



Published in final edited form as:

J Interpers Violence. 2001 August ; 16(8): 784–807. doi:10.1177/088626001016008004.

Attitudinal, Experiential, and Situational Predictors of Sexual Assault Perpetration

ANTONIA ABBEY,

Wayne State University

PAM MCAUSLAN,

University of Michigan–Dearborn

TINA ZAWACKI,

Wayne State University

A. MONIQUE CLINTON, and

Wayne State University

PHILIP O. BUCK

Wayne State University

Abstract

Past research demonstrates that sexual assault perpetration is caused by multiple factors including attitudes, early experiences, and situational factors. In this study, 343 college men described either a sexual assault they had committed or their worst date. Discriminant function analysis indicated that attitudes about gender roles and alcohol, number of consensual sex partners, how well the man knew the woman, how isolated the setting was, alcohol consumption during the event, the man's misperception of the woman's cues during the event, and prior consensual sexual activity between the man and the woman discriminated between sexual assaults and worst dates. Additionally, tactics used to obtain sex, self attributions, the perceived seriousness of the assault, and the extent to which it disrupted relationships with others significantly discriminated between men who committed forced sexual contact, sexual coercion, and rape. These results demonstrate the importance of considering both individual characteristics and situational factors in theories and prevention activities.

Sexual assault is a complex phenomenon, caused by multiple factors both across and within perpetrators. Depending on the definitions and measures used, studies of college men have found that 25% to 57% acknowledged committing sexual assault, with 7% to 15% describing an act that met standard legal definitions of rape (Abbey, McAuslan, & Ross, 1998; Koss, Gidycz, & Wisniewski, 1987; Muehlenhard & Linton, 1987). The study described in this article had three goals. The first goal was to distinguish between college men who had and had not committed sexual assault using a number of attitudinal, experiential, and situational variables. The second goal was to determine if men who had committed different types of sexual assault varied in their attributions and outcomes. The third goal was to highlight different ways in which alcohol contributed to sexual assault,

including attitudes about alcohol that facilitate sexual assault, past experiences with alcohol in sexual situations, and alcohol consumption during the assault. Although sexual assault research has addressed each of these goals (Koss, Leonard, Beezley, & Oros, 1985; Malamuth, Linz, Heavey, Barnes, & Acker, 1995; Muehlenhard & Linton, 1987), previous studies have not simultaneously examined them with a large group of perpetrators. The relevant literature is summarized below and then the study's hypotheses are described.

Attitudes About Gender Roles and Alcohol

One explanation for why sexual assault is so common focuses on societally sanctioned gender role beliefs that justify forced sex. Since the 1970s, feminist writers have described how traditional attitudes about women, dating, and sexual behavior contribute to sexual assault. In Western culture, sex is frequently described in terms of conquest and as a "battle between the sexes" in which eager men seduce reluctant women (Brownmiller, 1975; Clark, Shaver, & Abrahams, 1999). More than half of the high school males interviewed by Goodchilds and Zellman (1984) agreed that it was acceptable for a man to force sex on a woman if she "led him on," changed her mind, or sexually aroused him. Cook (1995) found lower agreement rates in a college sample, although sexual aggression was perceived as most justifiable in circumstances similar to those endorsed by younger students. For some sexually aggressive men, behaving in a dominant, aggressive manner in sexual relationships "may reinforce the idea that they are 'real men' " (Malamuth et al., 1995, p. 354). Numerous authors have demonstrated that a constellation of attitudes including adversarial sexual beliefs, hostility toward women, and acceptance of the use of verbal pressure or force to obtain sex predict sexual assault perpetration (Abbey et al., 1998; Koss, et al., 1985; Malamuth et al., 1995).

In addition, beliefs about alcohol can contribute to sexual assault. Men who believe they are drinking alcohol experience more sexual arousal than do men who do not believe they are drinking, regardless of whether they actually consumed alcohol (see George & Norris, 1991 for a review). A number of researchers have developed measures to assess people's commonly held beliefs about alcohol's effects. Although the precise factor structure varies depending on the authors' purposes, expectancies regarding alcohol's enhancement of sexual, aggressive, and generally disinhibited behavior are common (Brown, Goldman, Inn, & Anderson, 1980; Fromme, Stroot, & Kaplan, 1993). Only a few studies have focused on the effects of alcohol expectancies on the likelihood of perpetrating sexual assault (Abbey et al., 1998; McMurran & Bellfield, 1993). Abbey and colleagues (1998) found that alcohol expectancies regarding sexuality were indirectly linked to sexual assault perpetration through their effects on men's misperception of women's sexual intentions.

Past Sexual and Misperception Experiences

A second, complementary explanation of sexual assault focuses on early and frequent consensual sexual experiences. Men who have sex at an early age and who have many partners are more likely to commit sexual assault than are other men (Abbey et al., 1998; Kanin, 1985; Koss et al., 1985; Malamuth et al., 1995). This finding has been explained in terms of both individual differences in sexual interest and motivation, and increased

opportunities for committing sexual assault (Kanin, 1985; Malamuth, Sockloskie, Koss, & Tanaka, 1991).

In addition, men frequently misperceive women's friendly behavior as a sign of sexual interest (Abbey & Harnish, 1995; Shotland & Craig, 1988). Although sexual misperceptions are usually resolved fairly quickly, in extreme cases they may contribute to sexual assault (Abbey et al., 1998; Muehlenhard & Linton, 1987). For example, Abbey and colleagues (1998) found that the more frequently college men had misperceived a woman's sexual intentions, the more frequently they had committed sexual assault. As described previously, a sizable percent of young men believe that forced sex is acceptable if they have been "led on" or sexually aroused. Furthermore, men tend to expect sexual intercourse to occur earlier in a relationship than women do (Shotland, 1989); therefore, they may mistakenly take a woman's willingness to dance with them or kiss them as a sign of her interest in having sex. Thus, some men feel justified forcing sex if a woman refuses them, telling themselves that her sexual teasing warranted force. The fact that a sexual assault perpetrator uses these explanations does not provide moral or legal justification for his behavior; however, it helps explain why some seemingly normal, average men force sex on female companions.

