school students reported beating a dating partner (Coker, McKeown et al., 2000). Further, 25% of college men in one study reported having engaged in physical violence on more than one occasion (Barnes et al., 1991), indicating that such behavior not only emerges early in life, but also tends to recur over time.

Few studies have examined the presence of verbal abuse as separate from physical violence, in part because research has found such high co-occurrence rates between the two (Lundeberg, Stith, Penn, & Ward, 2004; Magdol, Moffitt, Caspi, & Silva, 1997; Ray & Gold, 1996). Among those studies that have examined rates of verbal abuse, it has been found to be pervasive. For instance, community samples have found self-report rates of verbal abuse among women are approximately 23% (Coker, Smith et al., 2000). Further, in a sample of young adult men, researchers found that the perpetration of verbal abuse was significantly correlated with the use of physical violence ($r = .74$; Magdol et al., 1998).

Verbal abuse is more commonly reported among college students than physical violence, and can range from insults or swearing to threats of violence. Data indicate that between 80% and 90% of college student samples have reported using acts of verbal abuse with their dating partner in the previous 12 months (Gidycz et al., 2007; Stets &
Henderson, 1991; Shook, Gerrity, Jurich, & Segrist, 2000; White & Koss, 1991). Further, it should be noted that although these acts are less severe, they do not appear to be isolated events. Acts of verbal abuse appear to occur repeatedly in dating relationships, and a recent study found that the 3-month incidence rate of verbal abuse perpetrated by college men was as high as 74% (Gidycz et al., 2007). Further, previous research (e.g., Rich, Gidycz, Warkentin, Loh, & Weiland, 2005) has demonstrated that the cumulative effects of verbal abuse can be as detrimental, if not more so, than physical violence.

Thus, physical violence within dating relationships or marriages remains a serious issue, with approximately one in five men in the community reporting having engaged in some form of physical violence. Research regarding the rates of physical dating violence varies quite a bit across studies, however, with perpetration rates ranging from 6% to 43%. Previous research has also demonstrated that such behaviors tend to begin early in life, and recur over time. Similarly, research has found that verbal abuse occurs in a majority of college relationships, with reports indicating that between 80% and 90% of college students use verbal abuse with their partner. This is particularly significant given the large correlation of verbal abuse with physical violence and the detrimental effects of verbal abuse over time.

Co-Occurrence of Sexual Assault and Dating Violence

Very few studies have examined the co-occurrence of dating violence and sexual assault. One of the most recent of these studies was conducted using a sample of 663 adolescent boys and girls, between the ages of 12 and 18 years (Sears et al., 2007). Researchers examined the use of verbal, physical, and sexual aggression within a dating
relationship, and found that 19% of boys reported using two or more forms of violence with their dating partner.

Gidycz and colleagues (2007) have conducted the only study to date that examines the co-occurrence of sexual aggression in general, and verbal abuse and physical violence with dating partners. They found that men who reported a history of verbal abuse were significantly more likely to also report a history of sexual aggression and a history of physical aggression. However, no such relationship existed between reports of sexual aggression and physical violence. Thus, their results suggest that there are some important differences between men who engage in sexual aggression and those who engage in physical violence.

**Models of Sexual Aggression and Dating Violence**

Given the broad nature of this field of research, empirically-based theoretical models are important in understanding past findings and setting a foundation for future research. One such model is the confluence model of sexual aggression formulated by Malamuth, Sockloskie, Koss and Tanaka (1991), which is based on data from a nationally representative sample of male college students. Their findings revealed that early life experiences converged with other risk factors to create two paths leading to sexual aggression: sexual promiscuity and hostility toward women (see Figure 1).

Within the context of this model, early life experiences includes the convergence of parental violence and child abuse in the family of origin, which may lead to delinquent behaviors in adolescence (Malamuth et al., 1991). Specifically, growing up in an environment where violence occurs between the parents, or the child experiences abuse
(especially child sexual abuse) might negatively impact the child’s cognitive and behavioral development. The child may view male-female intimate relationships as inherently hostile or adversarial, and feelings of shame or inadequacy involving sex may lead to exaggerated attempts to self-protect through anger and the need to control, thereby increasing the risk of behaving aggressively with women.

One consequence of these early developmental processes could be a tendency for the child to have difficulty tolerating frustration or forming a prosocial identity, resulting in increased involvement with delinquent peers (Malamuth et al., 1991). The presence of delinquent peers may also increase the likelihood of engaging in antisocial behaviors, which could reinforce hostile schemas and further disrupt the development of frustration tolerance and a prosocial identity. These influences may result in a desire to adopt adult behaviors (especially with regard to sexual behavior) before they have the developmental capacities to deal with them, and a tendency to use coercive behavior to obtain a desired outcome rather than using negotiation. These risk factors related to delinquent behavior can then influence further coercive behavior through either of the two paths.

The first path, that of hostile masculinity, appears to be the result of a convergence between delinquency and attitudes which are supportive of violence (Malamuth et al., 1991). Specifically, some subcultures within delinquent peer groups may be more encouraging of attitudes and behaviors which reinforce or are supportive of violence in general, and violence against women in particular. Further, these subcultures may place a high premium on the use of aggression, dominance, and toughness, which could lead to greater hostility and aggression in interpersonal relationships and the use of
aggression to control others. Similarly, these men may view women’s use of power and control through their sexuality as threatening, thus responding more defensively to a perceived rejection, which can result in the use of hostile behaviors to regain dominance.

The second path, which is based on sexual promiscuity, may result from the presence of delinquent peers who are more likely to encourage casual sex than non-delinquent peers (Malamuth et al., 1991). Further, these peers may place a greater emphasis on the use of sexual conquests to gain social status and increase self-esteem. Thus, sexual behaviors such as having sex at an earlier age, having more than one sex partner concurrently, and engaging in a number of casual sexual encounters would likely be reinforced, and behaviors such as sexual coercion may be viewed as acceptable means to obtain them.

Malamuth, Linz, Heavey, Barnes, and Acker (1995) later conducted a 10-year follow-up with this original sample and attempted to create a model that incorporates nonsexual forms of violence. In creating an elaborated confluence model of conflict with women, Malamuth and colleagues (1995) included slightly different risk factors than those used in the confluence model of sexual aggression (see Figure 2). Specifically, they chose not to include the influence of early childhood experiences (parental violence or child abuse) or delinquency since that data were more relevant at baseline. In addition, they included two factors related to the construct of hostile masculinity: proneness to general hostility (i.e., irritability, emotional susceptibility, affect intensity, and impulsiveness) and masculine role stress (i.e., degree of stress associated with situations that challenge traditional sex roles). Nonsexual forms of distress or aggression were also
incorporated: relationship distress, verbal non-sexual aggression (i.e., verbal abuse within the context of a dating relationship), and physical non-sexual aggression (i.e., physical violence within the context of a dating relationship).

As is evident in their elaborated confluence model of conflict with women, many factors converge to lead to an increased risk of conflict, with a variety of both direct and indirect influences present. For instance, a proneness to general hostility has a direct influence on verbal non-sexual aggression, and indirectly influences physical non-sexual aggression through verbal non-sexual aggression. Similarly, the influence of masculine gender role stress appears to be mediated by both hostile masculinity and attitudes, while a proneness to general hostility has a direct influence on both relationship distress and verbal non-sexual aggression. Furthermore, a risk analysis demonstrated that individuals who scored high on all five risk variables reported significantly greater levels of sexual aggression than participants with less than five risk factors.

Although Malamuth and colleagues (1995) did not include early childhood experiences or delinquency in their elaborated model, it is likely that these variables would continue to exert an influence on later aggressive behavior, based on the findings in the previous model. Thus, sexual aggression and the occurrence of verbal abuse and physical violence in dating relationships appear to have many of the same risk factors, both proximally and distally. This convergence of risk factors may lead to a greater co-occurrence of aggression; however, it may also allow researchers to better discriminate among men who engage in different forms of aggression.
Characteristics of Perpetrators

To better understand the factors leading to aggressive behavior in Malamuth and colleagues’ (1991; 1995) models, each factor will be examined as it relates to each form of aggression. Often studies examining physical violence and verbal abuse in romantic relationships fail to distinguish between them, so both forms of aggression will be referred to as dating violence, and distinctions between these behaviors will be made when possible.

Developmental and Socialization Influences.

Specific developmental and socialization factors that have been examined among perpetrators of interpersonal violence include violence in the family of origin, adolescent delinquency, increased sexual activity, and membership in all-male peer groups. Numerous studies have examined the transmission of violence within the family, and have demonstrated that experiencing violence in childhood is a significant risk factor for engaging in physical violence with an intimate partner later in life (e.g., Bernard & Bernard, 1983; Kaura & Allen, 2004; O’Keefe, 1998; Riggs, Caulfield, & Street, 2000; Stith, Rosen, Middleton, Busch, Lundeberg, & Carlton, 2000; Sugarman & Hotaling, 1989). In one of the earlier studies examining this phenomenon, Bernard and Bernard (1983) discovered that 73% of male undergraduate students who engaged in physical violence within an intimate relationship had experienced or witnessed violence in their family of origin, compared to 32% of a sample of nonviolent men. Further, of the sample of violent men with violence in their childhood, 74% engaged in the same form of violence that occurred in their family of origin (Bernard & Bernard, 1983). Similarly,
researchers have found that men who experienced early childhood violence were significantly more likely to engage in minor forms of physical dating violence as opposed to verbal abuse (Sugarman & Hotaling, 1986). Thus, the type of violence experienced in childhood appears to be as significant as the presence of violence in general.

Several studies have also addressed the impact of violence in the family of origin on sexually aggressive behaviors. Specifically, aggression present in early family life, regardless of the recipient of the violence, increases the risk of a person engaging in sexual aggression later in life (Baron & Richardson, 1994; Forbes & Adams-Curtis, 2001). Further, a longitudinal study of college men found that experiencing victimization in childhood (including being physically punished, sexually abused, or witness to domestic violence) resulted in a twofold increase in sexually aggressive behavior in adolescence, and accounted for 24% of the variance in sexual perpetration (White & Smith, 2004).

It should be noted that some theorists (e.g., Lewis & Fremouw, 2001) have argued that the evidence of transmission of violence within the family of origin is limited and evidence of the relationship between experiencing abuse in childhood and later dating violence is inconclusive. Such criticisms are supported in part by a recent meta-analysis that found that the relationship between witnessing or experiencing violence in the family of origin, and later perpetration of physical violence with a partner, ranges from small ($r = .08$) to large ($r = .35$; Stith et al., 2000). Thus, although violence in the family of origin appears to be important, its role as a risk factor for future partner violence has been somewhat inconsistent.
A significant positive relationship has also been found to exist between adolescent delinquent behaviors and perpetration of sexual aggression (Abbey & McAuslan, 2004; Jackson, Veneziano, & Riggen, 2004). Further, Calhoun and colleagues (1997) found the presence of delinquent behavior in adolescence to be the strongest predictor of later sexual aggression. The presence of delinquent peers or peers who are accepting of violence also appears to play a significant role in later violence. Specifically, the presence of delinquent peers in early adolescence has been found to predict both sexual aggression in late adolescence (Ageton, 1983), and physical dating violence. For instance, Foshee, MacDougall, and Bangdiwala (2001) followed adolescents over a year and a half, and found that those male adolescents who had friends who were involved in, or accepting of, dating violence had an increased risk of engaging in physical dating violence themselves.

The influence of all-male peer groups, such as social fraternities and athletic teams, on perpetration of sexual assault has been extensively studied; however, its influence on perpetration of dating violence is less clear. Members of all-male peer groups, such as social fraternities and athletic teams, have been found to demonstrate significantly more sexually aggressive behavior and adherence to rape myths than men who do not belong to such groups. In addition, members of all-male social fraternities have demonstrated significantly higher levels of rape myth acceptance than control groups of college men (Boeringer, 1999; Schwartz & DeKeseredy, 1997), and these attitudes appear quite strong. For example, when the frequency of strongly agreeing with rape myth supportive statements was examined, a maximum of only 3% of the control group strongly agreed with any one statement, while up to 7% of fraternity members and
15.4% of athletes strongly agreed with at least one of the statements (Boeringer, 1999). Thus, not only are members of fraternities or athletic teams significantly more likely to accept certain rape myths, these groups tend to demonstrate a stronger adherence to such myths.

In addition to acceptance of sexual aggression, members of all-male social fraternities have been found to be significantly more likely to actually engage in acts of sexual aggression (Boeringer, 1996; Boeringer, Shehan, & Akers, 1991; Fritner & Rubinson, 1993; Loh, Gidycz, Lobo, & Luthra, 2005). Although fraternity members do not differ from non-fraternity members in self-perceived likelihood to commit sexual assault, fraternity members’ responses to a measure assessing specific sexually aggressive behaviors indicates that they use significantly more nonphysical force (Boeringer et al., 1991) and drugs or alcohol (Boeringer, 1996) to coerce a female into having sex. Interestingly, when fraternity members are asked if they have ever raped a woman, their rates do not differ from those of non-fraternity men; however, when behavior specific measures are used, these same fraternity members report engaging in significantly more sexually aggressive acts than non-fraternity members (Boeringer et al., 1991). Thus, it appears that fraternity members lack the understanding or acknowledgement that their behaviors are coercive and assaultive in nature.

Such membership in fraternities also appears to function as a risk factor over time. Specifically, a recent prospective study (Loh et al., 2005) found that fraternity membership at a baseline assessment was significantly related engaging in sexual aggression during a 3-month follow-up. Other researchers (Koss & Gaines, 1993;
Schwartz & Nogrady, 1996), however, have failed to find that fraternity membership made a significant contribution to the prediction of sexual aggression. No studies exist which have examined the relationship between dating violence and fraternity membership.

Athletic membership is also significantly related to sexual aggression (Fritner & Rubinson, 1993; Koss & Gaines, 1993), and a greater proclivity for rape (Boeringer, 1996). Further, an examination of judicial affairs records demonstrated that male undergraduate student-athletes were overrepresented in reports of sexual assault and battering (Crosset, Ptacek, McDonald, & Benedict, 1996). Other researchers, however, have failed to demonstrate significant relationships between athletic participation and a history of sexually aggressive behavior (e.g. Caron, Halteman, & Stacy, 1997).

Interestingly, although Boeringer (1996) found that student athletes reported a greater proclivity for rape, he did not find significant differences with respect to actual self-reports of sexual aggression. With regards to dating violence, Forbes, Adam-Curtis, Pakalka, and White (2006) found that participation in aggressive athletics in high school was significantly related to perpetration of verbal abuse and physical violence with dating partners among college men.

The inconsistent findings in research on fraternity members and athletic teams have been explained by a variety of theories, including level of risk, environmental factors, and peer support. Humphrey and Kahn (2000) theorize that differences in the literature could be attributed to variations among high-risk and low-risk groups of social fraternity members and athletes. When they distinguished between high- and low-risk
groups of fraternities and athletic teams based on the overall environment of the group, significantly more acts of sexual aggression were reported by the high-risk groups than the low-risk groups. Likewise, Martin and Hummer (1989) argued that the environment of fraternities and athletic teams contributes to the higher proportion of sexually aggressive behaviors. Specifically, they argued that the lack of supervision of fraternity houses contributes to the ability of members to use alcohol more frequently, which may lead to an increase in sexual assaults (Martin & Hummer, 1989). Further, the fraternity norms, including secrecy, competitiveness, preoccupation with loyalty, and protection of the group contribute to a general atmosphere that denigrates women, and encourages the use of women as sexual conquests (Martin & Hummer, 1989).

Finally, Schwartz and DeKeseredy (1997) explain differences among various fraternity and athletic groups using a male peer support model, which attributes some of the sexually aggressive behavior to the presence of sexually aggressive friends and a general climate of tolerance. In fact, 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; Alder, 1984). Further, fraternity members are significantly more likely to associate with other men who engage in behavior that is coercive or violent (Boeringer et al., 1991), thereby reinforcing any coercive or violent behaviors they themselves engage in. It should also be noted, however, that many of the rituals found among these groups that are conducive to committing a sexual assault, such as male bonding and vows of secrecy, are not unique to fraternities and athletic teams.
(Schwartz & DeKeseredy, 1997). Thus, any group of men following similar rituals could provide an environment conducive to sexually aggressive behavior.

Though there is no specific research examining the relationship between dating violence and membership in all-male peer groups, the influence of such groups on dating violence may be similar. Specifically, the tendency of such peer groups to denigrate women and view them as sexual objects may also make it easier for men to engage in verbal abuse and/or physical violence with a female dating partner. Further, the emphasis on secrecy and loyalty may also make it less likely that a man would intervene if he found out about a peer member engaging in dating violence. Such silence on the issue could then be taken as condoning that behavior by other members of the peer group, which could then further perpetuate the acceptance of dating violence.

Research has also demonstrated that adolescent boys with multiple sex partners were significantly more likely to also report a history of engaging in physical dating violence (Howard & Wang, 2003). Similarly, sexually aggressive men have a greater number of sex partners and engage in their first sexual experience at an earlier age than nonsexually aggressive men (Abbey & McAuslan, 2004; Faurie, Pontier, & Raymond, 2004; Kanin, 1985; Lalumiere, Chalmers, Quinsey, & Seto, 1996; Loh, 1999; Senn, Desmarais, Verberg, & Wood, 2000). Regardless of their higher rate of sexual experiences, however, perpetrators report dissatisfaction with the amount of sexual intercourse they have experienced, and desire more partners (Kanin, 1985; Lalumiere et al., 1996). Interestingly, Lalumiere and colleagues (1996) found that, even after controlling for sexual experience, men with a history of sexual coercion desire
significantly more partner variety and casual sex than nonsexually coercive men. Thus, it does not appear that a perpetrator’s greater number of sexual experiences leads to a larger desire for such experiences; rather, their level of desire for sexual experiences is greater from the outset. No such studies exist linking dating violence to sexual experiences. However, given the fact that dating violence occurs in the context of a romantic relationship, it is possible that men who engage in this form of aggression are more likely to seek out relationships than they are to want a series of casual sexual experiences.

Thus, quite a few studies have found a link between violence in the family of origin, and both sexually aggressive acts, and perpetration of physical violence in a dating relationship. The transmission of violence theory has been proposed as a way to explain this phenomenon, but the evidence for this remains inconclusive. Delinquent behaviors and/or delinquent peers in adolescence have also been linked to sexually aggressive behavior, and the use of physical violence in a dating relationship. Similarly, numerous studies have found a significant link between all-male peer groups, such as fraternities and athletic teams; however, it should be noted that several other studies have failed to find such a relationship. While no studies have examined the relationship between dating violence and membership in all-male peer groups, the mechanisms at work in such groups (i.e., secrecy, loyalty to peers) and tendency to objectify women might also make it more likely that these men would engage in, or condone, violence in dating relationships. Finally, sexually aggressive behavior has been linked to a higher number of sexual partners and an earlier age of sexual intercourse, as well as a greater desire for variety of sexual experiences. Though no studies have examined the
relationship between sexual experiences and dating violence, it is possible that these men are motivated more by a desire to be in a relationship than they are to engage in numerous casual sexual encounters.

**Attitudes and Beliefs Regarding Women and Gender Roles**

The notion of masculine ideology and masculine gender role strain has received a great deal of attention from researchers. Masculine ideology refers to the cognitions, values, emotions, and behaviors associated with the socialized masculine gender role, such as the belief that men are supposed to repress negative affect and emotion, substituting it with aggressive or violent behavior (Jakupcak, 2003). Similarly, masculine gender role strain occurs when there are violations to those culturally defined schemes of masculinity (Jakupcak, 2003).

Increased levels of masculine ideology, or hypermasculinity, reported among college students have been significantly related to a history of sexual aggression (Gold, Fultz, Burke, Prisco, & Willett, 1992; Lackie & de Man, 1997; Murnen, Wright, & Kaluzny, 2002), as well as predictive of future sexually coercive behaviors (Norris & Kerr, 1993; Vaas & Gold, 1995). Similarly, a recent meta-analysis found a significant and strong effect size between masculine ideology and sexual assault perpetration ($d = .61$; Murnen et al, 2002). Further, in a laboratory study which exposed male college students to audiotaped scenarios of an acquaintance rape and measured corresponding physiological arousal, results indicated that men with increased levels of hypermasculinity became significantly more aroused by the scenario than those with lower levels (Bernat, Calhoun, & Adams, 1999). Thus, even those men who have not
engaged in sexually aggressive behaviors exhibit a physiological arousal to such situations, which likely increases their risk for engaging in sexually aggressive behaviors in the future.

Though it would seem that physically violent men would have a greater level of masculine ideology, this is not always the case. Some researchers have found that men who engage in partner violence report fewer masculine traits than nonviolent men (LaViolette, Barnett, & Miller, 1984), while others have found no differences at all in masculinity traits (Bernard & Bernard, 1983; Burke, Stets, & Pirog-Good, 1988; Worth, Matthews, & Coleman, 1990). Despite this, several studies have demonstrated the relationship between increased masculine ideology and a history of physical violence (Jenkins & Aube, 2002; Ray, 1999; Thompson, 1991) and verbal abuse (Good, Hepper, Hillenbrand-Gunn, & Wang, 1995; Jenkins & Aube, 2002) in dating relationships among college students.

Similarly, increased levels of masculine gender role strain have been found to significantly predict a history of engaging in both verbal abuse and physical dating violence among college students (Jakupcak, Lisak, & Roemer, 2002). Further, when men who are high in masculine gender role strain are given a dating conflict scenario, they are more likely to endorse aggressive behaviors to resolve the conflict than are men who are low in masculine gender role strain (Franchina, Eisler, & Moore, 2001). Some researchers have hypothesized that when a man experiences a perceived threat to his masculinity, he uses violence to counter the negative affect involved with such a threat (e.g., Jakupcak, 2003; Moore & Stuart, 2005; Schwartz, Waldo, & Daniel, 2005). Thus, if
a man feels his masculinity is being called into question during a conflict with a dating partner, he may be more likely to respond with violence if he feels pressure to abide by that masculine role.

A related notion to masculinity is that of adherence to extreme traditional gender roles, also referred to as gender-role ideology. Fitzpatrick, Salgado, Suvak, King, and King (2004) define gender-role ideology as an “individual’s attitudes and beliefs about the proper roles of men and women…how one judges the appropriateness of behaviors and characteristics of men and women in our society” (p. 92). As such, the construct of gender-role ideology goes beyond the concept of masculine ideology by including beliefs about the roles of women as well.

Sexually aggressive and coercive behavior has consistently been linked to adherence to extreme stereotypical gender roles, and generally hostile attitudes toward both women and heterosexual relationships. Men who are more accepting of extremely traditional or stereotypical gender roles have been found to be significantly more likely to use manipulative strategies (e.g., verbal coercion, getting the woman intoxicated) or rape in order to obtain sexual intercourse than are men who are less accepting of such extreme gender roles (Carr & VanDeusen, 2004; Loh et al., 2005; Muehlenhard & Falcon, 1991). In addition, rapists demonstrated more adherence to the principles of traditional gender roles and male sexual dominance than did verbally coercive or noncoercive men (Muehlenhard & Falcon, 1991), indicating that the presence of such beliefs may be associated with more severe acts of sexual aggression.
Increased levels of conservative attitudes regarding gender-role ideology are predictive of an increased frequency of both verbal abuse (Fitzpatrick et al., 2004; Ray & Gold, 1996; Reitzel-Jaffé & Wolfe, 2001) and physical violence among college students (Fitzpatrick et al., 2004; Parrott & Zeichner, 2003; Reitzel-Jaffé & Wolfe, 2001; Schumacher, Feldbau-Kohn, Slep, & Heyman, 2001). Further, more conservative gender role ideologies have been associated with an increased tolerance of dating violence (Fitzpatrick et al., 2004).

Hostility towards women in general, and heterosexual relationships in particular, has also been associated with aggression toward women. Not only have perpetrators of sexual aggression espoused more hostile attitudes toward women (Abbey & McAuslan, 2004; Marshall & Hambley, 1996), but a study that assessed implicit associations found that sexually aggressive men also have stronger associations in their memory between the constructs of women and hostility (Leibold & McConnell, 2004). Lastly, Loh and colleagues (2005) found greater adherence to the belief that heterosexual relationships are inherently hostile or manipulative was significantly related to both a history of sexual aggression, as well as predictive of sexual aggression over the course of a 6-month follow-up.

Parrott and Zeichner (2003) had college men engage in an adversarial relationship with a fictitious female confederate who either used low or high provocation directed toward the participant. Participants were able to give her a series of shocks, and they had sole choice over the frequency, duration and intensity of each individual shock. The researchers found that, compared with men with low levels of masculinity, men with
increased levels of masculinity administered higher levels of shock, for a longer duration of time, and at a higher severity, showed increased levels of aggression following high provocation interactions, and began to respond aggressively earlier in the experiment. These results support the notion of gender role strain, in that the participants may have felt that their masculinity was threatened by the interaction and thus responded with greater levels of aggression.

