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# Guy Time: The Effects Of Men's Male Friends On Their Heavy Drinking, Consensual Sexual Behaviors, And Sexual Assault Perpetration

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**GUY TIME: THE EFFECTS OF MEN'S MALE FRIENDS ON THEIR HEAVY  
DRINKING, CONSENSUAL SEXUAL BEHAVIORS, AND SEXUAL ASSAULT  
PERPETRATION**

by

**ANGELA JUDITH JACQUES-TIURA**

**DISSERTATION**

Submitted to the Graduate School

of Wayne State University,

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in partial fulfillment of the requirements

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**DOCTOR OF PHILOSOPHY**

2010

MAJOR: PSYCHOLOGY (Cognitive,  
Developmental, and Social Psychology)

Approved by:

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Advisor

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Date

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## **DEDICATION**

This dissertation is dedicated to my amazing and wonderful family. Mom and Dad, Rob and Lisa, Derek and Michele, Desirée and Craig, Mom and Dad Tiura, Lauren and Jeff, Steven, Chloe, Marisa, Dana, Griffin, Andrew, and James – you inspire me in so many ways. Mom – I am so, so, so grateful for all you have given me, but most importantly for giving me the love, support, and confidence to dream big. Dad – you are always in my heart, and I wish you were here to see me complete this saga as you have stood with me for so many of my adventures. James – I am so happy to wake up each day with such a brilliant, encouraging, and caring partner. Everyone – from the bottom of my heart, thank you for all of your support during this long and winding graduate school road!

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## CHAPTER 1

### Introduction

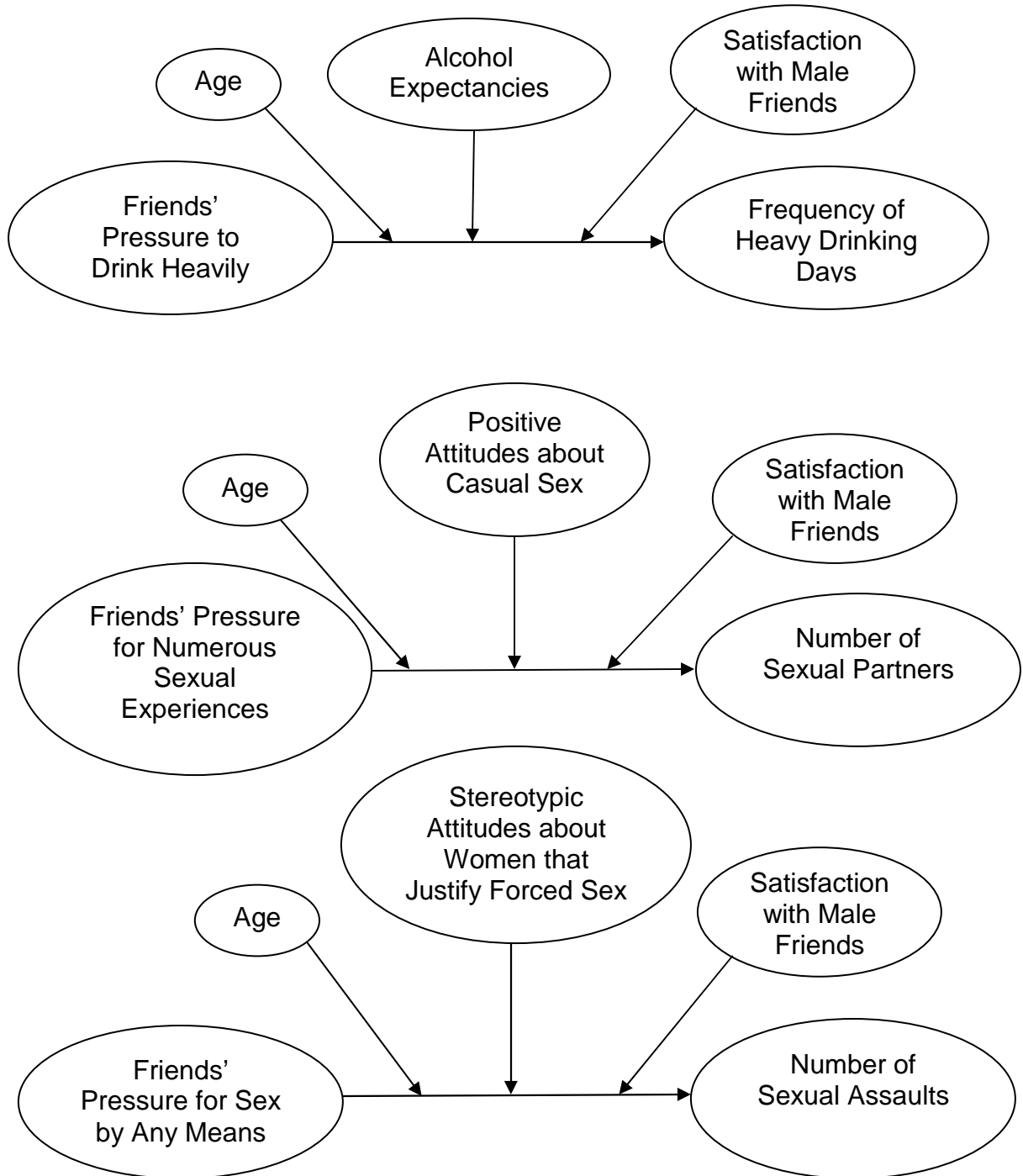
Risky and reckless behaviors peak during the adolescent and emerging adult years (Bradley & Wildman, 2002). Emerging adulthood, age 18 to 25 (and often beyond) is a somewhat autonomous period in which young people are relatively free of parental rules, often not married or in a career, and searching for the answer to the question, "Who am I?" (Arnett, 2000). In attempting to answer this question, emerging adults frequently assess and change their living arrangements, dating partners, jobs, and worldview. Many scholars have suggested that during this period of identity development, friends and peers influence young people's attitudes, beliefs, and behaviors in numerous ways (Brown, Dolcini, & Leventhal, 1997; Perkins, 2002).

The overarching goal of this dissertation is to examine how men's male friends influence their heavy drinking, consensual sexual experiences, and sexual assault perpetration. These outcomes were selected because they are three relatively common behaviors that potentially have negative consequences for many other people (such as victims of alcohol-involved car collisions, sexual partners who contract a sexually transmitted infection, and sexual assault victims). These three behaviors also tend to co-occur; two predictors of sexual assault perpetration are heavy, problematic drinking and a large number of sexual partners (Abbey, 2002; Malamuth, Sockloskie, Koss, & Tanaka, 1991). Although the sexual assault etiological literature links these three outcomes, little research has simultaneously studied the role of peer influence on even two of these in one study and the author is not aware of any study that has examined the role of peers on all three outcomes.

The underlying premise of theories of friends' influence is that through the selection process, people choose friends whose attitudes and beliefs match their own (Kandel, 1978). Through socialization with friends, one's attitudes and beliefs are reinforced and become more extreme because important others approve of these attitudes and beliefs and encourage their expression. Figure 1 demonstrates conceptually how this process is expected to unfold in the current study. Perceived pressure from friends, and personal attitudes and beliefs, are expected to have main effects on the outcomes, and are expected to interact. As shown (and described in much greater detail in the pages that follow), pressure from friends to drink heavily and men's beliefs about alcohol's effects are expected to relate to heavy drinking. Pressure from friends to have numerous sexual experiences and men's attitudes about casual sexual relationships are expected to relate to their number of sexual partners. Pressure from friends for sex by any means (including the use of manipulative tactics) and men's attitudes about women that justify forced sex are expected to relate to the number of sexually assaultive acts committed. "Sexual assault," "sex by any means," and "forced sex" are used synonymously in this paper.

The purpose of this study is not to determine which come first, personal attitudes or friends' pressure to behave in certain ways, but to examine the interplay of the two on certain behaviors. There has been a wealth of research linking personal attitudes and beliefs with behaviors (e.g., Braun-Courville & Rojas, 2009; Murnen, Wright, & Kaluzny, 2002; Zamboanga, Schwartz, Ham, Borsari, & Van Tyne, 2010), but less that has focused on how pressure from friends influences behavior. Even less research has

Figure 1. *Proposed Conceptual Model Linking Friends' Influences and Personal Beliefs with Heavy Drinking, Consensual Sexual Experiences, and Sexual Assault Perpetration.*



combined the two. Friends' pressure is at the forefront of this paper because of its relative lack of previous attention.

Further, although various methods have been used to assess peer influence on these three outcomes, the author is not aware of a measure that assesses these various aspects of peer influence. Thus, a second goal of this dissertation is to develop three new measures: 1) a scale of friends' pressure to drink heavily, have numerous sexual experiences, and have sex by any means, 2) a scale assessing how comfortable men feel if their male friends made sexist or nonsexist statements about women, and 3) a single, free-response item asking how men talk about women with their friends. The literature regarding the influence of friends on heavy drinking, sexual activity, and sexual assault perpetration is described below, followed by a description of the current study.

### **Heavy Drinking**

According to the Substance Abuse and Mental Health Services Administration (SAMHSA; 2007), emerging adults account for the highest proportion of current drinkers (defined as consuming at least one alcoholic drink within the past 30 days), binge drinkers (defined for men as consuming five or more alcoholic drinks on the same occasion within the past 30 days, also referred to as heavy episodic drinking), and heavy use drinkers (defined as consuming five or more alcoholic drinks on five or more separate occasions within the past 30 days). Rates of binge drinking peak in the 18 to 25-year-old bracket, with 46.1% of emerging adults reporting a recent heavy drinking episode. Similar proportions of 18 to 20-year-olds (36.2%) and 26 to 34-year-olds (34.2%) report a recent heavy drinking episode. Heavy episodic drinking is more

common among full-time college students aged 18 to 22 than those of the same age group who do not attend college or are enrolled part-time. This changes after the full-time students graduate; among adults age 26 or older, heavy episodic drinking rates were lower among college graduates than among nongraduates. More emerging adult men report current alcohol use than do women, as is the case throughout the lifespan.

Alcohol use is typically a social event. Borsari and Carey (2001) describe three ways that friends implicitly and explicitly pressure one another to drink: overt offers of alcoholic beverages, modeling, and social norms. Social learning theory accounts for the effects of overt offers through social reinforcement and for modeling through the process of vicarious learning (Bandura, 1977; Borsari & Carey, 2006).

In a recent study, Wood, Read, Palfai, and Stevenson (2001) examined the roles of overt offers of drinks, modeling, descriptive social norms, and alcohol expectancies on college students' drinking behaviors. Modeling and peer norms significantly predicted alcohol use, and the number of overt offers of alcohol marginally predicted use. Quigley and Collins (1999) conducted a meta-analysis of laboratory studies examining the role of modeling. Overall, there was a large significant main effect of the model, such that when a model (a confederate) consumed a large amount of alcohol, participants consumed more alcohol than those in control conditions with a model who consumed a light amount of alcohol or without a model. The main effect was especially evident for the no-model comparison and among participants with a heavy drinking history.

Theories that examine the influence of social norms, such as the theory of planned behavior, have also been applied to explain emerging adult drinking behaviors (Ajzen, 1985). Again, much of this research focuses on college students. Two different

types of norms appear to operate and relate to college students' drinking. Descriptive norms are those that describe the frequency or quantity of alcohol perceived to be consumed by a given group (e.g., friends, the typical student at the school being surveyed; Baer, Stacy, & Larimer, 1991). Injunctive norms are those that define acceptable or expected behaviors (Wood et al., 2001). Both of these influence drinking behaviors. For example, Neighbors, Lee, Lewis, Fossos, and Larimer (2007) surveyed 818 first year college students who reported at least one occasion of heavy drinking within the previous month. They assessed motives for drinking, alcohol expectancies, perceived injunctive and descriptive norms, typical weekly quantity of alcohol consumed, and alcohol problems. In regression analyses, descriptive and injunctive norms cross-sectionally predicted alcohol consumption and alcohol problems. Lo (1995) found that peer norms were more predictive of intoxication level than were parental norms, especially among men. Emerging adults want to drink with their friends and other people, consume amounts that they believe are similar to what their friends consume, and generally believe that their drinking behaviors are in line with their peers' drinking behaviors (Borsari & Carey, 2006; Miller & McFarland, 1991; Orcutt, 1991; Schroeder & Prentice, 1998).

Emerging adult drinkers, with their goal of affiliating with those they view as being of high status (Arnett, 2000), are likely to make some mistakes when they estimate peers' consumption norms and peers' expectations. First, there is evidence that college students are often subject to the false consensus effect (Ross, Greene, & House, 1977). College students who drink more alcohol believe that the typical college student drinks more alcohol and more often than are the actual mean levels of consumption and

frequency (Perkins, 2002). In Perkins, Meilman, Leichliter, Cashin, and Presley's (1999) national study of college students from more than 100 institutions, the authors found that most students (at every institution surveyed) believed that their peers drank alcohol much more often than was the school's actual frequency mean. There is also evidence that college students exhibit pluralistic ignorance about drinking behaviors (Miller & McFarland, 1991). Many students note the norm of heavy drinking at their school, actually drink to levels suggested by the norm, and believe that others hold personal views supportive of the heavy drinking behavior, but at the same time privately hold beliefs unsupportive of the heavy drinking behavior (Schroeder & Prentice, 1998). Prentice and Miller (1993) surveyed students from all four years of college. They found that compared with the average student and with their friends, students rated themselves as being less comfortable with the drinking on campus. The students also significantly underestimated the variability in other students' level of comfort with the drinking on campus. Believing in norms of the acceptability of heavy drinking is an implicit form of pressure (Borsari & Carey, 2001).

The role of peers is likely to depend on several factors. Age is expected to relate to the relationship between peer influence and heavy drinking, as those in the 18 to 24-year-old age range report the highest likelihood of a heavy drinking episode (SAMHSA, 2007). Thus, the effect of friends' pressure to drink heavily is expected to be stronger for younger participants than for older participants. Alcohol expectancies are beliefs about how alcohol affects one's behavior (Goldman, Del Boca, & Darkes, 1999). Zamboanga and colleagues (2010) recently reported that in a sample of 1,327 students from nine U.S. colleges, alcohol expectancies (including aggression, liquid courage, and sex



drive) were significantly, positively associated with hazardous alcohol use. In their review of peers' influence on college student drinking, Borsari and Carey (2006) highlighted the important role of the quality of the relationship with one's peers. They found that not having high quality peer relationships may induce drinking, that including drinking as a key feature of the shared activities of the relationship may foster heavy drinking, and that having friends who disapprove of drinking may inhibit heavy drinking. Friends and peers may have a stronger effect on those who are already likely to drink heavily as they may feel a sense of affiliation with their peers if they all drink together (Orcutt, 1991). Taken together, those more satisfied with their drinking-partner friends may be more susceptible to pressure from those friends.

### **Consensual Sexual Activity**

As young people develop their identity during their emerging adult years, they are likely to be exploring their sexual self (Lefkowitz & Gillen, 2006). This may mean having numerous sexual partners while determining what and whom they like and dislike (Arnett, 2004). Once considered deviant behavior if not within a committed relationship, premarital sexual activity with numerous partners is quite common. A national study indicated that approximately 85% of college students are sexually active and 34% have had six or more sexual partners (Douglas et al., 1997). As indicated in a recent meta-analysis of 834 samples, men still report more permissive attitudes about casual sexual activity (medium effect size) and more sexual experience (small effect size) than do women (Petersen & Hyde, 2010).

The study of adolescents' and young adults' sexual attitudes and behaviors gained impetus within the context of examining the rising rates of sexually transmitted

infections for this age group which reports numerous partners and inconsistent condom use (Desiderato & Crawford, 1994). Recently, researchers have begun to focus on “hooking up,” defined as some form of sexual activity among casually acquainted individuals without commitment (Epstein, Calzo, Smiler, & Ward, 2009; Lambert, Kahn, & Apple, 2003; Manning, Giordano, & Longmore, 2006; Paul, McManus, & Hayes, 2000). Hooking up is an ambiguous term because it may indicate any of a range of sexual activities, from kissing, petting, manual genital stimulation, to oral or vaginal sex (Kimmel, 2008; Lambert et al., 2003). Kimmel notes that the ambiguity of the term suits both partners because a man’s friends can assume that he had sexual intercourse, whereas a woman’s friends can assume that she did not have intercourse. A typical hook up experience begins with groups of same-sex friends going to a bar or party. Individual group members eventually intermix with opposite-sex group members, and some may pair off while at the party or go to one person’s residence. There is generally little expectation of a committed relationship; hook-ups are often one-night stands, although they may also be part of a “friends with benefits” relationship; and alcohol is often consumed (Kimmel, 2008).

Friends are an integral part of the social context for meeting sexual partners, and thus, peers are likely to influence sexual attitudes and behaviors during the emerging adult years (Christopher, 2001). Friends are also likely to affect each other’s attitudes and behaviors through the retelling of sexual activities and discussions of sexual expectations. Lefkowitz, Boone, and Shearer (2004) examined the frequency of sexual discussions with a same-sex best friend and demonstrated that sexual discussions are very common for both men and women. In a later study, Lefkowitz and Espinosa-

Hernandez (2007) described the topics of sex-related discussions first-semester college students had with their same-sex best friends. In their sample of 182 students (50% men), men were more likely than women to discuss behaviors and feelings (including, for example, “sexual desire” [p. 20]), whereas women were more likely than men to discuss dating, fertility issues, contraception, and abstinence. Sexually active participants (59% of the sample) discussed sexual topics more frequently than did abstinent participants, except for the topic of abstinence. Participants holding more permissive attitudes about sex discussed sex-related topics more openly and with greater comfort than did those with more traditional attitudes about sex.

Lambert et al. (2003) surveyed 264 male and female college students who had engaged in a hook-up. Participants indicated their level of comfort with the amount of hooking up on their campus and with types of sexual activities common during a hook-up. As expected, participants demonstrated pluralistic ignorance: ratings of participants’ own comfort level with hooking up was significantly lower than their estimate of a same-sex peer’s level of comfort. This was found for both genders, but the difference was significantly larger among male students. Further, both men and women overestimated the opposite gender’s comfort with hook-ups. Men were also more comfortable than women with the four types of sexual hook-up behaviors examined: petting above and below the waist, oral sex, and sexual intercourse.

Agostinelli and Seal (1998) recruited a sample of 319 (126 men) single, heterosexual college students age 18 to 25. Participants completed measures of sociosexuality (Simpson & Gangestad, 1991) and attitudes about casual sexual relationships for themselves, their close friends, and the typical student. Sociosexuality

refers to one's preference for uncommitted sexual activities; those who are classified as having an unrestricted sociosexual orientation have more sexual partners, expect more future sexual partners, have more one-night stands, engage in more frequent sexual fantasies, and hold more positive attitudes toward uncommitted sex than do those classified as having a restricted sociosexual orientation. Men reported more permissive attitudes toward casual sexual relationships than did women, for both themselves and their close friends. Similarly, those with an unrestricted sociosexual orientation reported more permissive attitudes toward casual sex for themselves and their close friends, compared with those classified as holding a restrictive sociosexual orientation. There was also a main effect of attitude target; the typical student was perceived to hold the most permissive attitudes about casual sex, followed by close friends. Participants' own attitudes about casual sex were the least permissive. This indicates that emerging adults demonstrate pluralistic ignorance about sexual attitudes, as well as about drinking behaviors.

