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Drinking Motivations and Experiences of Unwanted Sexual Advances Among Undergraduate Students

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Abstract

Objective—This study examined the relationship between drinking motivations and college students' experiences with unwanted sexual advances.

Participants—Undergraduates, from a public university in the mid-Atlantic region, who reported recent (30 day) alcohol use (n=289) completed an online survey midway through the spring 2007 academic semester.

Methods—Experiencing an unwanted sexual advance was the outcome of interest for the present study. The independent variables included socio-demographics and a three-factor (social ease, social image or reputation, emotional distress) drinking motivation measure. Prevalence estimates as well as unadjusted and adjusted odds ratios were produced.

Results—A strong relationship was found between having an unwanted sexual advance and recent binge drinking as well as drinking to remove emotional distress (OR= 3.40 and 2.73 respectively for the total sample; OR=7.27 and 2.82 for females).

Conclusions—Findings suggest that experiencing an unwanted sexual advance is associated with specific drinking motivations and more likely to occur among females. Further research is needed to fully understand pathways and implications.

Introduction

Alcohol use among undergraduate college students remains prevalent despite decades of programmatic attention to prevent and or reduce its occurrence. The quantity and frequency with which college students consume alcohol has been duly documented and heavy drinking has been associated with a host of negative consequences, many of which are sexually related (Bryan, Ray, & Cooper, 2007; Core Institute, 2004; Hingson, Heeran, Winter, & Weschler, 2005; Inkelas et al., 2004). Examples of such sexual-related outcomes are sexual regrets, sexual perpetration and sexual assault (Core Institute, 2004; Hingson et al, 2005; Inkelas et al., 2004). According to The National Center for Victims of Crime rape, attempted rape, unwanted sexual contact or threats are all forms of sexual assault. Nationally, over 100,000 college students report being victims of rape and/or sexual assault each year (Hingson et al., 2005). It has also been reported that about half of all sexual assault victims also reported using alcohol at the time of the assault (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001). Furthermore, recent data from over 33,000 college students indicated 83.2% had engaged in unwanted sexual intercourse and 72.3% experienced forced sexual touching while under the influence of alcohol or other drugs within the year prior to the survey (Core Institute, 2004). Parks and others reported that females' risk for victimization

was significantly associated with alcohol and other drug use (Parks, Romosz, & Bradizza, 2008). Furthermore, Rothman and Silverman (2007) indicated that students who drank alcohol or engages in binge drinking were at a significantly increased risk for sexual victimization.

While much is known about alcohol use and the negative alcohol-related consequences among college students (especially related to sexual assault and rape), drinking motivations and their relationship to experiencing unwanted sexual advances is an area that deserves further examination (Carey & Correia, 1997; LaBrie, Hummer, & Pedersen, 2007; Westmaas, Moeller, & Woicik, 2007). Unwanted sexual advances may include unwanted touching or groping, kissing, and even verbal advances. Unwanted sexual advances may not be viewed as traumatic as a sexual assault or rape, but may happen more frequently on and around a college campus. In a study examining the phenomenon of experiencing unwanted sexual advances as a result of others' alcohol use among university students in New Zealand, 34% of females and 25% of males reported such advances in the prior month (Cashell-Smith, Connor, Kypri, 2007). While unwanted advances do occur on college campuses, these unwanted advances have not been a primary focus of research and warrants better understanding. It has been documented that being under the influence increases one's risk of negative effects. Certainly, from a prevention and intervention perspective, it would be edifying to establish whether specific drinking motivations are differentially related alcohol-related outcomes, especially experiencing unwanted sexual advances.

While the motivations for college student drinking are numerous and varied, the relationship between drinking motivations and students' experiences with unwanted sexual advance is not understood. Motivations ascribed to college drinking include the desire for power and assertion (Bailly, Carman, & Forslund, 1991), a coping mechanism for emotional distress (Britton, 2004; Kuntsche, 2005), or as a means of fitting in with others or easing social awkwardness (Kuntsche, 2005; LaBrie et al., 2007; Weitzman, Nelson, & Wechsler, 2003; Westmaas et al., 2007). Regarding the latter, Westmaas et al. (2007) posit that alcohol serves as a social lubricant for college students to facilitate social encounters with others. Using their Social Context of Drinking scale, which measures the motivational factors surrounding alcohol use, Thombs, Beck, and Mahoney (1993) found that females drank more because of emotional pain and males drank more for social facilitation (to feel more comfortable in the presence of other people).

Several studies have demonstrated a link between drinking motivation and negative alcohol-related outcomes; female vulnerability has also been highlighted (Carey & Correia, 1997; LaBrie et al., 2007). Some students may drink for reasons of social facilitation or to rid emotional distress, knowing, at some level, that sexual behavior may result. Based on focus group data for this study (Howard, Griffin, Boekeloo, Lake, & Bellows, 2007), students suggested that their peers may drink, even to excess, knowing that negative effects, including sexual-related outcomes may result; they engage, anyway, based on a subjective calculation of immediate, likely and valued rewards. Furthermore, some data suggests that students may then 'blame' their intoxication for the sexual event, rather than taking responsibility for the consequences of their alcohol use (Abbey, 2002; Fromme, D'Amico, & Katz, 1999). This phenomenon, if true, is not only cause for alarm but strongly justifies its further examination. With a better understanding of these psychosocial dynamics researchers and clinicians may apply this knowledge to future programmatic efforts aimed to at reducing alcohol use and preventing sexual victimization and perpetration as well.