Thus, masculine ideology has been linked to sexual aggression, however, the findings regarding masculine ideology and dating violence are mixed. In addition, men who are experiencing masculine gender role strain appear to be more likely to engage in verbal abuse, and to respond to a conflict with a dating partner by becoming aggressive than are men with less masculine gender role strain. A strong adherence to traditional gender roles has also been found to be related to sexually aggressive behaviors, and both verbal abuse and physical violence in dating relationships. Finally, adhering to the belief that heterosexual relationships are adversarial in nature has been associated with an increased likelihood to engage in sexual aggression, and an overall tendency to respond to women with aggression.

**Personality Characteristics**

Several personality characteristics have been studied with regard to interpersonal violence, including psychopathy, narcissism, sensation seeking, and empathy. Men who endorse a greater number of psychopathic traits report significantly more sexually aggressive acts than men who endorse a smaller number of psychopathic traits (Kosson, Kelly, & White, 1997) and the presence of psychopathic traits has been shown to act as a
risk factor for future sexually aggressive acts (DeGue & DeLillo, 2005; Quinsey & Lalumiere, 1996). Interestingly, it appears that specific traits of the psychopathic personality may differentially influence the type of tactics a perpetrator frequently uses to engage in sexual assault. Specifically, Kosson and colleagues (1997) found that characteristics of an impulsive and antisocial personality were more strongly related to sexual aggression achieved through the use of manipulative and exploitive behavior or verbal coercion, while narcissistic traits were more strongly related to the use of authority, and callous personality traits were associated with the use of threat and/or force. Some theorists (e.g., Lalumiere et al., 1996) have posited that such personality traits would be consistent with findings that sexually aggressive men prefer, and have been successful at, opportunistic and short-term approaches to obtaining sexual intercourse, such that they have little to no interest in attempting to manage a long-term relationship like those often preferred by women.

Similarly, certain aspects of narcissism may contribute to an increased risk for engaging in sexual aggression. Specifically, Bushman, Bonacci, van Dijk, and Baumeister (2003) note that certain traits of narcissism, such as decreased empathy for others and an inflated sense of entitlement, may foster tendencies toward the use of sexually coercive behaviors. Further, the heightened reactance that these men may experience if their sexual advances are rejected may result in a desire to “take what has been denied” and the willingness to do so with aggression if necessary (p. 1027; Bushman et al., 2003). Several studies conducted by Bushman and colleagues (2003) using a college student population support these assertions, in that narcissism has been
found to correlate positively with acceptance of rape myths and negatively with empathy toward rape victims. Further, when participants’ enjoyment of a filmed depiction of rape was examined, results indicated that narcissists responded to the scenes more favorably than other college men. Finally, in an interesting test of narcissistic reactance, a female confederate refused to read a sexually arousing passage aloud to the participant, though she allegedly had read it for other participants. Men with narcissistic traits responded more punitively (such as recommending a lower level of pay for the confederate) than both men with fewer narcissistic traits as well as narcissistic men who did not receive the refusal from the confederate. Other researchers (i.e., Twenge & Campbell, 2003) have also found college students with greater narcissistic traits to respond more aggressively to a social rejection than a control group. Thus, some evidence exists for the influence of narcissistic traits on attitudes toward sexual aggression and responses to perceived rejection.

Personality characteristics often present in narcissistic or psychopathic personalities have also been found to increase the risk of engaging in violence with an intimate partner. Researchers have been able to distinguish samples of batterers from those of community men based on the presence of characteristics of psychopathy (Dutton, 1998; Hastings & Hamberger, 1988; Holzworth-Munroe & Stuart, 1994) and narcissism (Hastings & Hamberger, 1988), particularly with regard to the tendency to focus on their own needs and emotions, with little consideration for others. Further, it does not appear that these traits have to be at clinically significant levels in order to exert an influence. Gondolf and White (2001) assessed a group of repeat batterers and found
that approximately half of them demonstrated characteristics of psychopathy, even though only 11% met the diagnostic criteria of primary psychopathic disorder.

Sensation seeking refers to the need for different novel and complex experiences, as well as a willingness to take physical and social risks in order to engage in such experiences (Seto, Lalumiere, & Quinsey, 1995). Research has found that sexually coercive men report greater levels of sensation seeking than non-sexually coercive men (Seto et al., 1995). Further, a major component of sensation seeking, impulsivity, has been found to be related to a history of perpetrating sexual aggression (Ouimette, 1997; Spence, Losoff, & Robbins, 1991). Impulsivity has also been found to be related to perpetration verbal abuse and physical violence in married couples (Stuart & Holtzworth-Munroe, 2005).

Empathy is another personality variable that has been examined with regards to interpersonal violence. For instance, studies have found that sexual offenders displayed significantly less empathy toward their victims than offenders of nonsexual crimes, both among juveniles (Lindsey, Carlozzi, & Eells, 2001) and adults (Marshall & Moulden, 2001). Other researchers (i.e., Fernandez & Marshall, 2003), however, have failed to find significant differences in levels of empathy. In addition, adolescents who score higher on measures of empathy are significantly less likely to engage in physical dating violence (McCloskey & Lichter, 2003; Wolfe, Wekerle, Scott, Straatman, & Grasley, 2004).

In summary, both psychopathy and narcissism have been linked to sexual aggression and physical dating violence. This may be due to the impulsive and antisocial traits present in psychopathy, as well as the tendency toward narcissistic reactance.
Sensation seeking is another personality characteristic that has a positive correlation with both sexual aggression, and physical and verbal partner abuse. Finally, men who have a history of sexual aggression or physical dating violence report significantly less empathy than men without such histories of aggression.

_Psychopathology and Psychological Functioning_

Though there seems to be a rather strong impact of psychopathology on dating violence, its impact on sexually aggressive behavior is less clear. Some researchers (e.g., Herkov, Gynther, Thomas, & Myers, 1996) found significantly higher levels of pathology among adolescents incarcerated for sexual offenses as compared to adolescent patients in an inpatient unit, however, other researchers have failed to find levels of pathology that significantly exceeded normal scores among non-incarcerated men (Petty & Dawson, 1989). One possibility is that sexually aggressive behaviors are more influenced by psychological distress that does not meet clinically significant levels. For instance, low self-esteem has been identified as an important risk factor in sexual aggression (Leary, Schreindorfer, & Haupt, 1995; Mecca, Smelser, & Vasconcellos, 1989), as have general characteristics of impulsivity (Lisak & Roth, 1988; Petty & Dawson, 1989).

The role of psychopathology in dating violence appears somewhat stronger. For instance, low self-esteem has been linked to a greater risk for engaging in physical violence with a dating partner, among both adolescents (Goldstein & Rosenbaum, 1985; Magdol et al., 1997; O'Keefe, 1998) and adults (Hotaling & Sugarman, 1986; Schwartz et al., 2005). In addition, the presence of depressive symptoms is associated with greater levels of both verbal abuse (Good et al., 1995) and physical violence (Goldstein &
Rosenbaum, 1985; Hastings & Hamberger, 1988; Schumacher et al., 2001; Tolman & Bennett, 1990). In fact, data indicates that a 20% increase in depressive symptoms increases the risk of engaging in mild forms of physical dating violence by 30%, and severe forms of physical violence by 74% (Pan, Neidig, & O’Leary, 1994). Further, a recent meta-analysis shows a moderate relationship between the presence of depression and physical dating violence ($r = .23$; Schumacher et al., 2001). However, Tolman and Bennett (1990) note that it is not clear whether the presence of depression is a precipitator or a consequence of the violence.

Thus, both self-esteem and depression have emerged as significant risk factors for engaging in sexual aggression, or verbal or physical dating violence. Further, it does not appear that the levels of depression need to be clinically significant in order to be influential; rather, even small increases in the level of depression can result in a greater risk for engaging in physical dating violence.

**Substance Use**

The impact of alcohol and drug use on sexual aggression and dating violence is strong, though the exact nature of those relationships is unclear. Both global and proximal characteristics have been examined with regards to sexually aggressive behavior, and results are somewhat mixed. Although many researchers have found higher overall levels of alcohol use among sexually aggressive men (e.g., Carr & VanDeusen, 2004; Koss & Dinero, 1988; Ullman, Karabatsos, & Koss, 1999; Wilson, Calhoun, & McNair, 2002), other researchers have failed to find significant differences between perpetrators and non-
perpetrators (e.g., Johnson, Noel, & Sutter-Hernandez, 2000; Norris, Davis, George, Martell, & Heiman, 2004).

There is stronger evidence supporting the presence of alcohol as a proximal factor in sexual aggression. Specifically, sexually aggressive men report a greater level of alcohol consumption in dating and sexual interactions (Abbey & McAuslan, 2004), and a majority of college men who reported engaging in sexual assault also reported alcohol usage prior to the incident (Abbey et al., 1998; Carr & VanDeusen, 2004).

Some theorists have suggested that the contextual factors related to alcohol usage and sexual aggression are particularly important to examine. For example, men often consume alcohol in social situations as part of seeking a sexual partner or as part of male bonding, both of which may include derogatory views of women and relationships (Schwartz & DeKeseredy, 1997). Further, Abbey and colleagues (1998) have posited that increased levels of alcohol usage may be either a precipitator or a consequence of sexual aggression. Specifically, greater alcohol consumption could result from a perpetrator’s desire to reduce feelings of responsibility; thus, an incident of sexual assault would lead to greater alcohol consumption (Abbey et al., 1998). Conversely, various personality characteristics, like narcissism, or early life experiences could lead a perpetrator to drink more in general; thus, more drinking would lead to sexual assault (Abbey et al., 1998).

The presence of alcohol in incidents of physical dating violence is pervasive but findings are mixed as to whether global alcohol use or contextual alcohol use is more important. Some researchers (Murphy, McDevitt-Murphy, & Barnett, 2005; Stets & Henderson, 1991) have found that general drinking patterns do not predict the presence of
physical violence, but alcohol use prior to the incident increased the likelihood of engaging in physical violence. However, other researchers (e.g., Tolman & Bennett, 1990; Van Hasselt, Morrison, & Bellack, 1985) have found that higher levels of alcohol consumption in general is predictive of physical violence with an intimate partner, and a meta-analysis indicated a moderate relationship between alcohol abuse and physical violence \((r = .24; \text{ Schumacher et al., 2001})\). Significantly greater levels of alcohol use in general have also been associated with the increased presence of verbal abuse (Hammock & O’Hearn, 2002). Interestingly, Shook and colleagues (2000) found that whereas the proximal use of alcohol is significantly related to expression of physical violence in women, general alcohol use has a significant negative association with expression of physical violence in men. Similarly, the relationship between partner violence and illicit drugs has been reported (e.g., Schumacher et al., 2001; Stith et al., 2004), and O’Keefe (1997) found that high school males who reported drug use were significantly more likely to inflict physical violence on a dating partner.

There could be several reasons for the discrepancies among research findings for the role of substance use in interpersonal violence. For example, Abbey and colleagues (2003) have found a positive linear relationship between the amount of alcohol consumed by a perpetrator during an assault and the level of aggression used; however, the relationship between amount of alcohol consumed and the type of sexual assault is curvilinear. As part of the latter relationship, the highest levels of assault are committed in the presence of moderate alcohol usage, while lower levels are found when very small or very large quantities of alcohol consumption are present. It is possible that extremely
high quantities of alcohol consumption could interfere with the perpetrator’s ability to complete the assault (Brecklin & Ullman, 2001). To better understand the nature of these relationships, Abbey, Zawacki, Buck, Clinton, and McAuslan (2004) have called for researchers to include measures of the size and number of drinks consumed during an assault incident, the time period within which they were consumed, and the perpetrator’s perceived level of intoxication.

Another explanation for these divergent findings has been postulated by Sugarman, Aldarondo, and Boney-McCoy (1996), and refers to the possible presence of a feedback system related to alcohol use. Specifically, they hypothesize that when men are drinking alcohol, they are more likely to engage in physical violence, which may then prompt the man to consume even more alcohol in order to provide an excuse for having engaged in a violent act. Thus, the presence of global and proximal alcohol use may differ as a result of the feedback system. Surprisingly, Williams and Smith (1994) found that lower levels of alcohol among their college student sample were related to increased levels of dating violence. One complication with interpreting data from college students, though, is their overall levels of alcohol use are so much higher than those of other populations (Wood & Sher, 2002).

Thus, even though a great deal of research exists which links substance use and aggressive behavior, the nature of those relationships remains unclear. Greater alcohol consumption has been found among sexually aggressive men, but the contextual aspects of that relationship have not been sufficiently elucidated. Similarly, research has found a strong link between dating violence and substance use, but it remains unclear whether
this is due more to the global or proximal factors related to alcohol consumption. The divergent findings with regard to substance have been explained in several ways, including a focus on the curvilinear relationship between alcohol use and sexual aggression. Further, it has been pointed out that alcohol use may act as part of a feedback system, whereby men drink alcohol in order to have an excuse for having engaged in violent behavior. The significantly high level of alcohol consumption on college campuses further complicates all of these theories, and may contribute to the divergent research findings.

CHAPTER 2: RATIONALE FOR THE PRESENT STUDY

Understanding the co-occurrence of various forms of violence is vital in understanding interpersonal violence as a whole. Yet research focusing on this particular aspect of interpersonal violence has been inconsistent and researchers have yet to examine the presence of physical violence and verbal aggression in dating relationships as well as an overall history of sexual aggression, both in and out of dating relationships.

In examining the relationship between substance use and the various aggressive behaviors, Gidycz and colleagues (2007) found some aspects of substance use were able to differentiate between perpetrators of these forms of aggression. For example, average daily alcohol use was positively related to a history of sexual aggression but not to a history of verbal abuse or physical violence. Similarly, problem drinking behaviors were positively related to sexual aggression and verbal abuse, but failed to show a significant relationship with physical violence. Finally, drug use was positively correlated with both a history of sexual aggression and a history of verbal abuse but not physical violence.
Thus, it appears that the presence of general drug and alcohol use is not so influential in the occurrence of physical violence, but does play a significant role in instances of both sexual aggression and verbal abuse.

The research conducted by Gidycz and colleagues (2007) has prompted some interesting questions regarding the distinctions between physical violence and sexual aggression, the indirect factors that mediate the relationships between verbal abuse and both sexual assault and physical violence, and the role of proximal substance use in each form of aggression. The aim of the present study is to begin to lay the foundation for research that can address these issues. Based on the confluence model of sexual aggression and the elaborated confluence model of conflict with women, it seems that several factors appear to converge in their direct and indirect influence of both sexual and non-sexual aggression. Specifically, various early experiences (i.e., violence in the family of origin and delinquency) have been found to play important roles in the perpetration of sexual aggression. Similarly, factors related to hostility (i.e., proneness to general hostility and hostile masculinity), as well as factors related to gender roles (i.e., masculine role stress and attitudes towards women) exert an influence, both directly and indirectly, on the presence of both sexual and non-sexual aggression. Finally, factors related to sexual promiscuity and impersonal sexual behaviors have been found to play a direct role in sexual aggression and relationship stress, and an indirect role in verbal and physical non-sexual aggression.

Whereas Malamuth and colleagues (1991; 1995) have provided two very comprehensive and valid models of aggression, the exclusion of early life experience
variables in the elaborated confluence model of conflict with women, as well as the exclusion of other forms of aggression in the confluence model of sexual aggression, makes it difficult to determine the exact nature of these relationships. In addition, several risk factors found to be important in other research (i.e., psychopathy, narcissism, and self-esteem) are not incorporated in either of the two models.

Thus, the purpose of the present study was fourfold. First, it examined the rates of co-occurrence of aggressive behaviors among college men. Second, it attempted to better discern the specific factors predicting each form of aggression. Third, it examined the degree to which the cumulative influence of risk factors increases with rates of violence. Finally, attempts were made to determine if any of the variables are able to differentiate between various forms of aggression.

CHAPTER 3: HYPOTHESES

There were four main hypotheses in the current study that were examined. The first hypothesis concerned the co-occurrence of verbal abuse and physical violence in dating relationships and of sexual aggression in general. Based on findings by Gidycz and colleagues (2007), it was expected that verbal abuse would demonstrate a significant, positive relationship with both sexual aggression and physical violence. However, it was expected that there would be no significant correlation between the use of sexual aggression and physical violence.

Considering previous research, the second hypothesis was that increased global alcohol and drug use, as well as the presence of greater problem drinking behaviors, would be significantly related to reports of engaging in sexual aggression. With regards to
physical violence, it was hypothesized that global drug and alcohol use, and problem drinking behaviors would not be significantly related to history of perpetration; however, it was expected that contextual alcohol use would be reported by the majority of participants who engaged in physical violence. Finally, men who reported a history of verbal abuse were hypothesized to report drug use and problem drinking behaviors that were significantly related to their history of perpetration.

The third hypothesis was that men who report engaging in sexual aggression, physical violence or verbal abuse would endorse a greater number of traits of narcissism, psychopathy, delinquency, depression, low self-esteem, masculine gender role strain, and hostile attitudes regarding heterosexual relationships, as well as the presence of violence in their family of origin (either witnessed or experienced) than men with no history of aggressive behavior. It was also expected that a history of verbal abuse would be significantly predicted by increased use of drugs and alcohol, while a history of sexual aggression would be predicted by increased use of drugs and alcohol, as well as a greater level of problem drinking. It was also expected that fraternity membership or athletic participation would predict a history of sexual aggression.

Finally, it was hypothesized that athletes and fraternity members would report engaging in greater levels of sexual aggression than physical violence, and that drug use and problem drinking would occur significantly more often in sexual aggression than either form of dating violence. Further, it was expected that men who report engaging in physical violence would report significantly less alcohol usage than men who report engaging in either sexual or verbal abuse.
CHAPTER 4: METHOD

Participants

Five hundred and twenty four male undergraduate students were surveyed from Ohio University. However, 2% \((N = 10)\) of the participants did not complete more than 90% of the survey, resulting in a total of 514 participants used for data analyses. The majority of participants self-identified as heterosexual (98%) men, between the ages of 18 and 19 years (68.6%), and approximately half (55.3%) were in their first year of college. Consistent with the demographics of the university, the majority of participants identified as Caucasian (91.4%), 3.3% identified as African American, 1.6% identified as Latino or Hispanic, 0.8% identified as Asian or Pacific Islander, 0.2% identified as American Indian or Alaska Native, 1.9% identified as two or more races, and 0.8% listed their race/ethnicity as “other.” Thirty-four percent of the current sample reported an annual family income of $100,000 or more, 47% reported an annual family income between $50,000-$100,000, and 19% reported an annual family income of less than $50,000. See Table 1 for additional details.

Procedures

Sessions were held in classrooms in the Department of Psychology, with groups of no more than 25 participants. A trained male undergraduate student facilitated the data collection to reduce any gender effects, and the principle investigator or another clinical psychology graduate student was available on the premises during active data collection. Participants received one experimental credit per hour or partial hour of participation.
Participation involved approximately 50 minutes of time. The facilitator handed out two copies of the informed consent form (see Appendix A.1), one of which the participants signed and one which they kept for themselves. Packets of questionnaires were then handed out, which contained the following measures, in order: Demographics Questionnaire, Dating and Sexual Experiences Questionnaire, Drinking and Drug Habits Questionnaire, Gender Role Conflict Scale, Center for Epidemiological Studies Depression Scale, Early Experiences Questionnaire, Self-Report Psychopathy Scale, Adversarial Heterosexual Beliefs Scale, Rosenberg Self-Esteem Scale, Revised Conflict Tactics Scale, Marlowe-Crowne Social Desirability Scale, Narcissistic Personality Inventory, and Sexual Experiences Survey. The measures were arranged in such a way as to break up the most explicit questionnaires (e.g., Conflict Tactics Scale, Sexual Experiences Survey) with more innocuous questionnaires (e.g., Rosenberg Self-Esteem Scale, Marlowe-Crowne Social Desirability Scale). In addition, the most explicit questionnaires (Conflict Tactics Scale and Sexual Experiences Survey) were placed toward the end of the packet of surveys to reduce the likelihood that responses to other questionnaires would be influenced by their explicit nature.

Upon completing the survey packet, participants were given a debriefing form (see Appendix A.2), which included the information for campus and community resources in case any concerns arose that a participant might want to address with a professional. Table 2 summarizes the variables included and the measures used to assess them.
Measures

Demographics Questionnaire

A brief questionnaire used to collect personal information such as age, ethnicity and race, and religious background. In addition, participants were asked about their membership in all-male social fraternities and participation in various athletic sports. Eleven percent ($N = 58$) of participants were classified as members of all-male social fraternities, and the mean length of membership at the time of their participation was 1.17 years. Athletic participation was divided into three categories: none (did not endorse participating in any sports), contact sport (those in which direct physical contact between players is allowed within the rules of the sport, such as basketball or rugby), and non-contact sport (those in which direct physical contact in not allowed within the rules of the sport, such as crew or tennis). If a participant endorsed both contact and non-contact sports, he was categorized only as a contact sport. In the present study, 36% ($N = 185$) of participants were classified as none, 7% ($N = 34$) were classified as non-contact, and 57% ($N = 295$) were classified as contact. (See Appendix B.1).

Sexual Experiences Survey

The Sexual Experiences Survey (SES; Koss & Oros, 1982) was designed to identify perpetrators of sexual assault through a series of 10 sexually explicit questions in which the respondent assesses his past sexual behavior along a variety of dimensions. This measure is used to detect sexual assault perpetration even when the perpetrator is unaware of the criminal nature of his behavior and fails to deem it as such. The SES is the most frequently used of all similar measures assessing sexually aggressive behavior and
previous research indicates good internal consistency (Cronbach alpha coefficient = .82; Malamuth et al., 1995) and the 2-week test-retest reliability was found to be .93 for a sample of both male and female college students (Koss & Gidycz, 1985). Validity for the SES has been established by comparing men’s responses on the SES with those given to an interviewer, which demonstrated very good consistency, $r = .61$ (Koss & Gidycz, 1985).

Perpetration history since adolescence (age 14 and on) was examined and participants were placed into one of four categories of increasing severity based on the highest category in which they reported having an experience: (a) none (no items were endorsed); (b) sexually aggressive contact (use of continual arguments, authority or force to coerce a woman into sex play, but not intercourse); (c) sexual coercion (use of authority, continual arguments or pressure to coerce a woman into sexual intercourse); and (d) rape or attempted rape (physical force or threats of force were used to coerce the woman into sexual intercourse, including anal and oral sex; intercourse may or may not have occurred). This four category classification has been found to have good internal consistency (Cronbach alpha coefficient=.83; Abbey & McAuslan, 2004), and the Cronbach alpha coefficient for the current study was .57. (See Appendix B.2).

**Conflict Tactics Scale**

The Straus (1979) Conflict Tactics Scale consists of 36 statements which progress in order of severity, that assess interpersonal conflict that occurs in the context of a romantic relationship. Participants respond to each statement using a 7-point scale ranging from 0 (“Never”) to 6 (“More than 20 times”) to indicate the frequency with
which each behavior occurred, by both themselves and by their partner. The Conflict Tactics Scale asks participants to focus on the current or most recent intimate partner and to consider only acts occurring in the past year; however, Sharpe and Taylor (1999) note that dating relationships, such as those found among high school and college students, often include more than one partner, either sequentially or simultaneously. As such, asking participants to consider only one dating partner would likely result in inaccurate rates of violence. Further, Sharpe and Taylor (1999) note that a 1 year time frame results in more skewed scores among adolescents than scores among adults, and suggest extending the time frame to 2 years, which is consistent with other studies of dating violence (e.g., Marshall & Rose, 1990). Thus, these researchers adapted the measure such that participants were instructed to consider all dating partners in the previous 2 years, and an additional response option is included to capture earlier acts of violence (“At least once, but not in the past 2 years”). Participants in the present study received the same adapted instructions.

The Verbal Aggression (i.e., Verbal Abuse) subscale measured the use of verbal or nonverbal threats to hurt or symbolically hurt a partner, and includes items such as “I insulted or swore at her” and “I threatened to hit or throw something at her.” The Violence subscale (i.e. Physical Violence) measured the use of physical tactics to resolve conflicts with their partners, and includes items such as “I pushed, grabbed or shoved her” and “I beat her up.” Consistent with coding schemes used by previous research (i.e., Rich et al., 2005; Gidycz et al., 2007), participants were placed in one of three categories for each subscale according to the greatest severity of aggression they reported.
perpetrating since the age of 14. The categories for Verbal Abuse subscale included (a) *no verbal aggression*: no verbally aggressive behavior reported (no endorsement of items 7, 9, 11, 15, or 17); (b) *moderate verbal aggression*: reports of less severe forms of verbal aggression, such as saying something hurtful (items 7, 9 and 11); and (c) *severe verbal aggression*: reports of more severe forms of verbal aggression, such as threatening to throw something at one’s partner (items 15 and 17). The categories for the Physical Violence subscale included (a) *no physical aggression*: no physically aggressive behavior reported (no endorsement of items 19, 21, 23, 25, 27, 29, 31, 33, 35); (b) *moderate physical aggression*: reports of less severe forms of physical aggression, such as pushing one’s partner (items 19, 21 and 23); and (c) *severe physical aggression*: reports of more severe forms of aggression, such as slapping one’s partner (items 25, 27, 29, 31, 33, and 35). The CTS is the most frequently used measure of violence in interpersonal relationships (Cook, 2002) and the construct validity of the measure has been well established (Straus, 1979). Alpha coefficients for this measure range from .70 (Sharpe & Taylor, 1999) to .78 (O’Keefe, 1997), and in the current study the Cronbach alpha coefficients for the Verbal Abuse and Physical Violence subscales were .77 and .51, respectively. (See Appendix B.3).