The man's alcohol consumption in sexual and misperception situations can also contribute to sexual assault. Beliefs about alcohol's sexually disinhibiting effects and cognitive distortions induced by intoxication can lead a drinking man to misinterpret his date's behavior and assume that she is ready for sex when she is not (Abbey, Ross, McDuffie, & McAuslan, 1996). Alcohol interferes with higher order cognitive processes, making it difficult to interpret complex, ambiguous, or subtle cues (Steele & Josephs, 1990). Thus, an intoxicated man who is hoping to have sex with his female companion may overfocus on potentially encouraging cues such as her willingness to go back to his apartment after a movie and ignore discouraging cues, such as her insistence that she cannot stay long. Even when the man realizes that his companion's disinterest in sex is genuine, alcohol may encourage him to use force to obtain sex. In laboratory studies, intoxicated men behave aggressively toward women when they feel provoked (Giancola & Zeichner, 1995). In addition to the man's alcohol consumption, the woman's alcohol consumption can also contribute to sexual assault. Date rapists frequently report that alcohol is an effective tactic to gain sex (Kanin, 1985) and that drinking women are "fair game" for sexual aggression (Abbey et al., 1996).

Peer Approval of Forced Sex

Friends can overtly and covertly encourage sexual assault perpetration. Men who are a part of a subculture in which dominance over women is emphasized may feel more comfortable committing sexual assault than men who do not receive such encouragement (Malamuth et al., 1991). For example, based on interviews with fraternity men, Martin and Hummer (1989) concluded that peer groups can create a social environment in which sexual coercion is normalized because women are perceived as commodities available to meet men's sexual needs. Several authors have found that peer support can encourage sexual assault perpetration (Boeringer, Shehan, & Akers, 1991; Kanin, 1985).

Characteristics of the Situation in Which the Assault Occurs

The vast majority of sexual assaults committed by college men occur either on formal dates, casual dates, or in spontaneous social interactions with women at parties (Abbey et al., 1998; Koss et al., 1987; Muehlenhard & Linton, 1987). What situational factors lead some dates to end in sexual assault when most do not? Muehlenhard and Linton (1987) asked college men to describe two dates: one that involved sexual assault and one that did not. As compared with nonassaultive dates, in those that involved sexual assault the man was more likely to feel that he had been led on by the woman and both the woman and man were more likely to have drunk heavily. The literature reviewed previously suggests that other aspects of the situation might also distinguish between sexually assaultive and nonassaultive dates. Dates may feel more entitled to force sexual intercourse if they have known the woman a long time, have misperceived her friendly cues as sexual cues, are alone with her in an isolated location such as one of their homes, and if they have been kissing or petting (Goodchilds & Zellman, 1984; Koss, 1988; Shotland, 1989).

Hypotheses

In the present study, college men were asked to describe a social interaction with a woman that involved sexual assault. If they had never committed sexual assault, they were asked to describe their worst date. Worst dates were selected for comparison because they were expected to also involve disagreements and negative affect. Based on the literature reviewed above, college men's past attitudes and experiences and specific circumstances associated with the social interaction were hypothesized to discriminate between men who committed sexual assault and those who did not. In terms of attitudes, sexually assaultive men as compared with nonassaultive men were hypothesized to have stronger adversarial sexual beliefs, more hostility toward women, greater acceptance of verbal pressure to obtain sex, and stronger alcohol expectancies regarding sex and aggression. In terms of past experiences, sexually assaultive men were hypothesized to have earlier and more frequent sexual experiences, to drink alcohol more frequently during sexual interactions, to misperceive women's sexual intentions more frequently, to drink alcohol more frequently during misperceptions, and to have peers who approve more strongly of forced sex as compared with nonsexually assaultive men. In terms of the circumstances associated with the interaction, sexual assaults as compared with worst dates were hypothesized to occur in more steady dating relationships, in more isolated settings, to involve more alcohol consumption by the man and the woman, to include misperception of the woman's sexual intentions, and to involve higher levels of prior consensual sexual activity (e.g., kissing, petting).

Hypotheses about men who committed different types of sexual assault were also examined. Although the tactics used to obtain sex are related to perpetration group assignment, these are not identical constructs. Men who committed rape or attempted rape, as opposed to verbal coercion or forced sexual contact, were hypothesized to have used higher levels of all strategies to obtain sex including physical force, verbal pressure, and alcohol or other drugs. Few studies have compared the reactions of men who have committed different types of sexual assault (Koss, 1988), thus these hypotheses were viewed as exploratory. We

anticipated that men who acknowledged committing rape would recognize the seriousness of what they had done and, therefore, hold themselves more responsible for what occurred and experience more negative outcomes than men who committed forced sexual contact or sexual coercion. It also seemed possible that men who acknowledged committing rape had found a way to justify what they had done (e.g., told themselves that she deserved it) and therefore would see it as less serious and hold themselves less responsible.

METHOD

Participants

Participants were 343 male undergraduates at a large, urban, commuter university. An additional 14 students were given the questionnaire; however, they were omitted from data analyses because they did not answer most of the sexual assault questions. The men who were omitted did not significantly differ from those that were included on age, ethnicity, work status, relationship status, or college major.

Participants ranged in age from 18 to 53 years, with a median age of 21 years. Of the participants, 61% ($n = 211$) were Caucasian, 22% ($n = 74$) were African American, 6% ($n = 21$) were Arabic or Middle Eastern, 6% ($n = 21$) were Asian or Pacific Islander, 2% ($n = 7$) were Hispanic, 1% ($n = 4$) were Native American, and the remaining 2% ($n = 5$) were either another ethnicity or did not answer the question. Of the participants, 64% were employed at least part-time. Approximately one third of participants' parents had completed college (30% of mothers and 38% of fathers).

Procedures

Participants were recruited through advertisements in the student newspaper, fliers distributed on campus, and announcements made in classrooms. The distribution of majors represented the university's undergraduate enrollment: 19% science, 17% business, 12% psychology, 11% liberal arts, 11% fine arts, 10% education, 7% nursing, 3% engineering, and the remaining 10% had a different major or did not answer the question.

A research assistant contacted potential participants by telephone and told them that the study concerned the dating experiences of college students. Participants were required to have dated a woman in the past year, not to be married or engaged, and to have lived in the United States at least 10 years. The first two restrictions were based on our interest in studying men who were actively dating. The third restriction was made because of the study's focus on American cultural values (e.g., beliefs about gender roles and alcohol expectancies). Eligible participants were run in small groups of 3 to 5 men in a large classroom. An experimenter reviewed the consent form individually with participants, and then they completed the questionnaire on their own. Participants sat far apart and were unable to see anyone else's questionnaire. After participants finished, they placed their questionnaire in an envelope, sealed it, returned it to the experimenter, and were paid \$10 or given course extra credit. No names or identifying information were included on questionnaires.

Measures

Social desirability—Participants completed the 13-item short form of the Marlowe-Crowne social desirability scale (Ballard, 1992). Responses to these true-false questions were summed and averaged with lower scores indicating more socially desirable responses (Cronbach coefficient alpha = .72).

