Published in final edited form as:

J Interpers Violence. 2011 September ; 26(14): 2866–2889. doi:10.1177/0886260510390955.

Sexual Assault Perpetrators' Tactics: Associations With Their Personal Characteristics and Aspects of the Incident

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Abstract

Past theory and empirical research have consistently associated a number of risk factors with sexual assault perpetration. This study extends past research by considering if the tactics which perpetrators use to obtain sex are associated with these risk factors or with characteristics of the sexual assault. Audio computer-assisted self-interviews were completed with a community sample of young, single men. Few participants reported using physical force as a tactic to obtain sex, thus this article focuses on 457 participants who used verbal coercion ($n = 152$) or the victim's impairment ($n = 39$) to obtain sex or who were nonperpetrators ($n = 266$). Discriminant function analysis correctly classified 70% of participants. As hypothesized, analysis of covariance indicated that both groups of perpetrators scored higher than nonperpetrators on measures of negative attitudes toward women, positive attitudes about casual sex, personality traits associated with nonclinical levels of psychopathy, antisocial behavior, and alcohol problems. As compared to non-perpetrators describing their worst date, perpetrators knew the woman longer, used more isolating and controlling behaviors, misperceived her sexual intentions for a longer period of time, and engaged in more consensual sexual activities with the woman. Perpetrators who used impairment tactics did not usually consume more alcohol than other participants; however, they consumed much more alcohol during the incident. Although verbal coercion and taking advantage of an impaired victim are sometimes viewed as less serious tactics than the use of force, these findings demonstrate that perpetrators who use these strategies have personality, attitude, and experience profiles that distinguish them from nonperpetrators.

Keywords

sexual assault; perpetration; tactics; risk factors; alcohol; community sample

Definitions of rape, sexual assault, criminal sexual conduct, and other forms of sexual violence vary across legal jurisdictions and research studies; however, most include sex obtained by force or threat of force and when victims are mentally incapacitated and unable to consent (Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007). Short-term

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Declaration of Conflicting Interests

The author(s) declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

mental incapacitation is usually due to alcohol intoxication, with more than 95% of impaired victims reporting that they consumed alcohol (Kilpatrick et al., 2007). Verbally coercive strategies are not consistently included in sexual assault statutes. They are, however, routinely included in surveys of sexual assault because the use of any strategy to make someone have sex is traumatic and deprives these individuals of the basic human right to control their own body (United Nations, 2006). Different terms are used interchangeably in the literature (Abbey, 2002; Lyndon, White, & Kadlec, 2007). This article adopts the term “sexual assault” because it has traditionally been defined broadly to include the full range of strategies used to obtain some type of sex against a person’s wishes.

Self-reported rates of sexual assault perpetration are alarmingly high in studies of male college students (DeGue & DiLillo, 2004; Kosson, Kelly, & White, 1997; Wheeler, George, & Dahl, 2002; Zawacki, Abbey, Buck, McAuslan, & Clinton-Sherrod, 2003). In most of these studies, the use of physical force is rare. Instead verbal coercion is the most commonly used tactic, followed by the victim’s intoxication. For example, in a survey of 378 male college students, Kosson et al. (1997) found that 40.3% had committed some type of sexual aggression since age 14, with 27.1% using verbal coercion, 21.1% taking advantage of an intoxicated woman, 3.7% using force, and 2.4% using threats of force (some used multiple strategies). DeGue and DiLillo (2004) reported that 26.6% of their sample of 304 male college undergraduates used verbal coercion, 5.9% deliberately got a woman too drunk to resist, and 1.6% used physical force to obtain kissing, fondling, or oral sex (none reported using force to obtain vaginal or anal sex).

Although only a few authors have examined sexual assault perpetration in community samples, these studies also report high rates of self-reported perpetration primarily through the use of verbal coercion and the victim’s incapacitation (Abbey, Parkhill, Clinton-Sherrod, & Zawacki, 2007; Davis, Schraufnagel, George, & Norris, 2008; Knight & Sims-Knight, 2003; Senn, Desmarais, Verberg, & Wood, 2000). For example, in a study of 115 young heterosexual men, Davis et al. (2008) found that 21.7% had sex with a woman who was too incapacitated to give consent, 16.5% used verbally coercive strategies to obtain sexual intercourse, and 7.8% used force or threats of force. Senn and colleagues (2000) surveyed 195 men and found that 8.7% used verbal coercion to obtain sexual intercourse, 3.1% used alcohol or drugs, and 1% used physical force.

Theoretical Rationale

This article addresses two interrelated questions. First, in what ways do sexual assault perpetrators, who employ specific tactics differ from other perpetrators and from nonperpetrators in their personality traits, attitudes, and past experiences? Second, do the characteristics of sexual assaults committed by perpetrators who use different types of tactics vary in systematic ways? Several theoretical perspectives were drawn upon to develop this study’s hypotheses and measures including the confluence model, subclinical psychopathy models, theories about alcohol’s role in sexual assault, and theories about other situational factors (Abbey, 2002; Kanin, 1985; Malamuth, Sockloskie, Koss, & Tanaka, 1991; Muehlenhard & Linton, 1987; Ouimette, 1997; Testa, 2002).