This literature suggests that emerging adults have more permissive sexual attitudes and behaviors now than in previous generations. They engage in numerous sexual relationships, either within or outside the context of an on-going intimate relationship. They also assume that their friends and peers are more comfortable with casual sexual relationships than they actually are, which implies a certain amount of implicit pressure to engage in such activities.

As with heavy drinking, there are likely to be several factors which affect the relationship between friends' pressure to have numerous sexual experiences and the number of past-year consensual sexual partners. Much of the hook-up literature has

focused on college students with the implication that the traditional college age of 18 to 22-years-old is the time that hook-up experiences are most likely (Stinson, 2010). Thus, in the current study, the effect of friends' pressure on consensual sexual behaviors is expected to be stronger among the younger participants than among the older participants. As mentioned for drinking behaviors, participants who are more satisfied with their friends may be more apt to act upon friends' pressure. Finally, participants who hold more positive attitudes about casual sexual relationships are likely to have friends with similar attitudes and to have more recent consensual sexual partners (Agostinelli & Seal, 1998).

### **Sexual Assault Perpetration**

Every day, thousands of women are sexually assaulted by someone they know, such as a male acquaintance, friend, or boyfriend (Kilpatrick & McCauley, 2009; Moracco, Runyan, Bowling, & Earp, 2007). "Sexual assault" is an inclusive term that is not limited to illegal acts. Rather, sexual assault refers to the full range of unwanted sexual activity, including sexual contact such as kissing or petting, as well as anal, oral, or vaginal sexual intercourse obtained by using verbal manipulation, through the use of physical force, or when one cannot consent due to intoxication or mental status (Abbey, Jacques-Tiura, & Parkhill, 2010). Women's risk of sexual assault victimization is highest in adolescence and emerging adulthood (Tjaden & Thoennes, 2006).

In a national study of college students, 25% of men acknowledged some form of sexual assault perpetration since age 14, typically in a dating situation (Koss et al., 1987). Local college and community studies of men suggest even higher rates; some researchers have found that over 50% of men self-report having some form of sexual

activity with a women when they knew she did not want it (Abbey, Parkhill, BeShears, Clinton-Sherrod, & Zawacki, 2006; Davis, Schraufnagel, George, & Norris, 2008). There are several reasons for the wide ranges of prevalence in men's sexual assault perpetration rates, such as differences in the language used and number of survey items. When behaviorally specific questions are used that do not label the incidents as "rape" or "sexual assault," and when more questions are asked, higher rates are reported (Kilpatrick & McCauley, 2009). Women also report committing sexual assault against men; however, the vast majority of sexual assaults are perpetrated by men against women (Bureau of Justice Statistics, 2008).

Several theories have elucidated which men may be most likely to sexually assault women and the types of situations that foster sexually assaultive actions. Feminist sociocultural scholars have highlighted the patriarchal ideology of "rape-prone" societies and have focused on the role of male power and dominance in sexual assault (Brownmiller, 1975; Burt, 1980; Sanday, 1981, 2007). Murnen et al. (2002) summarized the research linking aspects of masculine ideology to sexual aggression in a meta-analysis of 39 studies. One of the strongest predictors of sexual aggression was hostile masculinity. As part of their confluence model of sexual assault perpetration, Malamuth and colleagues (Malamuth, Heavey, Linz, Barnes, & Acker, 1995; Malamuth, et al., 1991; Malamuth & Thornhill, 1991) describe hostile masculinity as a personality constellation involving hypersensitive, distrustful feelings about women and a sense of pleasure in dominating women. Numerous authors have demonstrated that aspects of hostile masculinity or hypermasculinity, such as acceptance of rape myths or stereotypic attitudes about women that justify forced sex, sexual dominance

motivations, adversarial sexual beliefs, and hostility toward women are positively associated with sexual assault perpetration (Abbey, McAuslan, Zawacki, Clinton, and Buck, 2001; Carr & VanDeusen, 2004; DeGue & DiLillo, 2004; Koss & Dinero, 1988; Malamuth et al., 1991; 1995; Wheeler, George, & Dahl, 2002; Zawacki, Abbey, Buck, McAuslan, & Clinton-Sherrod, 2003). For example, in their college sample of 303 men, DeGue and DiLillo found that sexual assault perpetrators endorsed more rape myths, were more accepting of interpersonal violence, felt more hostility toward women, and believed more strongly in adversarial heterosexual relationships.

Several researchers have also suggested that men's peer groups influence their likelihood of sexual assault perpetration. Theory and research in the domain of male peer support for sexual assault perpetration has taken many forms over the past several decades. At the forefront of this research area, Kanin (1967) suggested that sexually assaultive men may be socialized by their friends differently than nonperpetrators, such that sexually assaultive men's friends expect more sexual experiences and these men believe they will lose face with their group if they do not meet their group's expected sexual quota.

Kanin (1967) interviewed 341 unmarried male college students. Since their entrance into college, 25.5% reported using some type of force to obtain sexual intercourse from an unwilling woman. The sexually assaultive men reported more consensual sexual experiences than nonassaultive men; however, the sexual assault perpetrators were more dissatisfied with their level of sexual activity than were nonperpetrators. Kanin found that the sexually assaultive men and the nonassaultive men differed in their level of sexual expectations and that their peer groups influenced

their expectations. Compared with nonperpetrators, sexual assault perpetrators were more likely to report that their friends exerted pressure on them to seek new sexual experiences and that admitting virginity would result in a loss of face. Further, among the sexually aggressive subset, those who reported less sexual pressure from their friends reported greater sexual satisfaction, exemplifying the sexually aggressive men's feelings of relative deprivation compared with the standards set by their friends.

Later, Kanin (1985) replicated his findings with a sample of 71 college students. He demonstrated that date rapists had more sexual experiences than a matched sample of male nonassaulters. Date rapists were also much more likely to state that their best friends would "definitely approve" of using sexually assaultive methods with some women (p. 223), and nearly all of the date rapists, compared with almost one-third of the controls, had their friends suggest such tactics as good methods to obtain sex. Kanin's date rapists clearly found sexual conquests very important, and they compared their actions with their peer group.

Although Kanin's work began many years ago, his ideas and results are still relevant today. DeKeseredy and colleagues' (DeKeseredy, 1988; DeKeseredy & Kelly, 1995; Schwartz & DeKeseredy, 1997) theory of male peer support was based on social support theory (Cohen & Syme, 1985). Generally, social support theory is thought to describe how the tangible and intangible support provided by others promotes health and well-being (Wills, 1985). However, here it is applied to describe how the integration into a social network that promotes and accepts violence against women influences men to sexually assault women.



DeKeseredy and colleagues (DeKeseredy, 1988; DeKeseredy & Kelly, 1995; Schwartz & DeKeseredy, 1997) posit that men's sexual assault perpetration is a function of three aspects of peer support: informational support, attachment to abusive male friends, and pressure to have sex. DeKeseredy and Kelly defined informational support as "guidance and advice that influence men to sexually, physically, and psychologically assault their dating partners" (p. 44). The attachment to abusive male peers construct was assessed by listing the number of male friends who physically, verbally, or sexually assaulted a woman. DeKeseredy and Kelly assessed peer pressure to have sex with a single item.

In their Canadian national sample of 1,307 male postsecondary students, DeKeseredy and Kelly (1995) measured sexual assault perpetration, informational support, attachment to abusive male peers, and peer pressure to have sex. A modified version of Koss, Gidycz, and Wisniewski's (1987) 10-item Sexual Experiences Survey (SES) assessed sexual assault perpetration. Informational support and attachment to abusive male peers were significant predictors of sexual assault. However, these variables accounted for only 8% of the variance in sexual assault perpetration.

Other researchers have supported theories of male peer support. With a sample of 343 male college students, Abbey et al. (2001) examined attitudes, past experiences, and situational factors associated with sexual assault. Compared with nonperpetrators, sexual assault perpetrators reported that their friends would be more approving of using coercive strategies and reported greater pressure from their friends to use them. Abbey, Parkhill, Clinton-Sherrod, and Zawacki (2007) surveyed a community sample of 163 men aged 18-49. They found that men who had sexually assaulted a woman had a

greater proportion of friends who would approve of using forceful or coercive tactics to obtain sex than did nonperpetrators.

Thompson and Cracco (2008) discussed how the alcohol-fueled dating scene encourages hegemonic masculinity (Connell, 1995), commonly on display in bars and at parties. A major component of hegemonic masculinity involves competition and using sexually aggressive tactics in front of other men (Thompson & Cracco, 2008). Thompson and Cracco note, "In bars they [men] become performers of a context-specific masculinity, and they are generally with friends who serve as the audience of their performance" (p. 83). In a qualitative investigation, Flood (2008) demonstrated that homosociality (male-male peer relations) "shapes the sexual relations in which these men engage, the meanings given to their sexual involvements, and the development of narratives about them" (p. 339). By going to bars with their friends and witnessing each other's behaviors, many men have ample opportunities to compare their sexual tactics.

Although some tactics such as lying or not taking no for an answer may be acceptable in some peer groups, they may fit researchers' definitions of sexual aggression. Thompson and Cracco's (2008) sample of 264 male students from 22 colleges or universities completed a survey of their sexually aggressive behaviors in bar settings. Sexual aggression was defined as asking an unknown woman for sex, starting a sexual conversation at a party or bar, brushing up against a woman intentionally, pressing up against a woman from behind while dancing, or grabbing a woman's butt. Since starting college, 92% of the men acknowledged at least one of these acts and 15% had done all six acts. Controlling for demographic factors and sexual history,

endorsement of the toughness aspect of masculinity and antagonistic beliefs about women were predictive of sexual aggression.

In a related study, Parks and Scheidt (2000) conducted focus groups with male bar drinkers. Stereotypes about women bar drinkers that were commonly expressed included the beliefs that women who go to bars do so to have a sexual encounter and that women who drink heavily are sexually “easy” or “loose” (p. 934). Taken together, these studies suggest that men who frequent bars or attend parties with a heavy alcohol focus are more likely than other men to derogate the women in attendance and are likely to behave aggressively toward them.

There is also evidence that college men exhibit pluralistic ignorance regarding other men’s attitudes and beliefs about women. Kilmartin et al. (2008) surveyed 65 male college students for their own and their estimates of the “average man in the room’s” (p. 266) comfort with sexism, adversarial sexual beliefs, and hostile and benevolent sexism. Participants completed the measures independently in groups of 5-9 unacquainted men. On all four of these measures, Kilmartin et al. found that the perceived mean score was significantly higher than the actual mean score. Their results were replicated in a second sample of 63 male undergraduates, who completed the study in small groups composed of men who were acquaintances. This distinction is important because although the baseline findings just presented were similar, a short social norms challenge intervention to reduce the overestimation was less successful for the groups of acquaintances than for the groups of unacquainted men. At the three-week follow-up assessment of perceptions, there were significant effects of the intervention on all four variables for the unacquainted men; however, for the acquainted

men, there were only significant effects on two of the four variables (hostile sexism and comfort with sexism). For the other two variables, the pre- and post-intervention ratings of the average man's beliefs did not change. Kilmartin et al. suggest that the intervention effects for the acquainted men may have been less effective because acquainted men have many more opportunities to influence one another than those who only influenced each other during the intervention session. In other words, for the acquainted men, being told in the intervention setting what beliefs group members privately reported may not have been enough to overcome perceptions based on prior personal experiences with other group members.

Other researchers have demonstrated that involvement in groups that are likely to have norms of aggressive masculinity confers an increased level of risk for sexual assault perpetration. Several authors have noted the rape-prone environment of fraternities and athletic teams (Boeringer, 1999; Forbes, Adams-Curtis, Pakalka, & White, 2006; Koss & Dinero, 1988; Locke & Mahalik, 2005; Loh, Gidycz, Lobo, & Luthra, 2005; Sanday, 2007). Sanday (2007) theorized that the power of the group (i.e., the fraternity) and the situation (e.g., parties with large amounts of alcohol) both affect men's likelihood and acceptance of sexually assaulting women. She suggests that the socialization process involved with fraternity initiation rites and fraternity parties encourages objectification of woman and sexual conquests, even if the man has to "force a yes out" (Sanday, 2007, p. 145).

A few researchers have examined sexual discussions among friends (Lefkowitz et al., 2004). Korobov and Thorne (2006) demonstrated that even in short conversations in a laboratory, some young men will use the time to compare their sexual stories with

their friends, and will be more likely to discuss negative aspects than positive aspects. These authors invited thirty-two male college student participants aged 19-22 to bring a male friend to the laboratory for a study ostensibly on friendship dynamics. Participants were instructed to have a 10-minute “catch-up” conversation about whatever they wanted to discuss. Among the 32 dyads, 16 conversations included at least one romantic story, for a total of 40 romantic stories. A romantic story was a combination of 6 or more clauses that focused on “one’s own or another male’s sexual or romantic involvement or interest in a female, where such sexual involvement or interest was clearly nonplatonic” (p. 34). These romantic stories were analyzed for intimacy and distancing. Distancing utterances (short word segments of the conversation) were much more common than intimacy utterances. Korobov and Thorne also did not assess sexual assault perpetration; however, in these spontaneous conversations, 9% of the distancing utterances were coded as references to sexual activities or objectification of partner.

At the same time, not all researchers who hypothesize an effect of peer group find such an effect. Abbey and McAuslan (2004) conducted a 2-year longitudinal study with 197 male college students. The sample was representative of the university’s male population in age, ethnicity, and major. Peer influence was operationalized as the extent to which participants’ friends would approve of using six types of manipulative strategies to obtain sex. In an analysis of covariance that controlled for social desirability, there were no differences in peer approval of forced sex between groups of nonperpetrators, perpetrators who had only assaulted prior to the first assessment, perpetrators who assaulted only in the intervening year, and repeat perpetrators. However, higher levels

of peer approval were associated with more callous attitudes toward women, stronger personal acceptance of verbal pressure, earlier age of first consensual sex, more drinking in dating and sexual situations, and more frequent misperceptions of women's sexual intentions.

Loh and colleagues (2005) conducted a 3-wave longitudinal study with a sample of 325 college males (66% of whom completed the baseline, 3-month follow-up, and 7-month follow-up). Sexual assault perpetration was measured at each assessment with the 10-item SES (Koss & Oros, 1982). At Time 1, perpetration history was assessed since age 14; for the two follow-ups, the SES asked about incidents occurring in the interim time period. Fraternity membership, comfort with friends' sexist language and behaviors, rape myths, hypergender ideology, adversarial heterosexual beliefs, alcohol use, perceived token resistance, and perceptions of other men's rape myth acceptance and sexist language and behaviors were assessed in the baseline interview. Men's comfort with sexist language and behavior was not significantly bivariately associated with their perpetration, but it was significantly cross-sectionally related to endorsement of a hypergender ideology, adversarial heterosexual beliefs, fraternity membership, and alcohol use. Sexual assault perpetration was significantly cross-sectionally bivariately associated with hypergender ideology, and significantly longitudinally bivariately with fraternity membership (at the three-month follow-up) and adversarial heterosexual beliefs and rape myth acceptance (at the seven-month follow-up). Further, regardless of perpetration history, men rated other men as being more accepting of rape myths and more comfortable in sexist situations than themselves. Loh et al. suggested that this

may indicate a self-enhancement bias (e.g., Krueger, 1998), or that there is a cultural understanding among college men that supports the mistreatment of women.

As indicated in previous sections, friends' influence may depend on several personal factors. Men's stereotypic attitudes about women that justify forced sex have been shown to be a significant cross-sectional and longitudinal predictor of their sexual assault perpetration (Abbey & McAuslan, 2004; DeGue & DiLillo, 2004; Loh et al., 2005). Age may also affect the relationship between peer influence and sexual assault perpetration. Women between the ages of 16 and 24 were more likely than women over age 25 to report a rape or sexual assault in the 2008 National Crime Victims Survey (Bureau of Justice Statistics, 2009), which implies that younger men may be at heightened risk for perpetration and suggests that male friends may have greater influence among younger participants. As suggested in the heavy drinking section, men who feel more satisfied with their male friendships may be more likely to behave in line with such friends' pressures. Men who have a social network of mostly male members (or fewer female friends) have been shown to report more interpersonal violence and sexual assault perpetration (Casey & Beadnell, 2010; Forbes et al., 2006; Loh et al., 2005).

### **Goals of the Study and Hypotheses**

This study addresses several gaps in the literature. First, the vast majority of research on social influences on drinking, sexual experiences, and sexual assault perpetration involve college samples. This is not an inappropriate population, as these activities are common on college campuses. However, the current study expands past research by examining the influence of friends in a community sample of men aged 18-

35. Also, this study is novel in its use of both quantitative and qualitative assessments of friends' influences. Participants endorsed their level of perceived pressure to perform a variety of behaviors, and also described in their own words how they and their friends talk about women in a free-response format. An additional strength of this study is that it includes both prospective and cross-sectional associations. Participants' personal attitudes and beliefs about drinking, casual sex, and women were assessed one year prior to the assessment of friends' influences and the three outcomes.

The two main goals of this dissertation are to demonstrate the importance of male friends on young men's heavy drinking and sexual behaviors and to establish the reliability, factor structure, and applicability of several new scales. The construct of friends' influences has been operationalized differently by many different researchers (Abbey et al., 2006; 2001; Boeringer, Shehan, & Akers, 1991; DeKeseredy & Kelly, 1995; Feinn, Tennen, & Kranzler, 2003; Kanin, 1967; 1985; Schwartz & DeKeseredy, 1997). Here, it is also measured with several different scales (i.e., pressure to drink heavily, have numerous sexual experiences, have sex by any means; comments about women). The friends' influences scales were developed specifically for this study and were only loosely based upon previous measures.

**Hypotheses regarding scale development.** The first set of hypotheses concern the psychometrics of the three new measures developed for this study: the Male Friends' Pressure scale, the Comfort with Sexist and Nonsexist Statements scale, and an open-ended single item assessing how men and their friends talk about women.

**A1.** First, it was hypothesized there would be three reliable and distinct subscales in the Male Friends' Pressure scale. Items 1-2 were expected to form a *Male*



*Friends' Pressure to Drink Heavily* subscale; they were hypothesized to demonstrate an acceptable reliability coefficient and load on a single factor. Items 10-11 were hypothesized to form a *Male Friends' Pressure to Have Numerous Sexual Experiences* subscale; these items were expected to produce an adequate reliability coefficient and form a single factor. Items 12-16 were predicted to form a *Male Friends' Pressure to Have Sex by Any Means* subscale; these five items were hypothesized to demonstrate acceptable reliability and form a single factor. The full text of the measure can be found in the Appendix, p. 98. Note that the remaining items (items 3-9) were included as filler items and were not intended to be included in the subscales formed.