Attitudes about gender roles—Participants completed Burt's (1980) measure of adversarial sexual beliefs and Lonsway and Fitzgerald's (1995) measure of hostility toward women. Responses were made on 7-point scales. Preliminary data analyses indicated that these two scales were highly correlated ($r = .72$) so they were combined into a single scale (alpha = .87).

Participants also completed a measure that assessed how acceptable they believed it was for a man to verbally pressure a woman with whom he has spent the evening to obtain sex; 13 different questions described circumstances such as the woman agreed to be alone with the man, the woman kissed him, and they had dated a long time. This measure was developed by the authors based on past research (Cook, 1995; Goodchilds & Zellman, 1984). Responses were made on 7-point scales (alpha = .97).

Attitudes about alcohol—Participants completed a measure that assessed their beliefs regarding the effects of alcohol on men's aggressive and sexual behavior. Past research has demonstrated that these subscales have high internal consistency reliability and good discriminant validity (Abbey, McAuslan, Ross, & Zawacki, 1999). Responses were made on 5-point scales. Cronbach coefficient alpha for the 7-item aggression scale was .90, and for the 6-item sexual drive scale it was .92.

Past consensual sexual experiences—Using an open-ended question format, participants were asked their age when they first had consensual sexual intercourse and their total lifetime number of consensual sexual partners. Following convention, for participants who never had consensual sexual intercourse their current age was used (Malamuth et al., 1991). Participants' alcohol consumption was assessed by asking them to rate how often and how much they typically drank prior to consensual sexual intercourse (Abbey et al., 1996). A composite measure was created by combining the frequency and quantity items. Scores were skewed, so the final measure was winsorized, allowing for an 11-point scale.

Past misperception experiences—Participants were asked how many times a woman had "been friendly to you only for you to discover that you had misperceived her friendliness as a sexual come-on—she was just trying to be nice but you assumed she was sexually attracted to you?" (Abbey et al., 1998). Alcohol consumption during misperception was assessed with the same questions described above for drinking during consensual sexual experiences, and the same composite was formed.

Peer support for forced sex—Based on past research (Boeringer et al., 1991), two sets of questions were developed by the authors to assess peer support for sexual assault perpetration. First, participants were asked to what extent their friends would approve of getting a woman drunk to have sex with her, lying to a woman to have sex with her, and

forcing a woman to have sex. Then participants were asked how much pressure they ever felt from their friends to engage in each of these three behaviors. Responses were made on 5-point scales. The approval and pressure items were highly correlated so they were combined into one scale ($\alpha = .80$).

Sexual assault perpetration—Sexual assault perpetration was measured with a modified 12-item version of the Sexual Experiences Survey (SES) that includes incidents that occurred since the age of 14 (Koss et al., 1987). In addition to the 10 items in the 1987 version of the SES, 2 additional items assessed sexual intercourse when consent could not be given (because the victim was too intoxicated by alcohol or drugs or unconscious, Abbey et al., 1998; labeling the experience as rape, Koss & Oros, 1982). The SES is scored by forming five levels of sexual assault increasing in severity: no sexual assault, sexual contact (e.g., touching, fondling, but no penetration), verbally coerced sexual intercourse, attempted rape, and completed rape, with participants being assigned to the highest group into which they fit. This measure has been used extensively and has good internal consistency and test-retest reliability (Koss et al., 1987). Cronbach coefficient alpha in the present study was .83.

Characteristics of the sexual assault or worst date—All participants described one interaction with a woman in detail. Most of the questions were closed-ended although participants were asked at the end of this section to provide any additional information that they thought would help us better understand what happened. There was tremendous variation in the amount and type of additional information provided, thus it was not systematically coded. Participants who had answered yes to 1 item of the SES were instructed to think of that incident as they answered the next set of questions. Participants who answered yes to more than 1 SES item were asked to think of the incident with the highest number (items were ordered in the SES so that higher numbers were associated with more severe types of assault). Participants who answered no to every SES item were asked to think of their worst date.

The questions regarding the interaction were based on the measures used in past research (Abbey et al., 1998; Muehlenhard & Linton, 1987; Wyatt, 1992). Participants were asked to indicate how long ago the interaction occurred, their age at the time, and the woman's age at the time. The relationship between the man and the woman was assessed with two questions. Participants described their relationship using the following categories: no relationship, acquaintance, friend, coworker, casual date, or steady date. Participants also indicated how well they knew the woman at the time of the interaction on a 7-point scale. Characteristics of the location of the interaction were assessed with 2 items. First, participants were given a list of locations (e.g., his house, her house, a restaurant) and asked to check all where they had been with the woman during the interaction. Then participants were asked to rate how isolated the setting was using a 5-point scale.

Participants were asked how much alcohol they consumed prior to and during the interaction. They also evaluated how intoxicated they were during the interaction. These items were combined with higher scores indicating greater consumption and intoxication. The composite measure was winsorized, allowing for an 11-point scale. A parallel composite measure was formed that assessed the woman's alcohol consumption during the

interaction. The man's and the woman's alcohol consumption were highly correlated ($r = .75$), so they were combined into a single indicator of alcohol consumption during the interaction.

Participants were also asked to indicate how long they had misperceived the woman's sexual intentions during this interaction using a 6-point scale with responses ranging from *not at all* to *the whole time*. Prior consensual sexual interaction was determined by presenting participants with a list of eight sexual activities ranging from kissing to sexual intercourse. They were asked to check those that had previously occurred, and responses were summed creating a scale with values from 0 to 8.

Characteristics of the sexual assault—Several measures were answered only by participants who described a sexual assault. Participants rated the extent to which they used verbal pressure, physical force, and alcohol or other drugs to get the woman to engage in sexual activity. The extent to which each tactic was used was rated on a 5-point scale.

Attributions of responsibility for the assault were assessed by asking participants to rate how much they believed particular behaviors or circumstances led to the assault. Each question was rated on a 5-point scale. Based on factor analyses and past research, five subscales were formed. Five questions measured the extent to which the man considered himself to be at fault because he expected and planned for sexual intercourse to occur ($\alpha = .69$); 10 questions assessed the extent to which the man felt that the woman was responsible for the assault. Sample items included, "She led you on," "She flirted with you," and "She wore revealing clothes." ($\alpha = .86$). Two parallel 4-item scales assessed participants' perceptions that their alcohol consumption and the woman's alcohol consumption led to the assault (α s = .88 and .89, respectively). The final attribution scale was composed of 3 items that assessed feeling pressured by friends ($\alpha = .72$).