The confluence model focuses on two proximal predictors of sexual assault perpetration: hostile masculinity and an impersonal orientation to sex (Malamuth et al., 1991; Malamuth, Linz, Heavey, Barnes, & Acker, 1995). Hostile masculinity is a multidimensional construct that includes angry and hostile feelings toward women, cognitive distortions about women's motives that support rape myths, and the desire to dominate and control women. The impersonal sex construct concentrates on the desire to have many casual sexual relationships rather than establishing emotional intimacy with a partner. Empirical support for the confluence model comes from a number of studies conducted by several different research teams (Knight & Sims-Knight, 2003; Malamuth et al., 1991; 1995, Parkhill & Abbey, 2008; Wheeler, George, & Dahl, 2002).

Another line of etiological research focuses on personality traits and behaviors associated with psychopathy, which include impulsivity, irresponsibility, manipulation of others to meet egocentric goals, lack of remorse or empathy, and disregard for societal norms and laws (Hare, 1999; LeBreton, Binning, & Adorno, 2006). Less than 1% of the population meets the diagnostic criteria for psychopathy (Hare, 1999). However, subclinical levels are common in the general population (Gustafson & Ritzer, 1995) and have been linked to sexual assault perpetration in samples of male college students (DeGue & DiLillo, 2004; Kosson et al., 1997; Ouimette, 1997). For example, Kosson et al. (1997) found that sexual assault perpetration was positively associated with narcissism and negatively associated with respect for societal norms.

The common co-occurrence of alcohol consumption and sexual assault has generated a great deal of research designed to explain this relationship (for reviews, see Abbey 2002; Testa, 2002). Abbey (2002) has proposed a number of pathways that focus on cognitive impairments induced by alcohol consumption that are exacerbated by societal beliefs that link alcohol, sex, and aggression. Both general and situational components of alcohol consumption have been associated with sexual assault perpetration. Heavy drinkers are at increased risk of committing sexual assault and report committing more violent forms of sexual assault (Abbey, Clinton-Sherrod, McAuslan, Zawacki, & Buck, 2003; Ullman, Karabatsos, & Koss, 1999). The cognitive impairments induced by intoxication reduce the capacity to process and respond to multiple stimuli, as well as the ability to inhibit a desired response (Curtin & Fairchild, 2003). This focus on immediate, salient cues has been associated with an increased likelihood of an aggressive response in controlled laboratory settings (Giancola, 2000).

There is surprisingly little empirical research or theory that considers situational factors other than alcohol which might increase the likelihood of sexual assault. Men's misperception of women's degree of sexual interest has been linked to sexual assault perpetration in studies that compared characteristics of sexual assaults and worst or recent dates (Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001; Muehlenhard & Linton, 1987). Researchers have also found that many perpetrators report feeling entitled to sex with a woman with whom they have had consensual sex previously or who has been willing to engage in some consensual sexual activities during the interaction (Abbey et al., 2001; Kanin, 1985).

The Relationship Between Tactics and Perpetrators' Characteristics

The possibility that perpetrators' choice of tactics might reflect individual differences in personality, attitudes, or experience has only been evaluated in a few studies (Lyndon et al., 2007; Tyler, Hoyt, & Whitbeck, 1998). Using survey data from a sample of 189 male college students, Tyler et al. (1998) found that the use of physical force as a tactic was positively associated with fraternity membership and acceptance of rape myths. Use of alcohol or drugs was positively associated with usual alcohol consumption and favorable attitudes about casual sex. Use of verbal coercion was positively associated with fraternity membership, favorable attitudes about casual sex, and acceptance of rape myths. Lyndon et al. (2007) compared nonperpetrators, perpetrators who used verbal coercion, alcohol, or drugs as a tactic (combined into a single group), and perpetrators who used physical force as a tactic in a college sample of 528 sexually active men. Both groups of perpetrators had more extreme scores than nonperpetrators on measures of childhood maltreatment, delinquency, acceptance of male violence, and sexual dominance. Furthermore, perpetrators who used force had higher scores than other perpetrators on measures of childhood sexual abuse and acceptance of violence.

A few studies have examined the relationship between perpetrators' tactics and sexual assault characteristics using victims' reports (Abbey, BeShears, Clinton-Sherrod, & McAuslan, 2004; Testa, Livingston, VanZile-Tamsen, & Frone, 2003). In a community sample, Testa et al. (2003) compared the characteristics of 113 female victims' most recent rape based on whether the perpetrator used force or the victim's incapacitation as his primary tactic. Not surprisingly, incapacitated rape victims reported consuming more alcohol and being more intoxicated than did victims of forcible rapes. Although more perpetrators of incapacitated rapes consumed alcohol, they did not consume more drinks or appear to be more intoxicated than perpetrators of forcible rape. Also with a community sample, Abbey et al. (2004) compared 139 female victims' reports of the characteristics of sexual assaults that involved perpetrators' use of verbal, physical, or impairment tactics. In partial contrast to Testa et al.'s (2003) findings, both the victim and the perpetrator consumed more drinks in sexual assaults in which the victim's impairment was the primary tactic as compared to those in which the perpetrator used physical force or verbal coercion.