**Drinking and Drug Habits Questionnaire**

The 47-item Drinking and Drug Habits Questionnaire was adapted from a General Information Questionnaire created by Collins, Parks, and Marlatt (1985). The DDHQ assesses various aspects of drug and alcohol use, and taps several different constructs. *General drinking behaviors* (items 1, 34, and 35) includes usual drinking practices, as
well as the maximum and ideal drinks a participant might consume on any one occasion.

Responses for item 1 were recoded as ranging from 0 (“I do not drink at all, nor have I
ever had a drink in the past”) to 8 (“Having on average, 21 or more drinks per week”) and
responses for items 26 and 27 were recoded as ranging from 0 (“I do not drink”) to 19
(“19 or more drinks”). These scores were then summed, ranging from 0 to 46 with greater
scores indicating a greater level of alcohol use.

*Average daily alcohol use* (items 2 through 8) is an overall average score based on
average alcohol use reported for each day of the week. Responses for each item range
from 0 (“0”) to 17 (“17 or more”), and then are summed and divided by 7 to find the
average daily alcohol use. Scores ranged from 0 to 17, with higher scores indicative of
greater levels of alcohol use. *Situational drinking behavior* included drinking habits in
four different contexts: *a party or social event* (items 10 through 13), *a bar or club* (items
14 through 17), *while on a date* (items 18 through 21), and *prior to engaging in sexual
activity* (items 22 through 25). For each situation, participants indicated the average,
minimum, maximum, and ideal number of alcoholic drinks they would typically consume
on one occasion. Responses were recoded to range from 0 (“0”) to 9 (“17 or more”), and
then summed for each situation resulting in a total of 4 scores, each ranging from 0 to 81.
Higher scores are indicative of greater alcohol use within that situation.

*Problem drinking behaviors* (items 28 through 42) assesses the presence of
alcohol-related behavioral problems. Participants were asked to report whether they have
experienced a range of behaviors following consumption of alcohol (ex: “Blacked out”
and “Injured yourself or someone else”). Responses were recoded as 0 (“No”), 1 (“Yes,
but not in the past year”) and 2 (“Yes, in the past year”). In addition, participants were asked to indicate how frequently in the past year they experienced other symptoms of problem drinking, such as being unable to remember what happened the night before. Responses were recoded as ranging from 0 (“Never”) to 4 (“Daily or almost daily”). All of these items were then summed to create an overall problem drinking score ranging from 0 to 40, with higher scores indicating more problem drinking behaviors.

Finally, drug use (items 43 through 54) assesses the frequency of using various drugs, ranging from alcohol to cocaine. Participants responded using a 4-point scale, ranging from 0 (“Never used”) to 3 (“Regularly use”). Responses were summed to create an overall drug use score ranging from 0 to 36, with higher scores indicative of greater frequency and variety of drug use.

Reliability estimates of the situational drinking behavior subscale show Cronbach alpha coefficients of .79 for minimum use and .83 for maximum use (Collins & Lapp, 1991). Validity estimates of the DDHQ have also been good. The average daily alcohol use subscale has been found to significantly correlate to other measures of alcohol problems, including the Short Michigan Alcohol Screening Test, $r = .61$ (Collins & Lapp, 1992) and Calahan et al.’s (1969) Drinking Practices Questionnaire, $r = .50$ (Collins et al., 1985). Further, scores on the average daily alcohol use subscale are significantly correlated to a daily self-report timeline of drinking, $r = .86$ (Collins, Koutsky, Morsheimer, & MacLean, 2001), and aspects of the DDHQ have also been used by other researchers examining sexual aggression (e.g., Gidycz et al., 2007; Testa & Livingston, 2000; Wilson, Calhoun, & McNair, 2002). In the current study, Cronbach alpha
coefficients were good for general drinking behaviors ($\alpha = .85$), average daily alcohol use ($\alpha = .81$), situational drinking behaviors ($\alpha = .94$), problem drinking behaviors ($\alpha = .83$), and acceptable for drug use ($\alpha = .76$). (See Appendix B.4).

**Early Experiences Questionnaire**

Family violence and adolescent delinquency were measured by the Early Experiences Questionnaire. The questions regarding witnessing parental violence and experiencing physical abuse in childhood (items 1, 2, and 3) were taken from Malamuth and colleagues (1991; 1995), while the item assessing the experience of psychological abuse in childhood (item 4) was taken from Stuewig & McCloskey (2005). Both groups of researchers chose to use a scale consistent with that used by the Conflict Tactics Scale, which ranges from 0 (“never”) to 6 (“more than 20 times”). Scores for the first three items were summed for an overall score indicating the frequency of violence in the family of origin.

With regards to juvenile delinquency, questions regarding the presence of delinquent peers or episodes of running away from home (items 5 and 6) were taken from Malamuth (1991), who noted that the presence of delinquent peers has been found to be the best predictor of engaging in acts of delinquency (Hindelang, Hirschi, & Weis, 1981; as cited in Malamuth, 1991). Finally, Stuewig and McCloskey (2005) created the list of 10 delinquent behaviors (items 7 through 16), which participants responded to using a 4-point scale ranging from 0 (“none”) to 3 (“three or more”). Stuewig and McClokskey (2005) summed the items for a total score, which ranged from 0 to 30, and found a Cronbach alpha coefficient of .75 for the measure in their study. For the present study,
responses to items 5 and 6 were recoded as 0 (“No”) and 1 (“Yes”) and then added to the sum derived from the list of delinquent behaviors (items 7 through 16). Thus, scores ranged from 0 to 32, with higher scores indicative of greater levels of delinquency. In the current study, the Cronbach alpha coefficients for family violence and adolescent delinquency were .54 and .76, respectively. (See Appendix B.5).

**Dating and Sexual Experiences Survey**

The Dating and Sexual Experiences Survey was used to measure participants’ history of dating relationships and sexual activity. Scores for the seriousness of dating relationships were coded based on the most serious level of dating they have engaged in during the past year. Specifically, items 3 through 6 were entered as a continuous variable ranging from 1 to 4, with higher numbers indicative of a higher level of commitment to dating partners. With regards to history of sexual activity, participants wrote in the age at which they first had consensual sexual intercourse, the number of partners with which they had consensual sexual intercourse, and the number of partners with which they had sexual activity but not intercourse. (See Appendix B.6).

**Narcissistic Personality Inventory**

Narcissism was measured with the 40-item Narcissistic Personality Inventory (NPI, Raskin & Terry, 1988), which is the most widely used measure to assess narcissistic traits in a non-clinical population (Kubarych, Deary, & Austin, 2004). Participants were asked to read pairs of self-attitude statements and choose the statement most similar to their own beliefs. Examples of pairs of items include “I am a born leader” versus “Leadership is a quality that takes a long time to develop” and “I am going to be a great
person” versus “I hope I am going to be successful.” Responses were scored such that narcissistic responses were 1 and non-narcissistic responses were 0, and then summed to create a total score, ranging from 0 to 40, with higher numbers indicative of more narcissistic traits.

Internal consistency for the NPI is acceptable, with Cronbach alpha coefficients ranging from .76 (Washburn, McMahon, King, Reinecke, & Silver, 2004) to .83 (Raskin & Terry, 1988; Soyer, Rovenpor, Kopelman, Mullins & Watson, 2001), and a 13-week test-retest reliability has been shown to be significant, \( r = .81 \) (del Rosario & White, 2005). The NPI is also significantly correlated with other measures of narcissism (Soyer et al., 2001), and has been used in other studies examining both aggressive behavior in general (e.g., Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005; Twenge & Campbell, 2003; Washburn et al., 2004), and sexual aggression in particular (e.g., Bushman et al., 2003; Kosson et al., 1997). In the present study, the Cronbach alpha coefficient was good (\( \alpha = .81 \)). (See Appendix B.7).

**Self-Report Psychopathy Scale**

Psychopathy was assessed using Levenson, Kiehl, and Fitzpatrick’s (1995) Self-Report Psychopathy Scale (SRPS), a 26-item measure used to assess psychopathic attributes among noninstitutionalized populations. The SRPS yields two subscales that reflect differing aspects of psychopathy: *Primary Psychopathy* (characteristics such as lack of remorse and callousness), and *Secondary Psychopathy* (characteristics such as impulsivity and quick-temperedness). Each statement was rated on a 4-point scale, ranging from 0 (“Disagree strongly”) to 3 (“Agree strongly”) and scores were obtained
by summing the items both overall and within each subscale. Total scores ranged from 0 to 78, while scores for the Primary Psychopathy and Secondary Psychopathy subscales range from 0 to 48 and 0 to 30, respectively. Higher scores, both overall and among the subscales, indicate greater levels of psychopathy.

With regards to internal consistency reliability, the total scale and the Primary Psychopathy subscale both demonstrate good reliability (Cronbach alpha coefficient = .85 and .83, respectively) while the Secondary Psychopathy subscale is marginal (Cronbach alpha coefficient = .69; Brinkley, Schmitt, Smith, & Newman, 2001). The 8-week test-retest reliability demonstrates a Cronbach alpha coefficient of .83 (Brinkley et al., 2001), and the measure is significantly correlated with the Hare Psychopathy Checklist- Revised, $r = .35$ (Lynam, Whiteside, & Jones, 1999). In addition, the SRPS correlates both with self-reports of serious antisocial behavior, $r = .31$, as well as with records of violent criminal activity, $r = .24$ (Brinkley et al., 2001). Finally, Lalumiere and Quinsey (1996) also found that participants who had engaged in sexually coercive behavior demonstrated higher scores on this measure than participants who had not engaged in such behaviors, $t(97) = -2.36, p < .05$. In the present study, the Cronbach alpha coefficient was .81 (See Appendix B.8).

**Zuckerman-Kuhlman Personality Questionnaire, Impulsive Sensation Seeking Subscale**

Sensation seeking was measured using the 19-item Impulsive Sensation Seeking Subscale of the Zuckerman-Kuhlman Personality Questionnaire (ZKPQ-ImpSS; Zuckerman, Kuhlman, Joirement, Teta, & Kraft, 1993), which measures both a general
need for excitement and novelty (ex: “I’ll try anything once”), and a lack of planning and
tendency to act without thinking (ex: “I tend to change interests frequently”). The ZKPQ- ImpSS was scored by summing the answers to the items after they were recoded into 0 (false) and 1 (true). Items 4 and 18 were reverse coded, and scores ranged from 0 to 19, with higher scores indicating greater levels of sensation seeking. Research has found a Cronbach alpha of .77 for men and a 3 to 4 week test-retest reliability of .80 (Zuckerman, 2002). Further, the ZKPQ-ImpSS is correlated with psychopathy ratings (Thornquist & Zuckerman, 1995), early use of cocaine and severity of drug use (Ball, 1995), and general risk-taking and risky sex (Zuckerman & Kuhlman, 2000). In the current study, the Cronbach alpha was .79. (See Appendix B.9).

**Interpersonal Reactivity Index**

Empathy was measured using the 28-item Interpersonal Reactivity Index (IRI; Davis, 1980), the most widely used measure for empathy (Pulos, Elison, & Lennon, 2004). Participants respond using a 5-point scale and yields a total empathy score, as well as four subscales: (a) **Perspective-Taking** (ability to cognitively take the point of view of others; ex: “I try to look at everybody’s side of a disagreement before I make a decision”); (b) **Fantasy** (tendency to imaginatively place oneself into fictional situations rather than real-life behavior; ex: “After seeing a play or movie, I have felt as though I were one of the characters”); (c) **Empathic Concern** (tendency to experience sympathy and compassion for others in need; ex: “When I see someone being taken advantage of, I feel kind of protective towards them”); and (d) **Personal Distress** (tendency to experience discomfort and distress in reaction to distress in others; ex: “I tend to lose control during
emergencies”). The total score ranges from 0 to 112, while each subscale ranges from 0 to 28, with higher scores reflecting a greater level of empathy. Internal reliability coefficients ranged from .71 to .77, and 2-week test-retest reliabilities ranged from .62 to .71 (Davis, 1980). In the current study, the Cronbach coefficient alpha for the total scale was .80, and alphas for the subscales ranged from .69 to .77. (See Appendix B.10).

**Adversarial Heterosexual Beliefs Scale**

The Adversarial Heterosexual Beliefs Scale (AHBS; Lonsway & Fitzgerald, 1995) is a 15-item measure designed to assess the degree to which respondents feel that relationships between the sexes are fundamentally adversarial, exploitative, and manipulative in nature. Respondents used a 6-point scale, ranging from 0 (“Strongly disagree”) to 5 (“Strongly agree”) to indicate their level of agreement with each of the statements. Examples of items include “Men and women cannot really be friends” and “It is possible for the sexes to be equal in society.” Scores ranged from 0 to 90, with higher scores indicative of a greater adherence to adversarial sexual beliefs. The AHBS has adequate reliability (Cronbach alpha coefficient = .78), and demonstrates good concurrent validity with other measures of adversarial sexual beliefs, such as the Acceptance of Interpersonal Violence Scale, \( r = .54 \) (Lonsway & Fitzgerald, 1995). Further, scores on the AHBS have been found to be significantly related to sexual aggression at a 7-month follow-up (Loh & Gidycz, 2006). In the present study the Cronbach alpha coefficient was good (\( \alpha = .82 \)). (See Appendix B.11).
Gender Role Conflict Scale

The 37-item Gender Role Conflict Scale (GRCS; O’Neil, Helms, Gable, David, & Wrightsman, 1986) is designed to measure participants’ thoughts and feelings about their gender role behaviors, which often reflects their level of adherence to traditional male roles. Participants respond to a series of statements using a 6-point scale, ranging from 0 (“Strongly disagree”) to 5 (“Strongly agree”), and scores ranged from 0 to 185, with higher scores indicative of greater conflict regarding gender roles. The GRCS also includes 4 subscales based on factor analyses: (a) Success, Power, and Competition (ex: “I strive to be more successful than other people”); (b) Restrictive Emotionality (ex: “I often have trouble finding words that describe how I am feeling”); (c) Restrictive Affectionate Behavior Between Men (ex: “Hugging other men is difficult for me”); and (d) Conflicts Between Work and Family Relations (ex: “Finding time to relax is difficult for me”). Scores for each subscale were obtained by summing the items and dividing by the number of items within the subscale.

The four-factor structure of the measure has been replicated in several factor analytic studies (e.g., Good et al., 1995; Moradi, Tokar, Schaub, Jome, & Serna, 2000), and internal consistency estimates appear to be good, with Cronbach alpha coefficients ranging from .89 to .90 (O’Neil et al., 1986). In addition, 4-week test-retest reliability coefficient for the total score was found to be .88, while the subscales ranged from .72 to .86 (O’Neil, 1986). Further, the GRCS has been found to be significantly correlated with other measures of attitudes about masculinity (Good et al., 1995), and has been used in several studies examining masculinity and sexual aggression (e.g., Rando, Rogers, &
Brittan-Powell, 1998). In the present study, the Cronbach alpha coefficient was very good ($\alpha = .92$). (See Appendix B.12)

**Center for Epidemiological Studies- Depression Scale**

Depression was assessed using the 20-item Center for Epidemiological Studies-Depression Scale (CESD; Radloff, 1977), which was designed to assess symptoms of depression in the general population. Participants are instructed to respond to a series of statements using a 4-point scale, ranging from 0 (“Rarely or none of the time”) to 3 (“Most or all of the time”), and scores ranged from 0 to 60, with higher scores indicative of greater levels of depression. The CESD has demonstrated good internal reliability, with a Cronbach alpha coefficient of .87 for college students (Radloff, 1991), and the CESD has been found to be better at discriminating levels of depression among college students than the Beck Depression Inventory (Santor, Zuroff, Ramsay, Cervantes, & Palacios, 1995). Further, a 2.5 week test-retest correlation of .51 (Hann et al., 1999) has been found for the general population. The Cronbach alpha coefficient for this study was .89. (See Appendix B.13).

**Rosenberg Self-Esteem Scale**

Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1979), the most widely used measure for assessing self-concept (Blascovich & Tomaka, 1991). Participants respond to a series of statements using a 4-point scale, ranging from 1 (“Strongly disagree”) to 4 (“Strongly agree”), and scores ranged from 10 to 40, with higher scores indicative of greater self-esteem. The internal consistency of the RSE is good, with Cronbach alpha coefficients ranging from .88 (Greenberger, Chen,
Dmitrieva, & Farruggia, 2003) to .90 (Donnellan et al., 2005), and a 2-week test-retest reliability of $r = .72$ has been reported (Hojat & Lyons, 1998). The RSE has frequently been used in studies examining interpersonal violence (e.g., Donnellan et al., 2005). In the present study, the Cronbach alpha coefficient was good ($\alpha = .90$). (See Appendix B.14).

**Marlowe-Crowne Social Desirability Scale**

The short version of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982) a 13-item measure, was use to measure one's desire for social approval. It is believed that the stronger one's desire for social approval or need to give a positive impression, the more "virtuous" or socially desirable their responses will be. Participants responded to a series of statements as "True" or "False" based upon their agreement or disagreement with the statements. Scores range from 0 to 13, with higher scores reflecting a greater desire for social approval. Research indicates an internal consistency reliability of .76 and concurrent validity of .93 with the long form of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982). In the present study, the Cronbach alpha coefficient was .46 (See Appendix B.15).

**CHAPTER 5: RESULTS**

**Rates of Sexual Aggression and Dating Violence**

Thirteen percent ($N = 70$) of participants reported engaging in some form of sexual aggression since the age of 14 years (see Table 3). Specifically, 7.6% ($N = 39$) reported engaging in sexually aggressive contact, 3.1% ($N = 16$) reported engaging in
sexual coercion, and 2.9% \((N = 15)\) reported engaging in, or attempting to engage in, behaviors that are classified as rape.

Approximately 9% \((N = 47)\) of the participants reported no history of using verbal abuse against their dating partner, whereas 14% \((N = 71)\) reported using moderate verbal abuse and 76.8% \((N = 390)\) reported using severe verbal abuse. With regards to physical dating violence, 60.2% \((N = 305)\) reported no history of using such behaviors, 30.2% \((N = 153)\) reported using moderate physical violence, and 9.7% \((N = 49)\) reported using severe physical violence.

**Co-Occurrence of Sexual Aggression, Verbal Abuse, and Physical Violence**

In order to assess the co-occurrence of various forms of aggression, three Chi-square analyses were conducted on sexual aggression, verbal abuse, and physical violence (see Table 4). It should be noted that although Chi-square analyses are able to assess for the presence of a significant relationship between two categorical variables, it cannot provide detail about the nature of such relationships. Thus, it is possible that these results do not necessarily reflect a linear relationship; however, an examination of the breakdown of participants within the categorical variables is examined here to give some level of insight into the nature of these relationships.

Sexual aggression was significantly related to verbal dating abuse, \(\chi^2(6, N = 507) = 16.57, p < .05\), and it is notable that all of the men who reported a history of sexual aggression also reported a history of either moderate or severe verbal abuse. Further, the vast majority of men with a history of sexually aggressive contact and those with a history of rape or attempted rape reported a history of severe verbal abuse (94.9% and
92.9%, respectively), while all of the participants who reported a history of sexual coercion also reported a history of severe verbal abuse. There was no significant relationship between sexual aggression and physical dating violence.

Verbal dating abuse was significantly related to physical dating violence, \( \chi^2(4, N = 507) = 47.82, p < .001 \). Specifically, of those participants who engaged in moderate physical dating violence, approximately 90% also reported engaging in severe verbal abuse, with 8.5% also reporting moderate verbal abuse and only 2% reporting no history of verbal abuse. Of note, all of the participants who reported engaging in severe physical violence also reported engaging in severe verbal abuse.

**Predictor Variables and History of Aggression**

One-way analyses of variance (ANOVAs) were used to assess the relationships between continuous predictors and history of sexual aggression, verbal abuse, and physical violence. Variables that had significant bivariate relationships were then examined more closely, using Tukey’s Honestly Significant Difference (HSD) to examine the difference between groups. Given the large number of ANOVAs, a Bonferroni correction was applied to the analyses conducted for each of the forms of aggression to correct for Type I errors. Specifically, given that 37 separate ANOVAs are being conducted, a \( p \) value of .0013 would need to be applied as a cutoff for significance in order to maintain a 5% chance that any of the variables would be found significant under the null hypothesis. As such, only variables with a \( p \) value of .001 or below were reported as significant (see Tables 5, 7, and 9). Categorical variables were examined using Chi-Square analyses (see Tables 6, 8, and 10).
**Developmental and Socialization Factors**

Family violence differed only as a function of physical violence, $F(2, 504) = 9.14, p < .001$. Specifically, those participants who reported a history of severe physical dating violence also reported experiencing significantly more violence in their family of origin ($M = 5.08, SD = 3.67$) than both those with a history of moderate physical violence ($M = 3.65, SD = 2.67$) and those with no history of physical violence, ($M = 3.26, SD = 2.67$).

Adolescent delinquency differed significantly as a function of sexual aggression, $F(3, 509) = 8.42, p < .001$. Specifically, men with no history of sexual aggression reported significantly fewer delinquent behaviors in adolescence ($M = 5.11, SD = 4.80$) than both those with a history of sexual coercion ($M = 9.50, SD = 5.93$) and those with a history of attempted or completed rape ($M = 9.67, SD = 7.18$). Adolescent delinquency also differed significantly as a function of verbal abuse, $F(2, 505) = 11.87, p < .001$. Specifically, participants with no history of verbal abuse reported engaging in significantly fewer delinquent behaviors in adolescence ($M = 3.36, SD = 3.84$) than those who reported a history of severe verbal abuse ($M = 6.07, SD = 5.36$). None of the other developmental and socialization variables were found to be significant for any form of violence.

**Attitudes and Beliefs**

Hostile masculinity, as measured by the Adversarial Heterosexual Beliefs Scale, was found to differ significantly as a function of sexual aggression, $F(3, 508) = 7.14, p < .001$, and verbal abuse, $F(2, 504) = 12.56, p < .001$. Specifically, men with no history of
sexual aggression reported significantly fewer sexist beliefs ($M = 20.49, SD = 10.02$) than both those who reported a history of sexually aggressive contact ($M = 24.97, SD = 10.48$) and those with a history of rape or attempted rape ($M = 30.20, SD = 7.82$). In addition, those with a history of severe verbal abuse reported significantly more hostile masculinity ($M = 22.33, SD = 9.96$) than both those with no history of verbal abuse ($M = 15.77, SD = 9.46$) and those with a history of moderate verbal abuse ($M = 18.41, SD = 9.43$). The Gender Role Conflict Scale was not found to be significantly related to any form of aggression.

**Personality Characteristics**

Psychopathy, as measured by the Self-Report Psychopathy Scale, differed significantly as a function of sexual aggression, $F (3, 508) = 10.43, p < .001$, and verbal abuse, $F (2, 504) = 13.77, p < .001$. Specifically, men with no history of sexual aggression endorsed significantly fewer items indicating psychopathy ($M = 26.94, SD = 8.70$) than both those with a history of sexually aggressive contact ($M = 33.79, SD = 8.99$) and those with a history of rape or attempted rape ($M = 34, SD = 7.82$). With regards to verbal abuse, those participants with no history of verbal abuse reported significantly lower levels of psychopathy ($M = 21.98, SD = 9.38$) than both those with a history of moderate verbal abuse ($M = 26.23, SD = 9.02$) and those with a history of severe verbal abuse ($M = 28.73, SD = 8.61$).

Primary psychopathy, such as a lack of remorse and callousness, also differed as a function of sexual aggression, $F (3, 508) = 8.06, p < .001$, and verbal abuse, $F (2, 504) = 8.18, p < .001$. Specifically, men with no history of sexual aggression endorsed
significantly fewer traits of primary psychopathy \((M = 16.62, SD = 6.44)\) than men with a history of sexually aggressive contact \((M = 21.26, SD = 6.66)\). In addition, participants with no history of verbal abuse endorsed significantly fewer characteristics of Primary Psychopathy \((M = 13.74, SD = 7.04)\) than those with a history of severe verbal abuse \((M = 17.68, SD = 6.41)\).

Secondary Psychopathy, such as impulsivity and quick-temperedness, also differed significantly as a function of sexual aggression, \(F(3, 511) = 6.15, p < .001\), verbal abuse, \(F(2, 504) = 11.77, p < .001\), and physical violence, \(F(2, 503) = 8.17, p < .001\). Specifically, men with no history of sexual aggression reported significantly fewer traits of secondary psychopathy \((M = 10.32, SD = 4.08)\) than those who reported a history of sexually aggressive contact \((M = 12.54, SD = 4.22)\). Further, participants with a history of severe verbal abuse endorsed significantly more characteristics \((M = 11.05, SD = 4.08)\) than both those with no history of verbal abuse \((M = 8.23, SD = 4.11)\) and those with a history of moderate verbal abuse \((M = 9.76, SD = 4.06)\). Finally, those with a history of moderate physical violence endorsed significantly more characteristics of secondary psychopathy \((M = 11.66, SD = 4.17)\) than those with no history of physical violence \((M = 10.03, SD = 4.15)\).