**A2.** Second, the Comfort with Sexist and Nonsexist Statements scale was hypothesized to produce two reliable and distinct subscales. One subscale was expected to be formed with the *sexist* items (2, 3, 5, 7, 8, and 10). Another subscale was hypothesized to be formed with the *nonsexist* items (1, 4, 6, 9, and 11). The full text of the scale can be found in the Appendix, pp. 100-101.

**A3.** When asked to describe how they and their friends discuss women, two discrete themes were expected to emerge in participants' open-ended responses. Because participants completed this item immediately after responding to the Comfort with Sexism scale, both positive (egalitarian) and negative (objectifying) comments about women were expected. Objectifying discussion points were likely to involve degrading phrases, sexualized descriptions of appearance, examples of stereotypical behaviors, and stories of sexual experiences (Christopher, 2004). Egalitarian discussion points were likely to involve descriptions of women's personality, job, intelligence, or an

emotional connection. The exact phrasing of this question can be found in the Appendix, p. 99.

**Hypotheses regarding relationships of friends' influences and behaviors.**

The second set of hypotheses concern the bivariate relationships between men's perceived pressure to drink heavily, have numerous sexual experiences, and have sex by any means and men's frequency of recent heavy drinking, consensual sexual experiences, and sexual assault perpetration.

**B1.** Friends' pressure for drinking heavily was expected to be positively associated with frequency of past-year heavy drinking. The more pressure from friends to drink heavily, the more frequently men would report drinking heavily.

**B2.** Friends' pressure for numerous sexual experiences was hypothesized to be positively associated with the number of past-year consensual sexual partners. The more pressure from friends to have and discuss sexual experiences, the more sexual partners men would report having in the past year.

**B3.** Friends' pressure for sex by any means was predicted to be positively associated with the number of sexual assaults perpetrated in the past year. The more pressure from friends to use manipulative and/or forceful tactics to have sex, the more sexual assaults men would report committing in the past year.

**B4.** Items in the friends' pressure for forced sex scale were hypothesized to be related to specific sexual assault tactics described in the SES because they were written to correspond to sexually assaultive tactics described in the SES. The SES describes verbally coercive tactics (such as sulking and swearing at the woman), impairment tactics (such as giving the woman drinks or having sex with a woman who is

passed out), and physically forceful tactics (such as holding the woman down). Male Friends' Pressure to have Sex by Any Means items were written to reflect these tactics, but without using the exact same words. It was expected that all of the friends' pressure items and the SES items would be correlated; however, the following relationships were expected to be the strongest.

**B4a.** More pressure to have sex even if “he has to guilt her into it” was expected to be associated with more sexual assaults in which the man obtained the sexual activity by showing displeasure.

**B4b.** More pressure to have sex even if “he has to get her drunk” was hypothesized to be associated with more sexual assaults in which the man obtained the sexual activity by giving the woman alcohol or drugs.

**B4c.** More pressure to have sex even if “she was unlikely to remember it because she was so smashed” was predicted to be associated with more sexual assaults in which the man obtained the sexual activity when she was too intoxicated to be able to consent.

**B4d.** More pressure to have sex even if “being rough was necessary” was hypothesized to be associated with more sexual assaults in which the man obtained the sexual activity by using some degree of physical force.

**Hypotheses about interactions between friends' pressure and personal attitudes.** As conceptually illustrated in Figure 1 (p. 3), it was expected that the main effects of peer pressure on frequency of heavy drinking, number of consensual sexual partners, and number of sexual assaults perpetrated would be moderated by several personal characteristics: attitudes or beliefs relevant to the outcome, age, and

satisfaction with their friends. The attitude and beliefs variables were also hypothesized to have main effects on the three outcomes. The expected relationships are described below.

**C1a.** Alcohol expectancies were hypothesized to have a main effect on the number of heavy drinking days in the past year. Participants with stronger alcohol expectancies regarding aggression, liquid courage, and sex drive were expected to report drinking heavily more frequently in the past year than were participants with weaker alcohol expectancies.

**C1b.** Positive attitudes about casual sexual relationships were hypothesized to have a main effect on the number of consensual sexual partners in the past year. In other words, more past-year consensual sexual partners were expected for participants with more positive attitudes about casual sex than for participants with less positive attitudes about casual sex.

**C1c.** Stereotypic attitudes about women that justify forced sex were hypothesized to have a main effect on the number of sexual assaults perpetrated in the past year. Participants who believe more strongly in stereotypic attitudes about women were expected to commit more sexual assaults than participants who believe less strongly in stereotypic attitudes about women.

**C2.** As shown in Figure 1 (see p. 3), age, satisfaction with male friends, the individual difference measures described just above, and friends' pressure were hypothesized to interact together. In other words, for each outcome, a four-way interaction is expected. The strongest effects of friends' pressure on the three outcomes were expected for younger participants who are more satisfied with their friends and

who more strongly espouse the relevant attitude or belief. Alternatively stated, the group of participants who are younger, more highly satisfied, more strongly endorse the attitude, and feel more pressure from their friends to behave a certain way are expected to report the highest levels of the outcome.

**C2a.** The effect of friends' pressure for heavy drinking on the frequency of past-year heavy drinking was expected to be strongest among younger, highly satisfied participants with stronger alcohol expectancies.

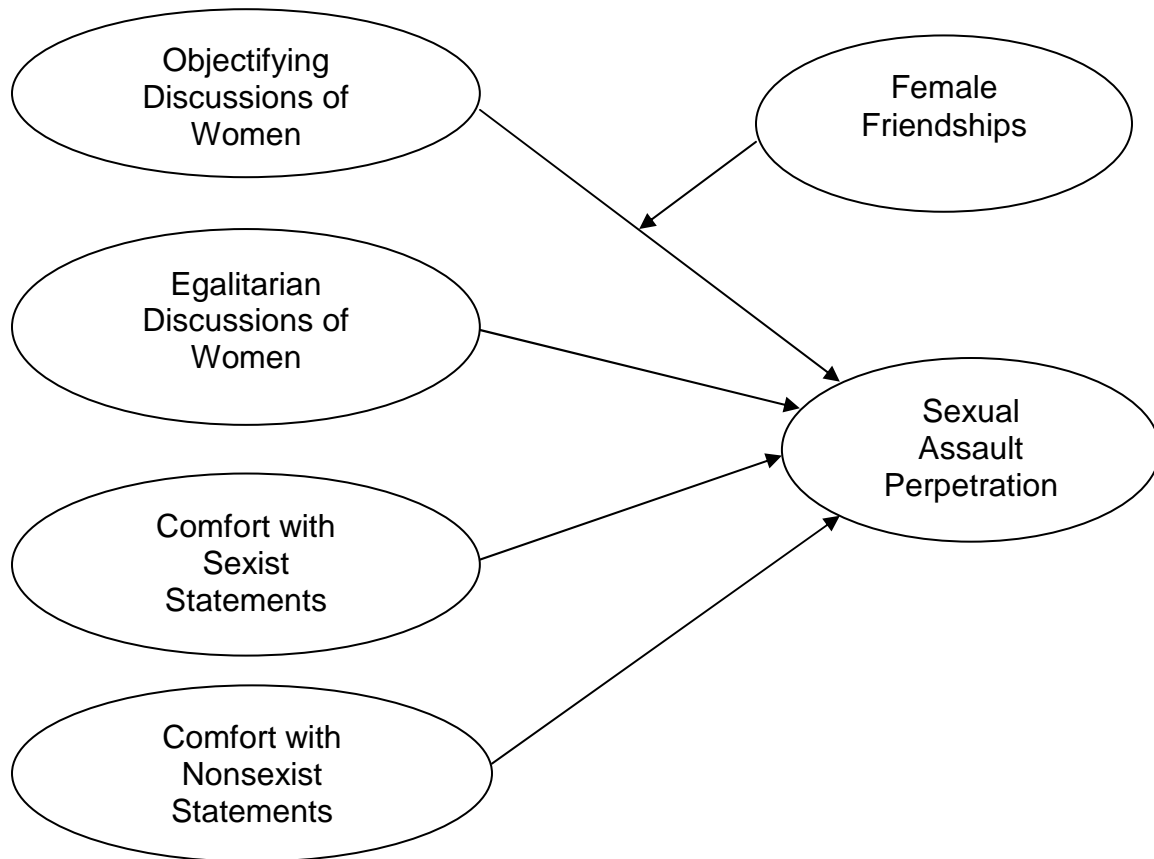
**C2b.** The effect of friends' pressure for numerous sexual experiences on the number of past-year consensual sexual partners was expected to be strongest among younger, highly satisfied participants with more positive attitudes about casual sex.

**C2c.** The effect of friends' pressure for sex by any means on the number of past-year sexual assaults was expected to be strongest among younger, highly satisfied participants with stronger stereotypic attitudes about women that justify forced sex.

**Hypotheses linking men's conversations about women with sexual assault perpetration.** As shown conceptually in Figure 2, whether men and their friends talk about women as sexual objects or as people, and their level of comfort with these types of conversations, were expected to be associated with men's sexual assault perpetration.

**D1.** Men who are more comfortable with sexist comments are hypothesized to have friends who make more objectifying statements about women. Objectifying comments men and their friends make about women and Comfort with Sexist Statements were expected to be positively associated with men's sexual assault perpetration; men who list more objectifying statements made by their friends and

Figure 2. *Proposed Conceptual Model Linking Types of Conversations about Women, Comfort with Sexist and Nonsexist Statements, Female Friendships, and Sexual Assault Perpetration.*



indicate greater comfort in sexist conversations were expected to commit more sexual assaults.

**D2.** Men who are more comfortable with nonsexist statements were hypothesized to have friends who make more egalitarian comments about women. Egalitarian phrases and Comfort with Nonsexist Statement were expected to be negatively associated with sexual assault perpetration. In other words, men who report more egalitarian statements made by their friends and more comfort in nonsexualized discussions of women are hypothesized to commit fewer sexual assaults.

**D3.** Men's friendships with women may buffer the influence of their male friends. Having more female friends may induce a sense of empathy which counteracts the effects of the comments made by male friends. Thus, the effects of friends' objectifying statements were expected to be stronger among men who have fewer female friends than among men with more female friends.

## CHAPTER 2

### Method

#### Participants

Participants were 423 men who completed the first and second waves of a two-year longitudinal study. Four hundred twenty-five men were interviewed at both time points; however, as described below, two participants' data were deleted for analyses. At the time of the first wave, participants were required to be between the ages of 18 and 35, to be single (not married, engaged, or cohabitating), to have dated a woman within the past two years, and to be expected to remain living in the Detroit area in the following year. Four hundred seventy-four men completed the first assessment. Four participants' data were removed after their responses were deemed unreliable because of large amounts of missing data, long series of identical responses, and low truthfulness. Forty-five men were not reinterviewed for Time 2. Of these, 60% ( $n = 27$ ) refused to complete the second interview, either explicitly ( $n = 7$ ), or implicitly by repeatedly missing appointments or putting the interviewer off ( $n = 14$ ), or by having another person refuse for them ( $n = 6$ ). Additionally, 27% ( $n = 12$ ) were ineligible for the Time 2 interview because they had moved too far away to be interviewed in person ( $n = 10$ ), were incarcerated ( $n = 1$ ), or were hospitalized ( $n = 1$ ). The remaining 13% ( $n = 6$ ) could not be located despite numerous attempts. Overall, 90.4% of participants from Time 1 also completed the Time 2 interview.

Time 1 participants were, on average, 23.67 years old ( $SD = 4.95$ ). Seventy-three percent of the sample ( $n = 344$ ) were Caucasian, 16% ( $n = 77$ ) were African Americans, 5% ( $n = 23$ ) had mixed ethnicity, 2% ( $n = 10$ ) were Middle Easterners, 1%



( $n = 5$ ) were Hispanics, 1% ( $n = 4$ ) were Asian, and 1% ( $n = 4$ ) reported another or unspecified ethnicity.

## **Procedures**

This dissertation is part of a larger study whose procedures have been approved by Wayne State University's and the University of Michigan's Institutional Review Boards. Separate approval was granted for the current project. Under contract with the Principal Investigator of the larger study, the University of Michigan's Survey Research Center (SRC) developed the sampling frame by purchasing a commercial telephone list of landline phone numbers with a high probability of an 18-35 year old man living in the residence (Groves et al., 2009). Phone screeners from the SRC contacted potential participants via telephone and invited them to participate in a study of men's dating and sexual experiences. Eighty-nine percent of potential participants who met the study's inclusion criteria agreed to complete an in-person interview. Participants were then contacted by an interviewer to schedule an interview. SRC trained both men and women to conduct interviews, which were conducted in mutually agreeable locations such as the participant's home, a coffee shop, restaurant, library, or school.

Time 1 interviews were conducted from March to June 2008. The interview session began with the presentation and signing of the informed consent. The consent form explained that the study dealt with men's attitudes, beliefs, dating and sexual experiences (including unwanted sexual activities), and substance use. The interview was conducted on a laptop computer. The interviewer administered the first few questionnaires to build rapport with the participant, showed the participant how to use the laptop, then the participant completed the majority of the measures independently.

The question text was displayed on the laptop screen and orally through headphones. When the participant completed the self-administered portion, he locked his responses with a personal 2-digit code to assure him that the interviewer could not go back and view his responses. The interviewer then administered the final (demographic) questions. In a separate database, the interviewer then verified and updated the participant's telephone numbers, address, and email address. The interviewer also obtained family members' and friends' contact information to aid in recontacting the participant. On average, interviews took 59.65 minutes to complete ( $SD = 13.92$ ). Participants were paid \$50 for participating in the Time 1 interview.

The Time 2 procedures were quite similar. To remind participants that they would soon be contacted for their follow-up interview, the research team sent a letter in March 2009 with some results from the first interview not related to the constructs described here. Interviews were conducted between April and July 2009. Interviewers contacted participants to set up an interview, which were again conducted in a variety of locations. Interviewers reviewed the previously signed consent form and then began the interview. Again participants completed the majority of the interview independently and locked their responses. The interviewer then verified and updated contact information for potential future studies. Interviews lasted 59.01 minutes on average ( $SD = 14.60$ ). Participants were compensated with \$60 for the Time 2 interview.

## **Measures**

**Outcome variables.** The three outcomes, frequency of past-year heavy drinking, number of past-year sexual partners, and number of sexual assaults perpetrated in the past year, were assessed at Time 2.

**Heavy drinking.** One item from the National Institute of Alcohol Abuse and Alcoholism (2003) assessed participants' past-year frequency of heavy drinking, which is defined as consuming five or more drinks in two hours or less. This item (item 3) is asked within the context of participants' typical frequency and quantity of alcohol consumption. The full text of the measure can be found in the Appendix, pp. 95-96.

**Sexual partners.** One item assessed participants' recent sexual activity. Participants reported their number of consensual sexual partners in the past year (Abbey, McAuslan, & Ross, 1998). This item can be found in the Appendix, p. 96.

**Sexual assault perpetration.** A 16-item modified version of Koss and colleagues' (2007; Abbey et al., 2006) Sexual Experiences Survey assessed sexually assaultive behavior in the past 12 months. Items use behaviorally specific phrasing to describe a sexual act and an aggressive tactic for obtaining the act with an unwilling woman, without labeling the behaviors as "rape" or "sexual aggression." At Time 2, the scale referred to acts that occurred since the last interview (i.e., in the past 12 months). Response options ranged from 0 (*never*) to 5 (*five or more times*). Responses were summed to have a score of recent sexual assault perpetration. Responses to items with the same tactic were also summed to provide a count of the number of times each tactic was employed. Obtaining sexual activity by *showing displeasure* is reflected in items 2, 8, and 13; obtaining sexual activity by *giving alcohol or drugs* is reflected in items 4, 9, and 14; obtaining sexual activity when the woman was *too intoxicated to consent* is reflected in items 5, 10, and 15; and obtaining sexual activity by the use of *physical force* is reflected in items 3, 6, 11, and 16. The full text of the scale can be found in the Appendix, pp. 96-98.

**Primary independent variables.** The primary focus of this dissertation is male friends' influence; thus, the primary independent variables were male friends' pressure to drink heavily, have numerous sexual experiences, and to have sex by any means; as well as male friends' discussions about women. These variables were all presented at Time 2. As described earlier and drawing from the work of several research teams, we developed a 16-item measure of pressure from male friends to engage in a variety of risky and aggressive behaviors (Abbey et al., 2006; 2001; Boeringer et al., 1991; DeKeseredy & Kelly, 1995; Feinn et al., 2003; Kanin, 1967; 1985; Schwartz & DeKeseredy, 1997). The full text of the measure can be found in the Appendix, on page 98. Items 3-9 were included as fillers.

***Male friends' pressure to drink heavily.*** Two items were developed to assess the amount of pressure participants perceived from their friends to drink every day and drink heavily on the weekend. A sample item is, "How much pressure have you felt from your friends to have 5 or more drinks every weekend?" Participants indicated the level of perceived pressure on a scale of 1 (*not at all*) to 5 (*very much*). These are items 1-2 in the Male Friends' Pressure scale, which can be found in the Appendix, p. 98.

***Male friends' pressure to have numerous sexual experiences.*** Two items (numbers 10 and 11) from the Male Friends' Pressure scale assessed the level of pressure participants perceived to engage in an active sex life. A sample item is, "How much pressure have you felt from your male friends to have sex with many different women?" Response options ranged from 1 (*not at all*) to 5 (*very much*). The full text of the scale can be found in the Appendix, p. 98.

**Male friends' pressure for sex by any means.** Five items (items 12-16) from the Male Friends' Pressure scale assessed perceived pressure for sexual experiences regardless of the tactic necessary. A sample item is, "How much pressure have you felt from your male friends to have sex, even if you have to make the woman feel guilty or plead with her?" Response options ranged from 1 (*not at all*) to 5 (*very much*). The full text of the scale can be found in the Appendix, p. 98.

**Comments about women.** One open-ended item asked participants to describe how they and their friends discuss women. The full text of the item is presented in the Appendix, p. 99. This item's responses were coded by three advanced undergraduates, under the author's direction. This item was presented immediately after the Comfort with Sexist and Nonsexist Statements scale listed below, which includes a variety of colloquial phrases and may have served to prime participants' thinking of actual conversations with friends.

Responses were coded by counting the number of objectifying and egalitarian phrases. The category of *objectifying phrases* included statements of a degrading nature (e.g., "I would tear that up"), ratings of appearance with a sexual focus (e.g., "she's got a nice rack"), stereotypical behaviors (e.g., "she's a gold-digger"), stories of sexual experiences (e.g., "she gave good head"), references to drinking or drug use with women (e.g., "we would talk about girls we wanted to invite to the bar because we knew that there was a chance of something sexual happening after the bar"), swearing (e.g., "i'd f\*\*k her" [sic]), and other negative attitudes about women (e.g., "She's really intelligent [saying this as we make motions referring to her chest]"; Christopher, 2004). The category of *egalitarian phrases* included statements about her job or career (e.g.,

“She has a good job”), intelligence (e.g., “where she went to college”), personality (e.g., “she is fun to be around or a funny person”), an emotional connection (e.g., “it is actually exclusively about emotional, intellectual, or social attraction”), nonsexual descriptions of appearance (e.g., “she's really pretty”), and other egalitarian attitudes about women (e.g., “what kind of relationship shes has with hee family and friends” [sic]).