Current Study's Hypotheses

This study had several interrelated hypotheses. The first hypothesis was that regardless of the tactic used, perpetrators would score higher than nonperpetrators on the personality, attitudinal, and experiential risk factors for sexual assault perpetration delineated in the literature review including hostility toward women, stereotypic attitudes about women that encourage forced sex, positive attitudes about casual sex, having many sex partners, personality traits related to psychopathy, antisocial behaviors, alcohol consumption, and alcohol problems (Abbey et al., 2007; Knight & Sims-Knight, 2003; Kosson et al., 1997; Malamuth et al. 1991; Zawacki et al., 2003).

Although the use of any tactic to obtain sex from an unwilling partner is unconscionable, perpetrators who use physical force or who have sex with someone too impaired to consent

are engaging in more extreme behavior than are perpetrators who use verbal coercion (Falk, 1998; White & Frabutt, 2006). Traditional gender role norms encourage men to believe that women are reluctant to admit their interest in sex and need to be persuaded (Murnen, Wright, & Kaluzny, 2002). Thus the line between persuasion and coercion may be difficult for some perpetrators to recognize, although this does not excuse their behavior. In contrast, societal norms do not condone the use of physical force or having sex with someone incoherent or unconscious. Consequently, the use of these strategies suggests an extreme self focus, lack of concern for others, and willingness to engage in antisocial behaviors. The second hypothesis was that perpetrators who used physical force or the victim's impairment would score more extremely than perpetrators who used verbal coercion on indicators of negativity toward women, personality traits related to psychopathy, antisocial behavior, alcohol consumption, and alcohol problems (Lyndon et al., 2007). Although we wanted to evaluate hypotheses about perpetrators who used physical force, we also considered it likely that there would be too few to include as a separate group in analyses, given the low rates reported in most surveys of perpetrators (DeGue & DiLillo, 2004; Kosson et al., 1997; Senn et al., 2000).

Two parallel sets of hypotheses were formed regarding differences associated with characteristics of the incident. In order to compare nonperpetrators with perpetrators, nonperpetrators were asked to describe their worst date with a woman; whereas perpetrators described a sexually assaultive incident (Abbey et al., 2001). Hypothesis 3 was that perpetrators would use more isolating and controlling behaviors, engage in more consensual sexual activities prior to the assault, and misperceive the woman's degree of sexual interest for a longer period of time as compared with nonperpetrators (Abbey et al., 2001). The fourth and final hypothesis was that as compared to other perpetrators, those who used the victim's impairment as their primary tactic would report that they knew the victim less well, that the victim drank more alcohol, and that she was more intoxicated (Abbey et al., 2004; Testa et al., 2003). Different strands of past research suggest that perpetrators who used the victim's impairment as their primary tactic might drink more or less during the assault than other perpetrators (Abbey et al., 2004; Kanin, 1985; Testa et al., 2003).

Typically, perpetrators' and victims' alcohol consumption during the assault are strongly, positively correlated (Abbey et al., 2003; Testa et al., 2003; Tyler et al., 1998; Ullman et al., 1999). However, the narratives of perpetrators who used the victim's impairment as their primary tactic often describe elaborate plans to get a potential victim intoxicated or to locate an intoxicated woman who appears to be an easy target (Kanin, 1985). This degree of planning suggests that these perpetrators may limit their alcohol consumption so that they can maintain control during the interaction. Thus, no specific hypothesis was made regarding differences in perpetrators' alcohol consumption associated with the tactics they used.

Method

Participants

Interviews were completed with 474 single men in the Detroit Metropolitan area. Participants were required to be between the ages of 18 and 35 ($M = 23.67$; $SD = 4.95$).

Seventy-three percent of participants self-identified as White, 16% as Black, 5% reported mixed ethnicity, 2% were of Middle Eastern descent, 1% Hispanic, 1% Asian, less than 1% Native American or Alaskan Native, and 1% reported another racial/ethnic background. Ninety-four percent of participants had graduated from high school. As described in the Results section, the analyses in this article were restricted to 457 participants who met data analysis criteria.

Procedures

Potential participants were recruited by telephone interviewers for a study of men's dating and sexual experiences. All of the study's procedures were approved by the university's institutional review board. Standard sampling procedures developed to efficiently identify stratified random samples of population subgroups (Groves et al., 2009) were followed through the use of a commercial telephone list that had a high probability of including eligible participants. In order to participate, men had to live in one of the three counties comprising the metropolitan region, be 18 to 35, single, and to have dated a woman in the past 2 years.

Among eligible participants, 89% agreed to be interviewed. Professionally trained male and female interviewers conducted in-person interviews at a mutually agreeable location selected for quiet and privacy. Preliminary data analyses demonstrated that there were no differences in participants' responses to any of the measures associated with interviewers' gender.

After completing the consent form, participants completed the majority of the audio computer-assisted self-interview on their own. A few initial and final questions were asked orally by the interviewer to establish rapport. On average, interviews were completed in 1 hour. Participants were paid US \$50 to compensate them for their time.

Measures

Hostility toward women—Buss and Perry's (1992) eight-item general hostility measure was adapted by the authors so that it referred to "women" rather than "people." A sample item is, "When women are especially nice, I wonder what they want." Responses were made on 5-point scales with options ranging from 1 (*very unlike me*) to 5 (*very like me*). Cronbach's coefficient alpha was .84.