Finally, several outcomes of the sexual assault were measured. Participants were asked to rate how serious the experience was for both themselves and the woman at the time it occurred. Responses were made on 7-point scales. Eight items assessed the extent to which the men experienced negative affect following the assault. Sample items included sad, upset, and angry ($\alpha = .89$). Five items assessed the extent to which the assault disrupted participants' relationships with others including this woman, women in general, friends, and family. Responses were made on 5-point scales ($\alpha = .71$).

RESULTS

Prevalence and Characteristics of Sexual Assault Perpetration

Of the sample, 33% ($n = 113$) reported that they had perpetrated some form of sexual assault. The most serious sexual assault described by 15% ($n = 51$) of the total sample involved sexual contact: for 10% ($n = 34$), it was coerced sexual intercourse; for 3% ($n = 9$), it was attempted rape; and 5% ($n = 19$) had perpetrated an act that met the standard legal definition of rape. The attempted and completed rape groups were combined ($n = 28$) for the analyses reported in this article, both because attempted rape is considered legally to be a form of rape and because of the relatively small number of men in the attempted rape group.

Of the men who reported that they had committed a sexual assault, 78% acknowledged committing more than one ($mdn = 4$).

Men who described a worst date were asked what made it their worst date. The most common responses were that something negative happened that spoiled the date (27%), the date was boring (25%), the date was rude and obnoxious (20%), or that there was no chemistry between them (10%).

Descriptive information about the interactions each group of men described is displayed in Table 1. Forced sexual contacts occurred at a younger age than worst dates, sexual coercions, or rapes. Men in all groups reported that on average the woman was just a few months younger than they were. All of the sexual assaults involved a woman whom the man knew. Worst dates were most likely to be with a casual date. Forced sexual contacts were about equally likely to occur with a casual or steady date. In contrast, sexual coercions and rapes were most likely to involve a steady dating partner. Participants were asked about all the locations where they were during the interaction. Sexual assaults were more likely than worst dates to include time spent at the man's or woman's house. Worst dates were most likely to include time spent at restaurants and movies. Overall, 35% of the sexual assaults and 20% of the worst dates involved alcohol consumption. Alcohol consumption was most likely during rapes, with both the man and the woman drinking.

Distinguishing Between Nonperpetrators and Perpetrators

There was a small but significant correlation between social desirability and sexual assault perpetration ($r = .13, p < .02$), with more socially desirable responses associated with the acknowledgment of less severe perpetration. A MANCOVA was conducted with sexual assault perpetration status as the independent variable and each of the variables in Table 2 included as dependent variables. Social desirability was included as a covariate; thus, the effects of social desirability were controlled for in the analyses. The MANCOVA was significant; therefore, follow-up ANCOVAs were conducted. As can be seen in Table 2, perpetrators significantly differed from nonperpetrators on 14 of the 15 variables.¹ As hypothesized, compared with men who had not committed sexual assault, perpetrators had more hostile gender role beliefs, greater acceptance of verbal pressure to obtain sex, stronger sexual alcohol expectancies, consensual sex at an earlier age, more consensual sex partners, greater alcohol consumption during sexual encounters, more frequently misperceived women's sexual intentions, greater alcohol consumption during sexual misperceptions, and friends who more strongly approved of forced sex. Situations that were associated with sexual assault as compared with a worst date were more likely to involve the man knowing the woman well, an isolated location, alcohol consumption during the interaction, the man misperceiving the woman's sexual intentions for a longer period of time, and higher levels of prior consensual sexual activity.²

¹The results were virtually identical when social desirability was not included as a covariate.

²Preliminary analyses were conducted to determine if both the man's and the woman's alcohol consumption during the situation related to perpetration in a similar manner. Sexual assaults were significantly more likely than worst dates to involve both the man's drinking ($M = 2.16$ vs. 1.56 , respectively) and the woman's drinking ($M = 2.32$ vs. 1.19 , respectively), $t = -2.65, -2.95$, respectively, $p < .01$.

Then these variables were included in a stepwise discriminant function analysis (DFA) to predict perpetrator status. A stepwise analysis was used because there was no a priori reason to assign some predictors higher priority than others and the stepwise procedure allows for the most parsimonious set of predictors to emerge. As is standard procedure (Klecka, 1980; Tabachnick & Fidell, 1996), the DFA took into account prior probabilities of group membership: 67% nonperpetrator, 33% perpetrator. One significant discriminant function emerged, Wilks's Lambda of .56 with $\chi^2(9, N = 343) = 194.89, p < .001$, accounting for 44% of the variance associated with perpetrator status. Variables that contributed significantly to the DFA (see last column of Table 2) included hostile gender role beliefs, acceptance of verbal pressure to obtain sex, sexual alcohol expectancies, number of consensual sexual partners, how well the man knew the woman, how isolated the setting was, alcohol consumption during the interaction, the length of misperception during the interaction, and prior consensual sexual activity between the man and the woman.

Classification rates were examined to assess how well this set of variables discriminated between perpetrators and nonperpetrators. Overall, 82% of the participants were correctly classified, which significantly improved on a chance rate of 56%, $z(343) = 9.70, p < .001$. The pattern of classification indicated that the predictor variables most successfully identified nonperpetrators (90% correctly classified). However, two thirds (66%) of the perpetrators were also correctly classified.

Discrimination Between Three Sexual Assault Groups Using Assault-Specific Predictors

An additional research question concerned distinctions between forced contacts, sexual coercions, and rapes. A similar analysis strategy was followed, with a significant MANCOVA followed up with ANCOVAs. As can be seen in Table 3, one or more of the perpetrator groups differed significantly from the others for 8 of the 12 potential predictor variables. Men who committed rape used the highest levels of physical force, alcohol, and other drugs to obtain sex during the assault. Rapists, who were most often in interactions that included alcohol consumption by both themselves and the woman, attributed the most responsibility for the assault to their own and the woman's alcohol consumption. Men who committed rape and sexual coercion took more personal responsibility for the assault than did men who committed sexual contact. Sexual coercers used the highest levels of verbal pressure to obtain sex during the assault, perceived the event as most serious, and viewed their relationships with others as least disrupted.