**Secondary independent variables.** Several individual difference variables are expected to moderate the primary independent variables described above or account for additional variance in the dependent variables. Alcohol Expectancies, Positive Attitudes about Casual Sex, Stereotypic Attitudes about Women that Justify Forced Sex, and Demographics were assessed at Time 1, one year earlier than the dependent variables were assessed. Comfort with Sexist and Nonsexist Statements, Female Friends, and Satisfaction with Male Friends were assessed at Time 2, concurrent with the dependent measures.

**Alcohol Expectancies.** Alcohol expectancies in the domains of aggression, liquid courage, and sex drive were assessed with five items each (Abbey, McAuslan, Ross, & Zawacki, 1999; Fromme, Stroot, & Kaplan, 1993). These three subscales were combined into a single scale score because they were expected to relate to heavy drinking in a similar fashion and were moderately highly correlated with one another ( $r_{\text{average}} = .47$ ). A sample item from the liquid courage subscale is “If I were under the influence of a moderate amount of alcohol, I would feel courageous.” Participants rated their agreement on scale of 1 (*not at all*) to 5 (*very much*). The full text of this scale is included in the Appendix, p. 99.

**Positive Attitudes about Casual Sex.** Seven items from the 10-item permissiveness subscale of Hendrick, Hendrick, and Reich's (2006) Brief Sexual Attitudes Scale assessed participants' attitudes about casual sexual relationships. A sample item is "One night stands are sometimes very enjoyable." Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The full text of this scale is included in the Appendix, pp. 99-100.

**Stereotypic attitudes about women that justify forced sex.** Based on Payne, Lonsway, and Fitzgerald's (1999) and Bumby's (1996) rape myths scales, we developed a nine-item scale of stereotypic attitudes about women. A sample item is, "If a woman is willing to 'make out' with a guy, then it is no big deal if he goes a little further and has sex." Participants rated their agreement on scale of 1 (*not at all agree*) to 7 (*strongly agree*). The full text of this scale is included in the Appendix, p. 100.

**Comfort with sexist and nonsexist statements.** Based on Kilmartin and colleagues' (2008) comfort with sexism scale, we developed a scale of six sexist statements and five nonsexist statements reflecting comments that men may make about female acquaintances or significant others. The phrases used in these items were pilot tested for face validity to ensure that men of the sample's age range were familiar with the terms and that the statements would sound legitimate. Participants indicate their level of comfort in each scenario. An example of a sexist scenario reads, "You and some friends are walking together when a woman that you have never seen before walks past. After she passes you, one of your friends says, 'I'd hit that.'" Response options range from 1 (*very comfortable*) to 7 (*very uncomfortable*). Responses were recoded so that higher scores indicate greater comfort in the presence of sexist (or

nonsexist) remarks. The full text of the scale appears in the Appendix, pp. 100-101. Items 2, 3, 5, 7, 8, and 10 comprised the comfort with sexist statements scale; whereas items 1, 4, 6, 9, and 11 comprised the comfort with nonsexist statements scale.

**Female friends.** One item asked participants to indicate their number of female friends. This item is presented in the Appendix, p. 101.

**Satisfaction with male friends.** Five items from Sarason, Levine, Basham, and Sarason's (1983) Social Support Questionnaire assessed participants' level of satisfaction with their male friends. A sample question is, "How satisfied are you with the extent to which you can really count on your male friends to accept you totally, including both your best and worst points?" Response options ranged from 1 (*not at all satisfied*) to 5 (*very satisfied*). This scale can be found in the Appendix, p. 101.

**Demographics.** Participants' date of birth, and racial or ethnic heritage were assessed at Time 1. These questions can be found in the Appendix, pp. 101-102.



## CHAPTER 3

### Results

#### Data Cleaning and Preliminary Data Analyses

Participants' responses were carefully examined for missing data, strings of repetitious responses, inconsistent responses, and indicators of untrustworthiness (e.g., reports of low truthfulness by participant or the interviewer notes that his responses may be suspect). Two participants were eliminated from the dataset for meeting several of the criteria above, thus the sample size for the current analyses is 423. For all other missing data, mean substitution was used at the item level because this is a conservative method for dealing with missing data. The amount of missing data for the scales in this study was extremely low.

The distributions and reliability coefficients for the secondary independent variables were examined; descriptive statistics can be found in Table 1. As can be seen, average scores on the alcohol expectancies and positive attitudes about casual sex measures were near the scale's midpoint; however, the mean level of belief in stereotypic attitudes about women that justify forced sex was below the midpoint. Cross-gender friendships were common; men reported a median of eight female friends. The distribution of the number of female friends was significantly skewed, and was winsorized to approximate the normal distribution for further analyses (Tabachnick & Fidell, 2007). Mean level of satisfaction with male friends was above the scale midpoint. Fifty-four percent of participants were aged 18 to 22-years-old at Time 1.

Frequency distributions for the dependent variables (prior to transformation) can be found in Tables 2-4. As can be seen in Table 2, in the past year, 48% of participants

Table 1

*Psychometric Properties of Secondary Independent Variables*

Scale	When Assessed <sup>a</sup>	Observed Range	<i>M</i>	<i>SD</i>	$\alpha$
Alcohol expectancies	1	1 - 5	2.41	.73	.91
Positive attitudes about casual sex	1	1 - 5	2.80	.92	.87
Stereotypic attitudes about women that justify forced sex	1	1 - 6.44	2.35	1.15	.86
Number of female friends	2	0 - 99	11.76	14.98	NA
Satisfaction with male friends	2	1 - 5	3.74	.97	.92
Age at Time 1	1	18 - 35	23.64	4.96	NA

*Note.* <sup>a</sup> Time 1 and Time 2 were one year apart. Number of female friends was skewed, and was winsorized for later analyses.

Table 2

*Frequency Distribution of Men's Frequency of Past-Year Heavy Drinking*

Frequency of heavy drinking	<i>n</i>	Percent
Zero days	134	31.7
One-two days	86	20.3
Three-eleven days	39	9.2
Once a month	40	9.5
Two-three days a month	44	10.4
Once a week	28	6.6
Twice a week	32	7.6
Three-four days a week	17	4.0
Five-six days a week	3	.7

*Note.* *N* = 423.

Table 3

*Frequency Distribution of Men's Number of Past-Year Consensual Sexual Partners*

Number of partners	<i>n</i>	Percent
Zero	71	16.8
One	145	34.3
Two	71	16.8
Three	57	13.5
Four	28	6.6
Five	14	3.3
Six	11	2.6
Seven	6	1.4
Eight	4	.9
Nine	0	.0
Ten	6	1.4
Eleven	0	.0
Twelve	4	.9
Thirteen	2	.5
Fourteen	0	.0
Fifteen	1	.2
Twenty	1	.2
Twenty-five	1	.2
Fifty	1	.2

*Note.* *N* = 423. Number of consensual sexual partners was skewed, and winsorized for later analyses.

Table 4

*Frequency Distribution for Men's Number of Past-Year Sexual Assaults*

Number of sexual assaults	<i>n</i>	Percent
Zero	315	74.5
One	32	7.6
Two	19	4.5
Three	16	3.8
Four	11	2.6
Five	7	1.7
Six	5	1.2
Seven	4	.9
Eight	3	.7
Nine	1	.2
Ten	1	.2
Eleven	1	.2
Twelve	1	.2
Fourteen	1	.2
Fifteen	1	.2
Sixteen	1	.2
Twenty-one	1	.2
Thirty	1	.2
Forty-five	1	.2
Eighty	1	.2

*Note.*  $N = 423$ . Number of sexual assaults was skewed, and log transformed for later analyses.

reported consuming five or more alcoholic drinks in less than two hours on at least three occasions. Table 3 demonstrates that approximately two-thirds (67.9%) of men had two or fewer consensual sexual partners in the past year and that 11.8% of men had five or more consensual sexual partners. The number of sexual partners was skewed; this variable was winsorized for further analyses (Tabachnick & Fidell, 2007). As shown in Table 4, in the past year, one quarter of men (25.5%) had some type of sexual experience with a woman who did not want it. Sexual assault perpetration was skewed and transformed with a logarithmic transformation (Abbey et al., 1998; Dean & Malamuth, 1997; Malamuth et al., 1991). Cronbach's coefficient alpha was .92. The psychometric properties of the male friends' pressure scale are described below because they were developed for this study.

### **Primary Data Analyses**

**Reliability and factor analysis of the Male Friends' Pressure scale (Hypothesis A1).** The first hypothesis posited that the Male Friends' Pressure scale would have three distinct and reliable subscales. Table 5 shows the bivariate correlations among the items in the Male Friends' Pressure Scale and the descriptive statistics of the items. The low item means suggest that participants did not perceive very much pressure from their friends to engage in heavy drinking, numerous sexual experiences, or sex by any means. All items correlated moderately highly to highly with each other, with generally high correlations among items that were hypothesized to form the three subscales. Cronbach's coefficient alpha for the Pressure to Drink Heavily scale was .84. Cronbach's coefficient alpha for the Pressure to have Numerous Sexual Experiences scale was .82. Cronbach's coefficient alpha for the Pressure for Sex by

Table 5

*Correlations and Descriptive Statistics of the Male Friends' Pressure Scale Items*

<i>Male friends' pressure to...</i>	1	2	3	4	5	6	7	8	9
1. Drink every day	--								
2. Drink 5+ every weekend	.74	--							
3. Have many sex partners	.49	.50	--						
4. Tell many sexual stories	.45	.42	.69	--					
5. Have sex, even if need to induce guilt	.35	.34	.52	.46	--				
6. Have sex, even if have to lie	.46	.44	.73	.63	.69	--			
7. Have sex, even if you have to get her drunk	.39	.39	.57	.47	.66	.58	--		
8. Have sex, even if she's smashed	.31	.32	.43	.40	.56	.46	.78	--	
9. Have sex, even if you have to get rough	.22	.23	.38	.32	.58	.42	.62	.69	--
Mean	1.56	1.79	1.86	1.95	1.23	1.51	1.29	1.23	1.15
Standard deviation	0.96	1.15	1.21	1.22	0.67	0.99	0.76	0.72	0.59

*Note.* All correlations are significant at  $p < .001$ .

Any Means was .87. Male friends' pressure for sex by any means was moderately skewed; 66.2% of participants indicated perceiving no pressure from their friends to have sex by any means. This subscale score was transformed logarithmically for later analyses.

The high intercorrelations among items were also evident in the factor analysis of the scale. Principal component analysis with promax rotation was conducted because the factors were expected to correlate. Three factors were specified a priori. The resultant pattern matrix is shown in Table 6. As shown, the two pressure to drink heavily items loaded together. The pressure to have numerous sexual experiences and pressure to have sex by any means subscales were less clearly distinguished. The items describing the use of verbal manipulation to have sex loaded with the sexual experiences items, although the item regarding using guilt as a strategy cross-loaded with the remaining having sex by any means items. It was not surprising that the item regarding lying to the woman loaded on the same factor as the two numerous sexual experience items because  $r = .73$  between the lying item and the many sex partners item.

The three components accounted for 79.61% of the variance. The first two eigenvalues were both greater than one; however, the third eigenvalue equaled .83. The eigenvalues suggest that the Male Friends' Pressure scale may be better represented with a two-factor solution.

When considering both the factorability of the scale and the subscales' reliability coefficients, it can be concluded that there is partial support for Hypothesis A1. The alpha values of the three subscales provide support for the hypothesis; however, the



Table 6

*Factor Loadings for Exploratory Factor Analysis with Promax Rotation of the Male Friends' Pressure Scale*

	Component		
	1	2	3
1. Drink every day	-.008	.046	<b>.904</b>
2. Drink 5+ every weekend	.022	-.009	<b>.929</b>
3. Have many sex partners	-.033	<b>.861</b>	.091
4. Tell many sexual stories	-.125	<b>.920</b>	.018
5. Have sex, even if need to induce guilt	<b>.547</b>	<b>.433</b>	-.097
6. Have sex, even if have to lie	.089	<b>.869</b>	-.043
7. Have sex, even if you have to get her drunk	<b>.768</b>	.147	.072
8. Have sex, even if she's smashed	<b>.944</b>	-.118	.077
9. Have sex, even if you have to get rough	<b>.954</b>	-.111	-.064

*Note.* Factor loadings > .40 are in boldface.

cross-loadings and unpredicted factor structure did not provide support. In the current study, the three hypothesized subscales were used in the analyses below because they were hypothesized to form three separate subscales and they demonstrated excellent reliability.

**Reliability and factor analysis of the Comfort with Sexist and Nonsexist Statements scale (Hypothesis A2).** Table 7 shows the bivariate correlations and descriptive statistics for the items in the Comfort with Sexist and Nonsexist Statements scale. The matrix is presented with the hypothesized nonsexist items as variables 1-5, and the hypothesized sexist items as variables 6-11. As all but two means were above the scale midpoint, participants appeared to be rather comfortable with all of the statements their friends may make. The highest level of comfort was found for the item about the friend who stated, “She’s so much fun to hang out with.” The lowest level of comfort was found for the item about the friend who advised, “That punch is so strong. Keep her drinking; you’ll be guaranteed to get laid.”

Correlations were strong among the Comfort with Nonsexist Statements items and ranged from .42 to .70. All correlations were significant for the Comfort with Sexist Statements, although they ranged from .18 to .65. Items from opposite subscales also varied in their level of association with each other, although these correlations were generally lower than those hypothesized to form subscales. Positive correlations between sexist and nonsexist statements items ranged from .01 to .37 and negative correlations ranged from -.03 to -.17. As suggested by the mostly high interitem correlations for each subscale, internal reliability was high. Cronbach’s coefficient

Table 7

*Correlations and Descriptive Statistics of the Comfort with Sexist and Nonsexist**Statements Scale Items*

	1	2	3	4	5	6	7	8	9	10	11
1. Promotion	--										
2. Engaged	.53**	--									
3. Fun	.49**	.55**	--								
4. Best in me	.50**	.49**	.67**	--							
5. Laughs	.45**	.42**	.59**	.70**	--						
6. Hit that	.37**	.21**	.34**	.29**	.33**	--					
7. Tongue ring	.25**	.15**	.27**	.20**	.26**	.65**	--				
8. Tell loved	-.06	-.03	-.06	-.15**	-.04	.25**	.40**	--			
9. Strong punch	-.17**	-.12**	-.12**	-.11*	-.04	.18**	.34**	.54**	--		
10. Good in bed	-.04	-.04	.02	.08	.11*	.37**	.43**	.56**	.63**	--	
11. Tramp stamp	.06	.01	.07	.13**	.20**	.44**	.58**	.44**	.53**	.60**	--
<i>M</i>	5.79	5.85	6.15	6.04	6.05	5.44	5.17	3.39	3.33	4.01	4.35
<i>SD</i>	1.95	1.77	1.56	1.68	1.51	1.87	1.84	2.01	2.00	2.03	2.01

*Note.* \*  $p < .05$ . \*\*  $p < .01$ .

alpha for the Comfort with Sexist Statements was .84, and alpha was .85 for the Comfort with Nonsexist Statements.

Factor analysis of the Comfort with Sexist and Nonsexist Statements scale items was also completed. Principal component analysis with promax rotation was conducted because the factors were not expected to be orthogonal. Two factors were specified a priori. Both eigenvalues were greater than one, and this solution accounted for 61.97% of the variance. There were no other eigenvalues greater than one, which suggests that the two-factor solution fits well. The resultant pattern matrix is shown in Table 8. As can be seen, the two factors clearly distinguished the items in the hypothesized manner, with two exceptions. The item including the statement, "I'd hit that" cross-loaded on both factors. The item about the "tongue ring" had a lower loading on Component 2 than the rest of the items, and a positive loading of nearly .300 on Component 1. These two items were also more strongly correlated than the remaining four items with items in the Comfort with Nonsexist Statements scale (Table 7). Without these two items, the internal consistency of the four-item Comfort with Sexist Statements scale was .83.

Taking the results of the reliability analyses into consideration with the results of the factor analysis, Hypothesis A2 is partially confirmed. Analyses described below thus used the hypothesized Comfort with Nonsexist Statements subscale score, and the shortened four-item Comfort with Sexist Statements Scale.

**Coding of responses for how men and their friends discuss women (Hypothesis A3).** Three undergraduate students, two women and one man, coded participants' responses to the open-ended item, "When you and your friends sit around and talk about women you are dating or would like to date, what are some common

Table 8

*Factor Loadings for Exploratory Factor Analysis with Promax Rotation of Comfort with Sexist and Nonsexist Statements Scale*

	Component	
	1	2
"I'm so proud of her, she just got a promotion at work."	<b>.756</b>	-.059
"I just got engaged!"	<b>.727</b>	-.107
"She's so much fun to hang out with."	<b>.833</b>	-.037
"She brings out the best in me."	<b>.840</b>	-.045
"She laughs at all my jokes!"	<b>.778</b>	.058
"I'd hit that."	<b>.443</b>	<b>.534</b>
"Oh, she's got a tongue ring, you know why a girl gets one of those!"	.299	<b>.693</b>
"I had to tell her I loved her just to get in her pants."	-.199	<b>.752</b>
"That punch is so strong. Keep her drinking; you'll be guaranteed to get laid."	-.272	<b>.788</b>
"If she wasn't so good in bed, I would have dumped her a long time ago."	-.065	<b>.836</b>
"She's got a tramp stamp, and you know what that means!"	.065	<b>.805</b>

*Note.* Factor loadings > .40 are in boldface.

things your friends are likely to say?” The coding process began with the author and the coders independently reading and coding the first 20 responses. Coders indicated the presence or absence of a variety of individual categories of objectifying and egalitarian statements, and also counted the number of statements that they felt indicated an objectifying or egalitarian attitude. The count of the number of objectifying and egalitarian statements was used for analyses.

After the first 20 responses were coded, the author and the three coders held a meeting to discuss their codes. Disagreements were resolved via discussion. As the coding process continued, the coders were not able to regularly come together face-to-face because none of the undergraduates were enrolled in classes on campus. The coding process then continued via email; disagreements between coders were resolved by the author. Overall, 297 of the responses were coded by multiple coders (the remaining 126 were each coded by one of the three coders). The intraclass correlation among coders was .92 for the number of objectifying phrases,  $F(27, 54) = 37.35, p < .001$ ; and was .92 for the number of egalitarian phrases,  $F(27, 54) = 37.71, p < .001$ .

Hypothesis A3 was confirmed; objectifying and egalitarian phrases were distinctly identified in the responses. On average, participants provided 1.43 ( $SD = 1.58$ ) objectifying statements and 1.26 ( $SD = 1.61$ ) egalitarian statements.

**Relationships between male friends’ pressure and men’s behaviors (Hypotheses B1-B4).** The second set of hypotheses concerned the bivariate relationships between the Male Friends’ Pressure scale and men’s recent heavy drinking, consensual sexual behavior, and sexual assault perpetration. Table 9 shows the correlations between the three areas of pressure and their behavioral analogues.