Stereotypic attitudes about women that justify forced sex—A subset of Payne, Lonsway, and Fitzgerald's (1999) and Bumby's (1996) rape myth acceptance items were combined to form a nine-item measure of Stereotypic Attitudes About Women That Justify Forced Sex. This measure was pilot tested with undergraduates; the items loaded on a single factor and had good internal consistency reliability. A sample item is, "If a woman goes to a man's home on a date, she is implying that she wants to have sex." Responses were made on 7-point scales with options ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Cronbach's coefficient alpha was .85.

Positive attitudes about casual sex—An abbreviated version of Hendrick, Hendrick, and Reich's (2006) Sexual Permissiveness Scale was used to measure Positive Attitudes About Casual Sex. This scale has been frequently used in past research and has strong internal consistency reliability and construct validity (Braun-Courville & Rojas, 2009; Hendrick et al., 2006). A sample item is, "One night stands are sometimes very enjoyable." Responses were made on 5-point scales with options ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach's coefficient alpha for our seven-item version was .88.

Lifetime number of consensual sex partners—Number of consensual sex partners was assessed with a single open-ended question. Participants were asked to report the number of women with whom they had consensual sexual intercourse during their lifetime.

Subclinical psychopathy-related personality traits and antisocial behavior—Williams, Paulhus, and Hare's (2007) Self-Report Psychopathy III Scale was used to assess nonclinical psychopathy-related personality traits and antisocial behavior. This 40-item measure was developed for high functioning populations and has strong internal consistency reliability and construct validity (Mahmut, Homewood, & Stevenson, 2008; Williams et al., 2007). Low Emotionality, which combines the callous affect and interpersonal manipulation subscales, assesses the personality dimensions typically associated with psychopathy. Social Deviance, which combines the impulsive lifestyle and antisocial tendencies subscales, assesses the antisocial behaviors typically associated with psychopathy. One social deviance item that asked about forced sex was deleted to avoid making participants feel that we were repeating questions. Responses were made on 5-point scales with options ranging from 1 (*disagree strongly*) to 5 (*agree strongly*). Cronbach's coefficient alpha was .78 for personality traits associated with nonclinical psychopathy (Low Emotionality) and .84 for antisocial behavior (Social Deviance).

General alcohol consumption—A recommended question from the National Institute on Alcohol Abuse and Alcoholism (2003) was used to assess the usual number of drinks consumed per day in the past 12 months. Responses ranged from 0 (*zero*) to 10 (*25 or more drinks*).

Drinking problems—Midanik and Clark's (1995) 13-item measure of dependence symptoms was used to assess participants' drinking problems. This measure has been used in large representative national surveys to assess alcohol dependence issues without providing a clinical diagnosis (Midanik & Clark, 1995). A sample item is "Sometimes I have needed a drink so badly that I couldn't think of anything else." Responses were 1 (*yes*) or 0 (*no*) and affirmative responses were summed. Cronbach's coefficient alpha was .78.

Sexual assault perpetration—A modified 16-item version of the Sexual Experiences Survey (SES; Koss et al., 2007) was used that the first author developed for an earlier study (Abbey et al., 2007). This measure uses behaviorally specific language to assess a range of sexual activities that happened since age 14 against a woman's wishes. The SES has demonstrated good test-retest and criterion validity in past research (Koss & Gidycz, 1985). Verbal tactics were operationalized with two phrasings that asked about sex with a woman when she did not want to by (a) overwhelming her with continual arguments and pressure

and (b) showing displeasure by sulking, making her feel guilty, swearing, getting angry, or threatening to end the relationship. Impairment tactics were operationalized with two phrasings that asked about sex with a woman when she did not want to (a) by giving her alcohol or drugs and (b) when she was passed out or too intoxicated to give consent or stop what was happening. Physical force was operationalized with one phrasing that asked about sex with a woman when she did not want to by threatening or using some degree of physical force such as twisting her arm, holding her down, grabbing, choking, pinching, keeping her from moving, or physically hurting her. The tactic phrasings were repeated for different types of sexual activities to create separate questions (e.g., threatening or using some degree of physical force to obtain sexual contact, sexual intercourse, and oral sex or sex acts). Responses were made on 6-point scales with options ranging from 0 (*never*) to 5 (*five or more times*). Cronbach's coefficient alpha was .84.

Characteristics of one incident—Based on Abbey et al. (2001), each participant was asked to describe one interaction with a woman in detail. If participants endorsed any of the sexual assault items, they were asked to describe the most severe incident based on a computer algorithm which treated penetrative sex through force as most severe and sexual touching through verbal coercion as least severe. Men who did not commit any type of sexual assault were asked to describe their worst date since age 14. They were given a checklist of possible reasons and asked which made their date worst; multiple mentions were allowed. The most common reasons for selecting a particular date as the worst were a lack of interest or chemistry between them (68%), the woman was boring, (42%), and the woman was rude (37%).

Participants indicated *how long they had known the woman* with a single item with six response options ranging from just 1 (*met that day*) to 6 (*more than a year*). Based on past research (Norris, Nurius, & Gaylord, 1998), participants were asked five questions to assess their use of *Isolating and Controlling Behaviors* during the interaction. A sample item is, “You tried to get her to agree to go someplace with you where you knew you could be alone.” Responses were made on 5-point scales with options ranging from 1 (*not at all true*) to 5 (*very true*). Cronbach's coefficient alpha was .74. The length of time that participants' *misperceived the woman's interest in having sex* during the interaction was assessed with a single item (Abbey et al., 2001). Responses were coded on a 6-point scale with options ranging from 0 (*didn't happen*) to 5 (*more than 3 hours*). The *number of consensual sexual activities* that occurred during the interaction was assessed by summing participants' responses to eight questions (e.g., kissing, oral sex, vaginal sex).