Next a DFA was conducted that took into account prior probabilities of group membership: 45% forced contact, 30% sexual coercion, and 25% attempted or completed rape. Two significant discriminant functions emerged. The first function had a Wilks's Lambda of .35 with $\chi^2(12, N = 113) = 114.22, p < .001$; the second function had a Wilks's Lambda of .64, $\chi^2(5, N = 113) = 47.26, p < .001$. The first function accounted for 61% of the total discriminating power of the analysis, and together these functions accounted for 82% of the variance associated with perpetrator group status. Overall, 75% of participants were correctly classified, significantly improving on a chance rate of 36%, $z(113) = 8.64, p < .001$. The pattern of classification indicated that the predictor variables most successfully identified men who reported a forced contact (90% correctly classified). However, almost

two thirds of the men who reported sexual coercion (68%) or attempted/ completed rape (57%) were also correctly classified.

The first function included 2 variables that significantly distinguished men who committed rape from those who committed sexual coercion or forced contact (see Table 3). Men who committed rape used the most physical force and alcohol or other drugs to obtain sex during the assault. Three of the 4 variables that significantly loaded on the second function distinguished men who committed sexual coercion from men who committed forced contact or rape. Men who committed sexual coercion used the most verbal pressure to obtain sex during the assault. Additionally, these men perceived the event as being most serious yet perceived the least relationship disruption. Attributions of responsibility to oneself were higher for rapists and sexual coercers as compared with men who committed forced contact.

DISCUSSION

One third of the college men surveyed reported that they had committed a sexual assault; 8% reported that they had committed an act that met standard legal definitions of rape or attempted rape. These perpetration rates are comparable with those that have been found in other college student studies (Koss 1988). Just more than one third of the sexual assaults involved alcohol consumption, usually by both the perpetrator and victim. This rate is somewhat lower than what is typically reported in the literature (Ullman, Karbatsos, & Koss, 1999). The present sample's relatively large proportion of African American participants may explain this disparity because African Americans are more likely to abstain from alcohol than are Caucasians (Caetano, Clark, & Tam, 1998). The prototypic sexual assault described by participants occurred approximately 3 years earlier, when they were 19 years old, with a steady dating partner, in one of their homes.

Overall, the attitudinal, experiential, and situational variables that were included to represent complementary models of sexual assault perpetration did an excellent job of discriminating between those men who committed sexual assault and those who did not. Attitudes supporting hostility toward women, the acceptability of verbal pressure to obtain sex, and alcohol's enhancement of men's sex drive significantly discriminated between perpetrators and nonperpetrators. For the past 25 years, theories of sexual assault have emphasized how stereotypic gender role beliefs about dating and sex create unequal power relationships between men and women that encourage forced sex (Brownmiller, 1975; Malamuth et al., 1991). Men who think that alcohol is an aphrodisiac may use this belief to justify feeling unable to control their sexual urges (Abbey et al., 1996). Having many consensual sex partners also distinguished perpetrators from nonperpetrators, supporting the argument that some perpetrators are strongly motivated to pursue all sexual opportunities (Kanin, 1985; Malamuth et al., 1991).

Characteristics of worst dates and sexual assaults also varied, suggesting that situational factors contribute to sexual assault. The better the man knew the woman, the more isolated the setting, the more alcohol they consumed, the more prior consensual sexual activity, and the longer the man misperceived the woman's degree of sexual interest, the more likely it was that sexual assault occurred. These situational factors might contribute to a perpetrator's

false sense of entitlement wherein he feels that his date “owes” him because he has misinterpreted her behavior as suggesting her willingness to have sex. As noted in the Method section, participants were given the opportunity to provide additional information about what happened. Many men mentioned that for much of the interaction they misread the woman’s cues. For example, one man explained why he forced sex on an acquaintance by writing, “she was going along with all my advances and was barely clothed . . . I thought if I keep asking, she’ll want to go all the way.” He further wrote, “I was confused. I understand that no really does mean no. But why would she just keep going along with my advances? . . . she changed her mind mid-sex stroke and expects me to be cool.” Another man who physically forced sex on a steady date after she had willingly touched his penis but was unwilling to have intercourse wrote, “I felt as if I had gotten something that I was entitled to. And I felt I was repaying her for sexually arousing me.” He described the experience as, “very powerful and titillating . . . It made me feel as if I was in control.” Prevention programs for men need to emphasize that a woman’s agreement to kiss or touch does not constitute agreement to have sex.

Past research has produced mixed results regarding the role of alcohol consumption during sexual assault (Ullman et al., 1999). In the present study, both the man’s and the woman’s alcohol consumption distinguished sexual assaults from worst dates although they were so highly correlated that potential unique effects of either’s drinking could not be disentangled. Alcohol consumption tends to be a shared social activity; college students perceive both men and women to be acting inappropriately if they drink alcohol when their date does not (Abbey & Harnish, 1995).

Additional exploratory hypotheses about men who committed different types of sexual assault were generally confirmed. Men who committed rape or attempted rape were most likely to use physical force, alcohol, or drugs whereas men who committed sexual coercion were most likely to use verbal pressure. Rapists can potentially use all of these tactics, and we had expected them to use more of all of them. These findings suggest that different types of perpetrators use different strategies to obtain sex, not just escalating strategies. Surprisingly, few researchers have examined this issue, and they have found somewhat conflicting results. Kanin (1985) emphasized the willingness of the date rapists he interviewed to use a variety of different tactics because they viewed dating as “a no-holds-barred contest” (p. 223). In contrast, Byers and Eno (1991) argued that men who used verbally coercive strategies were motivated by different factors than those who used physical force. Additional research is needed to better understand if sexual assault tactics are selected based on aspects of the situation or if men who use physical force to obtain sex differ in fundamental ways from men who do not.

Forced contact is defined by the type of sex involved (i.e., acts that do not involve penetration) and not the strategy used to achieve it, thus these assaults might have involved levels of physical force equal to those used in rape. Men who committed sexual contact used low levels of all tactics, were younger when the assault occurred, most often perpetrated against a casual dating partner, and perceived themselves as less responsible for the assault. These results indicate that forced contact differs from other types of sexual assault along multiple dimensions and might serve as a learning experience for some men early in their

dating history as they attempt to negotiate sexual activity with dating partners. One man described playing “Truth or Dare” with a woman friend at a party and touching her sexually despite her desire not to follow through on the “dare.” He described the event as a “definite learning and maturing experience. I still feel bad that it happened.”