Table 9

*Correlations between Male Friends' Pressure Subscales and Men's Recent Behaviors*

	Participants' past year...		
	Heavy drinking	Sex partners	Sexual assaults <sup>a</sup>
Male Friends' Pressure ...			
To drink heavily	<b>.34**</b>	.16**	.16**
For numerous sexual experiences	.14**	<b>.21**</b>	.26**
For sex by any means <sup>a</sup>	.10*	.18**	<b>.29**</b>

*Notes.* <sup>a</sup>The number of sexual assaults and the pressure for sex by any means scales were both transformed by taking the natural log. \* $p < .05$ . \*\* $p < .01$ .

Table 10 shows the correlations between four of the items from the Male Friends' Pressure for Sex by Any Means subscale and the use of different sexual assault tactics.

**B1.** As shown in Table 9, the moderate significant correlation between pressure to drink heavily and recent heavy drinking provides support for Hypothesis B1. The more pressure participants perceived from their friends to drink heavily, the more often they consumed five or more alcoholic beverages in two hours in the past year.

**B2.** As shown in Table 9, the moderate significant correlation between pressure to have numerous sexual partners and recent number of sexual partners supports Hypothesis B2. The more pressure participants perceived from their friends to have and discuss numerous sexual experiences, the more women they had consensual sex with in the past year.

**B3.** As shown in Table 9, the moderate significant correlation between friends' pressure for sex by any means and the number of recent sexual assaults demonstrates support for Hypothesis B3. The more pressure participants perceived to have sex even if they had to use verbal manipulation, physical force, or alcohol as a means to obtain the sexual activity, the more sexual assaults they acknowledged perpetrating in the past year. However, the correlation between friends' pressure for numerous sexual experiences and the number of sexual assaults in the past year was not significantly different from the correlation between friends' pressure for sex by any means and the number of sexual assaults perpetrated ( $z = .79, p > .05$ ; Meng, Rosenthal, & Rubin, 1992).

**B4.** As shown in Table 10, most of the correlations between friends' pressure for different types of sexually assaultive behavior and participants' recent use of sexually



Table 10

*Correlations between Male Friends' Pressure for Sex by Any Means and Men's Recent Sexually Assaultive Behaviors*

	Number of Times Sexual Assault Tactics Used				Number of Sexual Assaults
	Show Displeasure	Give Alcohol/ Drugs	Woman too Intoxicated	Physical Force	
<b>Male Friends' Pressure to Have Sex Even If...</b>					
Have to make her feel guilty	<b>.18**</b>	.17**	.15**	.16**	.32**
Have to get her drunk	.10*	<b>.21**</b>	.11*	.09	.23**
She's too smashed to remember	.08	.16**	<b>.11*</b>	.09	.19**
Have to be rough with her	.03	.21**	.11*	<b>.11*</b>	.18**
Scale score	.15**	.20**	.13**	.11*	<b>.30**</b>

*Notes.* All items are transformed with a natural log. \*\* $p < .01$ . \* $p < .05$ .

assaultive tactics were significant and moderate in magnitude. However, the strongest correlation for each friends' pressure item was with the total number of sexual assaults committed in the past year, rather than with the specific tactic. Further, the scale score for friends' pressure was nearly as highly correlated with the frequency of each tactic as was the corresponding pressure for each tactic. Finally, and not surprisingly, the number of men who acknowledged using the sexually assaultive tactics was quite low. Specifically, 5.4% of participants ( $n = 23$ ) reported giving a woman alcohol or drugs, 2.6% of participants ( $n = 11$ ) reported have sexual activity with woman who was too intoxicated to consent, and 2.4% of participants ( $n = 10$ ) reported using some type of physical force to obtain sexual activity. As noted in Table 10, each item was transformed logarithmically. Each subhypothesis is discussed below; however, these correlations suggest that the scale scores for both the friends' pressure for forced sex and the number of sexual assaults are more robust than the individual items.

**B4a.** In line with Hypothesis B4a, men who perceived more pressure from their friends to have sex even they have to make the woman feel guilty reported perpetrating more sexual assaults in which they obtained sexual activity by showing displeasure.

**B4b.** Confirming Hypothesis B4b, men who perceived more pressure from their friends to have sex even if they have to get the woman drunk reported perpetrating more sexual assaults in which they obtained sexual activity by giving the woman alcohol or drugs.

**B4c.** As expected by Hypothesis B4c, men who perceived more pressure from their friends to have sex even if the woman was too smashed to remember the sex reported perpetrating more sexual assaults in which the woman was too intoxicated to

consent. However, this correlation coefficient was slightly smaller than the correlation coefficient between this type of pressure and the number of times men gave a woman alcohol or drugs to obtain sexual activity.

**B4d.** As suggested by Hypothesis B4d, men who perceived more pressure from their friends to have sex even if they had to be rough with the woman reported perpetrating more sexual assaults in which they obtained sexual activity by using some type of physical force. However, this correlation coefficient was also smaller than the correlation coefficient between this type of pressure and the number of times men gave a woman alcohol or drugs to obtain sexual activity.

**Regressions predicting heavy drinking, consensual sexual experiences, and sexual assault perpetration (Hypotheses C1-2).** The third set of hypotheses predicted main effects of personal attitudes and beliefs on the three outcomes; and interactions between age, satisfaction with friends, friends' pressure, and the personal attitudes and beliefs on the three outcomes as illustrated in Figure 1 (p. 3). First the bivariate relationships are explained, and then the multivariate analyses are described.

Table 11 shows the correlations between participants' satisfaction with their male friends; age; beliefs and attitudes about alcohol, casual sex, and women; friends' pressure to drink heavily, have numerous sexual partners, and have sex by any means; and past-year frequency of heavy drinking, number of women sex partners, and number of sexual assaults perpetrated.

**C1a.** As predicted by Hypothesis C1a, men who indicated stronger alcohol expectancies reported drinking heavily more frequently than men who indicated weaker alcohol expectancies.

Table 11

*Correlations among Study Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Sat.	--										
2. Age	-.06	--									
3. AE	-.03	-.24**	--								
4. PAaCS	-.05	.09	.21**	--							
5. SAaW	-.16**	-.23**	.20**	.26**	--						
6. PDrink	-.08	-.24**	.21**	.18**	.23**	--					
7. PSxExp	-.20**	-.23**	.26**	.28**	.37**	.54**	--				
8. PSex <sup>1</sup>	-.18**	-.15**	.21**	.24**	.43**	.50**	.72**	--			
9. FAlc	.06	-.16**	.16**	.23**	.05	.34**	.14**	.10*	--		
10. SexP	-.04	.08	.16**	.40**	.11*	.16**	.21**	.18**	.27**	--	
11. SA <sup>1</sup>	-.15**	-.08	.10*	.17**	.30**	.16**	.26**	.29**	.12**	.22**	--

*Notes.* Sat = Satisfaction with male friends; Age = Alcohol expectancies; PAaCS = Positive Attitudes about casual sex; SAaW = Stereotypic attitudes about women that justify forced sex; PDrink = Male friends' pressure to drink heavily; PSxExp = Male friends' pressure to have numerous sexual experiences; PSex = Male friends' pressure to have sex by any means; FAlc = Past-year frequency of heavy drinking; SexP = Past-year number of women sex partners; SA = Past-year number of sexual assaults perpetrated.

<sup>1</sup> Log transformed.

\*\* $p < .01$ . \* $p < .05$ .

**C1b.** As expected by Hypothesis C1b, men who held more positive attitudes about casual sexual relationships reported more consensual sexual partners in the past year than men with less positive attitudes about casual sex.

**C1c.** As predicted by Hypothesis C1c, men who more strongly endorsed stereotypic attitudes about women that justify forced sex acknowledged committing more sexual assaults in the past year than men who less strongly endorsed stereotypic attitudes about women.

There were also numerous significant correlations among the study variables. As can be seen, men with more satisfying relationships with their male friends reported less stereotypic attitudes about women that justify forced sex, perceived less pressure from their friends to have numerous sexual experiences and to have sex by any means, and perpetrated fewer sexual assaults in the last year, than men with less satisfying relationships. Also, younger age was associated with stronger alcohol expectancies; greater endorsement of stereotypic attitudes about women; more pressure from their male friends to drink heavily, have numerous sexual experiences, and have sex by any means; and more frequent heavy drinking.

Many of the attitude and belief measures, friends' pressure scales, and past-year behaviors were also significantly related to each other. Greater endorsement of alcohol expectancies was associated with stronger positive attitudes about casual sex; greater stereotypic attitudes about women that justify forced sex; more pressure from male friends to drink heavily, have numerous sexual experiences, and have sex by any means; more frequent heavy drinking; more consensual sexual partners; and more sexual assaults perpetrated. Male friends' pressure for numerous sexual experiences

had the strongest bivariate relationship with alcohol expectancies. Positive attitudes about casual sexual relationships were positively associated with stereotypic attitudes about women; male friends' pressure to drink heavily, have numerous sexual experiences, and have sex by any means; frequency of heavy drinking; number of consensual sexual partners; and number of sexual assaults. Number of past-year sexual partners had the strongest bivariate relationship with positive attitudes about casual sex. Stereotypic attitudes about women that justify forced sex were associated with the three types of friends' pressure, as well as with the number of consensual sexual partners and number of sexual assaults perpetrated. Male friends' pressure for sex by any means had the strongest bivariate relationship with stereotypic attitudes about women.

The relationships between the three types of male friends' pressure and the three outcomes were described previously in Table 9, although the correlations among the three dependent variables were not included there. These correlations are presented in Table 11, and not surprisingly, the three recent behaviors were moderately significantly correlated with one another. More frequent heavy drinking was associated with more consensual sexual partners and sexual assaults, and the number of consensual sexual partners was positively related to the number of sexual assaults perpetrated.

Table 12 shows the results of hierarchical linear regressions predicting the three outcomes. Hierarchical multiple regressions, rather than structural equation models, were conducted to test the conceptual model shown in Figure 1 for two reasons. First, all constructs shown Figure 1 would have been indicated by single scales (often by single items). Secondly, including the 10 interaction terms for each dependent variable

Table 12

*Hierarchical Multiple Regression Analyses Predicting Men's Recent Heavy Drinking, Consensual Sexual Experiences, and Sexual Assault Perpetration (N = 423)*

Predictor	Men's Past Year Frequency of					
	<u>Heavy</u>		<u>Sexual</u>		<u>Sexual</u>	
	<u>Drinking</u>		<u>Partners</u>		<u>Assault<sup>a</sup></u>	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1	.14**		.17**		.13**	
Satisfaction with friends		.09		.00		-.09
Age		-.05		.08		-.01
Individual difference <sup>b</sup>		.08		.36**		.20**
Friends' pressure		.32**		.12**		.19**
Step 2	.04**		.02		.02	
Pressure X Age				-.02		-.33
Pressure X Satisfaction		.15**		.09		-.03
Pressure X Individual difference		.03		.10*		-.15*
Individual difference X Age		-.06		.06		.02
Individual difference X Sat.		-.04		-.04		-.14**
Age X Satisfaction		-.07		-.01		-.02
Step 3	.01*		<.01		.02*	
Pressure X Indiv. Dif. X Age				.04		.08
Pressure X Indiv. Dif. X Sat.				-.01		-.13
Pressure X Age X Sat.		.05		-.02		-.11*
Step 4	<.01		<.01		<.01	
Pressure X Indiv. Dif X Age X Sat.				-.04		.06

*Notes.* All Step 1 predictors were first standardized. <sup>a</sup>Number of sexual assaults and friends' pressure for sex by any means were both transformed with the natural log. <sup>b</sup>The individual difference for heavy drinking is alcohol expectancies; for sexual partners is attitudes about casual sex; and for sexual assault is stereotypic attitudes about women that justify forced sex. <sup>c</sup>The friends' pressure for heavy drinking is pressure to drink heavily; for sexual partners is pressure to have numerous sexual partners; and for sexual assault is pressure to have sex by any means. \* $p < .05$ . \*\* $p < .01$ .

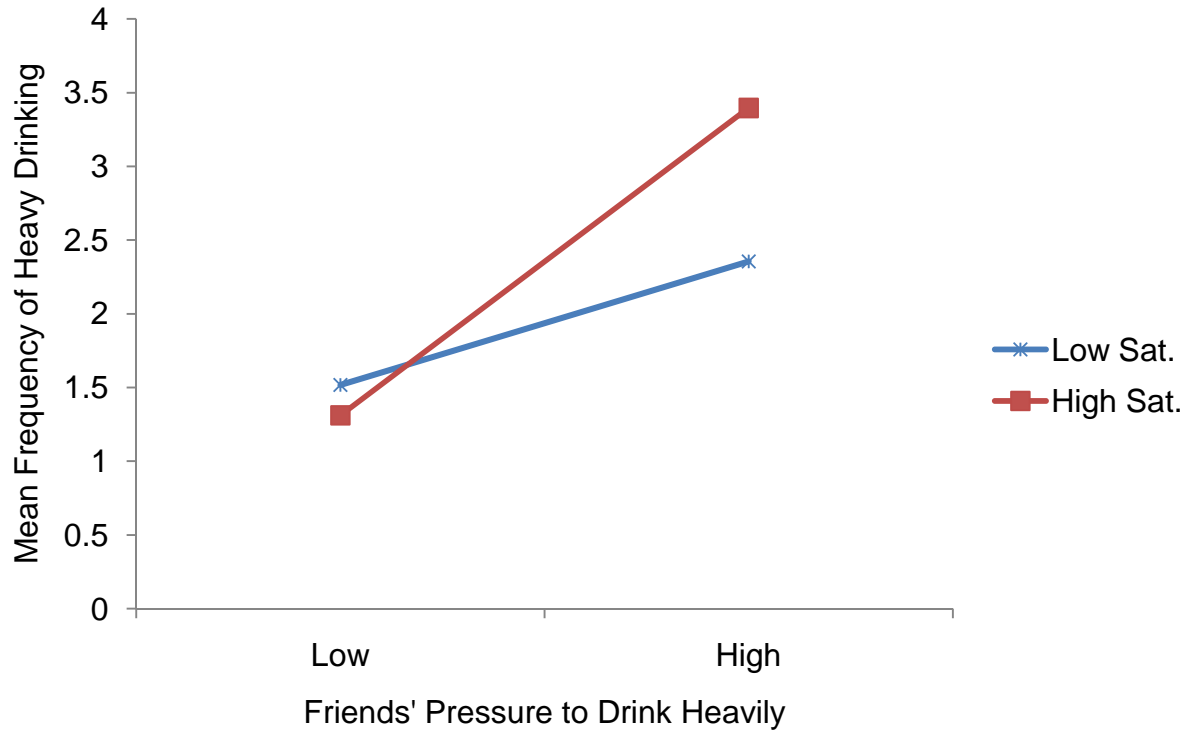
would make producing a model with acceptable goodness of fit indices unlikely. Thus, three regression equations were computed. All main effect independent variables were first standardized (Cohen, Cohen, West, & Aiken, 2003). Continuous interaction terms were formed by multiplying the standardized scores (Aiken & West, 1991; Cohen et al., 2003). Significant interactions were plotted at  $\pm 1$  SD of the mean to represent high and low scores of the given measure; thus, “low” corresponds to one standard deviation below the mean and “high” corresponds to one standard deviation above the mean (Cohen et al., 2003). All three regressions were significant: heavy drinking,  $F(14, 408) = 7.00, p < .001$ ; sexual partners,  $F(14, 408) = 6.97, p < .001$ ; and sexual assault perpetration,  $F(14, 408) = 6.09, p < .001$ .

**C2a.** As shown in the first column of Table 12, the main effects of satisfaction with friends, age, alcohol expectancies, and friends’ pressure to drink heavily were included on the first step as predictors of men’s frequency of recent heavy drinking,  $F_{\text{change}}(4, 418) = 16.50, p < .001$ . When considered jointly, the only significant predictor was friends’ pressure to drink heavily,  $t = 6.69, p < .001$ ; men who perceived more pressure from their friends to drink heavily reported consuming five or more alcoholic drinks in less than two hours more often in the past year.

The addition of the two-way interactions to the regression equation was significant,  $F_{\text{change}}(6, 412) = 3.41, p < .01$ . Although six interactions were entered, only the pressure to drink heavily by satisfaction with male friends interaction was significant,  $t = 2.93, p < .01$ . Figure 3 shows the nature of this interaction. The relationship between friends’ pressure to drink heavily and frequency of heavy drinking was positive for participants who scored low and high on the satisfaction measure. The slope for the



Figure 3. *Frequency of Past-Year Heavy Drinking as a Function of the Interaction between Male Friends' Pressure to Drink Heavily and Satisfaction with Male Friends*



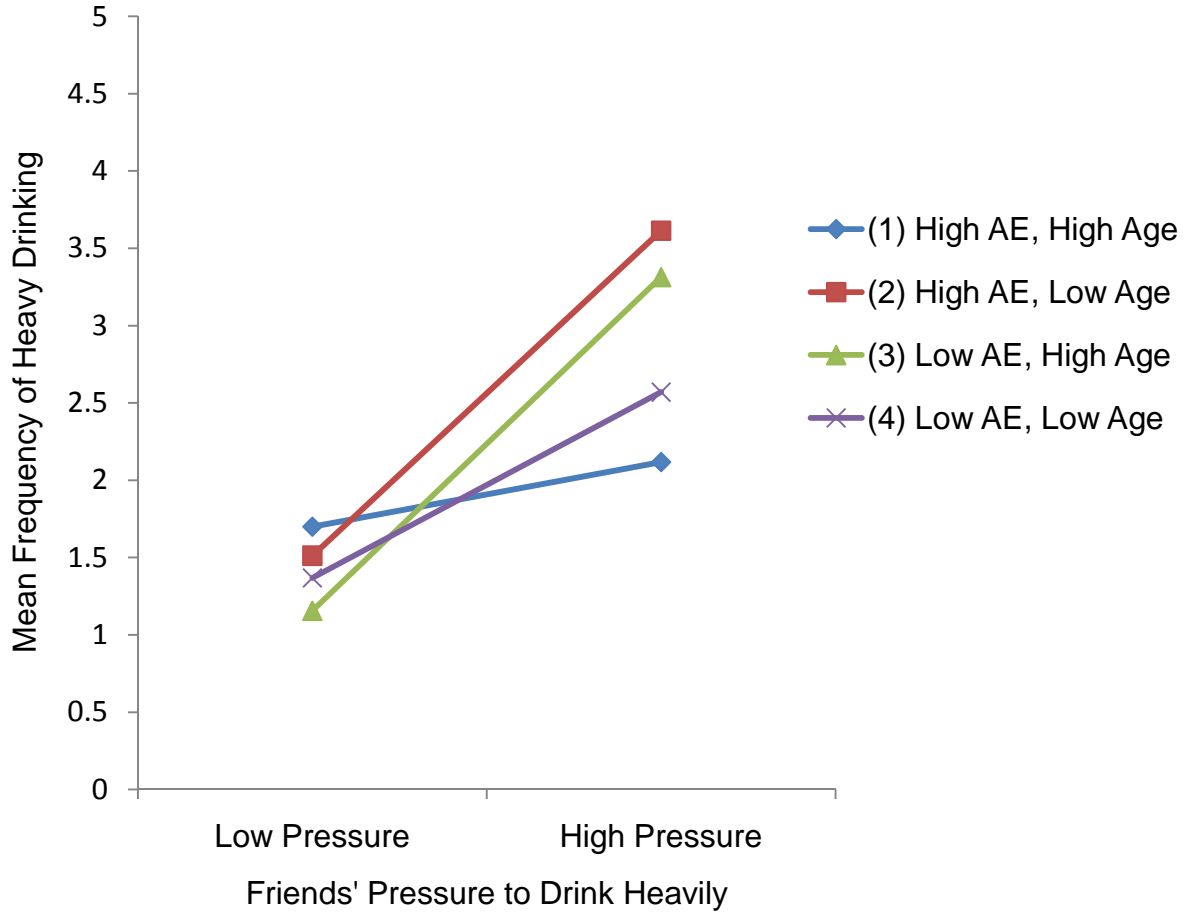
Note. Sat. = Satisfaction with male friends.

more satisfied participants was steeper than for the less satisfied participants, low satisfaction,  $t = 3.42$ ,  $p < .05$ ; high satisfaction:  $t = 5.28$ ,  $p < .05$ .