Participants reported the *number of alcoholic drinks* they consumed before and during the interaction with a drink defined as 12 ounces of beer or cooler, 5 ounces of wine, or one shot of liquor. Participants were also asked how many drinks the woman consumed to the best of their knowledge. The participant's and the woman's *highest level of intoxication* were measured with 5-point scales with response options ranging from 1 (*not at all intoxicated*) to 5 (*very intoxicated*). Participants were also asked if the woman used any *illicit drugs* and if they put any *drugs in the woman's drink* to make her high.

Covariates—Participants' current age and tendency to respond in a socially desirable manner were included as covariates. Social desirability was assessed with Stöber's (2001) 16-item measure which has demonstrated good convergent and discriminant validity in past research with adults (Blake, Valdiserri, Neuendorf, & Nemeth, 2006; Stöber, 2001). A sample item is, "I always admit my mistakes openly and face the potential negative consequences." Response options were 1 (*true*) and 0 (*false*). Affirmative responses were summed. Cronbach's coefficient alpha was .63.

Results

Preliminary Analyses

Four interviews were deleted because of large amounts of missing data and/or strings of identical responses. All analyses were conducted using IBM SPSS Statistics 18. Mean substitution was used for the limited amount of missing data (less than 0.5%) in the remaining 470 interviews. The distributions of all measures were examined to insure they were reasonably normal. Participants' number of consensual sexual partners was highly skewed; therefore it was winsorized (Tabachnick & Fidell, 2007).

Descriptive Information About Rates of Sexual Assault Perpetration

Forty-three percent of participants reported that they had committed some type of sexual assault since age 14. Only five perpetrators reported by using physical force. These individuals were excluded from the analyses described in this article and potential hypotheses about physical force were not evaluated.

As found in past research, many of the perpetrators committed multiple sexual assaults and used more than one tactic in a single incident (Abbey et al., 2007; Zawacki et al., 2003). Among the perpetrators who used the victim's impairment as a tactic, 89% also used verbal coercion. Thus three mutually exclusive groups were formed for these analyses: nonperpetrators, perpetrators who only used verbally coercive tactics, and perpetrators who used impairment tactics. None of these perpetrators reported that they gave the woman a drug to make her high without her knowledge. Twenty-one percent of the victims consumed illicit drugs in addition to consuming alcohol; however none of the impaired victims only used illicit drugs. There were eight perpetrators (1.7%) who used impairment tactics in an attempted rape situation, but described an incident that involved verbally coerced penetrative sex. When perpetrators endorsed more than one sexual assault item, the programming algorithm selected the most severe one for detailed follow-up. Any incident with completed penetrative sex was treated as more severe than attempted penetrative sex. Thus, these perpetrators were also excluded from the analyses described in this article because the incident they described in detail did not match the tactics group to which they were assigned. To ensure that there was not something unique about this subgroup, analyses with the individual difference measures were repeated including them in the impairment tactics group. The pattern of results described below was replicated.

Bivariate Relationships

The correlations between all the measures are provided in Table 1. As expected, correlations between individual difference variables that represented similar constructs were moderately high (e.g., hostility toward women and stereotypic attitudes about women; positive attitudes about casual sex and lifetime number of consensual sexual partners; personality traits associated with nonclinical psychopathy and antisocial behavior; usual number of drinks and drinking problems). Also as expected, victim's and perpetrator's alcohol consumption and intoxication during the incident were strongly, positively correlated. Tabachnick and Fidell (2007) state that multicollinearity is not a problem unless correlations reach .90.

The correlations between the individual difference variables and the characteristics of the incident were examined. Hostility toward women and stereotypic attitudes about women correlated most strongly with the use of isolating and controlling behaviors during the interaction; these attitudes about women were also positively correlated with the length of time participants misperceived the woman's degree of sexual interest during the interaction. Positive attitudes about casual sex, number of consensual sex partners, and personality traits associated with nonclinical psychopathy were most strongly correlated with the number of consensual sexual activities during the interaction. Socially deviant behaviors, usual alcohol consumption, and alcohol problems were most strongly correlated with participants' alcohol consumption during the interaction.

Several variables were significantly correlated with the covariates: age and social desirability. Not surprisingly, age was positively correlated with number of consensual sex partners. Social desirability was moderately negatively correlated with personality traits associated with nonclinical psychopathy and antisocial behavior. Other authors have found that psychopaths engage in less impression management than other individuals because they feel no need to justify their actions (Zagon & Jackson, 1994).

Discrimination Between Tactics Groups Using Individual Difference and Interaction Measures

Simultaneous entry discriminant function analysis (DFA) was conducted to compare nonperpetrators, perpetrators who only used verbal coercion as a tactic, and perpetrators who used the victim's impairment as a tactic. Age and social desirability were included as covariates. Two significant functions emerged. The first function distinguished perpetrators from nonperpetrators, Wilks's $\Lambda = .54$, $\chi^2(36, n = 457) = 275.53$, $p < .001$. The second function distinguished the perpetrators who used the victim's impairment as a tactic from the other two groups, Wilks's $\Lambda = .80$, $\chi^2(17, n = 457) = 98.24$, $p < .001$. The last two columns in Table 2 include the correlations between the predictor variables and the two functions.