Men who committed sexual coercion were most likely to assault a steady date, perceived the assault as most serious, and experienced the least relationship disruption. Perhaps these men were able to discuss what happened with their partner and improve their relationship with her and others as a result of what they learned. For example, one of our study participants who had verbally coerced his steady dating partner into having sex said that afterwards he, “felt like I made a mistake and we talked about it. . . . [now I] make sure there is a right time and place for this activity.” Another possible explanation is that sexual coercers perceive verbally coerced sex within intimate relationships as normative and seek out partners who accept this behavior, perhaps because of their childhood experiences (Bachar & Koss, 2001). Another man who verbally coerced a steady dating partner into having sex said, “We were both fine afterward. . . . She just wasn’t fully in the mood and I got a little mad/extreme that she wasn’t.” Additional research is needed to better understand the motives behind verbal coercion.

The standard definition of rape includes forcing sex on a woman too intoxicated to give consent, thus it is not surprising that rapes were more likely to involve alcohol consumption and that rapists were more likely to attribute what happened to their own and the woman’s drinking. It is often harder to obtain a conviction in a case in which the victim was intoxicated, because some judges and juries have perceived this as a precipitating action. In most jurisdictions, the perpetrator’s intoxication is not legally considered a factor that can affect the determination of guilt although it is sometimes considered in the sentencing stage (Graham et al., 1998).

These findings about men who have perpetrated different types of sexual assault are intriguing but need to be replicated. Studies with larger samples are necessary to allow for more complex analyses that examine mediating and moderating effects, as well as direct relationships. Qualitative research is needed to further explain differences between types of perpetrators. For example, interviews with perpetrators could help distinguish between those who learn from their actions and change their future behavior toward women and those who develop a callous attitude toward women that allows them to continue using physically and verbally coercive tactics to obtain sex. Two earlier quotes were from men who expressed regret about their actions. In contrast, another participant wrote that he felt as if, “I met the biggest tease in the world and that she treated me more unfairly than I treated her. . . . [now] I perceive most women as being teases.”

Strengths of this study include its relatively large sample size, use of predictor variables from a variety of different domains, and administration of many measures with well-established reliability and validity. Different men are motivated to commit sexual assault for different reasons, thus the simultaneous examination of attitudinal, experiential, and situational factors allowed for a more thorough analysis of predictors of perpetration. The cross-sectional design does not allow causality to be established; the causal direction of

effects may differ from that hypothesized (e.g., sexual assault perpetration may make men more hostile toward women), and third variables may underlie some of the findings (e.g., rapists may have higher levels of general aggressiveness than other men). All survey research relies on participants' retrospective recall of events, thus inaccuracies are possible either due to faulty memories or biased self-presentation. Sexual assault perpetration rates reported by men are always lower than women's reports, suggesting that underreporting is common (Koss, 1988). Standard strategies were used to encourage honest reporting (e.g., names were not included on questionnaires and participants placed them in sealed envelopes). More research is needed with nonstudent populations although the university studied is more heterogeneous than most in terms of students' age, ethnicity, parents' education, and income.

This study's results have important implications for sexual assault prevention programs for men. Peer approval of forced sex was significantly higher for perpetrators than nonperpetrators although this variable was not significant in the DFA. Peer approval correlated moderately highly with acceptance of verbal pressure ($r = .37, p < .001$), suggesting that there is some overlap between these concepts. Research with fraternities and sports teams demonstrates that prevention efforts aimed at limiting peer approval of forced sex are likely to be effective (Boeringer et al., 1991). Although many prevention programs focus on traditional gender role beliefs, few focus on alcohol expectancies (Bachar & Koss, 2001); thus, this represents an important new area for intervention. In general, combining alcohol and sexual assault prevention efforts would be worthwhile in light of the multifaceted role that alcohol plays in sexual assault perpetration. Men need to know that their own intoxication does not provide a moral or legal justification for forced sex and that having sex with a woman too intoxicated to give consent is illegal. College is an excellent intervention point because students are being exposed to new ideas, norms, and social groups. Prevention programs, however, need to begin in middle school as dating attitudes and behaviors are first developing.

Acknowledgments

The research described in this article was funded by grants to the first author from the National Institute on Mental Health and the National Institute on Alcohol Abuse and Alcoholism.

References

- Abbey A, Harnish RJ. Perception of sexual intent: The role of gender, alcohol consumption, and rape supportive attitudes. *Sex Roles*. 1995; 32:297–313.
- Abbey A, McAuslan P, Ross LT. Sexual assault perpetration by college men: The role of alcohol, misperception of sexual intent, and sexual beliefs and experiences. *Journal of Social and Clinical Psychology*. 1998; 17:167–195.
- Abbey A, McAuslan P, Ross LT, Zawacki T. Alcohol expectancies regarding sex, aggression, and sexual vulnerability: Reliability and validity assessment. *Psychology of Addictive Behaviors*. 1999; 13:174–182.
- Abbey, A.; Ross, LT.; McDuffie, D.; McAuslan, P. Alcohol, misperception and sexual assault: How and why are they linked?. In: Buss, DM.; Malamuth, NM., editors. *Sex, power, conflict: Evolutionary and feminist perspectives*. New York: Oxford University Press; 1996. p. 138-161.