Adding the three three-way interactions to the prediction of men's heavy drinking was also significant,  $F_{\text{change}}(3, 409) = 2.73$ ,  $p < .05$ . Only the friends' pressure to drink heavily by alcohol expectancies by age interaction was significant,  $t = 2.68$ ,  $p < .01$ . Figure 4 shows the nature of this interaction. The slope of the line for high alcohol expectancies and high age was not significant,  $t = 0.70$ , *NS*; however, the slopes of the other three lines were significantly greater than zero,  $t_{\text{high expectancies, low age}} = 14.86$ ,  $p < .05$ ,  $t_{\text{low expectancies, high age}} = 3.70$ ,  $p < .05$ , and  $t_{\text{low expectancies, low age}} = 2.97$ ,  $p < .05$ . The strongest effect of friends' pressure on participants' frequency of heavy drinking was for older participants with weaker alcohol expectancies, and for younger participants with stronger alcohol expectancies.

Dawson and Richter (2006) developed equations to test the differences of slopes of lines in three-way interactions. The slope of the line for the younger participants with stronger alcohol expectancies was significantly steeper than the slope of the line for older participants with stronger alcohol expectancies,  $t = 2.25$ ,  $p < .05$ . Thus, among participants with strong alcohol expectancies, the effect of friends' pressure was greater for younger participants than for older participants. Also, the slope of the line for older participants with low alcohol expectancies was significantly steeper than the slope of the line for older participants with high alcohol expectancies,  $t = 2.15$ ,  $p < .05$ . In other words, among the older participants, the effect of friends' pressure on their heavy drinking was greater for those with low alcohol expectancies than for those with high alcohol expectancies.

Figure 4. *Frequency of Heavy Drinking as a Function of the Interaction between Male Friends' Pressure to Drink Heavily, Alcohol Expectancies, and Age*



Note. AE = Alcohol Expectancies

The four-way interaction linking alcohol expectancies, friends' pressure to drink heavily, participants' age, and satisfaction with male friends was not significant,  $F_{\text{change}}(1, 408) = 0.18, p > .05$ . Overall, 19% of the variance in men's past-year frequency of heavy drinking was accounted for by these main effects and interactions. Further, portions of Hypothesis C2a were supported; however, because the predicted four-way interaction was not found, Hypothesis C2a was not confirmed.

**C2b.** As shown in the second column of Table 12, the main effects of satisfaction with friends, age, positive attitudes about casual sexual relationships, and friends' pressure to have numerous sexual experiences were included as predictors of men's number of recent sexual partners on the first step,  $F_{\text{change}}(4, 418) = 21.95, p < .001$ . There were two significant predictors: positive attitudes about casual sex,  $t = 7.60, p < .001$ ; and friends' pressure for numerous sexual experiences,  $t = 2.49, p < .01$ . Men who held more positive attitudes about casual sexual relationships and who perceived more pressure from their friends to have numerous sexual experiences reported more sexual partners in the past year.

The additions of the two-way, three-way, and four-way interactions to the regression equation were not significant, two-way:  $F_{\text{change}}(6, 412) = 1.48, p > .05$ ; three-way:  $F_{\text{change}}(3, 409) = 0.21, p > .05$ ; and four-way,  $F_{\text{change}}(1, 408) = 0.36, p > .05$ . Although overall addition of the two-way interactions were not significant, there was a significant friends' pressure to have numerous sexual by positive attitudes about casual sex interaction,  $t = 1.95, p < .05$ . This was not interpreted because it did not account for a significant proportion of the variance in the number of past-year sexual partners. No other interactions reached significance. Overall, 19% of the variance in men's number

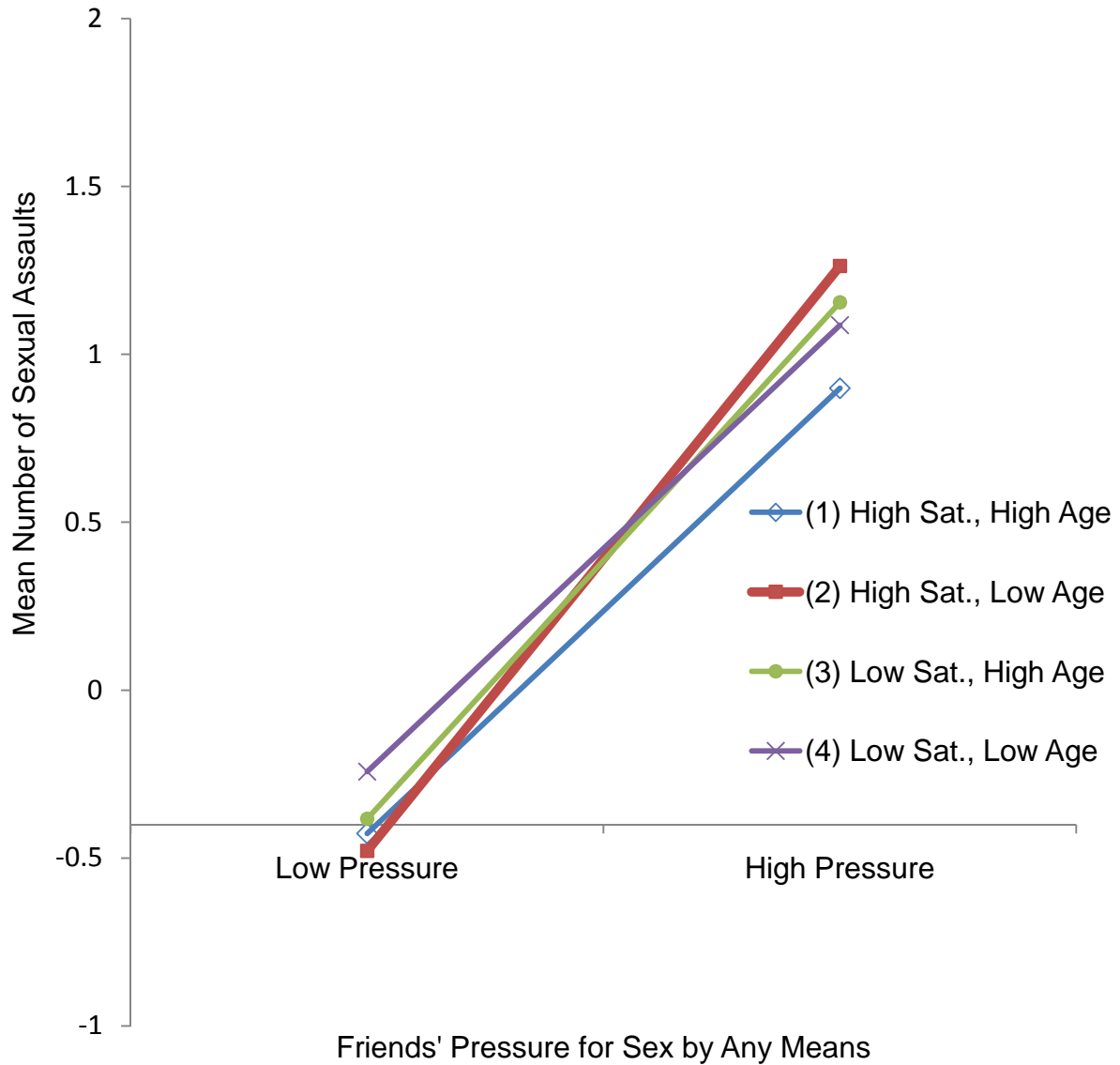
of sexual partners was accounted for by all of these main effects and interactions. Hypothesis C2b was not confirmed, because none of the interactions accounted for a significant proportion of variance.

**C2c.** Finally, as shown in the third column Table 12, the main effects of satisfaction with friends, age, stereotypic attitudes about women that justify forced sex, and friends' pressure for sex by any means significantly predicted men's recent frequency of sexual assault perpetration on the first step,  $F_{\text{change}}(4, 418) = 15.53, p < .001$ . Stereotypic attitudes about women,  $t = 3.81, p < .001$ , and friends' pressure for sex by any means,  $t = 3.73, p < .001$ , were significant predictors. Men who more strongly endorsed stereotypic attitudes about women that justify forced sex and who perceived more pressure from their friends to have sex even if they have needed to use coercive tactics reported perpetrating more sexual assaults in the past year.

The addition of the two-way interactions to the regression equation was marginally significant,  $F_{\text{change}}(6, 412) = 2.05, p = .06$ . There were two significant interactions: male friends' pressure for sex by any means and stereotypic attitudes about women that justify forced sex,  $t = 2.34, p < .05$ ; and stereotypic attitudes about women and satisfaction with male friends,  $t = 2.65, p < .01$ . These interactions were not interpreted, however, because they did not account for a significant proportion of variance after accounting for the main effects.

Adding the three three-way interactions to the prediction of men's sexual assault perpetration was significant,  $F_{\text{change}}(3, 409) = 2.87, p < .05$ . Only the friends' pressure by age by satisfaction with friends interaction was significant,  $t = 2.05, p < .05$ . The nature of this interaction is illustrated in Figure 5. As can be seen, there was an overriding

Figure 5. *Number of Sexual Assaults Perpetrated as a Function of the Interaction between Male Friends' Pressure for Sex by Any Means, Satisfaction with Male Friends, and Age*



Note. Number of sexual assaults and pressure for sex by any means were both log transformed. Sat. = Satisfaction with Male Friends.

positive effect of male friends' pressure for sex by any means on the number of assaults perpetrated. The slopes of the lines appear quite similar and all slopes were significantly greater than zero,  $t_{\text{high satisfaction, high age}} = 2.82, p < .05$ ,  $t_{\text{high satisfaction, low age}} = 3.10, p < .05$ ,  $t_{\text{low satisfaction, high age}} = 2.81, p < .05$ , and  $t_{\text{low satisfaction, low age}} = 2.43, p < .05$ . However, there was a significant difference in the slopes of the lines for older and younger men who are highly satisfied with their male friends,  $t = 3.29, p < .001$ . Friends' pressure to have sex by any means had a greater effect on the number of sexual assaults for younger men highly satisfied with their friends than for older men highly satisfied with their friends.

The four-way interaction linking stereotypic attitudes about women that justify forced sex, friends' pressure for sex by any means, participants' age, and satisfaction with male friends was not significant,  $F_{\text{change}}(1, 408) = 0.37, p > .05$ . Overall, 17% of the variance in men's past-year number of sexual assaults was accounted for by these main effects and interactions. Although portions of Hypothesis C2c were supported, Hypothesis C2c was not confirmed because the predicted four-way interaction was not found.

**Correlation and regression analyses linking sexual assault perpetration with men's discussions of women (Hypotheses D1-D3).** The fourth set of hypotheses concerned the relationships between the types of conversations men and their friends have about women, men's level of comfort in sexist and nonsexist situations, and men's sexual assault perpetration. Table 13 provides the correlations between the number of objectifying and egalitarian phrases provided, the subscale scores for the Comfort with Sexist and Nonsexist Statements scale, number of female friends, and sexual assault perpetration.

Table 13

*Correlations between Themes of Discussions about Women, Comfort with Sexist and Nonsexist Statements, Female Friendships, and Sexual Assault Perpetration*

	1	2	3	4	5	6
1. Number of objectifying phrases	--					
2. Number of egalitarian phrases	-.17*	--				
3. Comfort with Sexist Statements	.15*	-.25*	--			
4. Comfort with Nonsexist Statements	-.01	.20*	-.03	--		
5. Number of female friends	-.02	-.01	-.05	-.06	--	
6. Number of sexual assaults	.18*	-.15*	.14*	-.24*	.01	--

*Note.* Sexual assault perpetration was log transformed. \* $p < .01$ .



As can be seen, objectifying and egalitarian comments were modestly inversely related. In other words, the more objectifying comments men reported that they and their friends make about women, the fewer egalitarian comments they reported. Also, the number of objectifying phrases and the Comfort with Sexist Statements subscale were modestly positively correlated; men who are more comfortable with their friends making sexist statements also reported that they and their friends talk about women in more objectifying ways than men who are less comfortable with sexist statements. The number of objectifying statements was unrelated to the level of comfort with nonsexist statements. Both the number of objectifying phrases and Comfort with Sexism scores were modestly positively correlated with sexual assault perpetration. This provides support for Hypothesis D1.

Egalitarian phrases were moderately negatively related to the Comfort with Sexist Statements scale. Men who are more comfortable with their friends making sexist comments indicated that they and friends less commonly talk about women in egalitarian terms. Egalitarian phrases were positively related to the Comfort with Nonsexist Statements; men who are more comfortable with their friends making nonsexist statements about women reported that they and their friends more often discuss women in a nonsexualized manner. The number of egalitarian phrases and Comfort with Nonsexist Statements were also negatively correlated with sexual assault perpetration, which indicates that men who discuss women in more equal terms and who are more comfortable with their friends making nonsexist statements about women sexually assault women less frequently. This provides support for Hypothesis D2.

The number of female friends was not significantly correlated with the number of objectifying phrases, the number of egalitarian phrases, the Comfort with Sexist Statements scale score, the Comfort with Nonsexist Statements scale score, or the number of sexual assaults perpetrated in the past year.

Table 14 provides the results of the hierarchical linear regression predicting sexual assault perpetration with participants' Comfort with Sexist and Nonsexist Statements, their discussions with male friends about women, and their number of female friends. The numbers of objectifying phrases, egalitarian phrases, and female friends were first standardized (Cohen et al., 2003). The continuous interaction term (number of objectifying phrases by number of female friends) was formed by multiplying the standardized scores (Cohen et al., 2003). The overall regression equation was significant,  $F(6, 416) = 7.98, p < .001$ .

The main effects of number of objectifying phrases and Comfort with Sexist and Nonsexist Statements were significant on the first step,  $F_{\text{change}}(5, 417) = 9.37, p < .001$ . In other words, men who make more objectifying comments about women with their friends, who are more comfortable with their friends making sexist statements about women, and who are less comfortable with their friends making nonsexist statements about women, reported more sexual assaults in the past year.

The addition of the interaction between objectifying comments and number of female friends was not significant,  $F_{\text{change}}(1, 416) = 1.00, p > .05$ . Thus, Hypothesis D3 was not confirmed. However, overall, 10% of the variance in sexual assault perpetration was accounted for by this set of predictors.

Table 14

*Hierarchical Multiple Regression Analyses Predicting Men's Number of Past-Year Sexual Assaults Perpetrated (N = 423)*

Predictor	Sexual Assault Perpetration <sup>a</sup>	
	$\Delta R^2$	$\beta$
Step 1	.10**	
Number of Objectifying Phrases		.15**
Number of Egalitarian Phrases		-.05
Comfort with Sexist Statements		.10*
Comfort with Nonsexist Statements		-.22**
Number of Female Friends		.01
Step 2	<.01	
Objectifying X Female Friends		-.05

Note. <sup>a</sup>Sexual assault perpetration was log transformed. \* $p < .01$ .

## **CHAPTER 4**

### **Discussion**

The phrase “peer pressure” typically evokes images of adolescents being pressured by their friends to smoke cigarettes or drink alcohol. This study’s findings suggest that peer pressure is also important to adults, and not just to youth. Feeling pressured by one’s friends was associated with young men’s recent heavy drinking, engaging in consensual sex with many partners, and having sexual experiences with women against their wishes. Even in multivariate analyses that accounted for age and relevant attitudes, pressure from friends explained a significant amount of variance in these outcomes. The types of conversations that these young men have with their friends about women also predicted their recent sexual assault perpetration. In multivariate analyses, number of sexual assaults was positively associated with men’s reports of the number of phrases that objectify women in conversations with their friends and their level of comfort with their friends making sexist statements about women. In a complementary manner, sexual assault perpetration frequency was negatively associated with men’s level of comfort with their friends making positive, nonsexist statements about women.

The following section describes the major findings in more detail, placing them in context based on past research. Then the study’s strengths and limitations are described. The Discussion section concludes with directions for future research and implications for sexual assault prevention program development.

## Summary of Findings

**Measures Findings.** One major goal of this dissertation was to develop three new measures to assess young men's 1) perceived pressures from their friends, 2) comfort in situations when other men make sexist or nonsexist remarks about women, and 3) ways in which they and their friends talk about women. These scales were developed specifically for this study because previous authors had assessed peer influence in disparate ways with varying levels of success in predicting the given outcome (Baer et al., 1991; DeKeseredy & Kelly, 1995; Kilmartin et al., 2008; Lambert et al., 2003; Wood et al., 2001).

The first set of hypotheses focused on the psychometrics of the Male Friends' Pressure scale, the Comfort with Sexist and Nonsexist Statements scale, and the open-ended item assessing how men and their friends talk about women. This set of hypotheses received mixed support. The Male Friends' Pressures to Drink Heavily, Have Numerous Sexual Experiences, and to Have Sex by Any Means subscales, and the Comfort with Sexist and Nonsexist Statements scales, each exhibited excellent internal consistency; all alphas were above .80. However, the factor structure of the measures was not as clear-cut as expected; thus, the first two hypotheses were not fully confirmed. The third hypothesis was supported; as anticipated, independent coders were able to reliably classify participants' qualitative statements as objectifying or egalitarian and demonstrated excellent interrater reliability.

For the Male Friends' Pressure scale, three factors were specified a priori corresponding to the three hypothesized subscales: alcohol, consensual sexual experiences, and sex by any means. The two alcohol consumption items loaded on the

same factor and were distinguished from the other items. However, the seven items with a sexual nature were more strongly correlated with one another than expected. One sex by any means item (use of guilt) cross-loaded on both the consensual and forced sex factors. Another item (use of lies) loaded with the consensual sexual experiences items rather than with the items intending to measure pressure to have sex by any means.