General levels of empathy, as measured by the Interpersonal Reactivity Index, did not differ significantly as a function of any form of aggression; however, the subscale Empathic Concern did differ significantly, \(F(3, 508) = 5.69, p = .001\), as a function of sexual aggression. Specifically, those participants who reported no history of sexual aggression reported significantly more empathic concern \((M = 18.54, SD = 4.05)\) than
both those with a history of sexually aggressive contact \((M = 16.59, SD = 4.59)\) and those with a history of rape or attempted rape \((M = 15.20, SD = 5.17)\). No significant differences were found with regards to narcissism or sensation seeking.

**Psychopathology and Functioning**

Neither self-esteem nor depression were found to differ significantly as a function of group membership.

**Substance Use**

In examining the relationship between aggression and substance use, as measured by the Drinking and Drug Habits Questionnaire, several significant differences were found. General drinking habits differed significantly as a function of verbal abuse, \(F(2, 505) = 11.50, p < .001\). Specifically, men with no history of verbal abuse reported drinking significantly less alcohol overall \((M = 18.70, SD = 10.70)\) than both men with a history of moderate verbal abuse \((M = 23.51, SD = 10.95)\) or men with a history of severe verbal abuse \((M = 26.18, SD = 10.46)\). With regards to average daily alcohol use, a significant difference was again found as a function of verbal abuse, \(F(2, 499) = 11.70, p < .001\). Specifically, men with no history of verbal abuse reported significantly less average daily alcohol use \((M = 1.58, SD = 1.65)\) than both those with a history of moderate verbal abuse \((M = 2.74, SD = 2.29)\) and those with a history of severe verbal abuse \((M = 3.25, SD = 2.34)\).

When examining situational drinking, alcohol consumption while at a party or social event differed significantly as a function of verbal abuse, \(F(2, 504) = 11.78, p < .001\). Specifically, men with no history of verbal abuse reported drinking significantly
less alcohol while at a party or social event ($M = 9.70, SD = 6.56$) than both those with a history of moderate verbal abuse ($M = 12.87, SD = 6.91$) and those with a history of severe verbal abuse ($M = 14.60, SD = 6.83$). Alcohol use while at a bar or club also differed significantly as a function of verbal abuse, $F(2, 504) = 10.67, p < .001$. Specifically, when at a bar or club, those with no history of verbal abuse reported drinking significantly less alcohol ($M = 4.09, SD = 5.61$) than both those with a history of moderate verbal abuse ($M = 7.96, SD = 6.89$) and those with a history of severe verbal abuse ($M = 8.98, SD = 7.05$). Significant differences in alcohol consumption while on a date were also found for sexual aggression, $F(3, 506) = 7.63, p < .001$. Specifically, men with no history of sexual aggression reported drinking significantly less alcohol while on a date ($M = 3.18, SD = 3.73$) than men with a history of rape or attempted rape ($M = 7.80, SD = 4.43$). Finally, alcohol consumption prior to sexual activity differed significantly as a function of sexual aggression, $F(3, 506) = 12.62, p < .001$, and verbal abuse, $F(2, 503) = 9.33, p < .001$. Specifically, men with a history of rape or attempted rape reported drinking significantly more alcohol prior to engaging in sexual activity ($M = 16.00, SD = 6.87$) than either men with a history of sexually aggressive contact ($M = 8.26, SD = 6.99$) or men with no history of sexually aggressive behavior ($M = 6.69, SD = 6.35$). In addition, men with a history of sexual coercion reported drinking significantly more alcohol prior to engaging in sexual activity ($M = 11.13, SD = 6.79$) than men with no history of sexually aggressive behavior. Further, those with no history of verbal aggression reported drinking significantly less alcohol prior to engaging in sexual activity ($M = 3.60, SD = 4.91$) than those with a history of severe verbal abuse ($M = 7.81, SD = 6.87$).
Problem drinking behaviors also differed significantly as a function of sexual aggression, $F(3, 508) = 10.06, p < .001$, verbal abuse, $F(2, 504) = 13.06, p < .001$, and physical violence, $F(2, 503) = 15.79, p < .001$. Specifically, men with no history of sexual aggression reported significantly fewer problem drinking behaviors ($M = 8.61, SD = 5.92$) than those who engaged in sexually aggressive contact ($M = 11.63, SD = 7.17$), sexual coercion ($M = 13.31, SD = 7.34$), or rape or attempted rape ($M = 14.67, SD = 4.05$). Similarly, participants with a history of severe verbal abuse reported a significantly greater number of problem drinking behaviors ($M = 9.84, SD = 6.16$) than both those with no history of verbal abuse ($M = 5.38, SD = 4.66$) and those with a history of moderate verbal abuse ($M = 7.94, SD = 6.18$). Finally, participants with no history of physical violence reported significantly fewer problem drinking behaviors ($M = 7.92, SD = 5.73$) than both those with a history of moderate physical violence ($M = 11.01, SD = 6.54$) and those with a history of severe physical violence ($M = 10.94, SD = 6.04$).

When asked about the maximum number of drinks participants would consume on any one occasion, significant differences were found as a function of verbal abuse, $F(2, 505) = 8.57, p < .001$. Specifically, those with a history of severe verbal abuse reported a significantly higher number of drinks ($M = 12.32, SD = 5.40$) than those with no history of verbal abuse ($M = 8.96, SD = 5.44$). Similarly, when asked about the ideal number of drinks participants would consume on one occasion, significant differences were found as a function of verbal abuse, $F(2, 505) = 10.24, p < .001$. Specifically, participants with a history of severe verbal abuse ($M = 7.80, SD = 3.88$) reported a
significantly higher number than those with no history of verbal abuse ($M = 5.34, SD = 3.62$) and those with a history of moderate verbal abuse ($M = 6.61, SD = 3.98$).

**Social Desirability**

Social desirability, as measured by the Marlowe-Crowne Social Desirability Scale, differed significantly as a function of sexual aggression, $F(3, 509) = 7.09, p < .001$, verbal abuse, $F(2, 505) = 8.21, p < .001$, and physical violence, $F(2, 504) = 8.94, p < .001$. Specifically, men with no history of sexual aggression reported a significantly greater desire for social approval ($M = 6.26, SD = 2.24$) than men with a history of sexually aggressive contact ($M = 4.87, SD = 2.13$). Similarly, participants with a history of severe verbal abuse ($M = 5.87, SD = 2.27$) reported a significantly lower desire for social approval than both those with no history of verbal abuse ($M = 6.89, SD = 2.37$) and those with a history of moderate verbal abuse ($M = 6.77, SD = 1.97$). Finally, participants with a history of severe physical violence reported significantly less desire for social approval ($M = 4.96, SD = 2.38$) than both those with no history of physical violence ($M = 6.36, SD = 2.14$) and those with a history of moderate physical violence ($M = 5.93, SD = 2.38$).

**Path Analyses**

Recursive path analyses, using AMOS 4.0, were conducted to investigate the causal relationship among aggression and other variables. These analyses estimate the strength of the relationship between variables, and can then be used to estimate the underlying causal processes. Successive regression analyses were performed to obtain the main path coefficients, and each endogenous variable was regressed upon those
preceding variables that directly affected it. Various fit indices were employed to
determine the model fit: $\chi^2$ tests, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI),
and Root Mean Square Error of Approximation (RMSEA). These indices have been
widely used in path analytic procedures to clarify the causal relationships within the
model. The $\chi^2$ test can be problematic at larger sample sizes in that it is highly reactive to
sample size. Therefore, the indices of model fit mentioned above will also be reported.
For the CFI and TLI, values close to .95 and higher are considered desirable, and an
RMSEA value of .08 or lower indicates acceptable fit (Loehlin, 1998).

A model predicting sexual aggression, verbal abuse, and physical violence was
created based on the model created by Malamuth and colleagues (1995; see Figure 3).
The first set of predictors focused on life experiences that may have shaped participants’
personalities and behaviors. This included Family Violence and Adolescent Delinquency,
as measured by the Early Experiences Questionnaire. The second set of predictors
included both personality variables, and those that reflect participants’ level of
functioning at the time of data collection. These included Hostile Masculinity (as
measured by the Adversarial Heterosexual Beliefs Scale), Sexual Promiscuity (consisting
of age of first sexual intercourse, and number of sexual intercourse and sexual activity
partners), Masculine Gender Role Stress (as measured by the Gender Role Conflict
Scale), Personality Factors (consisting of the Self-Report Psychopathy Scale, Narcissistic
Personality Inventory, and Sensation Seeking Subscale), Psychological Functioning
(consisting of the CES Depression Scale and Rosenberg Self-Esteem Scale), Alcohol Use
(consisting of general drinking habits and average daily alcohol use), and Problem
Drinking (as measured by the subscale of the Drinking and Drug Habits Questionnaire). The final set of variables included the aggressive behaviors: sexual aggression, verbal abuse, and physical violence. The categories of aggressive behavior were not mutually exclusive, such that participants were placed into each category of aggressive behavior they reported engaging in. Numerous intercorrelations were found both between the various forms of aggression and between the predictors and aggression (see Table 11).

Initial results revealed some unsatisfying fit indices: $\chi^2 (31, N = 514) = 21.10, p < .001; CFI = .39; TLI = -.52; \text{RMSEA} = .20; 90\% \text{ confidence interval of RMSEA} = .19-.21$. The model was then analyzed removing all nonsignificant path links (see Figure 4). Although the Chi-Square remained highly significant, $\chi^2 (21, N = 514) = 14.72, p < .001$, the other fit indices improved (CFI = .55; TLI = .03; RMSEA = .16; 90\% confidence interval of RMSEA = .15-.18), suggesting that the significant causal path links are of import. Further, in Figure 3, those paths which were found to be significant in the modified model are highlighted and include the beta values to aid in comparison of the two models. Family violence was predictive of adolescent delinquency ($\beta = .19$, critical ratio = 4.28, $p < .001$), hostile masculinity ($\beta = .19$, critical ratio = 4.44, $p < .001$), sexual promiscuity ($\beta = .19$, critical ratio = 4.31, $p < .001$), and problem drinking ($\beta = .19$, critical ratio = 2.67, $p < .01$). Adolescent delinquency was predictive of sexual promiscuity ($\beta = .19$, critical ratio = 4.53, $p < .001$), alcohol use ($\beta = .32$, critical ratio = 7.60, $p < .001$), and problem drinking ($\beta = .42$, critical ratio = 10.40, $p < .001$).

Sexual aggression was predicted by hostile masculinity ($\beta = .14$, critical ratio = 3.32, $p < .001$), sexual promiscuity ($\beta = .08$, critical ratio = 1.90, $p < .05$), and problem
drinking (β = .18, critical ratio = 4.15, p < .001). Verbal abuse was predicted by hostile masculinity (β = .18, critical ratio = 4.15, p < .001), sexual promiscuity (β = .10, critical ratio = 2.26, p < .05), alcohol use (β = .10, critical ratio = 2.30, p < .05), and problem drinking (β = .09, critical ratio = 2.17, p < .05). Physical violence was predicted by problem drinking (β = .22, critical ratio = 5.05, p < .001).

**Differentiating Factors of Various Forms of Aggression**

To better examine potential differentiating factors, only men who reported some form of aggression were selected, and then categorized into the following, mutually exclusive, categories: history of sexual aggression only, history of verbal abuse only, history of physical violence only, history of sexual aggression and verbal abuse, history of sexual aggression and physical violence, history of verbal abuse and physical violence, and history of all three forms of aggression.

Approximately 50% (N = 229) reported only a history of verbal abuse, 0.6% (N = 3) reported a history of only physical violence, 6.9% (N = 32) reported engaging in sexual aggression and verbal abuse, 35% (N = 162) reported engaging in verbal abuse and physical violence, and 8% (N = 37) reported having engaged in all three forms of violence (see Table 12). No participants reported engaging only in sexual aggression or in a combination of sexual aggression and physical aggression. Since only 3 participants reported a history of engaging only in physical violence, that category was dropped for the following analyses. One-way analyses of variance were used to assess the relationships between continuous predictors and history of sexual aggression, verbal abuse, and physical violence. The Bonferroni correction was again applied due to the
large number of ANOVAs, and only variables with a $p < .001$ are reported as significant. Variables that had significant bivariate relationships were then examined more closely, using Tukey’s Honestly Significant Difference (HSD) to examine the difference between groups (see Table 13). Categorical variables were examined using Chi-Square analyses (see Table 14).

**Developmental and Socialization Factors**

Adolescent delinquency differed significantly as a function of group membership, $F (3, 456) = 7.63, p < .001$. Specifically, participants with a history of verbal abuse only reported significantly fewer delinquent behaviors in adolescence ($M = 4.71, SD = 4.57$) than participants with a history of verbal abuse and sexual aggression ($M = 7.41, SD = 5.98$), participants with a history of verbal abuse and physical violence ($M = 6.20, SD = 5.16$), and participants with a history of all three forms of aggression ($M = 8.19, SD = 6.48$). None of the other developmental or socialization factors were found to be significant.

**Attitudes and Beliefs**

Hostile masculinity, as measured by the Adversarial Heterosexual Beliefs Scale, was found to differ significantly as a function of group membership, $F (3, 455) = 6.07, p < .001$. Specifically, participants with a history of all forms of aggression reported significantly more hostile masculinity ($M = 26.86, SD = 9.60$) than participants with a history of verbal abuse only ($M = 20.20, SD = 10.19$) and those with a history of verbal abuse and physical violence ($M = 22.11, SD = 9.36$). The Gender Role Conflict Scale was not found to differ significantly as function of group membership.
**Personality Characteristics**

Psychopathy, as measured by the Self-Report Psychopathy Scale, differed significantly as a function of group membership, $F(3, 455) = 9.15, p < .001$. Specifically, participants with a history of all forms of aggression endorsed significantly more traits of psychopathy ($M = 34.27, SD = 9.94$) than participants with either a history of verbal abuse only ($M = 27.06, SD = 9.07$) or a history of verbal abuse and physical violence ($M = 28.17, SD = 7.40$). In addition, participants with a history of verbal abuse and sexual aggression reported significantly more traits of psychopathy ($M = 31.41, SD = 7.58$) than participants with a history of verbal abuse only.

Secondary Psychopathy, $F(3, 455) = 7.37, p < .001$, also differed significantly as a function of group membership. Specifically, participants with a history of all forms of aggression reported significantly more traits of Secondary Psychopathy ($M = 13.35, SD = 4.43$) than participants with a history of verbal abuse only ($M = 10.19, SD = 4.08$) and those with a history of verbal abuse and physical violence ($M = 11.06, SD = 3.88$). No other personality variables were found to differ significantly as a function of group membership.

**Psychopathology and Functioning**

No significant differences were found for either self-esteem or depression as a function of group membership.

**Substance Use**

Neither general drinking habits, nor average daily alcohol use differed significantly as a function of group membership. An examination of situational drinking
revealed that only alcohol use prior to sexual activity differed significantly as a function of group membership, $F(3, 454) = 5.34, p = .001$. Specifically, participants with a history of all forms of aggression reported drinking more alcohol prior to sexual activity ($M = 10.84, SD = 7.79$) than those with a history of verbal abuse and physical violence ($M = 7.31, SD = 5.94$) and those with a history of verbal abuse only ($M = 6.93, SD = 6.74$).

An examination of problem drinking behaviors also revealed significant differences as a function of group membership, $F(3, 455) = 13.42, p < .001$. Specifically, participants with a history of verbal abuse only reported significantly fewer problem drinking behaviors ($M = 7.93, SD = 5.45$) than those with a history of verbal abuse and sexual aggression ($M = 11.84, SD = 6.85$), those with a history of verbal abuse and physical violence ($M = 10.50, SD = 6.29$), and those with a history of all forms of aggression ($M = 13.30, SD = 6.66$). No significant differences were found for either maximum or ideal number of drinks consumed on one occasion or for drug use.

**Social Desirability**

Social desirability was found to differ significantly as a function of group membership, $F(3, 456) = 8.74, p < .001$. Specifically, those with a history of all three forms of aggression reported significantly less desire for social approval ($M = 4.81, SD = 2.54$) than those with a history of verbal abuse only ($M = 6.44, SD = 2.07$) and those with a history of verbal abuse and physical violence ($M = 5.88, SD = 2.36$). In addition, those with a history of verbal abuse and sexual aggression reported significantly less desire for social approval ($M = 5.06, SD = 1.76$) than those with a history of verbal abuse only.
CHAPTER 6: DISCUSSION

This study was designed to test a modified model of sexual aggression and dating violence, as well as examine co-occurrence rates of aggressive behaviors, the cumulative effect of risk factors, and assess for differentiating factors. The proportion of participants who reported some history of sexual aggression (13.6%) is noticeably lower than recent studies, which ranged from 17.7% (Gidycz et al., 2007) to 31.2% (Loh & Gidycz, 2006). Similarly, reports of acts that meet the legal definition of rape or attempted rape (2.9%) were also lower than the rate found in a nation-wide study (4%; Brener et al., 1999). It is possible that sampling differences account for this discrepancy, or that the increase in sexual assault prevention programs has increased college men’s awareness of the criminal nature of their behavior, making them less likely to report having engaged in it. Though it is possible that the decrease in reporting rates accurately reflects a decrease in sexually aggressive behavior, studies with college women have shown rates of victimization that continue to be largely unchanged since the 1980s (i.e., Brener et al., 1999; Gross, Winslett, Roberts, & Gohm, 2006).

The proportion of participants who reported a history of verbal abuse (91%) is consistent with findings from previous studies, in which 80% to 90% of participants reported such a history (Gidycz et al., 2007; Stets & Henderson, 1991; White & Koss, 1991). Though the proportion of participants who reported a history of some form of physical violence (40%) is consistent with previous studies using college students (i.e., Barnes et al., 1991; Jackson, 1999), it remains startlingly high. Further, it represents a noticeable increase from previous studies conducted at the same university, which found
between 6.4% (Gidycz et al., 2007) and 10% (Luthra & Gidycz, 2006), perhaps due to the larger sample size in the current study.

**Co-Occurrence of Aggression**

In examining the co-occurrence of aggressive behaviors, significant relationships were found between verbal abuse and physical violence, and between verbal abuse and sexual aggression. Consistent with previous findings (i.e., Gidycz et al., 2007; Lundeberg et al., 2004; Magdol et al., 1997; Ray & Gold, 1996), verbal abuse and physical violence were highly correlated, and all of the participants in the present study who reported a history of severe physical violence also reported a history of severe verbal abuse. Also consistent with previous research (i.e., Gidycz et al., 2007) participants who reported a history of sexual assault also reported high rates of using verbal abuse with their dating partners. For example, all of the men who reported engaging in sexual coercion also reported using severe verbal abuse. This finding is supported by previous research (Warkentin & Gidycz, 2007), which found that verbally coercive and aggressive behavior (i.e., covert tactics) were quite acceptable to sexually aggressive men. Further, it seems logical that men who engage in sexual coercion would also tend to be verbally abusive since they rely on verbal arguments and pressure to coerce their partner into having sexual intercourse.

Interestingly, there was no significant relationship between a history of sexual aggression and a history of physical violence. Gidycz and colleagues (2007) reported the same finding, but noted that it was unclear how much the small sample size and/or low proportion of physically violent men in their study contributed to the lack of significance.
The fact that the same findings were discovered in the present study, which used a larger sample size and found a higher proportion of physical violence, lends credence to the notion that there are qualitative differences between these two groups of aggressive men.

In looking at participants’ use of all aggressive behaviors, it is interesting that no participants reported engaging in only sexual aggression, or in some combination of sexual aggression and physical violence. These findings highlight the relationship between sexual aggression and verbal abuse, and it is possible that sexually aggressive men utilize verbal abuse in their attempts to coerce a woman into engaging in sexual activity. Similarly, the fact that no participants reported engaging in both sexual aggression and physical violence further underscores the fact that there appear to be qualitative differences between these groups of men.

**Predictors and Differentiating Factors of Aggression**

Consistent with previous research (e.g., Bernard & Bernard, 1983; Shook et al., 2000), perpetration of physical violence was found to differ significantly as a result of exposure to violence in the family of origin. Furthermore, participants with a history of severe physical violence reported the greatest exposure to early family violence, which supports the strong influence of early family experiences on later behaviors (Bernard & Bernard, 1983). Interestingly, adolescent delinquency was also found to differ significantly as a function of only verbal abuse and sexual aggression, such that participants who engaged in the most severe forms of aggression (i.e., rape or attempted rape or severe verbal abuse) reported significantly more delinquent behaviors in adolescence than participants with no history of aggression. Thus, it appears that the early
family environment is more influential for men who go on to engage in physical violence, while experiences in adolescence carry more weight for men who later engage in verbal abuse or sexual aggression.

In looking at the ability of adolescent delinquency to differentiate between forms of aggression, it is notable that participants with a history of more than one aggressive behavior (i.e., sexual aggression and verbal abuse, physical violence and verbal abuse, all three forms of aggression) reported more delinquent acts in adolescence than those with a history of verbal abuse alone. Thus, even though adolescent delinquency was not significantly related to physical violence, there seems to be some kind of relationship when physical violence is combined with another form of aggression.

Greater levels of hostile masculinity were found for perpetrators of verbal abuse and sexual aggression as compared to non-aggressive men. In addition, those participants who engaged in the most severe behaviors (attempted rape or rape, or severe verbal abuse) reported the greatest levels of hostile masculinity. Further, participants with a history of all forms of aggression reported significantly more hostile masculinity than other aggressive men, which suggests that they have an even greater negative view of women and relationships. Such strong beliefs may result in a greater likelihood to engage in aggressive behavior if these men view women and relationships as inherently hostile, such as having a greater reactivity to perceived slights or rejections by women.

Psychopathy was also found to be a significant predictor of sexually aggressive and verbally abusive behaviors compared to non-aggressive men. Traits of primary psychopathy, such as lack of remorse or callousness, were significantly higher among
participants with a history of severe verbal abuse and a history of sexually aggressive contact than among non-aggressive men, whereas traits of secondary psychopathy, such as impulsivity and quick-temperedness, were significantly higher among men with a history of sexually aggressive contact, severe verbal abuse, and moderate physical violence. Thus, men with a history of verbal abuse and those with a history of sexual aggression report greater levels of psychopathy in general, including manipulative behaviors, while men with a history of physical violence only report greater levels of impulsivity and quick-temperedness. In addition, when examining only aggressive men, it is notable that men with a history of all forms of aggression report the highest levels of overall psychopathy and secondary psychopathy. Also consistent with the significance of psychopathy as a risk factor is the finding that men with a history of sexually aggressive contact and a history of rape or attempted rape demonstrated significantly less empathic concern than men with no history of sexual aggression. Such results are consistent with past research showing that sexually aggressive men typically have little empathy for their victims (i.e., Marshall & Moulden, 2001).

In general, substance use was significantly higher among aggressive men than non-aggressive men. For example, men with a history of moderate or severe verbal abuse, or moderate physical violence, reported significantly greater alcohol consumption in general, as well as average daily alcohol consumption, than non-aggressive men. This trend toward greater alcohol use on a regular basis is consistent with previous research (i.e., Gidycz et al., 2007). An examination of situational drinking and sexual aggression also revealed some interesting findings. Specifically, men with a history of sexual
coercion or rape or attempted rape reported significantly more alcohol use prior to sexual activity and while on a date than non-sexually aggressive men. Further, men with a history of all three forms of aggression reported significantly greater alcohol use prior to sexual activity than either men with a history of verbal abuse, or those with a history of both verbal abuse and physical violence. The presence of greater levels of alcohol consumption by sexually aggressive men while in dating and sexual situations is consistent with previous research (i.e., Abbey & McAuslan, 2004). In addition, it provides support for the idea that men may use alcohol as a way to reduce feelings of responsibility (Abbey et al., 1998), such that a man would later blame his behavior on the fact that he was intoxicated.

Problem drinking behaviors were also significantly higher among sexually, verbally, and physically aggressive men than non-aggressive men. Further, all the forms of aggressive behavior were found to be related to problem drinking, as compared to those with no history of aggression. For example, participants with a history of sexually aggressive contact, sexual coercion, or rape or attempted rape all reported more problem drinking behaviors than participants with no history of sexual aggression. This trend can also be found in looking at the ability of problem drinking to differentiate between different forms of aggression, where participants with a history of verbal abuse only reported fewer problem drinking behaviors than all the other groups of aggressive men. It is possible that this is due, in part, to the alcohol-related feedback system proposed by Sugarman and colleagues (1996). These findings provide some support for their hypothesis that when men are drinking alcohol, they are more likely to engage in physical
violence, which may then prompt the man to consume even more alcohol in order to provide an excuse for having engaged in a violent act. Such a cycle of alcohol use could easily lead to problem drinking, thereby continuing the feedback system.