- Bachar, K.; Koss, MP. From prevalence to prevention: Closing the gap between what we know about rape and what we do. In: Renzetti, CM.; Bergen, RK.; Edelson, JL., editors. Sourcebook on violence against women. Thousand Oaks, CA: Sage; 2001. p. 117-142.
- Ballard R. Short forms of the Marlowe-Crowne social desirability scale. *Psychological Reports*. 1992; 71:1155-1160. [PubMed: 1480695]
- Boeringer SB, Shehan CL, Akers RL. Social contexts and social learning in sexual coercion and aggression: Assessing the contribution of fraternity membership. *Family Relations*. 1991; 40:58-64.
- Brown SA, Goldman MS, Inn A, Anderson L. Expectations of reinforcement from alcohol. *Journal of Consulting and Clinical Psychology*. 1980; 48:419-426. [PubMed: 7400427]
- Brownmiller, S. *Against our will: Men, women, and rape*. New York: Simon & Schuster; 1975.
- Burt MR. Cultural myths and supports for rape. *Journal of Personality and Social Psychology*. 1980; 48:217-230. [PubMed: 7373511]
- Byers ES, Eno RJ. Predicting men's sexual coercion and aggression from attitudes, dating history, and sexual response. *Journal of Psychology and Human Sexuality*. 1991; 4:55-70.
- Caetano R, Clark CL, Tam T. Alcohol consumption among racial/ethnic minorities. *Alcohol Health & Research World*. 1998; 22:233-241. [PubMed: 15706749]
- Clark CL, Shaver PR, Abrahams MF. Strategic behaviors in romantic relationship initiation. *Personality and Social Psychology Bulletin*. 1999; 25:707-720.
- Cook SL. Acceptance and expectation of sexual aggression in college students. *Psychology of Women Quarterly*. 1995; 19:181-194.
- Fromme K, Stroot E, Kaplan D. Comprehensive effects of alcohol: Development and psychometric assessment of a new expectancy questionnaire. *Psychological Assessment*. 1993; 5:19-26.
- George WH, Norris J. Alcohol, disinhibition, sexual arousal, and deviant sexual behavior. *Alcohol Health and Research World*. 1991; 15:133-138.
- Giancola PR, Zeichner A. Alcohol-related aggression in males and females. *Alcoholism: Clinical and Experimental Research*. 1995; 19:130-134.
- Goodchilds, JD.; Zellman, GL. Sexual signaling and sexual aggression in adolescent relationships. In: Malamuth, NM.; Donnerstein, E., editors. *Pornography and sexual aggression*. Orlando, FL: Academic Press; 1984. p. 233-243.
- Graham K, Leonard KE, Room R, Wild TC, Pihl RO, Bois C, Single E. Current directions in research on understanding and preventing intoxicated aggression. *Addiction*. 1998; 93:659-676. [PubMed: 9692266]
- Kanin EJ. Date rapists. *Archives of Sexual Behavior*. 1985; 14:219-231. [PubMed: 4004546]
- Klecka, WR. *Discriminant analysis*. Beverly Hills, CA: Sage; 1980.
- Koss, M. Hidden rape: Sexual aggression and victimization in a national sample of students in higher education. In: Burgess, AW., editor. *Rape and sexual assault*. Vol. 2. New York: Garland; 1988. p. 3-25.
- Koss MP, Gidycz CA, Wisniewski N. The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*. 1987; 55:162-170. [PubMed: 3494755]
- Koss MP, Leonard KE, Beezley DA, Oros CJ. Nonstranger sexual aggression: A discriminant analysis of the psychological characteristics of undetected offenders. *Sex Roles*. 1985; 12:981-992.
- Koss MP, Oros C. The sexual experiences survey. A research instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology*. 1982; 50:455-457. [PubMed: 7096751]
- Lonsway KA, Fitzgerald LF. Attitudinal antecedents of rape myth acceptance. *Journal of Personality and Social Psychology*. 1995; 68:704-711.
- Malamuth NM, Linz D, Heavey CL, Barnes G, Acker M. Using the confluence model of sexual aggression to predict men's conflict with women: A 10-year follow-up study. *Journal of Personality and Social Psychology*. 1995; 69:353-369. [PubMed: 7643309]
- Malamuth NM, Sockloskie RJ, Koss MP, Tanaka JS. Characteristics of aggressors against women. *Journal of Consulting and Clinical Psychology*. 1991; 59:670-681. [PubMed: 1955602]
- Martin PY, Hummer RA. Fraternities and rape on campus. *Gender & Society*. 1989; 3:457-473.

- McMurrin M, Bellfield H. Sex-related alcohol expectancies in rapists. *Criminal Behaviour and Mental Health*. 1993; 3:76–84.
- Muehlenhard CL, Linton MA. Date rape and sexual aggression in dating situations: Incidence and risk factors. *Journal of Counseling Psychology*. 1987; 34:186–196.
- Shotland, RL. A model of the causes of date rape in developing and close relationships. In: Hendrick, C., editor. *Close relationships*. Newbury Park, CA: Sage; 1989. p. 247–270.
- Shotland RL, Craig JM. Can men and women differentiate between friendly and sexually interested behavior? *Social Psychology Quarterly*. 1988; 51:66–73.
- Steele CM, Josephs RA. Alcohol myopia: Its prized and dangerous effects. *American Psychologist*. 1990; 45:921–933. [PubMed: 2221564]
- Tabachnick, BG.; Fidell, LS. *Using multivariate statistics*. 3. New York: HarperCollins; 1996.
- Ullman SE, Karbatsos G, Koss MP. Alcohol and sexual aggression in a national sample of college men. *Psychology of Women Quarterly*. 1999; 23:673–689.
- Wyatt GW. The sociocultural context of African American and White American women's rape. *Journal of Social Issues*. 1992; 48:77–91.

Biographies

Antonia Abbey is an associate professor in the Department of Community Medicine at Wayne State University. She received her Ph.D. in social psychology from Northwestern University. Her research interests include alcohol's role in sexual assault, sexual assault etiology and prevention, and young adults' risky sexual behavior.

Pam McAuslan is an assistant professor of psychology at the University of Michigan–Dearborn. She received a Ph.D. in social psychology from Wayne State University. Her research interests concern various topics related to violence against women, including the predictors of sexual assault perpetration, the relationship between sexual assault victimization, disclosure, social reactions and health, and communication patterns in intimate relationships.

Tina Zawacki received her M.A. in social psychology from Wayne State University and is currently a Ph.D. candidate. She will receive her doctorate in the summer of 2001, under the guidance of her mentor Dr. Antonia Abbey. Her research interests concern alcohol's effects on cognition and decision-making in social situations and focus on alcohol's involvement in aggression, sexual assault, and risk-taking behaviors such as drunk driving.

A. Monique Clinton is a Ph.D. candidate at Wayne State University. She received her M.A. in social psychology from Wayne State and will complete her Ph.D. during the summer of 2001 under the guidance of her mentor Dr. Antonia Abbey. Her research interest concerns the interpersonal and intrapersonal effects of childhood and adult sexual victimization, with a specific focus on the causal or consequential role of alcohol use.

Philip O. Buck received his B.A. in psychology from SUNY at Geneseo and his M.A. in social psychology from Wayne State University. He is presently pursuing a Ph.D. at Wayne State under the guidance of Dr. Antonia Abbey. His research interests revolve around the relationship between alcohol and cognitive functioning, specifically decision-making in risky social situations.