There are several interrelated reasons why these two items (guilt, lies) loaded on the same factor as the items describing pressure to have many sexual partners and to tell sexual stories. First, these two items do not generally reflect illegal behavior; whereas the last three items of the scale refer to acts that could be considered criminal sexual conduct (use of alcohol and physical tactics). The verbally manipulative items may not be interpreted by some men as sexually assaultive behavior, but rather as what it takes to “force a yes out” (Sanday, 2007). Secondly, some previous researchers have found that sexually assaultive men perceived pressure to have numerous partners (Kanin, 1967). It may be that some friends pressure each other to have as many sexual experiences as possible and do not place limits on what it takes to meet this goal.

The Comfort with Sexist and Nonsexist Statements scale was inspired by Kilmartin et al.’s (2008) Comfort with Sexism scale. New items were created so that phrases would be up-to-date and sound plausible for the age range of the sample. The two hypothesized subscales demonstrated excellent internal consistency; although, there were two items that cross-loaded on both factors. One item referred to passing an unknown woman on the street and having a friend state, “I’d hit that” after she passed. This item was perceived as a sexist comment by the research team and in pilot testing,

but perhaps its familiarity in popular culture has increased its acceptability among less sexist men (cf., Urban Dictionary, August 10, 2010). The second item referred to a woman with a “tongue ring.” This item also surprisingly correlated moderately positively with the nonsexist items. Perhaps the thoughts of a woman with a tongue ring produced ideas not simply about her sexuality, but also about her personality. Someone with a tongue ring may be perceived as someone who likes to have fun, have a good time regardless of the activity, and laugh a lot. If these are characteristics that participants associated with having a tongue ring, then it would make logical sense that it would correlate with items that refer to how much “fun she is to hang out with” and that “she laughs at all my jokes.” The “I’d hit that” and “tongue ring” items were deleted from the scale score for later analyses because of their cross-loadings.

The third new measure developed for this study was a single open-ended item assessing how participants and their friends discuss women. The responses provided very sobering reading for the author and the coders because of the extreme negativity expressed by some participants and some participants’ vulgar word choice. More importantly, however, participants’ responses could be distinguished into objectifying and egalitarian comments. Some examples of objectifying responses included, “Terms are used like: ‘is she loose?’, or ‘is she easy?’; also statements like: ‘if you hit that you’d better wrap it first’, and ‘she’s got a nice body but she’s a but’er face!’-(but’er face means she’s good looking but for her face)”, and “tits, ass, face n its all good (sic)”. Some examples of responses coded as egalitarian included, “good personality, smart, bright future”, “she’s intelligent, she has a job, shes got goals, she’s in school, she

makes me laugh, i love being with her (sic)", and "she's really pretty,she's cool, she smart and caring,she has a good personality,shes nice (sic)".

The new scales have several strengths. The Male Friends' Pressures to Drink Heavily, Have Numerous Sexual Experiences, and to Have Sex by Any Means scales, and the Comfort with Sexist and Nonsexist Statements scales, were parsimonious; the maximum number of items for any of the subscales was five items. The low number of items did not compromise the integrity of the scales, however, because the items were strongly related to each other. The high internal correlations, combined with the brevity, imply that the scales will be easy to administer in a variety of research settings.

Although the scales performed rather well with this sample of emerging and young adult men, additional research is needed with other samples to demonstrate their applicability. The current sample was larger than is found in many studies, but for scale development projects, very large samples are required. More diverse samples are also needed; some of the phrases listed in the Comfort with Sexist Statements scale may be unfamiliar to members of some ethnic groups, men living in different regions of the country, or men of different ages. The Male Friends' Pressure scale would likely benefit from additional items assessing alcohol consumption and consensual sexual behavior because each of these subscales only had two items. Further, items in the Pressure to Have Sex by Any Means subscale had very low rates of endorsement and had to be transformed with a logarithmic transformation. As is often found in the SES, the items describing verbally coercive tactics had the highest level of endorsement. Additional items that describe verbally manipulative strategies may help reduce the skew of this subscale. Alternatively, based on the high intercorrelations and cross-loadings, it may



be helpful in future research to combine all of the sex-related items into one subscale that focuses on having sex by a variety of means. Future research with the Comfort with Sexist and Nonsexist Statements scale should focus on rephrasing the “I’d hit that” and “tongue ring” items. The open-ended responses should be used as guide for developing additional sexist and nonsexist items that reflect what young men report saying to each other. Finally, the discriminant and criterion validity of these scales need to be established.

**Heavy Drinking Findings.** Heavy drinking was defined as consuming five or more alcoholic beverages in two hours or less, which matches the established guidelines for heavy episodic drinking (SAMHSA, 2007). It was hypothesized and found that men who perceived more pressure from their friends to drink often and drink a lot, reported that they drank heavily more often in the past year than those who reported feeling less pressure to drink heavily, although the correlation was moderate. These findings are in line with previous research relating social norms with college students’ drinking behaviors. Several authors have found that college students who believe that other students at their school drink large quantities of alcohol (descriptive norms) and that they are expected to drink similar large quantities (injunctive norms) actually drink more excessively than do students who do not endorse these norms (Lo, 1995; Neighbors et al., 2007; Perkins et al., 1999; Wood et al., 2001).

As hypothesized, the main effect of friends’ pressure on heavy drinking remained strong when other main effects were considered. There was a bivariate relationship with age, indicating that younger participants drank heavily more frequently than older participants; however, when other variables were considered simultaneously in multiple

regression analysis, this effect was lost. Also as hypothesized, there was a significant bivariate relationship between alcohol expectancies and heavy drinking which is important because it is a prospective association; the expectancies were assessed one year before the heavy drinking was assessed.

There were several unexpected findings. Although there was not a significant multivariate effect of alcohol expectancies on heavy drinking, there was an interaction involving expectancies (discussed below). The marginally significant positive association between satisfaction with friends and heavy drinking frequency in the multiple regression analysis was surprising. Borsari and Carey (2006) suggested that people with low-quality friendships may drink more frequently than those with high-quality friendships, although they (2001) and others (Orcutt, 1991) also note that drinking is very often a social event. The data here suggest that heavy drinking was somewhat more common among men more satisfied with their friends.

The hypothesized four-way interaction between age, satisfaction with friends, alcohol expectancies, and pressure from friends to drink heavily was not significant; however, there was an unexpected two-way interaction (pressure by satisfaction) and an unexpected three-way interaction (pressure by age and alcohol expectancies). The interaction of pressure and satisfaction indicated that both more and less satisfied men drank heavily more frequently when they felt more pressure from their friends to frequently drink heavily, although this was especially the case for men who were more satisfied with their friends. This suggests that men care about what their friends expect of them and act in accordance with their friends' expectations. Further, this interaction did not depend on men's age. This extends past research that has focused on younger

drinkers and shows that even as single men pass through their twenties and early thirties, they still are influenced by their friends' expectations for their behavior and how they feel about the relationship they have with their friends.

The interaction involving participants' age included alcohol expectancies and friends' pressures, and was noteworthy because the effect of friends' pressure was greatest for two opposite groups: younger participants with stronger alcohol expectancies, and older participants with weaker alcohol expectancies. In Figure 4, the lines were computed at one standard deviation above and below the mean. This would translate to a line for 18.68-year-olds as the "younger" group, and a line for 28.60-year-olds for the "older" group. It may be the case that as people age and have more drinking experiences, their alcohol expectancies become more in line with reality, because they have had more chances to see how they behave when they drink. Older participants may have other reasons for drinking and may not drink to feel courageous, sexual, or aggressive, or may have realized over time that these feelings are not how they respond when they drink. Pabst, Baumeister, and Kraus (2010) recently analyzed the 2003 German Epidemiological Survey on Substance Abuse data, which surveyed over 6,000 men and women aged 18 to 59. They found that compared with 18 to 29-year olds, those in the 30 to 44-year-old group reported weaker alcohol expectancies in the domains of social assertiveness, tension reduction, sexual enhancement, cognitive impairment, and aggression. With the exception of sexual enhancement, these expectancies were associated with the number of recent drinking days; social assertiveness and cognitive impairment were negatively related to drinking frequency, whereas tension reduction and aggression were positively related to drinking frequency.

Further, there was an age by expectancy interaction effect on drinking frequency for social assertiveness and sexual enhancement, with both effects being stronger among younger participants.

Thus, older participants may need some other instigator besides alcohol expectancies to drink heavily, which may be their friends. However, younger men who expect to feel courageous, sexual, and/or aggressive when they drink may be those especially likely to drink heavily with their friends, thus their friends have a greater influence on them than among younger drinkers with lower alcohol expectancies. In the current study, being somewhat older may also be a proxy for other lifestyle differences, such as having a full-time career or feeling the effects of heavy drinking differently than when younger.

Overall, these findings suggest that men experience a moderate amount of pressure from their friends to drink heavily, and that this pressure corresponds to how often they drink heavily. The pressure was more influential among men more satisfied with their friends, older participants holding weaker alcohol expectancies, and younger participants who more strongly believe that alcohol makes them courageous, sexual, and aggressive. Neither of the significant interactions was hypothesized; thus, they need to be replicated in future research. Future research should also evaluate the conclusion that different alcohol expectancies become more important as men move from their late teens and early twenties to their late twenties and early thirties.

**Consensual Sexual Activity Findings.** As hypothesized, men who indicated that they felt more pressure from their friends to have many sexual experiences reported having more sexual partners in the past year than those who did not feel as

much pressure to have numerous experiences, at the bivariate level and when considered with other variables in multiple regression analysis. Also as hypothesized, those who held more positive attitudes about casual sexual relationships also reported having more partners than those with less positive attitudes, again both in bivariate analyses and when examined in multiple regression with other variables included in the model.

There were no significant bivariate or multivariate relationships between satisfaction with male friends or age with the number of recent sexual partners. The hypothesized four-way interaction linking pressure to have numerous sexual experiences, attitudes about casual sex, age, and satisfaction with male friends was also nonsignificant, and no interactions accounted for a significant amount of variance. The finding that age and number of past-year sexual partners were not correlated indicates that sexual variety is just as common among men in their thirties as among men in their late teens or twenties; although, the frequency distribution of the number of consensual sexual partners indicates that most participants had two or fewer sexual partners in the past year.

Although attitudes about casual sex were assessed one year prior to the assessment of peer pressure to have numerous sexual experiences, it is not clear whether men developed their attitudes or perceived pressure from their friends first. It is likely that these both developed over time together. As men share their stories of dating and sexual experiences, they strengthen their own attitudes about relationships. Men who hold more positive attitudes about casual sex are probably more likely to discuss sexual topics with their friends, as Lefkowitz and Espinosa-Hernandez (2007) found for

both genders. Thus, holding attitudes that favor casual sex likely leads to more discussions about sex, which may increase feelings of pressure to have more sexual experiences to discuss, which in turn strengthens the attitude. Men who feel pressured to have many sexual partners put themselves and their partners at heightened risk for sexually transmitted infections and unintended pregnancies. This implies that the line between appropriate strategies to use with a potential sex partner (seduction) and inappropriate strategies (coercion) can be crossed by someone who feels pressured by friends to have sex frequently.

**Sexual Assault Perpetration Findings.** As hypothesized, men who felt more pressure from their friends to have sex by any means necessary reported perpetrating more sexual assaults in the past year than those who felt less pressure. The sexual assault perpetration measure clearly indicates that sexual activity occurred when the woman did not want it to happen, but does not use the words “aggression,” “assault,” or “rape” in the items. This measure has shown excellent internal consistency and validity in studies conducted by a variety of research teams (Koss et al., 1987; Malamuth et al., 1995; Testa, VanZile-Tamsen, Livingston, & Koss, 2004). In a statistical sense, the rate of endorsement was low; however, in a real-world sense, the fact that in the current sample of 423 community members, one in four men reported having some type of sexual activity with an unwilling woman in the past year is disturbingly high. Taking the rate of sexual assault perpetration into account, it may not be surprising that the level of endorsement of pressure from male friends to have sex by any means also had a low base-rate; just over one-third of participants reported feeling any pressure from their friends to have sex by any means.

In addition to friends' pressure to have sex by any means, friends' pressure for numerous sexual experiences was also positively associated with men's sexual assault perpetration, albeit moderately. Kanin (1967) reported similar findings with his sample of college students. In his study, sexual assault perpetrators reported feeling more pressure from their friends to seek new sexual experiences, and higher levels of pressure were also associated with feelings of sexual dissatisfaction for the sexually aggressive men.

At the bivariate level, the hypothesized relationship between stereotypic attitudes about women that justify forced sex and number of sexual assaults was supported. There was also a significant negative correlation between satisfaction with male friends and the number of sexual assaults perpetrated. This relationship was not hypothesized. It may be that having highly satisfying friendships (with friends who do not promote the objectification of women) helps protect men from committing sexual assault, in a manner similar to how Borsari and Carey (2006) suggested that low-quality friendships may increase hazardous drinking. Having lower levels of satisfaction with male friends may also indicate other forms of interpersonal difficulties.

When potential predictors were considered simultaneously in multiple regression analysis, friends' pressure to have sex by any means and endorsement of stereotypic attitudes about women that justify forced sex were both associated with sexual assault perpetration; however, age and satisfaction with male friends were not significantly associated. Many researchers have found that sexual assault perpetrators espouse stereotypic attitudes about women, as these provide justifications for their actions (DeGue & DiLillo, 2004; Murnen et al., 2002). Stereotypic attitudes about women that

justify forced sex (or rape myths) serve to exonerate perpetrators and blame victims for the perpetrator's behavior.

The hypothesized four-way interaction was not found; however, there was a significant three-way interaction between friends' pressure for sex by any means, satisfaction with male friends, and age. Although the nature of the interaction did not appear to show different effects of pressure for differing levels of age and satisfaction, there was a significant difference between highly satisfied younger and older participants. Younger, highly satisfied men who felt less pressure to have sex by any means reported the lowest number of sexual assault perpetrated; whereas, younger, highly satisfied men who felt more pressure reported the highest number of sexual assaults. This implies that younger men who are highly satisfied with their friends may be the most vulnerable to their friends' suggestions, regardless of the appropriateness of the suggestion. As this conclusion is based upon an unhypothesized three-way interaction, future research needs to replicate the finding.

In a second set of analyses, sexual assault perpetration was cross-sectionally predicted by qualitative and quantitative measures that assessed how men and their friends talk about women and men's level of comfort with these types of conversations. At the bivariate level, as hypothesized, there were positive associations between the number of objectifying phrases used, men's comfort with sexist situations, and the number of sexual assaults perpetrated. There were also the hypothesized negative associations between the number of sexual assaults and the number of egalitarian statements and men's level of comfort with nonsexist statements. When considered jointly in multiple regression analysis, men's use of objectifying phrases, comfort with



sexist statements, and comfort with nonsexist statements were associated with the number of sexual assaults. The hypothesized interaction between objectifying phrases and the number of female friends was not found.

The findings that link men's types of conversations with their friends about woman and their level of comfort in these types of situations fit well with the recent findings of Brown and Messman-Moore (2010). These authors surveyed 395 male college students and assessed rape myths, personal and peer attitudes about sexual assault, and willingness to intervene if they saw a peer sexually assaulting a woman. Rape myth acceptance and personal attitudes about sexual assault were significantly associated with willingness to intervene; however, perceived peer attitudes were a stronger bivariate and multivariate predictor of willingness to intervene. The types of discussions that men have with their friends about women are likely to influence participants' perceptions of their friends' attitudes about women. Taken together, the findings of the current study and Brown and Messman-Moore's study suggest that how men perceive their friends' attitudes can have an impact on their willingness to stop their own or their peers' sexually assaultive actions.

### **Strengths of the Study**

There are several notable strengths of the current study. First, this study surveyed single men from a large, tri-county metropolitan area. Most research in the areas of heavy drinking, consensual sexual activities, and sexual assault perpetration focuses on college students. This study extended past literature by demonstrating that male friends influence these behaviors not only in junior high, high school, and college, but throughout the emerging and young adult period. Second, the sample size was

larger than is often found in college (Kanin, 1967; Lefkowitz & Espinosa-Hernandez, 2007) or community studies (Abbey et al., 2006; Davis et al., 2008), which provides more stable estimates with lower standard errors. Third, the survey was administered on a laptop computer with the text presented via audio and on-screen. This afforded greater privacy for the participant than if the interviewer administered the entire questionnaire verbally. Fourth, the study had an excellent follow-up rate; 90% of participants who completed the first assessment also completed the second assessment. Fifth, missing data were extremely rare.

Additional strengths are found in the types of included measures and analyses of the measures. First, the study made use of both prospective and cross-sectional analyses. Participants' beliefs about alcohol's effects, casual sexual relationships, and women were assessed one-year before the three outcome measures and the friends' influence measures. These beliefs were predictive of behavior in the following year. Second, the diversity of measures included and developed for this study allowed for friends' influence to be evaluated in several different ways. The author is not aware of any study which has simultaneously assessed friends' influences on these three domains of behavior, or with the variety of influence variables. Third, friends' influence was assessed both quantitatively and qualitatively. Qualitative research is relatively rare in this literature (for exceptions, see Lefkowitz et al., 2004 and Lefkowitz & Espinosa-Hernandez, 2007), and allows participants to provide their own voice.

### **Limitations of the Study**

Although this study addresses several gaps in the literature and possesses several strengths, it is not without flaws. First, all analyses are correlational. Although

beliefs were assessed in the first wave of data collection, it does not mean that they caused participants' behavior in the intervening year. Friends' influences were measured at the same time point as the outcome behaviors and they too cannot be considered as casual agents. Second, change in attitudes and behaviors could not be assessed because most of these constructs were only assessed at one of the time points. Third, participants were only surveyed at two time points in their early adult years. Fourth, all measures were self-report; there were no observational measurements or experimental manipulations included. As such, participants' responses may have been affected by social desirability concerns, a self-enhancement bias, poor memory, or lack of self-insight. Fifth, although participants completed the questionnaire independently on a laptop computer, away from the interviewer's field of vision, and locked their responses so that the interviewer could not access their data, many of the interviews were conducted in public locations or with other people present on the periphery. The presence of others could have unknowingly affected some participants' responses. How a given participant was affected likely depends on a variety of factors; some participants may want to appear "good" and to please their interviewer. Others, perhaps those who value male dominance and a hypermasculine gender ideology, may be prone to respond in a more "negative" manner if they believe that this is the "correct" answer. Every methodology has limitations, and confidence in this study's findings will be strengthened with replication with other research designs and populations.

Another set of limitations is related to the study's requirements of being single at Time 1, having dated a woman in the prior two years, having a landline telephone

number, and expecting to remain living in the metropolitan Detroit area one year later. These requirements preclude making statements about the representativeness of these findings to all men, because men who were married or living with a woman, who only used a cell phone, were over age 35, or who were planning to move out of the area were excluded. Homosexual men were also excluded, because of the study's focus on dating violence against women. Further, although the sample was somewhat diverse in racial or ethnic background, almost three-quarters of the sample was Caucasian. Although the Detroit metropolitan area is economically and ethnically diverse, replication in other areas of the country would also be valuable.