Classification rates were examined to determine how well this set of predictors distinguished the three groups, with prior probabilities for group membership taken into account (Klecka, 1980). Seventy percent of participants were correctly classified, which is significantly higher than the chance rate of 45.7%, $z = 10.35$, $p < .05$. Classification of all three groups improved substantially. This set of variables correctly predicted 79.3% of nonperpetrators as compared to a chance rate of 33.9%; 57.2% of perpetrators who used verbal coercion as

compared to a chance rate of 11.1%; and 53.8% of perpetrators who used the victim's incapacitation as compared to a chance rate of 0.7% (Tabachnick & Fidell, 2007).

Differences between group means are commonly used to aid in interpretation of DFA results (Klecka, 1980). Given the number of predictor variables, first a multivariate analysis of covariance (MANCOVA) was conducted with participants' current age and social desirability as covariates. The MANCOVA was significant, Pillai's trace $F(32, 876) = 9.17$, $p < .001$; thus analyses of covariance were computed, and for each significant effect the Least Significant Difference post hoc test was used to determine which of the three groups significantly differed from each other. The same pattern of results was found if the covariates were not included in these analyses.

Table 2 displays the adjusted means for each group as well as the effect size. The partial η^2 was used because of the large number of significant effects (Tabachnick & Fidell, 2007). With this indicator, a small effect size is about .01, a medium effect size about .06, and a large effect size about .14.

The first 2 hypotheses focused on the individual difference measures. In support of the first hypothesis, perpetrators who used verbal coercion and perpetrators who used the woman's impairment had more extreme scores than did nonperpetrators on seven of the eight individual difference measures: hostility toward women, stereotypic attitudes about women that justify forced sex, positive attitudes about casual sex, lifetime number of consensual women sex partners, personality traits associated with nonclinical psychopathy, antisocial behavior, and drinking problems. In support of the second hypothesis, perpetrators who used the woman's impairment had more extreme scores than did perpetrators who used verbal coercion on five of these measures: hostility toward women, stereotypic attitudes about women that justify forced sex, personality traits associated with nonclinical psychopathy, antisocial behavior, and drinking problems. The groups did not differ in the usual number of alcoholic drinks they consumed (see Table 2 for means).

The remaining hypotheses focused on the characteristics of the incident. As predicted by Hypothesis 3, perpetrators used more isolating and controlling behaviors, misperceived the woman's sexual intentions for a longer period of time, and engaged in more consensual sexual activities during a sexually assaultive interaction than did nonperpetrators during their worst date. In addition, perpetrators knew the woman they sexually assaulted longer than nonperpetrators knew their worst date (see Table 2 for means).

Perpetrators who used the woman's impairment differed from perpetrators who used verbal coercion and nonperpetrators on the four measures associated with alcohol consumption during the interaction. As predicted by Hypothesis 4, perpetrators who used the woman's impairment to obtain sex reported that the woman consumed the most alcohol and was most intoxicated. Perpetrators who used the woman's impairment also reported that they consumed the most alcohol and were most intoxicated. In addition, perpetrators who used the woman's impairment misperceived the woman's sexual intentions longer than did perpetrators who used verbal coercion (see Table 2).

Discussion

In this representative sample of young, single, men from one large metropolitan area, 43% reported that they made a woman have sex against her wishes. In combination, the individual difference and incident variables substantially increased prediction of participants' perpetration group above the chance rate. Although the highest classification rate was found for nonperpetrators, more than half of the perpetrators who used verbal coercion and the victim's incapacitation were correctly classified. As compared to nonperpetrators, men who used verbal coercion or the victim's incapacitation to obtain sex were more hostile toward women, had more stereotypic attitudes toward women, had more positive attitudes about casual sex, had more sexual partners, scored higher on a measure of subclinical psychopathy-related personality traits and antisocial behavior, and reported more drinking problems. In addition, as compared to verbal coercers, men who had sex with a woman too impaired to consent were more hostile toward women, had more negative attitudes toward women, scored higher on measures of subclinical psychopathy-related personality traits and antisocial behavior, and had more drinking problems. The measure of sexual assault perpetration used in this study was not designed to determine if these acts would meet legal definitions of rape or other forms of criminal sexual misconduct. However, it is noteworthy that men who had sex with a woman too impaired to consent had more extreme scores on these risk factors because this tactic constitutes rape in most jurisdictions (Abbey et al., 2007; Kilpatrick et al., 2007).

Men who commit sexual assault make choices about whom they target and under what circumstances. As compared to nonperpetrators describing their worst date, men who used verbal coercion or the victim's incapacitation to obtain sex had known the woman longer (on average less than a year but more than a few months), used more isolating and controlling behaviors during the interaction to keep the woman's attention on them and to get her alone with them, engaged in more consensual sexual activities with the woman during the interaction, and misperceived the woman's degree of sexual interest for a longer period of time. Many perpetrators use the victim's willingness to engage in some consensual sexual activities as justification for continuing to pressure her to have sex, feeling that consent to any sexual activity entitles them to whatever type of sex they want (Payne et al., 1999). Although these cognitive distortions may help perpetrators justify their behavior, perpetrators in this study acknowledged that they knew the woman did not want to have sex, yet they made her anyway. This sense of entitlement and single-minded focus on fulfilling their own needs, even if it hurts someone else, is a hallmark of psychopathic tendencies.