It is also interesting to note that significant differences were found with regards to social desirability, with aggressive men reporting less desire to follow social norms than non-aggressive men. Specifically, significantly lower levels of social desirability were reported by men with a history of sexually aggressive contact, a history of severe verbal abuse, and severe physical abuse as compared to non-aggressive men. Such a trend makes sense when considering the greater levels of psychopathy reported by aggressive men. However, it is not clear if these results reflect the fact that aggressive men know what the socially appropriate behaviors are and simply refuse to follow them, or if they have difficulty identifying which behaviors would be socially appropriate or inappropriate.

The psychopathology and psychological functioning variables were not successful in predicting aggressive behavior, as neither depression nor low self-esteem were related to aggression. It is possible that no significant relationships were found because the psychological distress experienced by these men occurs at a sub-clinical level. Even though the symptoms may not be significant enough to register on a standardized measure, even low levels of depression over time may have an effect on men’s relationships and/or responses to conflict. Similarly, gender role conflict failed to be significantly related to aggressive behavior. It is possible that, given aggressive men’s decreased desire for following social norms, that these men do not experience the stress
that comes with feeling conflict about adhering to gender roles. Further, it has already been noted that aggressive men have strong and hostile beliefs about the role of men and women in relationships, which suggests they may adhere strongly to proscribed gender roles, thus eliminating any stress and conflict. This notion is supported somewhat by the data, in that the means of gender role stress were higher for non-aggressive men than they were for aggressive men, even though the differences were not significant.

In addition, neither narcissism nor sensation seeking were found to be related to aggressive behavior. Though it is possible that no such differences exist, it should also be noted that the narcissism scale was included towards the end of the survey packet, and participants may have begun to fatigue and not pay close enough attention to the two statements they needed to choose from for each item. Future studies may want to take the placement of the survey into further consideration. With regards to the lack of significance for sensation seeking, one possible explanation is that men in this age group in general tend to be more willing to engage in risky behavior, resulting in overall higher levels of sensation seeking. However, it is also possible that aggressive men differ from non-aggressive men in specific traits of sensation seeking, which were not sufficiently tapped with the measure used in the present study.

Similarly, neither fraternity membership nor athletic participation were significantly related to aggressive behavior. This may be due in part to the low number of participants who endorsed fraternity membership, making it more difficult to detect a significant relationship. Further, athletic participation encompasses a broad range of activities, with varying levels of commitment to the team, which may dilute any
significant findings. Finally, neither sexual nor dating history was significantly related to aggressive behavior. This finding is somewhat surprising in light of the fact that sexual promiscuity emerged as a significant path in the path analysis; however, the path analysis did not differentiate between different forms of verbal or sexual aggression. Thus, it may be that there are significant differences between the general groups of aggressive versus non-aggressive men that get washed out when the aggressive men are further divided into subgroups.

**Modified Confluence Model for Predicting Aggression**

Using a path analysis, a modified confluence model was created to predict sexual aggression, verbal abuse and physical violence. This model differs from Malamuth and colleagues (1995) in that it incorporates early experiences (family violence and adolescent delinquency), as well as adding in personality and substance use variables. Contrary to their model, the present study failed to find significant pathways for masculine gender role stress or attitudes.

Consistent with previous research (i.e., Stith et al., 2000), family violence significantly predicted adolescent delinquency. In addition, family violence was the only variable to predict hostile masculinity, which in turn predicts sexual aggression and verbal abuse. Thus, the relationship between early childhood experiences and later views toward women and relationships appears significant with regard to sexual aggression and verbal abuse. Sexual promiscuity was predicted by both family violence and adolescent delinquency. Further, sexual promiscuity predicted sexual aggression and verbal abuse, but not physical violence. It is possible that this finding reflects the difference in
motivations discussed earlier, in that physically violent men’s primary motivations are not a series of casual sexual encounters.

Alcohol use was predicted only by adolescent delinquency, whereas problem drinking was predicted by both family violence and adolescent delinquency. Further, alcohol use predicts only verbal abuse, while problem drinking predicted each form of aggression, and problem drinking was the only predictor for physical violence. Thus, it appears that it is not the presence of greater levels of alcohol use in and of itself that predicts verbal, physical and sexual aggression; rather, it is the transition from heavy alcohol use to problem drinking that increases the risk of engaging in such aggression.

**Limitations**

Several limitations for the present study should be noted, including the retrospective nature of the study, reliance on self-report measures, limited generalizability, and the low base rates for sexually aggressive behavior. The retrospective design of this study limited the ability to examine the influence of these risk factors on future aggressive behaviors. However, given that this study was an attempt to integrate previous models (e.g., Malamuth et al., 1991; 1995), and to build on previous co-occurrence work (e.g., Gidycz et al., 2007), a retrospective study was viewed as a logical first step. Future research should apply this integrated model to a prospective design, to determine its validity across time. In addition, the present study is one of the few that has attempted to differentiate between men who engage in various forms of aggression. Further research on this topic is needed to better tease out the specific variables that contribute to these differences, especially with regard to sexually
aggressive versus physically aggressive men. In addition, the reliance on self-report measures may skew the data somewhat, such that there is likely some subset of participants who, for whatever reason, do not endorse behaviors they have engaged in. Though this is an issue that affects the vast majority of research in this field, it remains a complicating factor which has not yet been adequately addressed.

The generalizability of the study may be limited due to the homogenous nature of the sample, consisting of young, primarily Caucasian college men. Future research should make an effort to include greater racial and ethnic diversity, to increase the ability to generalize findings to other groups. Finally, despite the large sample size, the proportion of men reporting sexual aggression was lower than found in previous studies, which may have limited the ability to detect significant differences. Efforts to increase robustness in this area could include sampling participants from more than one location. Despite these limitations, the present study is the first to combine Malamuth and colleagues (1991; 1995) models of aggression and to include a focus on co-occurrence and differentiation of aggressive behaviors.

**Implications**

The current study found a startlingly high rate of physical violence perpetrated by college men, and underscores the necessity of better identifying groups which are at a higher risk for engaging in aggressive behavior. The fact that a low proportion of men reported sexual aggression, while numbers remain unchanged among reports from females, suggests that college men are becoming more savvy about this behavior. That is, it seems they are more aware of the criminal nature of the behavior, but continue to
engage in it nonetheless. The qualitative differences between sexually aggressive and physically aggressive men should also be explored further. For example, it seems notable that family violence was significantly related only to physical violence, while adolescent delinquency was significantly related to verbal abuse and sexual aggression. It is possible that this reflects different mechanisms at work which result in different aggressive behaviors later in life. Better defining the risk factors for these men, as well as the factors that differentiate them, can be of great use to prevention programming.

Clinicians and researchers should also take note of the significant impact of problem drinking behaviors. The fact that problem drinking behaviors predicted each form of aggression, and was the sole predictor of physical violence, highlights the importance of targeting these behaviors, both with regards to treatment and prevention. In addition, it may be useful to screen for aggressive behaviors when working with students who present with problem drinking behaviors. Further research is needed to better understand why the transition from heavy drinking to problem drinking results in such a large increase in risk for engaging in aggressive behaviors.
REFERENCES


Brecklin, L. R., & Ullman, S. E. (2002). The roles of victim and offender alcohol use in sexual assaults: Results from the National Violence Against Women Survey. *Journal of Studies on Alcohol, 63*, 57-63.


Murnen, S. K., Wright, C., & Kaluzny, G. (2002). If “boys will be boys,” then girls will be victims? A meta-analytic review of the research that relates masculine ideology to sexual aggression. *Sex Roles, 46,* 11-12.


Ohio Revised Code, 2907 §§ 28907.01-2907.02 (1998).


Figure 1

Confluence Model of Sexual Aggression (Malamuth et al., 1991).
Figure 2

*Elaborated Confluence Model of Conflict with Women (Malamuth et al., 1995).*
Figure 3

*Original Model for Path Analyses.*

Note. Those paths which were later found to be significant are indicated with the unbroken lines, and beta values for each are shown.
Figure 4

*Modified Confluence Model Predicting Aggression.*
Table 1

*Participant Demographics*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
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<td></td>
</tr>
<tr>
<td>18</td>
<td>114</td>
<td>22.2</td>
</tr>
<tr>
<td>19</td>
<td>238</td>
<td>46.4</td>
</tr>
<tr>
<td>20</td>
<td>107</td>
<td>20.9</td>
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<tr>
<td>21</td>
<td>35</td>
<td>6.8</td>
</tr>
<tr>
<td>22</td>
<td>12</td>
<td>2.3</td>
</tr>
<tr>
<td>23</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>24</td>
<td>1</td>
<td>0.2</td>
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<tr>
<td>25</td>
<td>1</td>
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</tr>
<tr>
<td>27</td>
<td>2</td>
<td>0.4</td>
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<td><strong>Year in School</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First</td>
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<tr>
<td>Second</td>
<td>152</td>
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<td>Third</td>
<td>55</td>
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<tr>
<td>Fourth</td>
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</tr>
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<td>Fifth or above</td>
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<tr>
<td><strong>Current Residence</strong></td>
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<tr>
<td>Dorm or residence hall</td>
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<td>79.8</td>
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<tr>
<td>Fraternity house</td>
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<tr>
<td>Other university housing</td>
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<td>0.2</td>
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<td>Off-campus house or apartment</td>
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<tr>
<td>Parent/Guardian’s home</td>
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<td>2.3</td>
</tr>
<tr>
<td>Other</td>
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<td>0.2</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
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</tr>
<tr>
<td>Caucasian, non-Hispanic</td>
<td>470</td>
<td>91.4</td>
</tr>
<tr>
<td>African American</td>
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<tr>
<td>American Indian or Alaska Native</td>
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<td>Other</td>
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<td>Protestant</td>
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<td>Religion, continued</td>
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<td>%</td>
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<tr>
<td>-------------------------------------------</td>
<td>----</td>
<td>-----</td>
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<tr>
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<td>Nondenominational</td>
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<td>9.4</td>
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<td>None</td>
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<td>13.7</td>
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<table>
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<tr>
<th>Family Income</th>
<th>N</th>
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<td>Unemployed or disabled</td>
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<td>2.1</td>
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<td>$10,000 - $20,000</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td>$21,000 - $30,000</td>
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<td>$31,000 - $40,000</td>
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<td>$41,000 - $50,000</td>
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<td>9.4</td>
</tr>
<tr>
<td>$51,000 - $75,000</td>
<td>114</td>
<td>22.2</td>
</tr>
<tr>
<td>$76,000 - $100,000</td>
<td>128</td>
<td>25.0</td>
</tr>
<tr>
<td>$101,000 - $150,000</td>
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<td>20.5</td>
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<tr>
<td>$151,000 or more</td>
<td>71</td>
<td>13.8</td>
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### Table 2

**Variables and Measures Used to Assess Them**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure</th>
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<tbody>
<tr>
<td><strong>Aggression</strong></td>
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<tr>
<td>Sexual assault perpetration</td>
<td>Sexual Experiences Survey</td>
</tr>
<tr>
<td>Physical dating violence</td>
<td>Conflict Tactics Scale</td>
</tr>
<tr>
<td>Verbal dating abuse</td>
<td>Conflict Tactics Scale</td>
</tr>
<tr>
<td><strong>Developmental/Socialization Factors</strong></td>
<td></td>
</tr>
<tr>
<td>Past and present dating behavior</td>
<td>Dating and Sexual Experiences Questionnaire</td>
</tr>
<tr>
<td>Past and present sexual behavior</td>
<td>Dating and Sexual Experiences Questionnaire</td>
</tr>
<tr>
<td>Fraternity membership</td>
<td>Demographics Questionnaire</td>
</tr>
<tr>
<td>Athletic participation</td>
<td>Demographics Questionnaire</td>
</tr>
<tr>
<td>Adolescent delinquency</td>
<td>Early Experiences Questionnaire</td>
</tr>
<tr>
<td>Family violence</td>
<td>Early Experiences Questionnaire</td>
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<tr>
<td><strong>Attitudes and Beliefs</strong></td>
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</tr>
<tr>
<td>Hostile masculinity</td>
<td>Adversarial Heterosexual Beliefs Scale</td>
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<tr>
<td>Masculine gender role stress</td>
<td>Gender Role Conflict Scale</td>
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<tr>
<td><strong>Personality Characteristics</strong></td>
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<tr>
<td>Empathy</td>
<td>Interpersonal Reactivity Index</td>
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<tr>
<td>Narcissism</td>
<td>Narcissistic Personality Inventory</td>
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<tr>
<td>Psychopathy</td>
<td>Self-Report Psychopathy Scale</td>
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<tr>
<td>Sensation Seeking</td>
<td>ZKPQ Impulsive-Sensation Seeking Subscale</td>
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<tr>
<td><strong>Psychopathology/Functioning</strong></td>
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<tr>
<td>Depression</td>
<td>CES – Depression Scale</td>
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<tr>
<td>Self-esteem</td>
<td>Rosenberg Self-Esteem Scale</td>
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<tr>
<td><strong>Substance Use</strong></td>
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<tr>
<td></td>
<td>Drinking and Drug Habits Questionnaire</td>
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<tr>
<td><strong>Social Desirability</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marlowe-Crowne Social Desirability Scale</td>
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</table>
Table 3

*Frequency of Aggressive Behaviors*

<table>
<thead>
<tr>
<th>History of Sexual Aggression</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>443</td>
<td>86.4</td>
</tr>
<tr>
<td>Sexually aggressive contact</td>
<td>39</td>
<td>7.6</td>
</tr>
<tr>
<td>Sexual coercion</td>
<td>16</td>
<td>3.1</td>
</tr>
<tr>
<td>Attempted rape or rape</td>
<td>15</td>
<td>2.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>History of Verbal Abuse</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>47</td>
<td>9.1</td>
</tr>
<tr>
<td>Moderate</td>
<td>71</td>
<td>14.0</td>
</tr>
<tr>
<td>Severe</td>
<td>390</td>
<td>76.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>History of Physical Violence</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>305</td>
<td>60.2</td>
</tr>
<tr>
<td>Moderate</td>
<td>153</td>
<td>30.2</td>
</tr>
<tr>
<td>Severe</td>
<td>49</td>
<td>9.7</td>
</tr>
</tbody>
</table>
Table 4

Relationships Between Various Forms of Aggression

<table>
<thead>
<tr>
<th>none</th>
<th>Moderate</th>
<th>Severe</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal Dating Abuse</td>
<td>46 (10.5%)</td>
<td>68 (15.5%)</td>
<td>324 (74.0%)</td>
</tr>
<tr>
<td>Sexually Aggressive Contact</td>
<td>0 (0%)</td>
<td>2 (5.1%)</td>
<td>37 (94.9%)</td>
</tr>
<tr>
<td>Sexual Coercion</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>16 (100%)</td>
</tr>
<tr>
<td>Attempted/Completed Rape</td>
<td>0 (0%)</td>
<td>1 (7.1%)</td>
<td>13 (92.9%)</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>71</td>
<td>390</td>
</tr>
</tbody>
</table>
$\chi^2 (6, N = 507) = 16.57, p < .05.$

<table>
<thead>
<tr>
<th>none</th>
<th>Moderate</th>
<th>Severe</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Dating Violence</td>
<td>44 (14.4%)</td>
<td>57 (18.7%)</td>
<td>204 (66.9%)</td>
</tr>
<tr>
<td>Moderate</td>
<td>3 (2.0%)</td>
<td>13 (8.5%)</td>
<td>137 (89.5%)</td>
</tr>
<tr>
<td>Severe</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>49 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>305</td>
<td>153</td>
<td>49</td>
</tr>
</tbody>
</table>
$\chi^2 (4, N = 507) = 47.82, p < .001.$

<table>
<thead>
<tr>
<th>none</th>
<th>Moderate</th>
<th>Severe</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Aggression</td>
<td>272 (62.2%)</td>
<td>127 (29.1%)</td>
<td>38 (8.7%)</td>
</tr>
<tr>
<td>Sexually Aggressive Contact</td>
<td>19 (48.7%)</td>
<td>15 (38.5%)</td>
<td>5 (12.8%)</td>
</tr>
<tr>
<td>Sexual Coercion</td>
<td>5 (31.3%)</td>
<td>8 (50.0%)</td>
<td>3 (18.8%)</td>
</tr>
<tr>
<td>Attempted/Completed Rape</td>
<td>8 (57.1%)</td>
<td>3 (21.4%)</td>
<td>3 (21.4%)</td>
</tr>
<tr>
<td>Total</td>
<td>304</td>
<td>153</td>
<td>49</td>
</tr>
</tbody>
</table>
$\chi^2 (6, N = 506) = 11.10, p = ns.$
Table 5

*Means (Standard Deviations) for Continuous Variables with History of Sexual Aggression*

<table>
<thead>
<tr>
<th>History of Sexual Aggression</th>
<th>None</th>
<th>Contact</th>
<th>Coercion</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of first date</td>
<td>14.57 (1.64)</td>
<td>14.36 (1.58)</td>
<td>14.50 (1.55)</td>
<td>15.48 (1.13)</td>
</tr>
<tr>
<td>Number of dating partners</td>
<td>2.28 (1.48)</td>
<td>2.41 (0.97)</td>
<td>2.25 (1.18)</td>
<td>2.20 (1.21)</td>
</tr>
<tr>
<td>Seriousness of dating</td>
<td>1.74 (0.80)</td>
<td>1.69 (0.73)</td>
<td>1.69 (0.79)</td>
<td>1.60 (0.63)</td>
</tr>
<tr>
<td>relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of first sexual</td>
<td>16.68 (1.52)</td>
<td>16.15 (1.94)</td>
<td>16.44 (1.55)</td>
<td>16.93 (1.49)</td>
</tr>
<tr>
<td>intercourse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of sexual intercourse partners</td>
<td>5.44 (7.52)</td>
<td>7.79 (9.12)</td>
<td>9.31 (10.78)</td>
<td>7.47 (8.63)</td>
</tr>
<tr>
<td>Number of sexual activity</td>
<td>6.12 (8.30)</td>
<td>6.84 (6.23)</td>
<td>10.81 (14.58)</td>
<td>12.93 (17.97)</td>
</tr>
<tr>
<td>partners</td>
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<td></td>
</tr>
<tr>
<td>Family violence</td>
<td>3.44 (2.80)</td>
<td>4.41 (3.11)</td>
<td>4.38 (4.58)</td>
<td>4.47 (2.39)</td>
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<tr>
<td>Adolescent delinquency***</td>
<td>5.11 (4.80)</td>
<td>6.56 (5.74)</td>
<td>9.50 (5.93)</td>
<td>9.67 (7.18)</td>
</tr>
<tr>
<td>Drinking and Drug Habits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td></td>
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</tr>
<tr>
<td>General drinking habits</td>
<td>24.83 (10.79)</td>
<td>24.69 (11.99)</td>
<td>27.94 (11.64)</td>
<td>30.80 (5.31)</td>
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<tr>
<td>Average daily alcohol use</td>
<td>2.94 (2.27)</td>
<td>3.19 (2.45)</td>
<td>3.61 (2.88)</td>
<td>4.52 (2.50)</td>
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<tr>
<td>Party or social event</td>
<td>13.76 (6.97)</td>
<td>13.49 (7.29)</td>
<td>16.19 (8.01)</td>
<td>16.33 (4.62)</td>
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<tr>
<td>Bar or club</td>
<td>8.07 (6.94)</td>
<td>8.54 (7.14)</td>
<td>12.00 (8.74)</td>
<td>13.60 (5.68)</td>
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<tr>
<td>On a date***</td>
<td>3.18 (3.73)</td>
<td>4.05 (4.31)</td>
<td>4.19 (5.08)</td>
<td>7.80 (4.43)</td>
</tr>
<tr>
<td>Prior to sexual activity***</td>
<td>6.69 (6.35)</td>
<td>8.26 (6.99)</td>
<td>11.13 (6.79)</td>
<td>16.00 (6.87)</td>
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<tr>
<td>Max. number of drinks</td>
<td>11.72 (5.51)</td>
<td>11.28 (5.94)</td>
<td>13.75 (6.19)</td>
<td>14.73 (3.22)</td>
</tr>
<tr>
<td>Ideal number of drinks</td>
<td>7.30 (3.94)</td>
<td>7.59 (4.25)</td>
<td>8.19 (4.34)</td>
<td>9.27 (3.04)</td>
</tr>
<tr>
<td>Problem drinking***</td>
<td>8.61 (5.92)</td>
<td>11.63 (7.17)</td>
<td>13.31 (7.74)</td>
<td>14.67 (4.05)</td>
</tr>
<tr>
<td>Drug use</td>
<td>4.59 (3.08)</td>
<td>5.08 (3.80)</td>
<td>4.94 (3.00)</td>
<td>6.60 (3.16)</td>
</tr>
<tr>
<td>Adversarial Heterosexual</td>
<td>20.49 (10.02)</td>
<td>24.97 (10.48)</td>
<td>23.94 (8.54)</td>
<td>30.20 (7.82)</td>
</tr>
<tr>
<td>Beliefs Scale***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5: Continued

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Contact</th>
<th>Coercion</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Role Conflict Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>87.54 (24.84)</td>
<td>74.13 (21.30)</td>
<td>80.06 (27.13)</td>
<td>75.80 (15.98)</td>
</tr>
<tr>
<td>Success, Power, and Competition</td>
<td>25.69 (10.49)</td>
<td>19.41 (8.14)</td>
<td>24.13 (10.92)</td>
<td>25.07 (7.84)</td>
</tr>
<tr>
<td>Restrictive Emotionality</td>
<td>29.03 (9.39)</td>
<td>26.13 (8.76)</td>
<td>26.75 (10.27)</td>
<td>21.20 (7.17)</td>
</tr>
<tr>
<td>Restrictive Emotional behavior between Men</td>
<td>20.67 (8.52)</td>
<td>19.13 (7.43)</td>
<td>17.94 (8.23)</td>
<td>17.00 (5.57)</td>
</tr>
<tr>
<td>Conflict between Work and Family</td>
<td>12.16 (4.97)</td>
<td>9.46 (4.44)</td>
<td>11.25 (4.85)</td>
<td>12.53 (3.76)</td>
</tr>
<tr>
<td>Interpersonal Reactivity Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>60.78 (10.95)</td>
<td>58.36 (12.70)</td>
<td>60.44 (10.76)</td>
<td>55.27 (12.27)</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>16.29 (4.42)</td>
<td>15.90 (6.11)</td>
<td>16.63 (4.08)</td>
<td>15.33 (5.12)</td>
</tr>
<tr>
<td>Fantasy</td>
<td>15.77 (4.50)</td>
<td>15.54 (3.85)</td>
<td>14.75 (4.58)</td>
<td>13.67 (5.12)</td>
</tr>
<tr>
<td>Empathic Concern***</td>
<td>18.54 (4.05)</td>
<td>16.59 (4.59)</td>
<td>18.94 (4.02)</td>
<td>15.20 (5.17)</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>10.09 (3.94)</td>
<td>10.41 (4.12)</td>
<td>10.00 (5.02)</td>
<td>11.33 (3.56)</td>
</tr>
<tr>
<td>Narcissistic Personality Inventory</td>
<td>18.06 (6.78)</td>
<td>20.59 (7.88)</td>
<td>18.44 (5.82)</td>
<td>18.53 (6.30)</td>
</tr>
<tr>
<td>Sensation Seeking Scale</td>
<td>10.91 (4.20)</td>
<td>10.95 (4.31)</td>
<td>13.88 (3.18)</td>
<td>11.27 (4.01)</td>
</tr>
<tr>
<td>Self-Report Psychopathy Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum***</td>
<td>26.94 (8.70)</td>
<td>33.79 (8.99)</td>
<td>30.06 (9.60)</td>
<td>34.00 (7.82)</td>
</tr>
<tr>
<td>Primary***</td>
<td>16.62 (6.44)</td>
<td>21.26 (6.66)</td>
<td>17.94 (6.66)</td>
<td>20.93 (5.86)</td>
</tr>
<tr>
<td>Secondary***</td>
<td>10.32 (4.08)</td>
<td>12.54 (4.22)</td>
<td>12.13 (4.27)</td>
<td>13.07 (4.06)</td>
</tr>
<tr>
<td>CES- Depression Scale</td>
<td>14.61 (9.03)</td>
<td>17.05 (8.67)</td>
<td>15.06 (7.34)</td>
<td>15.67 (10.85)</td>
</tr>
<tr>
<td>Rosenberg Self-Esteem Scale</td>
<td>18.03 (5.20)</td>
<td>18.33 (5.46)</td>
<td>17.38 (2.92)</td>
<td>21.40 (5.48)</td>
</tr>
<tr>
<td>Social Desirability***</td>
<td>6.26 (2.24)</td>
<td>4.87 (2.13)</td>
<td>5.13 (2.66)</td>
<td>4.93 (1.91)</td>
</tr>
</tbody>
</table>