Finally, although this study demonstrated that friends' pressure influences a variety of behaviors, the types of pressures that friends used were not assessed. Borsari and Carey (2001) described three types of pressure that have been associated with drinking outcomes: overt offers, modeling, and social norms. In the current study, it is not clear how men were pressured to drink heavily, have numerous sexual partners, or have sex by any means. It is also possible the word "pressure" may have been interpreted differently by different participants. Qualitative research is needed that examines the types of pressure men experience.

### **Suggestions for Future Research**

To address the above noted weaknesses, future research should proceed with large-scale longitudinal surveys. Multi-year longitudinal studies that begin in elementary school and interview participants through adulthood are needed to further explicate the feedback loops between personal attitudes, friends' influences, and personal behaviors. The relationship between friendship selection due to shared values and friends' impact

on one's values can best be disentangled if both constructs are measured repeatedly over time. This type of study would also allow potential differences to be found at points of lifestyle change, such as starting a new job or attending a new school, where norms and perceived peer pressure may change precipitously.

Future research should also assess whether different types of pressures are associated with different outcomes. For example, it is quite likely that a man may be handed a beer or mixed drink upon arrival to a party with the implicit assumption that he will drink it, but it is less likely that he "is given" a woman with the same implicit assumption. However, the sharing of sexual stories may induce more pressure to be sexually active than the sharing of drinking stories induces pressure to drink. Future research is needed to determine if these examples are true and what types of behaviors are interpreted by men as peer pressure. At multiple timepoints, participants' own attitudes, the types of pressure they feel from their friends, the nature of this pressure, whether and how they feel different types of pressure from different friends, and their own behaviors should be assessed.

Another future study could involve a large sample composed of men and several of their friends. All participants would be independently given the same questionnaire, with measures that assess personal attitudes and behaviors, perceptions of each other's attitudes and behaviors, expectations or standards of behaviors, perceived pressure to behave in certain ways, types of shared activities and discussions, indices of friendship quality and satisfaction, length of friendship, and perceived costs and benefits of the friendship. By measuring these factors concurrently, the effects of men's (male) social network structure on attitudes and behavior can be analyzed.

Further, this type of study would allow for the examination of differences between participants' perceptions of their friends' attitudes and their friends' actual attitudes (i.e., pluralistic ignorance), how the types of shared activities relate to sexual assault perpetration and heavy drinking (e.g., is a sexual assault more likely when men and their friends are at a nightclub together, egging each other on while trying to meet women than when a typical shared activity involves watching an evening sports game together at a neighborhood bar?), as well as how the costs and benefits of the friendship interact with perceived pressure to act in certain ways (e.g., would a friend's level of pressure be as strongly related to a participant's behavior if that friendship was perceived to be highly costly in terms of time and resources or low in benefits to the participant?). This type of study would have some methodological concerns. Some participants may be less likely to describe events that peers may not condone, and some participants may be less likely to fully disclose their behavior if all were asked to describe potentially illegal or harmful acts against others (e.g., a party at which a sexual assault occurred). These points of apprehension may be solved by interviewing participants alone and obtaining a Certificate of Confidentiality to protect responses from being subpoenaed.

### **Implications for Sexual Assault Prevention Programs**

A popular current focus of sexual assault prevention programming is engaging young men in bystander intervention (Berkowitz, 2002; Burn, 2009; McMahon & Farmer, 2009). The data in the current study provide support for this idea. Particularly among young men who are highly satisfied with their relationships with their male friends, prevention programming directed at groups rather than individuals may be especially

effective. Similar to Brown and Messman-Moore's (2010) findings, Kilmartin et al.'s (2008) results with acquainted men versus unacquainted men demonstrate that more than a single, short session challenging social norms is necessary. Programs need to be long-term especially if started later in life.

In this study, when asked how they and their friends discuss women, egalitarian comments about women were just as common as objectifying comments. This indicates that many men and their friends do see women as more than sexual objects; this message could become the basis of a social norms challenge to let men know that it is "okay" to look beyond the face and body of woman. This study also found that men who were more comfortable with hypothetical scenarios of friends making nonsexist statements about women reported fewer sexual assaults in the past year. This further indicates that sexist and aggressive masculinity is not perceived positively by all men and that many men accept and feel comfortable when their friends share news of their significant others' strengths and accomplishments.

## APPENDIX

## HEAVY DRINKING

1. *People drink alcohol in bars, with meals, in restaurants, at sporting events, at home while watching TV, and in many other places.* Since the last interview, how often did you usually have any kind of drink containing alcohol? By a drink we mean half an ounce of alcohol which would be a 12 ounce can or glass of beer or cooler, a 5 ounce glass of wine, or a drink containing 1 shot of liquor. Please choose the one response that best describes your alcohol consumption since the last interview.

- Every day
- 5 to 6 times a week
- 3 to 4 times a week
- twice a week
- once a week
- 2 to 3 times a month
- once a month
- 3 to 11 times
- 1 or 2 times
- I did not drink any alcohol since the last interview, but I did drink in the past
- I never drank any alcohol in my life

2. Since the last interview, how many alcoholic drinks did you have on a typical day when you drank alcohol?

- 25 or more drinks
- 19 to 24 drinks
- 16 to 18 drinks
- 12 to 15 drinks
- 9 to 11 drinks
- 7 to 8 drinks
- 5 to 6 drinks
- 3 to 4 drinks
- 2 drinks
- 1 drink

3. Since the last interview, how often did you have 5 or more drinks containing any kind of alcohol in a two-hour period? That would be the equivalent of at least 5 12-ounce cans or bottles of beer or coolers, 5 five ounce glasses of wine, 5 drinks each containing one shot of liquor or spirits.

How often have you had that many drinks in a two-hour time period?

- Every day
- 5 to 6 days a week
- 3 to 4 days a week
- two days a week
- one day a week
- 2 to 3 days a month



- one day a month
- 3 to 11 days
- 1 or 2 days
- 0 days

4. Since the last interview, what is the maximum number of drinks containing alcohol that you drank within a 24-hour period?

- 36 drinks or more
- 24 to 35 drinks
- 18 to 23 drinks
- 12 to 17 drinks
- 8 to 11 drinks
- 5 to 7 drinks
- 4 drinks
- 3 drinks
- 2 drinks
- 1 drink

### **CONSENSUAL SEXUAL EXPERIENCES**

*The following questions concern your consensual sexual experiences with women. When the term sexual intercourse is used, we mean penetration of a woman's vagina, no matter how slight, by your penis. Ejaculation is not required. Whenever you see the words sexual intercourse, please use this definition. By consensual we mean that both you and the woman wanted to have sex.*

1. Since the last interview, how many women have you had consensual sexual intercourse with?

### **SEXUAL ASSAULT PERPETRATION**

*The following questions concern unwanted sexual experiences since the last interview. We are interested in situations when you were with a woman, for example, a friend, date, coworker, girlfriend, wife, or stranger. Sometimes more than one of these questions applies to the same sexual experience. Please answer all that apply even if you have already partially described that event. These are personal questions, but we hope that you will be willing to answer them honestly. Please remember that your answers are completely confidential. Past research shows that many men report having at least one of these experiences.*

*The first set of questions will ask about sexual contact. By sexual contact, we mean some type of sexual touching like fondling, kissing, or petting, but not intercourse.*

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

1. Since the last interview, how many times have you had sexual contact with a woman when she didn't want to by overwhelming her with continual arguments and pressure?
2. Since the last interview, how many times have you had sexual contact with a woman when she didn't want to by showing your displeasure (sulking, making her feel guilty, swearing, getting angry, or threatening to end the relationship)?
3. Since the last interview, how many times have you had sexual contact with a woman when she didn't want to by threatening or using some degree of physical force (twisting her arm, holding her down, grabbing, choking, pinching, keeping her from moving, or physically hurting her)?

*The following questions are about attempted sexual intercourse. By attempted sexual intercourse, we mean when a man tries to insert his penis inside a woman's vagina, but for some reason he does not, so intercourse does not occur.*

4. Since the last interview, how many times have you attempted sexual intercourse with a woman when she didn't want to by giving her alcohol or drugs (but intercourse didn't occur)?
5. How many times have you attempted sexual intercourse with a woman who was passed out or too intoxicated to give consent or stop what was happening?
6. How many times have you attempted sexual intercourse with a woman when she didn't want to by threatening or using some degree of physical force (twisting her arm, holding her down, grabbing, choking, pinching, keeping her from moving, or physically hurting her)?

*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.*

7. Since the last interview, how many times have you had sexual intercourse with a woman when she didn't want to by overwhelming her with continual arguments and pressure?
8. How many times have you had sexual intercourse with a woman when she didn't want to by showing your displeasure (sulking, making her feel guilty, swearing, getting angry, or threatening to end the relationship)?
9. How many times have you had sexual intercourse with a woman when she didn't want to by giving her alcohol or drugs?
10. How many times have you had sexual intercourse with a woman when she was passed out or too intoxicated to give consent or stop what was happening?
11. How many times have you had sexual intercourse with a woman when she didn't want to by threatening or using some degree of physical force (twisting her arm, holding her down, grabbing, choking, pinching, keeping her from moving, or physically hurting her)?

*The following questions ask about the sex acts of oral sex, anal sex, or penetration by objects other than a penis. By oral sex, we mean that a man put his penis in a woman's mouth or he penetrated the woman's vagina or anus (butt) with his mouth or tongue. By*

*anal sex, we mean that a man put his penis in a woman's anus (butt). By penetration by an object, we mean that a man put some type of object, for example a stick, bottle or sex toy, in a woman's vagina, anus (butt), or mouth.*

12. Since the last interview, how many times have you had sex acts (oral sex, anal sex, or penetration by an object) with a woman when she didn't want to by overwhelming her with continual arguments and pressure?

13. How many times have you had sex acts with a woman when she didn't want to by showing your displeasure (sulking, making her feel guilty, swearing, getting angry, or threatening to end the relationship)?

14. How many times have you had sex acts with a woman when she didn't want to by giving her alcohol or drugs?

15. How many times have you had sex acts with a woman when she was passed out or too intoxicated to give consent or stop what was happening?

16. How many times have you had sex acts with a woman when she didn't want to by threatening or using some degree of physical force (twisting her arm, holding her down, grabbing, choking, pinching, keeping her from moving, or physically hurting her)?

### **MALE FRIENDS' PRESSURE**

*Please continue to think about your male friends for these next few questions. This time we are interested in the amount of pressure they might put on you.*

Response scale: 1 = Not at all, 2 = A little, 3 = Somewhat, 4 = Quite a bit, 5 = Very much

How much pressure have you felt from your male friends to

1. drink alcohol every day?
2. have 5 or more drinks every weekend?
3. stay out late with them, even when you have to get up early in the morning?
4. gamble more money than you can afford?
5. keep up with the latest electronic gadgets?
6. skip work or school to go somewhere with them?
7. take foolish risks?
8. do things you later regret?
9. maintain a certain physical appearance?
10. have sex with many different women?
11. tell lots of stories about your sexual experiences?
12. have sex, even if you have to lie to the woman?
13. have sex, even if you have to make a woman feel guilty or plead with her?
14. have sex, even if you have to get a woman drunk?
15. have sex, even if the woman was so smashed that she wouldn't remember it the next day?
16. have sex, even if you have to be a little rough with the woman?

## COMMENTS ABOUT WOMEN

The last set of questions asked about comments some men make to other men about women. When you and your friends sit around and talk about women you are dating or would like to date, what are some common things your friends are likely to say? Please try to give several examples.

## ALCOHOL EXPECTANCIES

*The next set of questions ask about the effects alcohol has on people. Please answer in terms of the effects of a moderate amount of alcohol. You don't have to drink alcohol to have an opinion about how it would affect you.*

*If I were under the influence of a moderate amount of alcohol, I would*

1. feel courageous.
2. say and do rude things.
3. feel sexually aroused.
4. feel brave and daring.
5. have a strong sex drive.
6. feel unafraid.
7. find it easy to get into a fight or argument with someone.
8. be likely to initiate sex.
9. be mean.
10. feel powerful.
11. act bold.
12. become hostile.
13. want to have sex.
14. feel angry.
15. become sexually excited.

## POSITIVE ATTITUDES ABOUT CASUAL SEX

Listed below are several statements that reflect different attitudes about sex. You can express an attitude about these issues even if you haven't had direct experience with them. For each statement fill in the response that indicates how much you agree or disagree with it.

response scale: strongly disagree 1 -- strongly agree 5

1. I do not need to be committed to a woman to have sex with her.
2. Casual sex is acceptable.
3. I would like to have sex with many partners.
4. One night stands are sometimes very enjoyable.
5. It is okay to have ongoing sexual relationships with more than one person at a time.

6. Sex as a simple exchange of favors is okay if both people agree to it.
7. Life would have fewer problems if people could have sex more freely.

### **STEREOTYPIC ATTITUDES ABOUT WOMEN THAT JUSTIFY FORCED SEX**

*The following questions ask you about women's behavior.*

response scale: 1 = Not at all agree, 7 = Strongly agree

If a woman:

1. teases a man sexually, she deserves what she gets.
2. is willing to "make out" with a guy, then it is no big deal if he goes a little further and has sex.
3. dresses in skimpy clothes, she should not be surprised if a man tries to force her to have sex.
4. goes to a man's home on a date, she is implying that she wants to have sex.
5. does not resist strongly to sexual advances, she is probably willing to have sex.
6. gets drunk at a party, it is really her fault if someone takes advantage of her sexually.
7. has had sex with a man before, then she should know that he expects her to have sex with him.
8. says "no," she is probably just playing hard to get and really means "yes."
9. goes to bars a lot, then she is mainly looking to have sex.

### **COMFORT WITH SEXIST AND NONSEXIST STATEMENTS**

*In each of the following hypothetical situations, estimate your degree of comfort on a scale of 1 (very comfortable) to 7 (very uncomfortable).*

1. You and some friends are talking about an upcoming party. One of your friends mentions that he's bringing his new girlfriend, and says "I'm so proud of her, she just a promotion at work!"
2. You and some friends are walking together when a woman that you have never seen before walks past. After you pass her, one of your friends says, "I'd hit that."
3. You and some friends are at a party and you see a girl talking with some friends. One of your friends says, "Oh, she's got a tongue ring, you know why a girl gets one of those!"
4. While at a party with some friends you haven't seen in a while, one friends announces, "I just got engaged!"
5. While having a conversation with you about a woman he is dating, your friend says, "I had to tell her that I loved her just to get in her pants."
6. Your friends are catching up with each other. One of them mentions his new girlfriend, and says, "She's so much fun to hang out with."
7. You've been talking with a girl at a party. When she goes to get another glass of punch, your male friend says to you, "That punch is so strong. Keep her drinking; you'll be guaranteed to get laid."

8. Your friend is telling you about relationship problems he's having with his girlfriend; he claims that, "If she wasn't so good in bed, I would have dumped her a long time ago."
9. One of your friends is talking about long-time girlfriend and says, "She brings out the best in me."
10. One of your friends is telling you about the girl he just met. He tells you, "She's got a tramp stamp, and you know what that means!"
11. While hanging out with some friends, one of your friends tells you about his new girlfriend. "She laughs at all my jokes!"

## **FEMALE FRIENDS**

How many female friends do you have?

## **SATISFACTION WITH MALE FRIENDS**

*Now we have a few questions about how satisfied you are with your male friends.*

Response options: 1 = Not at all satisfied, 2 = A little satisfied, 3 = Somewhat satisfied, 4 = Quite satisfied, 5 = Very satisfied

How satisfied are you with the extent to which you can really count on your male friends to

1. help you feel more relaxed when you are under pressure or tense?
2. accept you totally, including both your best and worst points?
3. care about you in both good times and bad times?
4. listen to you when you need to talk?
5. help with a problem?

## **DEMOGRAPHICS**

We are almost done now. We would like to ask a few general background questions. This helps us determine if people with different types of backgrounds have similar or different experiences.

1. What is your birth date?
2. Are you of Hispanic, Latino, or Spanish origin?
  - 1 Yes, Hispanic
  - 5 No, not Hispanic

3. How would you describe your ethnicity?

- 1 Black or African American
- 2 White
- 3 American Indian, Native American, or Alaskan Native
- 4 Asian
- 5 Native Hawaiian or Other Pacific Islander
- 6 Other (specify)

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**ABSTRACT****GUY TIME: THE EFFECTS OF MEN'S MALE FRIENDS ON THEIR HEAVY DRINKING, CONSENSUAL SEXUAL BEHAVIORS, AND SEXUAL ASSAULT PERPETRATION**

by

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Risky, reckless, and potentially harmful behaviors reach their peak during the adolescent and emerging adulthood years. Past research demonstrates that a variety of social influences, including descriptive and injunctive norms, overt pressure, and modeling affect adolescents' and college students' heavy drinking, consensual sexual experiences, and sexual assaults. The construct of peer influence has been measured in many different ways, and little research has simultaneously considered peer influence on even two of the three outcomes in the current study. Further, much of the research with emerging adults is conducted with college students. To address these gaps in the literature, this study had two interrelated goals. First, to demonstrate how men's male friends influence their past-year frequency of heavy drinking, number of consensual sexual partners, and number of sexual assaults perpetrated. Second, to develop three new measures: Male Friends' Pressure to Drink Heavily, Have Numerous Sexual Partners, and Have Sex by Any Means; Comfort with Sexist and Nonsexist Statements; and a qualitative assessment of how men and their friends discuss women. Participants

were 423 single, heterosexual men aged 18 to 35 from the Detroit metropolitan area who completed two audio-computer-assisted self-interviews, one year apart. The three new measures demonstrated excellent internal reliability coefficients, although the factor analyses did not fully support the hypothesized factor structure. Responses to the single item assessing how men and their friends talk about women were coded by three research assistants, who counted the number of objectifying and egalitarian phrases with a high level of interrater reliability. As hypothesized, male friends' pressures were significantly related to participants' past-year frequency of heavy drinking, number of consensual sexual partners, and number of sexual assaults perpetrated. There were also several interactions with individual difference measures, satisfaction with male friends, and age. Sexual assault perpetration was also associated with the types of discussions men had with their male friends about women and comfort in these situations. This study demonstrates that friends influence young men's drinking and sexual behaviors. Suggestions are made for involving peer groups in sexual assault prevention programs.

**AUTOBIOGRAPHICAL STATEMENT**

Angie Tiura is a native of Royal Oak, Michigan, where she has resided for most of her life. She earned her Bachelor of Arts in Mathematics with a minor in Psychology from Wayne State University in 2002. Throughout undergrad, she was actively involved in Project Volunteer and Alternative Spring Break. She is currently completing her doctoral work in Social/Health Psychology, also at Wayne State University. During grad school, she balanced teaching a variety of courses, volunteering on departmental and student committees, and learning to love the research process. Her research interests focus on the interplay of alcohol, risky sexual behaviors, and sexual assault perpetration and victimization. In her spare times she loves playing catch with her husband James, reading, and watching her nieces' and nephews' sports activities.