Although perpetrators reported more adverse consequences of drinking, perpetrators who used the victim's impairment did not drink more in general. They did drink more during the interaction and reported higher levels of intoxication than did verbal coercers or nonperpetrators. Both perpetrators and victims in impaired sexual assaults drank approximately seven alcoholic drinks and were moderately intoxicated according to participants. There were no reports of a drug being given to a woman without her knowledge. Date rape drugs such as Rohypnol are frightening and have received a great deal of media attention, but alcohol is a much greater concern.

The bivariate correlations demonstrated that individual differences in personality, attitudes, and experience were related in a logical manner to characteristics of the incident. For example, the greater men's hostility toward women, the more they used isolating and controlling behaviors during the interaction. The greater the amount of past antisocial behavior and general alcohol consumption, the larger amount of alcohol consumed during the interaction. These analyses included both nonperpetrators and perpetrators; thus they explain patterns found with sexual assaults and worst dates. These findings suggest that knowledge of men's general beliefs and behaviors can help predict the types of social situations to which they will be attracted and the strategies they will use when interacting with a woman in these settings. Theories of sexual assault perpetration have focused primarily on who is likely to commit sexual assault, not when and with what type of victim. An important direction for future theory development is the integration of distal and situational factors into a coherent framework that can guide hypotheses about how individual differences in personality, attitudes, and past experience correspond to the selection of specific sexual assault targets and circumstances.

Strengths and Limitations

Most sexual assault etiology research has been conducted with incarcerated sex offenders or college students. Thus the strength of this study is its use of a relatively large community sample. The sample was restricted to young, single, men who date women because this corresponds to the demographic profile of most sexual assault perpetrators and allows more direct comparisons to past research. However, this also potentially limits the generalizability of the findings, as does the focus on a single region of the country. Although state-of-the-art telephone sampling procedures were used (Groves et al., 2009), as more and more people monitor their calls and rely solely on cell phones, survey researchers face challenges in their ability to obtain representative samples.

Another strength of this study was the measure of perpetration which included a broad range of types of sexual activities and tactics used to achieve sex against the woman's wishes. However, potential hypotheses about perpetrators who use physical force or threats of physical force could not be examined because very few participants reported using this tactic. Other studies of college and community perpetrators have also found low rates of physical force (Davis et al., 2008; DeGue & DiLillo, 2004; Senn et al., 2000), thus this finding is not unique to this study. Due to the cross-sectional survey design, hypotheses about causality cannot be evaluated.

By asking nonperpetrators questions about their worst date, characteristics of sexual assaults could be compared to incidents described by nonperpetrators. Advantages of using the worst date as a comparison are that it was a negative interaction with a woman and that it was easy for participants to remember the details. However, other types of criteria are important to consider in future research such as dates that involve conflict with a woman about sexual or nonsexual issues.

Implications

Despite years of education and advocacy, rape myths are still commonly believed and laypeople often have doubts about incidents that do not include the perpetrator's use of physical force (Payne et al., 1999). Verbal coercion often includes veiled threats, yet outsiders may not understand why the victim did not fight back (DeGue & DiLillo, 2004; Falk, 1998). Although most state and federal statutes treat the use of physical force and the victim's incapacitation as equally serious offenses, many defense attorneys cast aspersions on impaired victims (Kramer, 1994). Double standards about alcohol consumption lead some people to exonerate intoxicated perpetrators, yet view intoxicated victims as blameworthy and contributing to the sexual assault (Heath, 1993; Stormo, Lang, & Stritzke, 1997).

Furthermore, prevention programs focused on reducing rape myths have not been effective in changing behavior (Anderson & Whiston, 2005). Based on this study's findings, more prevention efforts need to be focused on high risk individuals with nonclinical levels of psychopathy-related personality traits and a history of antisocial behavior. There is some promising research suggesting the effectiveness of prevention programs that increase men's empathy toward rape survivors (Foubert & Newberry, 2006), which could be adapted for this population. Another potentially promising direction involves providing skills-based training to help young men identify the characteristics of social situations associated with sexual assault and how they can avoid crossing the line between using acceptable and unacceptable strategies to obtain sex. These programs need to counteract the assumption that consent to kissing or petting is consent to sexual intercourse and teach people how to ask for consent without being embarrassed. The importance of not making any sexual decisions when intoxicated or when with a partner who is intoxicated must be creatively and forcefully conveyed so this information will remain salient when individuals are actually in that situation. For example, MacDonald, Fong, Zanna, and Martineau (2000) found that when a strong AIDS prevention message was salient, intentions to engage in risky sexual behavior were reduced among intoxicated participants. Researchers need to collaborate with program developers to insure that new prevention programs are based on the strongest available research.

Acknowledgments

Funding

The author(s) disclosed that they received the following support for their research and/or authorship of this article: This research was funded by a grant from the National Institute on Alcohol Abuse and Alcoholism to the first author (R01 AA016338).