Note. ***p < .001.
Table 6

*Categorical Predictors: History of Sexual Aggression*

<table>
<thead>
<tr>
<th>Fraternity Membership</th>
<th>None</th>
<th>Sexual Contact</th>
<th>Sexual Coercion</th>
<th>Attempted/Completed Rape</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>392 (86.5%)</td>
<td>34 (7.5%)</td>
<td>13 (2.9%)</td>
<td>14 (3.1%)</td>
<td>453</td>
</tr>
<tr>
<td>Yes</td>
<td>49 (84.5%)</td>
<td>5 (8.6%)</td>
<td>3 (5.2%)</td>
<td>1 (1.7%)</td>
<td>58</td>
</tr>
<tr>
<td>Total</td>
<td>441</td>
<td>39</td>
<td>16</td>
<td>15</td>
<td>511</td>
</tr>
</tbody>
</table>

$\chi^2 (3, N = 511) = 1.31, p = \text{ns.}$

<table>
<thead>
<tr>
<th>Athletic Participation</th>
<th>None</th>
<th>Sexual Contact</th>
<th>Sexual Coercion</th>
<th>Attempted/Completed Rape</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>167 (90.3%)</td>
<td>9 (4.9%)</td>
<td>4 (2.2%)</td>
<td>5 (2.7%)</td>
<td>185</td>
</tr>
<tr>
<td>Non-Contact</td>
<td>30 (88.2%)</td>
<td>1 (2.9%)</td>
<td>1 (2.9%)</td>
<td>2 (5.9%)</td>
<td>34</td>
</tr>
<tr>
<td>Contact</td>
<td>246 (83.7%)</td>
<td>29 (2.9%)</td>
<td>11 (3.7%)</td>
<td>8 (2.7%)</td>
<td>294</td>
</tr>
<tr>
<td>Total</td>
<td>443</td>
<td>39</td>
<td>16</td>
<td>15</td>
<td>513</td>
</tr>
</tbody>
</table>

$\chi^2 (6, N = 513) = 7.36, p = \text{ns.}$
### Table 7

**Means (Standard Deviations) for Continuous Predictors with History of Verbal Dating Abuse**

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of first date</td>
<td>15.24 (1.69)</td>
<td>14.28 (1.66)</td>
<td>14.54 (1.59)</td>
</tr>
<tr>
<td>Number of dating partners</td>
<td>2.04 (1.96)</td>
<td>2.55 (1.65)</td>
<td>2.28 (1.30)</td>
</tr>
<tr>
<td>Seriousness of dating relationships</td>
<td>1.38 (0.99)</td>
<td>1.79 (0.72)</td>
<td>1.76 (0.75)</td>
</tr>
<tr>
<td>Age of first sexual intercourse</td>
<td>16.94 (1.54)</td>
<td>16.68 (1.55)</td>
<td>16.58 (1.55)</td>
</tr>
<tr>
<td>Number of sexual intercourse partners</td>
<td>3.13 (4.15)</td>
<td>5.92 (12.27)</td>
<td>6.18 (7.13)</td>
</tr>
<tr>
<td>Number of sexual activity partners</td>
<td>3.04 (4.84)</td>
<td>5.80 (7.54)</td>
<td>7.15 (9.45)</td>
</tr>
<tr>
<td>Family violence</td>
<td>2.91 (2.42)</td>
<td>3.08 (2.11)</td>
<td>3.72 (2.97)</td>
</tr>
<tr>
<td>Adolescent delinquency***</td>
<td>3.36 (3.84)</td>
<td>3.62 (3.26)</td>
<td>6.07 (5.36)</td>
</tr>
</tbody>
</table>

**Drinking and Drug Habits Questionnaire**

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>General drinking habits***</td>
<td>18.70 (10.70)</td>
<td>23.51 (10.95)</td>
<td>26.18 (10.46)</td>
</tr>
<tr>
<td>Average daily alcohol use***</td>
<td>1.58 (1.65)</td>
<td>2.74 (2.29)</td>
<td>3.25 (2.34)</td>
</tr>
<tr>
<td>Party or social event***</td>
<td>9.70 (6.56)</td>
<td>12.87 (6.91)</td>
<td>14.60 (6.83)</td>
</tr>
<tr>
<td>Bar or club***</td>
<td>4.09 (5.61)</td>
<td>7.96 (6.89)</td>
<td>8.98 (7.05)</td>
</tr>
<tr>
<td>On a date</td>
<td>1.53 (2.13)</td>
<td>3.39 (3.78)</td>
<td>3.69 (4.05)</td>
</tr>
<tr>
<td>Prior to sexual activity***</td>
<td>3.60 (4.91)</td>
<td>6.44 (6.71)</td>
<td>7.81 (6.67)</td>
</tr>
<tr>
<td>Max. number of drinks***</td>
<td>8.96 (5.44)</td>
<td>11.23 (5.59)</td>
<td>12.32 (5.40)</td>
</tr>
<tr>
<td>Ideal number of drinks***</td>
<td>5.34 (3.62)</td>
<td>6.61 (3.98)</td>
<td>7.80 (3.88)</td>
</tr>
<tr>
<td>Problem drinking***</td>
<td>5.38 (4.66)</td>
<td>7.94 (6.18)</td>
<td>9.84 (6.16)</td>
</tr>
<tr>
<td>Drug use</td>
<td>3.81 (3.13)</td>
<td>3.87 (2.43)</td>
<td>4.96 (3.14)</td>
</tr>
</tbody>
</table>

**Adversarial Heterosexual Beliefs Scale***

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>15.77 (9.46)</td>
<td>18.41 (9.43)</td>
<td>22.33 (9.96)</td>
</tr>
</tbody>
</table>

**Gender Role Conflict Scale**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>96.47 (29.70)</td>
<td>87.90 (23.56)</td>
<td>84.18 (23.20)</td>
</tr>
<tr>
<td>Success, Power and Competition</td>
<td>29.83 (13.40)</td>
<td>25.82 (9.69)</td>
<td>24.38 (10.0)</td>
</tr>
</tbody>
</table>
Table 7: Continued

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictive Emotionality</td>
<td>31.06 (10.59)</td>
<td>29.13 (10.30)</td>
<td>28.09 (9.07)</td>
</tr>
<tr>
<td>Restrictive Emotional Behavior Between Men</td>
<td>22.30 (9.83)</td>
<td>20.38 (8.17)</td>
<td>24.38 (10.0)</td>
</tr>
<tr>
<td>Conflict between Work and Family</td>
<td>13.34 (5.27)</td>
<td>12.58 (4.77)</td>
<td>11.64 (4.93)</td>
</tr>
</tbody>
</table>

Interpersonal Reactivity Index
- **Sum**: 62.36 (10.11) | 60.50 (10.84) | 60.13 (11.37)
- **Perspective-Taking**: 17.49 (4.75) | 16.40 (4.28) | 16.06 (4.61)
- **Fantasy**: 16.40 (4.66) | 15.77 (3.82) | 15.53 (4.58)
- **Empathic Concern**: 18.87 (3.65) | 17.87 (4.11) | 18.33 (4.27)
- **Personal Distress**: 9.28 (4.33) | 10.60 (3.25) | 10.14 (4.02)

Narcissistic Personality Inventory
- 17.94 (7.46) | 17.38 (6.64) | 18.53 (6.79)

Sensation Seeking Scale
- 10.26 (3.87) | 9.99 (4.06) | 11.35 (4.20)

Self-Report Psychopathy Scale
- **Sum***: 21.98 (9.38) | 26.23 (9.02) | 28.73 (8.61)
- **Primary***: 13.74 (7.04) | 16.46 (6.55) | 17.68 (6.41)
- **Secondary***: 8.23 (4.11) | 9.76 (4.06) | 11.05 (4.08)

CES – Depression Scale
- 12.81 (7.73) | 12.17 (7.63) | 15.44 (9.22)

Rosenberg Self-Esteem Scale
- 17.40 (5.06) | 16.80 (4.81) | 18.41 (5.23)

Social Desirability***
- 6.89 (2.37) | 6.77 (1.97) | 5.87 (2.27)

*Note.*** *p < .001.*
Table 8

**Categorical Predictors: History of Verbal Dating Abuse**

<table>
<thead>
<tr>
<th>Fraternity Membership</th>
<th>History of Verbal Dating Abuse</th>
<th>None</th>
<th>Moderate</th>
<th>Severe</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td>45 (10%)</td>
<td>63 (14.1%)</td>
<td>340 (75.9%)</td>
<td>448</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>2 (3.4%)</td>
<td>8 (13.8%)</td>
<td>48 (82.8%)</td>
<td>58</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>47</td>
<td>71</td>
<td>388</td>
<td>506</td>
</tr>
</tbody>
</table>

χ² (2, N = 506) = 2.72, p = ns.

<table>
<thead>
<tr>
<th>Athletic Participation</th>
<th>History of Verbal Dating Abuse</th>
<th>None</th>
<th>Moderate</th>
<th>Severe</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td>21 (11.5%)</td>
<td>26 (14.3%)</td>
<td>135 (74.2%)</td>
<td>182</td>
</tr>
<tr>
<td>Non-Contact</td>
<td></td>
<td>5 (15.2%)</td>
<td>4 (12.1%)</td>
<td>24 (72.7%)</td>
<td>33</td>
</tr>
<tr>
<td>Contact</td>
<td></td>
<td>21 (7.2%)</td>
<td>41 (14%)</td>
<td>231 (78.8%)</td>
<td>293</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>47</td>
<td>71</td>
<td>390</td>
<td>508</td>
</tr>
</tbody>
</table>

χ² (4, N = 508) = 4.13, p = ns.
Table 9

*Means (Standard Deviations) for Continuous Predictors and History of Physical Dating Violence.*

<table>
<thead>
<tr>
<th>History of Physical Dating Violence</th>
<th>None</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of first date</td>
<td>14.58 (1.68)</td>
<td>14.49 (1.59)</td>
<td>14.71 (1.46)</td>
</tr>
<tr>
<td>Number of dating partners</td>
<td>2.25 (1.51)</td>
<td>2.40 (1.27)</td>
<td>2.22 (1.25)</td>
</tr>
<tr>
<td>Seriousness of dating relationships</td>
<td>1.66 (0.77)</td>
<td>1.81 (0.81)</td>
<td>1.94 (0.72)</td>
</tr>
<tr>
<td>Age of first sexual intercourse</td>
<td>16.70 (1.60)</td>
<td>16.52 (1.57)</td>
<td>16.56 (1.57)</td>
</tr>
<tr>
<td>Number of sexual intercourse partners</td>
<td>5.40 (8.09)</td>
<td>6.65 (8.00)</td>
<td>6.12 (5.77)</td>
</tr>
<tr>
<td>Number of sexual activity partners</td>
<td>6.08 (7.90)</td>
<td>7.11 (10.71)</td>
<td>7.71 (8.79)</td>
</tr>
<tr>
<td>Family violence***</td>
<td>3.26 (2.67)</td>
<td>3.65 (2.67)</td>
<td>5.08 (3.67)</td>
</tr>
<tr>
<td>Adolescent delinquency</td>
<td>4.82 (4.74)</td>
<td>6.41 (5.47)</td>
<td>6.76 (5.51)</td>
</tr>
</tbody>
</table>

**Drinking and Drug Habits Questionnaire**
- General drinking habits: 23.94 (10.88), 27.11 (10.04), 26.00 (11.48)
- Average daily alcohol use: 2.80 (2.25), 3.47 (2.46), 2.96 (2.16)
- Party or social event***: 12.98 (6.97), 15.42 (6.56), 14.92 (7.31)
- Bar or club: 7.59 (6.72), 9.60 (7.30), 9.65 (7.60)
- On a date: 3.08 (3.54), 4.03 (4.40), 4.06 (4.36)
- Prior to sexual activity: 6.74 (6.74), 7.85 (6.39), 8.33 (6.63)
- Max. number of drinks: 11.31 (5.60), 12.75 (5.14), 12.31 (5.77)
- Ideal number of drinks: 6.95 (3.86), 8.15 (3.90), 7.86 (4.26)
- Problem drinking***: 7.92 (5.73), 11.01 (6.53), 10.94 (6.04)
- Drug use: 4.43 (2.99), 5.14 (3.44), 5.00 (2.99)

**Adversarial Heterosexual Beliefs Scale**
- Sum: 19.96 (10.21), 22.98 (9.48), 22.76 (9.93)

**Gender Role Conflict Scale**
- Sum: 87.61 (26.54), 83.24 (21.53), 82.84 (23.06)
- Success, Power and Competition: 25.66 (10.99), 24.56 (9.61), 23.16 (9.03)
Table 9: Continued

<table>
<thead>
<tr>
<th></th>
<th>History of Physical Dating Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Restrictive Emotionality</td>
<td>29.04 (9.81)</td>
</tr>
<tr>
<td>Restrictive Emotional Behavior Between Men</td>
<td>21.02 (8.93)</td>
</tr>
<tr>
<td>Conflict between Work and Family</td>
<td>11.90 (5.19)</td>
</tr>
</tbody>
</table>

Interpersonal Reactivity Index

<table>
<thead>
<tr>
<th></th>
<th>Sum</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Reactivity Index</td>
<td>60.60 (11.62)</td>
<td>59.84 (10.58)</td>
<td>60.88 (10.55)</td>
</tr>
<tr>
<td>Perspective-Taking</td>
<td>16.52 (4.62)</td>
<td>15.78 (4.56)</td>
<td>15.94 (4.50)</td>
</tr>
<tr>
<td>Fantasy</td>
<td>15.69 (4.67)</td>
<td>15.32 (4.21)</td>
<td>16.41 (4.14)</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>18.31 (4.26)</td>
<td>18.42 (3.93)</td>
<td>18.14 (4.56)</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>10.05 (3.84)</td>
<td>10.05 (3.97)</td>
<td>10.71 (4.61)</td>
</tr>
</tbody>
</table>

Narcissistic Personality Inventory

| Narcissistic Personality Inventory      | 18.50 (6.91)          | 17.91 (6.52) | 18.23 (7.42) |

Sensation Seeking Scale

| Sensation Seeking Scale                 | 10.87 (4.25)          | 11.48 (4.29) | 10.79 (3.26) |

Self-Report Psychopathy Scale

<table>
<thead>
<tr>
<th>Self-Report Psychopathy Scale</th>
<th>Sum</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>26.77 (9.30)</td>
<td>29.29 (8.33)</td>
<td>28.98 (8.07)</td>
</tr>
<tr>
<td>Primary</td>
<td>16.74 (6.90)</td>
<td>17.63 (5.96)</td>
<td>18.08 (6.30)</td>
</tr>
<tr>
<td>Secondary***</td>
<td>10.03 (4.15)</td>
<td>11.66 (4.17)</td>
<td>10.90 (3.66)</td>
</tr>
</tbody>
</table>

CES – Depression Scale

| CES – Depression Scale                 | 13.84 (8.98)          | 15.72 (8.45) | 17.04 (9.75) |

Rosenberg Self-Esteem Scale

| Rosenberg Self-Esteem Scale            | 17.86 (5.21)          | 18.33 (5.11) | 18.81 (5.33) |

Social Desirability***

| Social Desirability***                 | 6.36 (2.14)           | 5.93 (2.38)  | 4.96 (2.38)  |

*Note.* ***p < .001.*
Table 10

*Categorical Predictors: History of Physical Dating Violence*

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Moderate</th>
<th>Severe</th>
<th>Total</th>
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<tr>
<td><strong>Fraternity Membership</strong></td>
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<tr>
<td>No</td>
<td>269 (60.2%)</td>
<td>137 (30.6%)</td>
<td>41 (9.2%)</td>
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<tr>
<td>Yes</td>
<td>34 (58.6%)</td>
<td>16 (27.6%)</td>
<td>8 (13.8%)</td>
<td>58</td>
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<tr>
<td>Total</td>
<td>303</td>
<td>153</td>
<td>49</td>
<td>505</td>
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</table>

$\chi^2 (2, N = 505) = 1.31, p = ns.$

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<th>Severe</th>
<th>Total</th>
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<tr>
<td><strong>Athletic Participation</strong></td>
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<td></td>
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<tr>
<td>None</td>
<td>109 (59.9%)</td>
<td>58 (31.9%)</td>
<td>15 (8.2%)</td>
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<tr>
<td>Non-Contact</td>
<td>21 (63.6%)</td>
<td>8 (24.2%)</td>
<td>4 (12.1%)</td>
<td>33</td>
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<tr>
<td>Contact</td>
<td>175 (59.9%)</td>
<td>87 (29.8%)</td>
<td>30 (10.3%)</td>
<td>292</td>
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<tr>
<td>Total</td>
<td>305</td>
<td>153</td>
<td>49</td>
<td>507</td>
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$\chi^2 (4, N = 507) = 1.34, p = ns.$
Table 11

Correlations Among Model Variables

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<th>11</th>
<th>12</th>
<th>M</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>1. History of sexual aggression</td>
<td>.15**</td>
<td>.11*</td>
<td>.09*</td>
<td>.20**</td>
<td>.19**</td>
<td>.14**</td>
<td>-.14**</td>
<td>.16**</td>
<td>.06</td>
<td>.09*</td>
<td>.23**</td>
<td>.23</td>
<td>.64</td>
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<tr>
<td>2. History of verbal abuse</td>
<td>−</td>
<td>.29**</td>
<td>.08</td>
<td>.20**</td>
<td>.22**</td>
<td>.17**</td>
<td>-.14**</td>
<td>.19**</td>
<td>.13**</td>
<td>.21**</td>
<td>.22**</td>
<td>1.68</td>
<td>.64</td>
</tr>
<tr>
<td>3. History of physical violence</td>
<td>−</td>
<td>.15**</td>
<td>.15**</td>
<td>.13**</td>
<td>.08</td>
<td>-.08</td>
<td>.06</td>
<td>.11*</td>
<td>.11*</td>
<td>.11*</td>
<td>.50</td>
<td>.67</td>
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<tr>
<td>4. Family violence</td>
<td>−</td>
<td>.19**</td>
<td>.19**</td>
<td>.22**</td>
<td>-.02</td>
<td>.17**</td>
<td>.15**</td>
<td>.08</td>
<td>.18**</td>
<td>3.01</td>
<td>2.75</td>
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<td>5. Adolescent delinquency</td>
<td>−</td>
<td>.11*</td>
<td>.23**</td>
<td>.04</td>
<td>-.32**</td>
<td>.12**</td>
<td>.32**</td>
<td>.44**</td>
<td>5.37</td>
<td>5.00</td>
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<tr>
<td>6. Hostile masculinity</td>
<td>−</td>
<td>.08</td>
<td>-.40**</td>
<td>.37**</td>
<td>.24**</td>
<td>.10*</td>
<td>.25**</td>
<td>21.21</td>
<td>10.10</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>7. Sexual promiscuity</td>
<td>−</td>
<td>-.02</td>
<td>.30**</td>
<td>-.10*</td>
<td>.36**</td>
<td>.28**</td>
<td>27.16</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>8. Gender role stress</td>
<td>−</td>
<td>.25**</td>
<td>-.26**</td>
<td>-.06</td>
<td>-.20**</td>
<td>85.91</td>
<td>24.72</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>9. Personality Factors</td>
<td>−</td>
<td>.07</td>
<td>.32**</td>
<td>.37**</td>
<td>56.85</td>
<td>14.34</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10. Psychological functioning</td>
<td>−</td>
<td>.01</td>
<td>.19**</td>
<td>32.87</td>
<td>12.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Alcohol use</td>
<td>−</td>
<td>.60**</td>
<td>25.07</td>
<td>10.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>12. Problem drinking</td>
<td>−</td>
<td>9.15</td>
<td>6.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

Note. * p < .05. ** p >.01.
Table 12

*Frequency of All Aggressive Behaviors Combined*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>No history of aggression</td>
<td>54</td>
<td>10.5</td>
</tr>
<tr>
<td>Some history of aggression</td>
<td>460</td>
<td>89.5</td>
</tr>
<tr>
<td><em>Sexual aggression only</em></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Verbal abuse only</em></td>
<td>229</td>
<td>49.5</td>
</tr>
<tr>
<td><em>Physical violence only</em></td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td><em>Sexual aggression and verbal abuse</em></td>
<td>32</td>
<td>6.9</td>
</tr>
<tr>
<td><em>Sexual aggression and physical violence</em></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Verbal abuse and physical violence</em></td>
<td>162</td>
<td>35</td>
</tr>
<tr>
<td><em>Sexual aggression, verbal abuse and physical violence</em></td>
<td>37</td>
<td>8.0</td>
</tr>
</tbody>
</table>

*Note.* *a* the percentages of the categories within some history of aggression reflect only participants who have some history of aggression.
Table 13: Continuous Predictors and Combined Forms of Aggression

<table>
<thead>
<tr>
<th></th>
<th>VA(^a)</th>
<th>VA &amp; SA(^b)</th>
<th>VA &amp; PV(^c)</th>
<th>VA, SA &amp; PV(^d)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age of first date</strong></td>
<td>16.68 (1.55)</td>
<td>16.65 (1.98)</td>
<td>15.57 (1.46)</td>
<td>16.09 (1.51)</td>
</tr>
<tr>
<td>**Number of dating</td>
<td>2.29 (1.44)</td>
<td>2.13 (1.21)</td>
<td>2.34 (1.33)</td>
<td>2.51 (0.90)</td>
</tr>
<tr>
<td><strong>partners</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Seriousness of dating</strong></td>
<td>1.72 (0.73)</td>
<td>1.72 (0.68)</td>
<td>1.88 (0.78)</td>
<td>1.62 (0.76)</td>
</tr>
<tr>
<td><strong>Age of first sexual</strong></td>
<td>16.68 (1.54)</td>
<td>16.65 (1.98)</td>
<td>16.57 (1.46)</td>
<td>16.09 (1.51)</td>
</tr>
<tr>
<td><strong>intercourse</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Number of sexual</td>
<td>5.41 (8.29)</td>
<td>8.19 (9.84)</td>
<td>6.25 (7.12)</td>
<td>8.14 (9.10)</td>
</tr>
<tr>
<td><strong>intercourse partners</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Number of sexual</td>
<td>6.01 (6.99)</td>
<td>10.74 (13.71)</td>
<td>7.22 (10.34)</td>
<td>7.94 (10.31)</td>
</tr>
<tr>
<td><strong>activity partners</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family violence</strong></td>
<td>3.16 (2.58)</td>
<td>4.50 (3.30)</td>
<td>3.93 (3.05)</td>
<td>4.35 (2.89)</td>
</tr>
<tr>
<td><strong>Adolescent delinquency</strong></td>
<td>4.71 (4.57)</td>
<td>7.41 (5.98)</td>
<td>6.20 (5.16)</td>
<td>8.19 (6.48)</td>
</tr>
<tr>
<td><strong>Drinking and Drug</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Habits Questionnaire</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General drinking habits</strong></td>
<td>24.74 (10.58)</td>
<td>25.66 (10.97)</td>
<td>26.74 (10.27)</td>
<td>27.76 (11.19)</td>
</tr>
<tr>
<td><strong>Average daily alcohol use</strong></td>
<td>2.96 (2.22)</td>
<td>3.38 (2.56)</td>
<td>3.28 (2.34)</td>
<td>3.75 (2.65)</td>
</tr>
<tr>
<td><strong>Party or social event</strong></td>
<td>13.57 (6.92)</td>
<td>13.38 (6.47)</td>
<td>15.25 (6.60)</td>
<td>15.86 (7.47)</td>
</tr>
<tr>
<td><strong>Bar or club</strong></td>
<td>8.03 (6.81)</td>
<td>9.09 (5.99)</td>
<td>9.26 (7.01)</td>
<td>11.70 (8.50)</td>
</tr>
<tr>
<td><strong>On a date</strong></td>
<td>3.26 (3.73)</td>
<td>3.75 (3.22)</td>
<td>3.66 (3.97)</td>
<td>6.00 (5.52)</td>
</tr>
<tr>
<td><strong>Prior to sexual activity</strong>*</td>
<td>6.93 (6.74)</td>
<td>10.06 (7.23)</td>
<td>7.31 (5.94)</td>
<td>10.84 (7.79)</td>
</tr>
<tr>
<td><strong>Max. number of drinks</strong></td>
<td>11.63 (5.49)</td>
<td>12.31 (5.73)</td>
<td>12.65 (5.22)</td>
<td>12.89 (5.74)</td>
</tr>
<tr>
<td><strong>Ideal number of drinks</strong></td>
<td>7.20 (3.84)</td>
<td>7.53 (3.74)</td>
<td>7.99 (3.94)</td>
<td>8.59 (4.29)</td>
</tr>
<tr>
<td><strong>Problem drinking</strong>*</td>
<td>7.93 (5.45)</td>
<td>11.84 (6.85)</td>
<td>10.50 (6.29)</td>
<td>13.30 (6.66)</td>
</tr>
<tr>
<td><strong>Drug use</strong></td>
<td>4.54 (2.95)</td>
<td>4.53 (2.91)</td>
<td>4.90 (3.18)</td>
<td>6.14 (3.89)</td>
</tr>
<tr>
<td><strong>Adversarial Heterosexual Beliefs Scale</strong>*</td>
<td>20.20 (10.19)</td>
<td>24.31 (9.40)</td>
<td>22.11 (9.36)</td>
<td>26.86 (9.60)</td>
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<td><strong>Gender Role Conflict Scale</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td>87.34 (26.02)</td>
<td>75.13 (20.01)</td>
<td>84.98 (21.38)</td>
<td>75.97 (23.27)</td>
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</table>