TABLE 1

Descriptive Characteristics of Men's Interactions

Characteristic	Worst Date/ No Assault (<i>n</i> = 230, 67%)			Forced Contact (<i>n</i> = 51, 15%)			Sexual Coercion (<i>n</i> = 34, 10%)			Attempted or Completed Rape (<i>n</i> = 28, 8%)			<i>F</i>
	<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>		
How long ago was the interaction (years)	2.5	3.5		3.3	4.3		3.1	3.0		2.5	3.4		.83
Man's age at time of interaction	19.2	3.5 ^a		17.5	3.1 ^b		19.2	3.5		20.0	3.6 ^a		4.33 ^{**}
Woman's age at time of interaction	18.8	3.6 ^a		17.1	2.6 ^b		19.1	3.9 ^a		19.6	3.8 ^a		4.42 ^{**}
	<i>n</i>	%		<i>n</i>	%		<i>n</i>	%		<i>n</i>	%		χ^2
Relationship between man and woman													
Casual date	164	71.3		21	41.2		8	23.5		8	28.6		49.33 ^{***}
Steady dating partner	41	17.8		24	47.1		24	70.6		17	60.7		61.38 ^{***}
Friend or coworker	12	5.2		3	5.9		1	2.9		1	3.6		.53
Acquaintance	13	5.6		3	5.9		1	2.9		2	7.1		.68
Location of interaction													
Man's home	21	9.1		10	19.6		12	35.3		3	10.7		19.51 ^{***}
Woman's home	46	20.0		15	29.4		14	41.2		12	42.9		12.95 ^{**}
Car or outdoors (includes sporting event)	36	15.7		9	17.6		3	8.8		2	7.1		2.75
Party or bar (includes frat house)	51	22.2		8	15.7		5	14.7		9	32.1		3.91
Restaurant	102	44.3		13	25.5		3	8.8		5	17.9		24.34 ^{***}
Movie	72	31.3		14	27.5		3	8.8		4	14.3		10.13 [*]
Other	34	14.8		9	17.6		5	14.7		6	21.4		1.01
Alcohol consumption during the interaction													
Neither man nor woman consumed alcohol	183	79.6		39	76.5		27	79.4		8	28.6		35.09 ^{***}
Both man and woman consumed alcohol	25	10.9		10	19.6		4	11.8		16	57.1		40.64 ^{***}
Only man consumed alcohol	8	3.5		0	0.0		1	2.9		1	3.6		1.83
Only woman consumed alcohol	14	6.1		2	3.9		2	5.9		3	10.7		1.46

NOTE: Means with different subscripts differ significantly ($p < .05$) based on follow-up Tukey tests. The question regarding location of interaction allowed for multiple mentions; therefore the columns within each group total more than 100%. Some other percentages total to slightly more or less than 100 due to rounding error. The χ^2 analyses compare the four perpetrator groups on each level of the categorical variables.

.100' > *d*

.10' > *d*
**
.50' > *d*
*

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Means, Standard Deviations, and Results of MANCOVA, ANCOVAs, and Discriminant Function Analysis (DFA) That Distinguish Nonperpetrators and Perpetrators

TABLE 2

Potential Predictor	Non-perpetrator (<i>n</i> = 230)		Perpetrator (<i>n</i> = 113)		<i>F</i>	Correlation With Function
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Attitudes about gender roles and alcohol						
Hostile gender role beliefs	3.15	.94	3.31	.90	3.21*	.125 [†]
Acceptance of verbal pressure	2.44	1.50	3.89	1.70	59.79***	.493 [†]
Alcohol expectancies: Male aggression	3.40	.86	3.57	.77	3.06	—
Alcohol expectancies: Male sex drive	3.76	.91	4.15	.66	15.74***	.260 [†]
Past consensual sexual experience						
Age at first consensual sex	17.70	2.45	16.43	1.78	23.65***	-.235
Number of consensual sexual partners	4.85	7.43	8.66	9.50	16.07***	.240 [†]
Typical drinking prior to consensual sex	4.31	5.60	6.13	6.63	6.97**	.164
Past misperception experiences						
Number of times man misperceived a woman	1.23	2.24	2.06	2.99	8.01**	.150
Typical drinking during misperception	1.61	1.56	2.10	1.98	6.32*	.200
Peer approval of forced sex	1.38	.54	1.70	.76	19.41***	.203
Characteristics of situation						
How well man knew woman	3.50	2.01	5.12	1.73	52.58***	.432 [†]
How isolated the setting	2.74	1.35	3.72	1.28	40.55***	.396 [†]
Drinking during interaction	1.20	2.72	2.20	3.74	7.76**	.183 [†]
Length of misperception during interaction	.30	1.03	1.37	1.70	50.62***	.451 [†]
Prior consensual sexual activity	1.49	2.65	3.90	3.68	46.83***	.424 [†]

NOTE: MANCOVA, with social desirability as the covariate, found a significant main effect for perpetrator group status using these predictor variables, Pillias $F(15, 326) = 16.96, p < .001$.

[†] Significantly contributed to the discriminant function.

* $p < .05$.

** $p < .01$.

.100) > d

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

TABLE 3

Means, Standard Deviations, and Results of MANCOVA, ANCOVAs, and Discriminant Function Analysis (DFA) That Distinguish Three Assault Groups

Potential Predictor	Forced Contact (<i>n</i> = 51)		Sexual Coercion (<i>n</i> = 34)		Attempted/Completed Rape (<i>n</i> = 28)		Correlations With Discriminant Functions	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	1	2
Tactics perpetrator used								
Verbal pressure	2.24	1.16 ^a	3.15	1.37 ^b	2.31	1.36 ^a	-.110	.410 [†]
Physical force	1.05	.20 ^a	1.04	.17 ^a	1.58	1.34 ^b	.365 [†]	-.010
Gave woman alcohol/drugs	1.10	.34 ^a	1.12	.30 ^a	2.13	1.31 ^b	.672 [†]	.007
Attributions regarding assault								
Man's behavior	2.29	.89 ^a	3.18	.88 ^b	3.35	.71 ^b	.394	.606 [†]
Woman's behavior	2.58	.96	2.91	.87	2.91	.95	—	—
Man's alcohol consumption	1.39	.71 ^a	1.30	.70 ^a	2.40	1.28 ^b	.445	.162
Woman's alcohol consumption	1.39	.69 ^a	1.24	.68 ^a	2.52	1.29 ^b	.467	.153
Peer pressure	1.46	.71	1.36	.56	1.69	1.09	—	—
Outcomes								
Man's perceived seriousness	3.12	1.74 ^a	4.35	2.10 ^b	3.46	1.95	-.036	.374 [†]
Woman's perceived seriousness	3.32	1.73	4.26	2.11	3.92	1.74	—	—
Negative affect	1.77	.70	1.73	.90	1.92	.91	—	—
Relationships disruption	1.55	.66 ^a	1.21	.31 ^b	1.54	.52 ^a	.104	-.369 [†]

NOTE: Means with different subscripts differ significantly ($p < .05$) based on follow-up Tukey tests. MANCOVA, with social desirability as the covariate, found a significant main effect for perpetrator group status using these predictor variables, Pillai's $F(24, 198) = 6.96, p < .001$.

[†] Significantly contributed to the discriminant function.

* $p < .05$.

** $p < .01$.

*** $p < .001$.