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Table 1
Intercorrelations Between Individual Difference Variables and Characteristics of Incident ($N = 457$)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Hostility toward women	—																
2. Stereotypes about women	.39**	—															
3. Attitudes about casual sex	.21**	.24**	—														
4. Number consensual sex partners	.04	.01	.35**	—													
5. Personality traits	.26**	.33**	.32**	.04	—												
6. Antisocial behavior	.19**	.23**	.41**	.27**	.54**	—											
7. Usual number of drinks	.10*	.06	.33**	.12**	.23**	.39**	—										
8. Drinking problems	.23**	.13**	.25**	.10*	.21**	.35**	.54**	—									
9. How long knew woman	-.02	.07	.01	-.05	.11*	.03	.03	.00	—								
10. Isolation and control	.29**	.33**	.16**	.09	.12**	.15**	-.01	.06	.19**	—							
11. Time misperceive woman	.21**	.19**	.07	-.01	.05	.07	.03	.13**	.07	.30**	—						
12. Number of consensual sex activities	.15**	.13**	.29**	.20**	.19**	.23**	.15**	.18**	.26**	.16**	-.01	—					
13. His alcohol consumption	.10*	.06	.25**	.16**	.12**	.29**	.37**	.42**	.01	.01	.05	.20**	—				
14. Her alcohol consumption	.10*	.07	.24**	.18**	.11*	.22**	.28**	.29**	.03	.03	.05	.16**	.84**	—			
15. His intoxication level	.17**	.11*	.27**	.10*	.15**	.24**	.31**	.39**	.05	.10*	.15**	.21**	.83**	.68**	—		
16. Her intoxication level	.12**	.06	.23**	.11*	.11*	.17**	.25**	.29**	.07	.08	.08	.14**	.72**	.84**	.73**	—	
17. Age at first interview	-.05	-.19**	.09*	.43**	-.24**	-.12**	-.13**	-.06	-.06	-.05	.04	-.02	.06	.13**	.01	.10*	—
18. Social desirability	-.12**	-.05	-.20**	-.02	-.34**	-.34**	-.21**	-.20**	-.02	-.02	.00	-.08	-.18**	-.13**	-.19**	-.13**	.13**

*
 $p < .05$.

**
 $p < .01$.

Table 2
Results of ANCOVA and DFA Analyses Distinguishing Between Sexual Assault Perpetration Subgroups

Measures	Range	No assault (<i>n</i> = 266)		Verbal coercion (<i>n</i> = 152)		Impairment (<i>n</i> = 39)		<i>F</i> value	Partial η^2	<i>r</i> with Fn. 1	<i>r</i> with Fn. 2
		<i>M</i> (<i>SE</i>)		<i>M</i> (<i>SE</i>)		<i>M</i> (<i>SE</i>)					
Hostility toward women	1–5	2.07 (0.05)a		2.30 (0.07)b		2.71 (0.14)c		10.93*	.05	.33	–.11
Stereotypic attitudes about women	1–7	2.15 (0.07)a		2.49 (0.09)b		3.02 (0.17)c		12.98*	.05	.33	–.11
Positive attitudes about casual sex	1–5	2.60 (0.05)a		2.99 (0.07)b		3.23 (0.14)b		14.49*	.06	.41	.05
Lifetime number of consensual sex partners	0–51	7.98 (0.69)a		11.14 (0.91)b		13.08 (1.81)b		5.89*	.02	.23	.07
Personality traits related to psychopathy	1–5	1.99 (0.02)a		2.11 (0.03)b		2.27 (0.07)c		9.89*	.04	.35	–.09
Antisocial behavior/social deviance	1–5	2.42 (0.04)a		2.62 (0.05)b		2.83 (0.09)c		12.10*	.05	.39	–.05
Usual number of drinks consumed	0–10	3.05 (0.12)		3.39 (0.16)		3.38 (0.31)		1.65	.01	.16	.04
Drinking problems	0–13	1.57 (0.14)a		2.12 (0.18)b		3.01 (0.36)c		8.10*	.04	.30	–.09
Length of time knew woman	1–6	3.86 (0.09)a		4.90 (0.12)b		4.52 (0.24)b		24.24*	.10	.39	.36
Use of isolating and controlling behaviors	1–5	1.86 (0.05)a		2.22 (0.07)b		2.42 (0.13)b		13.32*	.06	.34	.06
Length of time misperceived woman	0–5	0.78 (0.08)a		1.17 (0.11)b		1.82 (0.22)c		11.22*	.05	.31	–.09
Number of consensual sexual activities	0–8	2.44 (0.14)a		4.63 (0.18)b		4.67 (0.36)b		52.27*	.19	.65	.34
His alcohol consumption	0–30	2.09 (0.26)a		2.06 (0.34)a		7.22 (0.68)b		26.42*	.10	.36	–.51
Her alcohol consumption	0–22	1.94 (0.21)a		1.58 (0.28)a		6.77 (0.56)b		36.44*	.14	.36	–.64
His intoxication level	1–5	1.39 (0.06)a		1.46 (0.07)a		2.81 (0.15)b		41.61*	.16	.49	–.59
Her intoxication level	1–5	1.52 (0.06)a		1.43 (0.08)a		2.76 (0.15)b		33.42*	.13	.36	–.61

Note: ANCOVA and DFA analyses are adjusted for participants' current age and social desirability. Means in a row with different subscripts are significantly different using the least significant difference (LSD) test, *p*'s < .05. Univariate *df* = 2, 452.

* *p* < .001.