Table 13: Continued
<table>
<thead>
<tr>
<th></th>
<th>VA(^a)</th>
<th>VA &amp; SA(^b)</th>
<th>VA &amp; PV(^c)</th>
<th>VA, SA &amp; PV(^d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success, Power, and Competition</td>
<td>25.35 (10.44)</td>
<td>21.69 (8.80)</td>
<td>24.86 (9.47)</td>
<td>21.35 (9.21)</td>
</tr>
<tr>
<td>Restrictive Emotionality</td>
<td>29.10 (9.61)</td>
<td>25.22 (9.44)</td>
<td>28.37 (8.66)</td>
<td>25.14 (8.76)</td>
</tr>
<tr>
<td>Restrictive Emotional Behavior between Men</td>
<td>21.10 (8.91)</td>
<td>17.72 (7.30)</td>
<td>19.45 (7.50)</td>
<td>18.92 (7.31)</td>
</tr>
<tr>
<td>Conflict between Work and Family</td>
<td>11.79 (5.17)</td>
<td>10.50 (4.66)</td>
<td>12.30 (4.61)</td>
<td>10.57 (4.53)</td>
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</table>

Interpersonal Reactivity Index

<table>
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<tr>
<th></th>
<th>VA(^a)</th>
<th>VA &amp; SA(^b)</th>
<th>VA &amp; PV(^c)</th>
<th>VA, SA &amp; PV(^d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>60.64 (11.75)</td>
<td>58.25 (12.20)</td>
<td>60.44 (10.13)</td>
<td>58.05 (12.44)</td>
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<tr>
<td>Perspective-Taking</td>
<td>16.27 (4.38)</td>
<td>16.75 (5.78)</td>
<td>15.98 (4.41)</td>
<td>15.14 (5.14)</td>
</tr>
<tr>
<td>Fantasy</td>
<td>15.67 (4.61)</td>
<td>14.72 (4.89)</td>
<td>15.67 (4.33)</td>
<td>15.24 (3.83)</td>
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<tr>
<td>Empathic Concern</td>
<td>18.50 (4.22)</td>
<td>16.34 (4.80)</td>
<td>18.57 (3.93)</td>
<td>17.24 (4.72)</td>
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<tr>
<td>Personal Distress</td>
<td>10.19 (3.74)</td>
<td>10.53 (3.89)</td>
<td>10.09 (4.02)</td>
<td>10.46 (4.56)</td>
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Narcissistic Personality Inventory

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<tr>
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<th>VA &amp; SA(^b)</th>
<th>VA &amp; PV(^c)</th>
<th>VA, SA &amp; PV(^d)</th>
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</thead>
<tbody>
<tr>
<td>Sensation Seeking Scale</td>
<td>10.98 (4.35)</td>
<td>10.93 (3.89)</td>
<td>11.14 (4.04)</td>
<td>12.22 (4.28)</td>
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Self-Report Psychopathy Scale

<table>
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<tr>
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<th>VA(^a)</th>
<th>VA &amp; SA(^b)</th>
<th>VA &amp; PV(^c)</th>
<th>VA, SA &amp; PV(^d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum***</td>
<td>27.06 (9.07)</td>
<td>31.41 (7.58)</td>
<td>28.17 (7.40)</td>
<td>34.27 (9.94)</td>
</tr>
<tr>
<td>Primary</td>
<td>16.87 (6.71)</td>
<td>19.81 (6.60)</td>
<td>17.11 (5.63)</td>
<td>20.92 (6.64)</td>
</tr>
<tr>
<td>Secondary***</td>
<td>10.19 (4.08)</td>
<td>11.59 (3.71)</td>
<td>11.06 (3.88)</td>
<td>13.35 (4.43)</td>
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CES- Depression Scale

<table>
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<tr>
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<th>VA(^a)</th>
<th>VA &amp; SA(^b)</th>
<th>VA &amp; PV(^c)</th>
<th>VA, SA &amp; PV(^d)</th>
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</thead>
<tbody>
<tr>
<td>Rosenberg Self-Esteem Scale</td>
<td>17.88 (5.19)</td>
<td>18.53 (5.75)</td>
<td>18.34 (5.25)</td>
<td>18.81 (4.59)</td>
</tr>
</tbody>
</table>

Social Desirability***

<table>
<thead>
<tr>
<th></th>
<th>VA(^a)</th>
<th>VA &amp; SA(^b)</th>
<th>VA &amp; PV(^c)</th>
<th>VA, SA &amp; PV(^d)</th>
</tr>
</thead>
</table>
| Note. a verbal abuse only. b verbal abuse and sexual aggression. c verbal abuse and physical violence. d verbal abuse, sexual aggression, and physical violence. ***p < .001.
Table 14

*Categorical Predictors: All Forms of Aggression*

<table>
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<tr>
<th></th>
<th>VA only&lt;sup&gt;a&lt;/sup&gt;</th>
<th>SA and VA&lt;sup&gt;b&lt;/sup&gt;</th>
<th>VA and PV&lt;sup&gt;c&lt;/sup&gt;</th>
<th>SA, VA and PV&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Total</th>
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<tbody>
<tr>
<td>Fraternity Membership</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>201 (50.0%)</td>
<td>26 (6.5%)</td>
<td>141 (35.1%)</td>
<td>34 (8.5%)</td>
<td>402</td>
</tr>
<tr>
<td>Yes</td>
<td>26 (46.4%)</td>
<td>6 (10.7%)</td>
<td>21 (37.5%)</td>
<td>3 (5.4%)</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>227</td>
<td>32</td>
<td>162</td>
<td>37</td>
<td>458</td>
</tr>
<tr>
<td>χ² (3, N = 458)</td>
<td>2.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p = ns.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|                  |                     |                       |                       |                           |       |
| Athlete Participation |                 |                       |                       |                           |       |
| None             | 79 (49.1%)          | 9 (5.6%)              | 64 (39.8%)            | 9 (5.6%)                  | 161   |
| Non-Contact      | 14 (50.0%)          | 2 (7.1%)              | 10 (35.7%)            | 2 (7.1%)                  | 28    |
| Contact          | 136 (50.2%)         | 21 (7.7%)             | 88 (32.5%)            | 26 (9.6%)                 | 271   |
| Total            | 229                 | 32                    | 162                   | 37                        | 460   |
| χ² (6, N = 460)  | 4.27                |                       |                       |                           |       |
|                  | p = ns.             |                       |                       |                           |       |

*Note.* <sup>a</sup>verbal abuse only. <sup>b</sup>sexual aggression and verbal abuse. <sup>c</sup>verbal abuse and physical violence. <sup>d</sup>sexual aggression, verbal abuse and physical violence.
APPENDIX A.1: CONSENT FORM

OHIO UNIVERSITY

Human Subjects Consent Form

Title of Research: Men’s Social and Dating Experiences
Principal Investigator: Jennifer Warkentin, M.S.
Department: Psychology

Federal and university regulations require us to obtain consent for participation in research involving human participants. After reading the statements below, please indicate your consent by signing this form.

Explanation of Study
Research has shown that people have different perceptions of the world based on their knowledge, attitudes, and experiences. This project is evaluating how knowledge, attitudes, and experiences are related, and how they differ over time. These results will aid in our understanding of social and worldly issues, and will promote future research as well.

Many questionnaires will be used to assess knowledge and attitudes on a variety of issues, including society and sexual behaviors. Additionally, some questionnaires address personal characteristics and past experiences. Some of the surveys are sexually explicit in nature. Please consider before participation whether you may be embarrassed, offended, or upset by the sensitive content of such materials. Participation is voluntary and may be discontinued at any time without penalty.

Your participation today will take approximately 45 minutes. You will be asked to complete a packet of questionnaires and you will receive 1 experimental credit point toward your psychology class at the end of the session. All answers are confidential.

Risks and Discomforts
The primary risk associated with this study is discomfort in answering questions about personal or private information. In addition, certain combinations of responses to particular demographics questionnaires could possibly identify you. However, your participation is entirely voluntary, and you may withdraw from the study at any time without penalty or negative consequences.

Benefits
As a research participant, you will be exposed to psychological research, and your answers will help the field of psychology better understand these issues.

Confidentiality and Records
You will place your survey packet in the attached manila envelope before turning it in to the experimenter in order to provide confidentiality regarding your identity. In addition, the data from this study will be kept in a locked storage facility and accessible only by authorized individuals.

**Compensation**
You will receive 1 experimental credit for your participation at the end of today’s session. If you choose not to complete the study today, you will still receive 1 experimental credit point.

**Contact Information**
If you have any questions or concerns, please contact the principle investigator, Jennifer Warkentin at 593-1088 or e-mail her at jw154901@ohio.edu, or the faculty advisor Dr. Christine Gidycz at 593-1092 or gidycz@ohiou.edu.

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740)593-0664.

I certify that I have read and understand this consent form and agree to participate as a subject in the research described. I agree that known risks to me have been explained to my satisfaction and I understand that no compensation is available from Ohio University and its employees for any injury resulting from my participation in this research. I certify that I am 18 years of age or older. My participation in this research is given voluntarily. I understand that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I certify that I have been given a copy of this consent form to take with me.

Signature ___________________________ Date ____________

Printed Name ___________________________
APPENDIX A.2: DEBRIEFING FORM

Thank you for your participation in this research project. This study was designed to investigate men’s knowledge, beliefs, social experiences, dating experiences, and sexual behavior. The relationships between each of these variables were also examined. The information provided by these questionnaires will help psychology researchers and clinicians learn more about the relationship between various different constructs.

As a reminder, all of your questionnaire responses will remain strictly confidential. If you have any further questions regarding the nature of this study, or would like to request details of the results of the study, please feel free to contact one of the following:

Graduate Researcher: Jennifer Warkentin
Porter Hall – Room 043
593-1088

Faculty Advisor: Christine A. Gidycz
Porter Hall - Room 231
593-1092

In addition, if you are concerned about the study materials used or questions asked and wish to speak with a professional, or if you would like more information or reading material on this topic, please contact one of the following resources:

Ohio University Counseling and Psychological Services: 593-1616

Ohio University Psychology and Social Work Clinic: 593-1092

Tri-County Mental Health Services: 592-3091

Tri-County 24-hour Crisis hotline: 593-3344
APPENDIX B.1: DEMOGRAPHICS QUESTIONNAIRE

DIRECTIONS: Please choose the best response for each question.

1. What is your age? _______

2. What is your current year in college?
   A. First
   B. Second
   C. Third
   D. Fourth
   E. Fifth or above
   F. Graduate student
   G. Other

3. Where do you currently live?
   A. College dormitory or residence hall
   B. Fraternity house
   C. Other university/college housing
   D. Off-campus house or apartment
   E. Parent/Guardian’s home
   F. Other

4. What is your race/ethnicity?
   A. Caucasian, Non-Hispanic
   B. African American
   C. Latino or Hispanic
   D. Asian or Pacific Islander
   E. American Indian or Alaska Native
   F. Two or more races
   G. Other

5. What is your religion?
   A. Catholic (Christian)
   B. Protestant (Christian)
   C. Jewish
   D. Muslim
   E. Nondenominational
   F. Agnostic
   G. Other
   H. None

6. Approximately what is your parents’ yearly income?
   A. Unemployed or disabled
   B. $10,000 – $20,000
   C. $21,000 – $30,000
   D. $31,000 – $40,000
   E. $41,000 - $50,000
   F. $51,000 - $75,000
   G. $76,000 - $100,00
   H. $101,000 - $150,000
   I. $151,000 or more

The following three questions ask about fraternity membership.

7. Are you a member of an all-male social fraternity?
   A. No
   B. Yes
   If Yes, how long have you been a member? __________

8. Are you a member of a coed fraternity?
   A. No
   B. Yes
If Yes, how long have you been a member? __________

9. Are you a member of a professional fraternity?
   A. No
   B. Yes
      If Yes, how long have you been a member? __________

The following three questions ask about sports team membership.

10. Are you a member of an all-male sports team?
    A. No
    B. Yes

11. Are you a member of a co-ed sports team?
    A. No
    B. Yes

12. Please circle any of the following sports you are currently playing or have played in the most recent season. (This includes both all-male and co-ed teams).
    A. Baseball
    B. Basketball
    C. Boxing or wrestling
    D. Broomball
    E. Crew
    F. Cross country or track and field
    G. Cycling or mountain bike
    H. Dodge ball
    I. Equestrian
    J. Fencing
    K. Field hockey
    L. Football
    M. Golf
    N. Gymnastics
    O. Ice hockey
    P. Lacrosse
    Q. Mixed martial arts, Shotokan, Tae kwon do
    R. Racquetball
    S. Rugby
    T. Soccer
    U. Swimming and diving
    V. Tennis
    W. Ultimate Frisbee
    X. Volleyball
    Y. Water polo
APPENDIX B.2: SEXUAL EXPERIENCES SURVEY

DIRECTIONS: The following questions are about your sexual experiences from age 14 on. Please choose only one option for each item and circle your answer. Answer all questions.

Have you ever had any of these experiences from age 14 on?

1. Have you ever had sex play with a woman (fondling, kissing, or petting, but not intercourse) when she didn’t want to because you overwhelmed her by your continual arguments and pressure?
   A. No
   B. Yes

2. Have you had sex play with a woman (fondling, kissing, or petting, but not intercourse) when she didn’t want to because you used your authority (boss, teacher, camp counselor, supervisor) to make her?
   A. No
   B. Yes

3. Have you had sex play with a woman (fondling, kissing, or petting, but not intercourse) when she didn’t want to because you threatened or used some degree of physical force (twisting her arm, holding her down, etc.) to make her?
   A. No
   B. Yes

The following questions are about sexual intercourse. By sexual intercourse we mean penetration of a woman’s vagina, no matter how slight, by a man’s penis. Ejaculation is not required. Whenever you see the words sexual intercourse, please use this definition.

4. Have you attempted sexual intercourse with a woman (get on top of her and insert your penis) when she didn’t want to by threatening or using some degree of force (twisting her arm, holding her down, etc.) but intercourse did not occur?
   A. No
   B. Yes

5. Have you attempted sexual intercourse with a woman (get on top of her and insert your penis) by giving her alcohol or drugs, but intercourse did not occur?
   A. No
   B. Yes
6. Have you had sexual intercourse with a woman when she didn’t want to by overwhelming her with your continual arguments and pressure?
   A. No
   B. Yes

7. Have you had sexual intercourse with a woman when she didn’t want to because you used your position of authority (boss, teacher, counselor, supervisor)?
   A. No
   B. Yes

8. Have you had sexual intercourse with a woman when she didn’t want to because you gave her alcohol or drugs?
   A. No
   B. Yes

9. Have you had sexual intercourse with a woman when she didn’t want to because you threatened to use some degree of physical force (twisting her arm, holding her down, etc.) to make her?
   A. No
   B. Yes

10. Have you had sexual acts (anal or oral intercourse or penetration by objects other than the penis) with a woman when she didn’t want to by using threats or some degree of physical force (twisting her arm, holding her down, etc.)?
    A. No
    B. Yes

Please look back over your responses to the 10 questions above and select the highest number to which you answered “Yes.”

If you did not answer “Yes” to any of these questions, please select or write in the response “Not applicable.”

11. Please write in the number of the question you selected: _______

12. How many times have you had the experience you selected in #11 since the age of 14?
    A. 1
    B. 2
    C. 3
    D. 4
    E. 5
    F. 6 or more
    G. Not applicable
Now think about the most recent time you had the experience you selected in #11, and respond to the following questions about that experience.

13. How old were you when you had the experience selected in #11?
   - A. 14 years old
   - B. 15 years old
   - C. 16 years old
   - D. 17 years old
   - E. 18 years old
   - F. 19 years old
   - G. 20 years old
   - H. 21 years old
   - I. 22 years or older
   - J. Not applicable

14. How old was the woman when you had the experience selected in #11? (If you do not know, please select your best estimate of the woman’s age)
   - A. 14 years old
   - B. 15 years old
   - C. 16 years old
   - D. 17 years old
   - E. 18 years old
   - F. 19 years old
   - G. 20 years old
   - H. 21 years old
   - I. 22 years or older
   - J. Not applicable

15. How long ago did you most recently have the experience selected in #11?
   - A. Within the past month
   - B. 2 to 3 months ago
   - C. 4 to 6 months ago
   - D. 7 months to 1 year ago
   - E. 1 to 2 years ago
   - F. 3 to 4 years ago
   - G. More than 4 years ago
   - H. Not applicable

16. What was your relationship to the woman when you had the experience selected in #11?
   - A. No relationship
   - B. Just met
   - C. Acquaintance
   - D. Friend
   - E. Casual date
   - F. Steady date
   - G. Girlfriend
   - H. Ex-girlfriend
   - I. Not applicable

17. How much alcohol did you have over the course of the day in which you had the experience selected in #11?
   - A. None
   - B. 1 to 2 drinks
   - C. 3 to 4 drinks
   - D. 5 to 6 drinks
   - E. 7 to 8 drinks
   - F. 9 to 10 drinks
   - G. 11 to 12 drinks
   - H. 13 or more drinks
   - I. Not applicable

18. How much alcohol did you have during the 3 hours prior to the experience selected in #11?
   - A. None
   - B. 1 to 2 drinks
   - C. 3 to 4 drinks
   - D. 5 to 6 drinks
   - E. 7 to 8 drinks
   - F. 9 to 10 drinks
   - G. 11 to 12 drinks
   - H. 13 or more drinks
   - I. Not applicable
19. Based on the following scale, how did you feel when you had the experience selected in #11?

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<th>NA</th>
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<tbody>
<tr>
<td></td>
<td>Sober</td>
<td>Buzzed</td>
<td>Drunk</td>
<td>Not applicable</td>
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</tbody>
</table>

20. Did you use any illicit drugs over the course of the day in which you had the experience selected in #11?
   A. No
   B. Yes
   C. Not applicable

21. Did you use any illicit drugs during the 3 hours prior to the experience selected in #11?
   A. No
   B. Yes
   C. Not applicable

22. Did the woman use alcohol during the 3 hours prior to the experience selected in #11?
   A. No
   B. Yes
   C. Not applicable

23. Did the woman use any illicit drugs during the 3 hours prior to the experience selected in #11?
   A. No
   B. Yes
   C. Not applicable
APPENDIX B.3: CONFLICT TACTICS SCALE

Directions: No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired, or for some other reason. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences.

Please circle how many times you did each of these things in the past 2 years, and how many times your partner, past or present, did them in the past 2 years.

If you or your partner did not do one of these things in the past 2 years, but it happened before that, circle “7.”

How often did this happen?

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<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td>Never</td>
<td>Once</td>
<td>Twice</td>
<td>3 – 5 times</td>
<td>6 – 10 times</td>
<td>11 – 20 times</td>
<td>More than 20 times</td>
<td>At least once, but not in past 2 years</td>
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</table>

1. I discussed the issue calmly.
2. My partner discussed the issue calmly.
3. I got information to back up my side of things.
4. My partner got information to back up her side of things.
5. I brought in or tried to bring in someone to help settle things.
6. My partner brought in or tried to bring in someone to help settle things.
7. I insulted or swore at my partner.
8. My partner did this to me.
9. I sulked or refused to talk about it.
10. My partner sulked or refused to talk about it.
11. I stomped out of the room or house.
12. My partner stomped out of the room or house.
13. I cried.
15. I did or said something to spite my partner.
16. My partner did or said something to spite me.
17. I threatened to hit or throw something at my partner.
18. My partner did this to me.
19. I threw or smashed or hit or kicked something.
20. My partner threw or smashed or hit or kicked something.
21. I threw something at my partner.
22. My partner did this to me.
23. I pushed, grabbed, or shoved my partner.
24. My partner did this to me.
25. I slapped my partner.
26. My partner did this to me.
27. I kicked, bit, or hit my partner with a fist.
28. My partner did this to me.
29. I hit or tried to hit my partner with something.
30. My partner did this to me.
31. I beat up my partner.
32. My partner did this to me.
33. I threatened my partner with a knife or gun.
34. My partner did this to me.
35. I used a knife or gun against my partner.
36. My partner did this to me.

Please look back over your responses to the questions above and select the most severe behavior you used to resolve a conflict, regardless of the number of times you used the behavior.

For example, if you answered that you grabbed your partner once, and you did something to spite your partner 11-20 times, you would select the time you grabbed your partner.

Remember: Pick the most severe act, not the most frequent act.

37. Please write in the number of the question you chose as the most severe: _____

Now think about the most recent time you used the behavior you selected in #37 to resolve a conflict, and answer the following questions about that experience.
38. How long were you in a relationship with your partner prior to using the behavior you selected in #37 to resolve a conflict?
   A. 1 month or less       D. 7 to 9 months
   B. 2 to 3 months        E. 10 to 12 months
   C. 4 to 6 months        F. More than 12 months

39. Who initiated the conflict in which you used the behavior selected in #37 to resolve it?
   A. You
   B. Both you and your partner
   C. Your partner

40. How much alcohol did you have over the course of the day in which you used the behavior selected in #37 to resolve a conflict?
   A. None          E. 7 to 8 drinks
   B. 1 to 2 drinks F. 9 to 10 drinks
   C. 3 to 4 drinks G. 11 to 12 drinks
   D. 5 to 6 drinks H. 13 or more drinks

41. How much alcohol did you have during the 3 hours prior to the beginning of the conflict in which you used the behavior selected in #37?
   A. None          E. 7 to 8 drinks
   B. 1 to 2 drinks F. 9 to 10 drinks
   C. 3 to 4 drinks G. 11 to 12 drinks
   D. 5 to 6 drinks H. 13 or more drinks

42. Did you use any illicit drugs over the course of the day in which you used the behavior selected in #37 to resolve a conflict?
   A. No
   B. Yes

43. Did you use any illicit drugs during the 3 hours prior to the beginning of the conflict in which you used the behavior selected in #37 to resolve a conflict?
   A. No
   B. Yes

44. Was your partner using alcohol or drugs over the course of the day in which you used the behavior selected in #37 to resolve a conflict?
   A. No
   B. Yes

45. Was your partner using alcohol or drugs during the 3 hours prior to the beginning of the conflict in which you used the behavior selected in #37?
   A. No
   B. Yes
46. There are a variety of reasons for why people use certain behaviors to resolve a conflict. Please look over the list below and circle all of the reasons that apply to your most recent use of the behavior in #37 to resolve a conflict.

A. To show anger
B. Due to an inability to express yourself verbally
C. To feel more powerful
D. To get control over the other person
E. In retaliation for being hit first
F. To protect yourself (e.g., self-defense)
G. In retaliation for emotional hurt
H. Anger displaced onto partner
I. To punish your partner for wrong behavior
J. To prove love
K. Because it was sexually arousing
L. To get attention
M. Because of jealousy

47. Now please look over the same list again, and consider the strongest and second strongest reasons for using the behavior selected in #37 to resolve a conflict. Circle the appropriate number (1 = strongest, 2 = second strongest) for the two behaviors you selected.

1  2  To show anger
1  2  Due to an inability to express yourself verbally
1  2  To feel more powerful
1  2  To get control over the other person
1  2  In retaliation for being hit first
1  2  To protect yourself (e.g., self-defense)
1  2  In retaliation for emotional hurt
1  2  Anger displaced onto partner
1  2  To punish your partner for wrong behavior
1  2  To prove love
1  2  Because it was sexually arousing
1  2  To get attention
1  2  Because of jealousy
APPENDIX B.4: DRINKING AND DRUG HABITS QUESTIONNAIRE

DIRECTIONS: Please answer all of the following questions. We ask that you answer each as honestly and thoughtfully as possible and remind you that all information you provide is strictly confidential. Please do not skip any of the following questions. Choose only one answer for each question, and circle your response.

*A Standard Drink is…*

4 oz. glass of wine
12 oz. beer
1 oz. hard liquor
1 pitcher =

6 drinks

1 straight/mixed drink

1. My usual drinking practices are best described as:
   A. I do not drink at all, nor have I ever had a drink in the past.
   B. I do not drink at all, though I used to drink in the past
   C. Having a drink less than 1 time per year
   D. On the average, less than 1 drink a month but more than 1 drink per year
   E. On the average, at least 1 drink per week but not more than 3 drinks per week
   F. On the average, 4 drinks per week, but no more than 8 drinks per week
   G. On the average, 9 drinks per week, but no more than 14 drinks per week
   H. On the average, 15 drinks per week, but no more than 20 drinks per week.
   I. Having on average, 21 or more drinks per week.

The questions below are used to describe your drinking pattern during a *typical week*. Please choose the number for each day of the week indicating the average number of drinks you consumed on that day. For days you typically do not drink, choose zero. If you are a non-drinker, choose all zeros.

The average number of drinks you consume on…

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<th>17 or more</th>
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<tr>
<td>2. Monday</td>
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<td>17 or more</td>
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</table>
9. How often do you have 6 or more drinks on one occasion?  
   A. Never  
   B. Less than monthly  
   C. Monthly  
   D. Weekly  
   E. Daily or almost daily  

Drinking can vary based on the occasion. In considering your typical drinking behavior, please indicate the minimum, average, maximum, and ideal number of drinks you typically consume on one occasion in each of the following situations. The ideal number of drinks you like to consume during a single drinking episode represents drinking to experience positive effects without experiencing any negative effects (e.g., upset stomach, headache).

### At a party or social event:

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<tr>
<th></th>
<th>Average</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Ideal</th>
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<tbody>
<tr>
<td>10.</td>
<td>0 1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17 or more</td>
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<td></td>
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<tr>
<td>11.</td>
<td>0 1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17 or more</td>
<td></td>
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<tr>
<td>12.</td>
<td>0 1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17 or more</td>
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<tr>
<td>13.</td>
<td>0 1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17 or more</td>
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### At a bar or club:

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<th>Minimum</th>
<th>Maximum</th>
<th>Ideal</th>
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<td>14.</td>
<td>0 1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17 or more</td>
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<tr>
<td>15.</td>
<td>0 1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17 or more</td>
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</tbody>
</table>
16. Maximum 0 1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17 or more
    17. Ideal 0 1-2 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17 or more

**While on a date:**

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<td>5-6</td>
<td>7-8</td>
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<td>Ideal</td>
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<td>13-14</td>
<td>15-16</td>
<td>17 or more</td>
</tr>
</tbody>
</table>

**Prior to engaging in sexual activity:**

<table>
<thead>
<tr>
<th></th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>24</th>
<th>25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>0</td>
<td>1-2</td>
<td>3-4</td>
<td>5-6</td>
<td>7-8</td>
<td>9-10</td>
<td>11-12</td>
<td>13-14</td>
<td>15-16</td>
<td>17 or more</td>
</tr>
<tr>
<td>Ideal</td>
<td>0</td>
<td>1-2</td>
<td>3-4</td>
<td>5-6</td>
<td>7-8</td>
<td>9-10</td>
<td>11-12</td>
<td>13-14</td>
<td>15-16</td>
<td>17 or more</td>
</tr>
</tbody>
</table>

26. Please choose the number that represents the **maximum** number of drinks that you might consume on any **ONE** occasion.
   - A. I do not drink
   - B. 1 drink
   - C. 2 drinks
   - D. 3 drinks
   - E. 4 drinks
   - F. 5 drinks
   - G. 6 drinks
   - H. 7 drinks
   - I. 8 drinks
   - J. 9 drinks
   - K. 10 drinks
   - L. 11 drinks
   - M. 12 drinks
   - N. 13 drinks
   - O. 14 drinks
   - P. 15 drinks
   - Q. 16 drinks
   - R. 17 drinks
   - S. 18 drinks
   - T. 19 or more drinks
   - U. 20 or more drinks

27. Please choose the number of drinks that you **ideally** like to consume during a single drinking occasion **without experiencing any negative effects** (e.g., upset stomach, headache) from your drinking.
   - A. I do not drink
   - B. 1 drink
   - C. 2 drinks
   - D. 3 drinks
   - E. 4 drinks
   - F. 5 drinks
   - G. 6 drinks
   - H. 7 drinks
   - I. 8 drinks
   - J. 9 drinks
   - K. 10 drinks
   - L. 11 drinks
   - M. 12 drinks
   - N. 13 drinks
   - O. 14 drinks
   - P. 15 drinks
   - Q. 16 drinks
   - R. 17 drinks
   - S. 18 drinks
   - T. 19 or more drinks
In terms of your experience after drinking, have you:

28. Been sick to your stomach?
   A. No
   B. Yes, but not in the last year
   C. Yes, during the last year

29. Had unusual flushing of the skin?
   A. No
   B. Yes, but not in the last year
   C. Yes, during the last year

30. Had a hangover (e.g., headaches, nausea)?
   A. No
   B. Yes, but not in the last year
   C. Yes, during the last year

31. Blacked out?
   A. No
   B. Yes, but not in the last year
   C. Yes, during the last year

32. Been arrested for driving while intoxicated (DWI)?
   A. No
   B. Yes, but not in the last year
   C. Yes, during the last year

33. Had problems with police not related to DWI (e.g., disturbing the peace, bar fights)?
   A. No
   B. Yes, but not in the last year
   C. Yes, during the last year

34. Injured yourself or someone else?
   A. No
   B. Yes, but not in the last year
   C. Yes, during the last year

35. Had an accident other than driving related?
   A. No
   B. Yes, but not in the last year
   C. Yes, during the last year

36. Broken things or damaged property?
   A. No
   B. Yes, but not in the last year
   C. Yes, during the last year
37. How often during the last year have you found that you were not able to stop drinking once you had started?
   A. Never
   B. Less than monthly
   C. Monthly
   D. Weekly
   E. Daily or almost daily

38. How often during the last year have you failed to do what was normally expected of you because of drinking?
   A. Never
   B. Less than monthly
   C. Monthly
   D. Weekly
   E. Daily or almost daily

39. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
   A. Never
   B. Less than monthly
   C. Monthly
   D. Weekly
   E. Daily or almost daily

40. How often during the last year have you had a feeling of guilt or remorse after drinking?
   A. Never
   B. Less than monthly
   C. Monthly
   D. Weekly
   E. Daily or almost daily

41. How often during the last year have you been unable to remember what happened the night before because of your drinking?
   A. Never
   B. Less than monthly
   C. Monthly
   D. Weekly
   E. Daily or almost daily

42. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?
   A. No
   B. Yes, but not in the last year
   C. Yes, during the last year
Please indicate how often you have used each of the following substances. Please choose only one response for each substance and circle the number of your response. Please use the following definitions to help guide your responses.

1 = Never used
2 = Rarely use
3 = Occasionally use
4 = Regularly use

<table>
<thead>
<tr>
<th>Substance</th>
<th>Never used</th>
<th>Rarely use</th>
<th>Occasionally use</th>
<th>Regularly use</th>
</tr>
</thead>
<tbody>
<tr>
<td>43. ALCOHOL</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44. MARIJUANA (pot, grass, hashish):</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>45. OPIATES (Heroin, morphine, Demerol, Codeine, oxycontin):</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>46. BARBITURATES (downers, sleeping pills):</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>47. “CLUB” DRUGS (Ecstasy, GHB, Special K):</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>48. TRANQUILIZERS (Valium, Librium, Xanax):</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>49. COCAINE (powder form):</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>50. CRACK</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>51. AMPHETAMINES (uppers, speed, crystal meth):</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>52. STEROIDS</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>53. INHALENTS</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>54. PSYCHEDELICS (LSD, mescaline, peyote):</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
APPENDIX B.5: EARLY EXPERIENCES QUESTIONNAIRE

Directions: The following are questions about your experiences from childhood through the present time. Please select the best answer for each and circle your response.

1. While you were growing up, how often did your father use physical blows against your mother (e.g., hitting or kicking) within a typical month?
   A. Never  E. 6 – 10 times
   B. Once    F. 11 – 20 times
   C. Twice   G. More than 20 times
   D. 3 – 5 times

2. While you were growing up, how often did your mother use physical blows against your father (e.g., hitting or kicking) within a typical month?
   A. Never  E. 6 – 10 times
   B. Once    F. 11 – 20 times
   C. Twice   G. More than 20 times
   D. 3 – 5 times

3. While you were growing up, how often did your parents hit or spank you within a typical month?
   A. Never  E. 6 – 10 times
   B. Once    F. 11 – 20 times
   C. Twice   G. More than 20 times
   D. 3 – 5 times

4. While you were growing up, how often did your parents insult or yell at you within a typical month?
   A. Never  E. 6 – 10 times
   B. Once    F. 11 – 20 times
   C. Twice   G. More than 20 times
   D. 3 – 5 times

5. When you were growing up, did you have friends who got in trouble with the law for minor offenses (e.g., fighting, running away)?
   A. No
   B. Yes

6. When you were growing up, did you ever run away from home for more than 24 hours?
   A. No
   B. Yes
<p>| | | | |</p>
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<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Trespassing</td>
<td>None</td>
<td>Once</td>
<td>Twice</td>
</tr>
<tr>
<td>8. Breaking and entering</td>
<td>None</td>
<td>Once</td>
<td>Twice</td>
</tr>
<tr>
<td>9. Vandalism</td>
<td>None</td>
<td>Once</td>
<td>Twice</td>
</tr>
<tr>
<td>10. Taking something worth less than $50</td>
<td>None</td>
<td>Once</td>
<td>Twice</td>
</tr>
<tr>
<td>11. Taking something worth more than $50</td>
<td>None</td>
<td>Once</td>
<td>Twice</td>
</tr>
<tr>
<td>12. Stealing a car</td>
<td>None</td>
<td>Once</td>
<td>Twice</td>
</tr>
<tr>
<td>13. Threatening someone with a weapon</td>
<td>None</td>
<td>Once</td>
<td>Twice</td>
</tr>
<tr>
<td>14. Arson</td>
<td>None</td>
<td>Once</td>
<td>Twice</td>
</tr>
<tr>
<td>15. Selling drugs</td>
<td>None</td>
<td>Once</td>
<td>Twice</td>
</tr>
<tr>
<td>16. Assault</td>
<td>None</td>
<td>Once</td>
<td>Twice</td>
</tr>
</tbody>
</table>

17. Have you ever been referred to University Judiciaries, either here at Ohio University or at another university?  
   A. No  
   B. Yes

18. Since the age of 18, have you ever been arrested?  
   A. No  
   B. Yes

19. Since the age of 18, have you ever been convicted of a misdemeanor?  
   A. No  
   B. Yes

20. Since the age of 18, have you ever been convicted of a felony?  
   A. No  
   B. Yes
APPENDIX B.6: DATING AND SEXUAL EXPERIENCES QUESTIONNAIRE

**Directions:** Please provide the best response for each of the following questions. The following 6 questions ask about dating history. If you are unsure about an exact number, please provide your best estimate. If a question does not apply to you then write N/A.

1. How old were you when you first began going on dates? __________
2. Approximately how many serious dating relationships have you had since you began dating? ______
3. Just in the past 12 months, have you engaged in casual dating (e.g., a good time with no future commitment or obligation on the part of you or your date)?
   A. No
   B. Yes
4. Just in the past 12 months, have you had any serious dating relationships (e.g., involving a great deal of commitment and intimacy)?
   A. No
   B. Yes
5. Just in the past 12 months, have you moved in with or lived with a partner?
   A. No
   B. Yes
6. Just in the past 12 months, have you been engaged to a partner?
   A. No
   B. Yes

The following 4 questions ask about sexual activity. If you are unsure about an exact number, please provide your best estimate. If a question does not apply to you, then write N/A.

7. How old were you when you first had consensual sexual intercourse? ______
8. Approximately how many partners have you had consensual sexual intercourse with (including oral, anal and vaginal intercourse)? __________
9. Approximately how many partners have you engaged in sexual activity with, but did not have sexual intercourse? ______
10. What best describes your sexual orientation?
    A. Heterosexual
    B. Homosexual
    C. Bisexual
APPENDIX B.7: NARCISSISTIC PERSONALITY INVENTORY

DIRECTIONS: Please read each pair of statements and then choose the one that is closer to your own feelings and beliefs. Indicate your answer by circling the letter “A” or “B” to the left of each item. Please do not skip any items.

1. A I have a natural talent for influencing people.  
   B I am not good at influencing people

2. A Modesty doesn’t become me.  
   B I am essentially a modest person.

3. A I would do almost anything on a dare.  
   B I tend to be a fairly cautious person.

4. A When people compliment me I sometimes get embarrassed.  
   B I know that I am a good because everybody keeps telling me so.

5. A The thought of ruling the world frightens the hell out of me.  
   B If I ruled the world, it would be a much better place.

6. A I can usually talk my way out of anything.  
   B I try to accept the consequences of my behavior.

7. A I prefer to blend in with the crowd.  
   B I like to be the center of attention.

8. A I will be a success.  
   B I am not too concerned about success.

9. A I am no better or worse than most people.  
   B I think I am a special person.

10. A I am not sure if I would make a good leader.  
    B I see myself as a good leader.

11. A I am assertive.  
    B I wish I were more assertive.

12. A I like having authority over people.  
    B I don’t mind following orders.

13. A I find it easy to manipulate people.  
    B I don’t like it when I find myself manipulating people.

14. A I insist upon getting the respect that is due me.
B I usually get the respect that I deserve.

15. A I don’t particularly like to show off my body.
   B I like to display my body.

16. A I can read people like a book.
   B People are sometimes hard to understand.

17. A If I feel competent I am willing to take responsibility for making decisions.
   B I like to take responsibility for making decisions.

18. A I just want to be reasonably happy.
   B I want to amount to something in the eyes of the world.

19. A My body is nothing special.
   B I like to look at my body.

20. A I try not to be a show off.
   B I am apt to show off if I get the chance.

21. A I always know what I am doing.
   B Sometimes I am not sure of what I am doing.

22. A I sometimes depend on people to get things done.
   B I rarely depend on anyone else to get things done.

23. A Sometimes I tell good stories.
   B Everybody likes to hear my stories.

24. A I expect a great deal from other people.
   B I like to do things for other people.

25. A I will never be satisfied until I get all that I deserve.
   B I take my satisfactions as they come.

26. A Compliments embarrass me.
   B I like to be complimented.

27. A I have a strong will to power.
   B Power for its own sake doesn’t interest me.

28. A I don’t very much care about new fads and fashions.
   B I like to start new fads and fashions.

29. A I like to look at myself in the mirror.
   B I am not particularly interested in looking at myself in the mirror.
30. A I really like to be the center of attention.
   B It makes me uncomfortable to be the center of attention.

31. A I can live my life any way I want to.
   B People can’t always live their lives in terms of what they want.

32. A Being an authority doesn’t mean that much to me.
   B People always seem to recognize my authority.

33. A I would prefer to be a leader.
   B It makes little difference to me whether I am a leader or not.

34. A I am going to be a great person.
   B I hope I am going to be successful.

35. A People sometimes believe what I tell them.
   B I can make anybody believe anything I want them to.

36. A I am a born leader.
   B Leadership is a quality that takes a long time to develop.

37. A I wish somebody would someday write my biography.
   B I don’t like people to pry into my life for any reason.

38. A I get upset when people don’t notice how I look when I go out in public.
   B I don’t mind blending into the crowd when I go out in public.

39. A I am more capable than other people.
   B There is a lot that I can learn from other people.

40. A I am much like everybody else.
   B I am an extraordinary person.

Note. The responses which are scored as narcissistic are in bold.
APPENDIX B.8: SELF-REPORT PSYCHOPATHY SCALE

DIRECTIONS: Please read each of the following statements carefully and indicate how much you agree with them using the following scale.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>Strongly</td>
<td>Somewhat</td>
<td>Somewhat</td>
<td>Strongly</td>
</tr>
</tbody>
</table>

1. Success is based on survival of the fittest; I am not concerned about the losers.
2. I quickly lose interest in tasks I start.
3. When I get frustrated, I often “let off steam” by blowing my top.
4. My main purpose in life is getting as many goodies as I can.
5. Before I do anything, I carefully consider the possible consequences.
6. Making a lot of money is my most important goal.
7. For me, what’s right is whatever I can get away with.
8. I am often bored.
9. I enjoy manipulating other people’s feelings.
10. I often admire a really clever scam.
11. I would be upset if my success came at someone else’s expense.
12. People who are stupid enough to get ripped off usually deserve it.
13. I tell other people what they want to hear so that they will do what I want them to do.
14. I feel bad if my words or actions cause someone else to feel emotional pain.
15. Looking out for myself is my top priority.
16. Most of my problems are due to the fact that other people just don’t understand me.
17. Cheating is not justified because it is unfair to others.
18. I find myself in the same kinds of trouble, time after time.
19. Even if I were trying very hard to sell something, I wouldn’t lie about it.
20. In today’s world, I feel justified in doing anything I can get away with to succeed.
21. I don’t plan anything very far in advance.
22. I let others worry about higher values; my main concern is with the bottom line.
23. I find that I am able to pursue one goal for a long time.
24. I make a point of trying not to hurt others in pursuit of my goals.
25. I have been in a lot of shouting matches with other people.
26. Love is overrated.
APPENDIX B.9: ZKPQ, SENSATION SEEKING SUBSCALE

Directions: Please read each of the following statements and decide whether or not it describes you. Then circle your response. If you agree with a statement or decide that it describes you, then answer true (T). If you disagree with the statement or feel that it is not descriptive of you, answer false (F).

1. I tend to begin a new job without much advance planning on how I will do it.
2. I am an impulsive person.
3. I’ll try anything once.
4. I usually think about what I am going to do before doing it.
5. I tend to change interests frequently.
6. I like to explore a strange city or section of town by myself, even if it means getting lost.
7. I prefer friends who are excitingly unpredictable.
8. I like doing things just for the thrill of it.
9. I sometimes like to do things that are a little frightening.
10. I often get so carried away by new and exciting things and ideas that I never think of possible complications.
11. I would like to take off on a trip with no preplanned or definite routes or timetables.
12. I would like the kind of life where one is on the move and traveling a lot, with lots of change and excitement.
13. I often do things on impulse.
14. I like to have new and exciting experiences and sensations even if they are a little frightening.
15. I very seldom spend much time on the details of planning ahead.
16. I enjoy getting into new situations where you can’t predict how things will turn out.
17. I tend to change interests frequently.
18. Before I begin a complicated job, I make careful plans.
19. I like “wild” uninhibited parties.
APPENDIX B.10: INTERPERSONAL REACTIVITY INDEX

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate letter on the scale at the top of the page. Read each item carefully before responding. Answer as honestly as possible.

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</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>Does not describe me well</td>
<td>Very well</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I daydream and fantasize, with some regularity, about things that might happen to me.
2. I often have tender, concerned feelings for people less fortunate than me.
3. I sometimes find it difficult to see things from the “other guy’s” point of view.
4. Sometimes I don’t feel very sorry for other people when they are having problems.
5. I really get involved with the feelings of the characters in a novel.
6. In emergency situations, I feel apprehensive and ill-at-ease.
7. I am usually objective when I watch a movie or play, and I don’t often get completely caught up in it.
8. I try to look at everyone’s side of a disagreement before I make a decision.
9. When I see someone being taken advantage of, I feel kind of protective towards them.
10. I sometimes feel helpless when I am in the middle of a very emotional situation.
11. I sometimes try to understand my friends better by imagining how things look from their perspective.
12. Becoming extremely involved in a good book or movie is somewhat rare for me.
13. When I see someone get hurt, I tend to remain calm.
14. Other people’s misfortunes do not usually disturb me a great deal.
15. If I’m sure I’m right about something, I don’t waste much time listening to other people’s arguments.
16. After seeing a play or movie, I have felt as though I were one of the characters.
17. Being in a tense emotional situation scares me.
18. When I see someone being treated unfairly, I sometimes don’t have much pity for them.

19. I am usually pretty effective in dealing with emergencies.

20. I am often quite touched by things that I see happen.

21. I believe that there are two sides to every question and try to look at them both.

22. I would describe myself as a pretty soft-hearted person.

23. When I watch a good movie, I can very easily put myself in the place of a leading character.

24. I tend to lose control during emergencies.

25. When I’m upset at someone, I usually try to “put myself in his shoes” for a while.

26. When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.

27. When I see someone who badly needs help in an emergency, I go to pieces.

28. Before criticizing somebody, I try to imagine how I would feel if I were in their place.
APPENDIX B.11: ADVERSARIAL HETEROSEXUAL BELIEFS SCALE

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>somewhat disagree</td>
<td>slightly disagree</td>
<td>slightly agree</td>
<td>somewhat agree</td>
<td>strongly agree</td>
</tr>
</tbody>
</table>

1. In dating relationships, people are mostly out to take advantage of each other.

2. If you don’t show who’s boss in the beginning of a relationship, you will be taken advantage of later.

3. Most people are pretty devious and manipulative when they are trying to attract someone of the opposite sex.

4. Men and women are generally out to use each other.

5. It impossible for men and women to truly understand each other.

6. In the work force, any gain by one sex necessitates a loss for the other.

7. When women enter the workforce, they are taking jobs away from men.

8. Men and women cannot really be friends.

9. Sex is like a game where one person “wins” and the other “loses”.

10. In all societies, it is inevitable that one sex is dominant.

11. It’s natural for one spouse to be in control of the other.

12. When it comes to sex, most people are just trying to use the other person.

13. It is possible for the sexes to be equal in society.

14. Men and women share more similarities than differences.

15. It is possible for a man and woman to be “just friends”.

APPENDIX B.12: GENDER ROLE CONFLICT SCALE

DIRECTIONS: Please select the number that most closely represents the degree to which you Agree or Disagree with each statement. There is no right or wrong answer to each statement: your own reaction is what is asked for.

| Strongly Disagree | 1 | 2 | 3 | 4 | 5 | Strongly Agree | 6 |

1. Moving up the career ladder is important to me.
2. I have difficulty telling others I care about them.
3. Verbally expressing my love to another man is difficult for me.
4. I feel torn between my hectic work schedule and caring for my health.
5. Making money is part of my idea of being a successful man.
6. Strong emotions are difficult for me to understand.
7. Affection with other men makes me tense.
8. I sometimes define my personal value by my career success.
9. Expressing feelings makes me feel open to attack by other people.
10. Expressing my feelings to other men is risky.
11. My career, job, or school affects the quality of my leisure or family life.
12. I evaluate other people’s value by their level of achievement and success.
13. Talking (about my feelings) during sexual relations is difficult for me.
14. I worry about failing and how it affects my doing well as a man.
15. I have difficulty expressing my emotional needs to my partner.
16. Men who touch other men make me uncomfortable.
17. Finding time to relax is difficult for me.
18. Doing well all the time is important for me.
19. I have difficulty expressing my tender feelings.
20. Hugging other men is difficult for me.
21. I often feel that I need to be in charge of those around me.
22. Telling others of my strong feelings is not part of my sexual behavior.
23. Competing with others is the best way to succeed.
24. Winning is a measure of my value and personal worth.
25. I often have trouble finding words that describe how I am feeling.
26. I am sometimes hesitant to show my affection to other men because of how others might perceive me.

27. My needs to work or study keep me from my family or leisure more than I would like.

28. I strive to be more successful than others.

29. I do not like to show my emotions to other people.

30. Telling my partner my feelings about him/her during sex is difficult for me.

31. My work or school often disrupts other parts of my life (e.g., home, family, health, leisure).

32. I am often concerned about how others evaluate my performance at work or school.

33. Being very personal with other men makes me uncomfortable.

34. Being smarter or physically stronger than other men is important to me.

35. Men who are overly friendly to me make me wonder about their sexual preference (men or women).

36. Overwork and stress, caused by need to achieve on the job or in school, affects/hurts my life.

37. I like to feel superior to other people.
APPENDIX B.13: CENTER FOR EPIDEMIOLOGIC STUDIES DEPRESSION SCALE

DIRECTIONS: Below is a list of some ways you may have felt or behaved. Please indicate how often you have felt this way during the past week.

1 = Rarely or none of the time (Less than 1 day)
2 = Some or a little of the time (1-2 days)
3 = Occasionally or a moderate amount of the time (3-4 days)
4 = Most or all of the time (5-7 days)

1. I was bothered by things that usually don’t bother me.
2. I did not feel like eating; my appetite was poor.
1. I felt that I could not shake off the blues even with help from my family or friends.
2. I felt that I was just as good as other people.
3. I had trouble keeping my mind on what I was doing.
4. I felt depressed.
5. I felt that everything I did was an effort.
6. I felt hopeful about the future.
7. I thought my life had been a failure.
8. I felt fearful.
9. My sleep was restless.
10. I was happy.
11. I talked less than usual.
12. I felt lonely.
13. People were unfriendly.
15. I had crying spells.
16. I felt sad.
17. I felt that people disliked me.
18. I could not get “going.”
APPENDIX B.14: ROSENBERG SELF-ESTEEM SCALE

DIRECTIONS: Below is a list of statements dealing with your general feelings about yourself. Please use the following scale to indicate how much you agree with each statement.

<table>
<thead>
<tr>
<th>SA</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Agree</td>
</tr>
<tr>
<td>D</td>
<td>Disagree</td>
</tr>
<tr>
<td>SD</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

1. On the whole, I am satisfied with myself.
2. At times, I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I certainly feel useless at times.
7. I feel that I’m a person of worth, or at least on an equal plane with others.
8. I wish I could have more respect for myself.
9. All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.
APPENDIX B.15: MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE

DIRECTIONS: Listed below are thirteen statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>True</td>
<td>False</td>
</tr>
</tbody>
</table>

1. It is sometimes hard for me to go on with my work if I am not encouraged.
2. I sometimes feel resentful when I don't get my way.
3. On a few occasions, I have given up doing something because I thought too little of my ability.
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.
5. No matter who I'm talking to, I'm always a good listener.
6. There have been occasions when I took advantage of someone.
7. I'm always willing to admit it when I make a mistake.
8. I sometimes try to get even rather than forgive and forget.
9. I am always courteous, even to people who are disagreeable.
10. I have never been irked when people expressed ideas very different from my own.
11. There have been times when I was quite jealous of the good fortune of others.
12. I am sometimes irritated by people who ask favors of me.
13. I have never deliberately said something that hurt somebody.