Many commonly used social-psychological theories suggest that motivations and expectations are critical determinants of human behavior. For example, the Theory of Reasoned Action posits that behavior is determined through an assessment of beliefs

regarding likely behavioral outcomes, the perceived desirability of these outcomes, along with the perception of whether important referents think the behavior should be performed (Fishbein & Ajzen, 1975). Operant conditioning suggests that immediate favorable consequences are extremely potent conditioners or reinforcers of subsequent behavior. Finally, Social Cognitive Theory (SCT) also posits that behavioral expectations and their valuation play a critical role in shaping behavior (Bandura, 1977). Indeed, SCT has oft been referred to as a bridge between behaviorist and cognitive learning theories because it encompasses attention, memory and motivation (Bandura, 1977). Therefore, the idea that college students may drink based on specific motivations and that those motivations may then lead to an increased risk of experiencing unwanted sexual advances has conceptual coherency but needs empirical verification.

Within this context, the aim of the present study was to examine the relationship between experiencing an unwanted sexual advance, alcohol use and drinking motivations. Differential exposure to unwanted sexual advances according to demographic factors was also examined. An understanding of these relationships is not only warranted but critically necessary in order to more fully understand the role that drinking motives play in students' experiences with sexual violence victimization.

Methods

Sample

This study was part of a larger intervention, "Peers as Family: Preventing Problem Drinking (PAF)", which aimed to reduce alcohol use and alcohol-related outcomes among a sample of primarily incoming freshmen college students (Boekeloo, 2005). All methods were approved by the university's Institutional Review Board. A purposive sampling frame of predominantly freshmen residence halls was utilized to assure that gender and special group learning communities (living-learning) were proportionate across study conditions. Four residence halls met the criteria and 36 wings of students within those halls were selected. All students ($n=1155$, 578 males and 577 females) on the 36 chosen wings were recruited with personalized emails and flyers to complete a web-based survey during the spring academic semester. Each email contained a hot link to the web survey with a unique study identification number for each student. The IRB approved consent form assured students that their data would remain confidential and was accessed upon entry to the study website. Students had to electronically consent to participate in the study by entering their own unique study identification number as well as their birthdates. Upon consent, students were then granted access to the web-based survey. Upon completion of the survey, each student participant was sent a \$10 bookstore coupon by the research staff for their participation. The survey was administered one month into the spring 2007 semester with 502 (219 males and 283 females) students providing complete data. Those undergraduate students self-reporting recent (30 day) alcohol use ($n=289$; 170 females and 119 males) comprised the sample for this study. The study sample included mostly females (58.8%), 18-year olds (66.4%), whites (67.1%), and living-learning members (63.3%).

Survey Measures

Sexual-Related Outcomes—Experiencing an unwanted sexual advance was the main study outcome. This item was part of a larger negative secondhand effects scale included in the parent survey. The larger scale was taken from the 2003-2004 National Study of Living Learning Programs instrument and included 10 items with good validity (single scale) and acceptable reliability (Cronbach's α 0.72). The original wording of the item was kept worded broadly so as to capture participant's subjective assessments, including a range of verbal and/or physical advances such as: unwanted sexual touching or groping; forcible

kissing; or repeated unwanted offers of sex. This survey item and specific wording were determined acceptable following the analysis of focus group data, gathered during the developmental phase of the study (Howard et al., 2007). The survey in its entirety and specific survey items were then pre-tested with 12 students (6 males, 6 females) to assess the usability, wording of, and layout of the survey.

The lead-in statement for the secondhand effects section was “How often did you experience any of the following as a result of others’ alcohol use since arriving back (on campus) for the spring 2007 semester?” with the specific outcome of interest worded “I experienced an unwanted sexual advance”. The survey item responses, originally coded as 0=none, 1=1 time, 2=2 times, and 3=3 or more times, were recoded as a binary variable, ever and never, due to the frequency (never: 84.4%; once: 12.5%; twice: 1.4%; three or more times: 1.7%) with which this item was endorsed.

Drinking Motivation—Students were asked to respond to a number of items that assessed their social and emotional motivations for consuming alcohol based on the Social Context of Drinking scale (Thombs et al., 1993). The lead-in statement for this section of the web-based survey was “Since arriving at UM for the Spring 2007 semester, how often have you drunk alcohol...” Based on acceptable factor analysis and reliability testing, the drinking motivation items were sub-grouped into three variables, labeled: ‘social ease’, ‘social image’, and ‘emotional distress’. The five items comprising the ‘social ease’ variable were: ‘to reduce inhibitions’, ‘have a good time’, ‘to build up courage to talk to someone of the opposite sex’, ‘to feel relaxed’, and ‘to feel very relaxed’ (Cronbach’s alpha 0.86). The three items that comprised the ‘social image’ variable were: ‘to be part of a group’, ‘because it’s cool’, and ‘to maintain my image’ (Cronbach’s alpha 0.80). The three items that comprised the ‘emotional distress’ variable were: ‘to get rid of depression’, ‘to forget about personal problems’, and ‘to feel numb or faint’ (Cronbach’s alpha 0.63).

The original coded response options were 0=never, 1=seldom, 2=occasionally, and 3=frequently; however, responses were dichotomized into never and ever due to the frequency with which these items were endorsed. The ‘never’ category consisted of students who responded ‘never’ to all items in their respective sub-scales (‘social ease’, ‘social image’, and ‘emotional distress’); students who reported ‘seldom’, ‘occasionally’, or ‘frequently’ to at least one item in the sub-scale were put into the ‘ever’ category. Collapsing all positive responses into a single ‘ever’ category was warranted by the researchers given that drinking for these specific reasons at least once during the reference period was deemed important.

Substance Use—Substance use was self-reported by the students based on how often they used the following substances in the 30 days prior to completing the survey: illegal non-prescription drugs, combined alcohol with illegal/non-prescription drugs, and binge drinking (defined as 4 or more drinks for a female and 5 or more drinks for a male in a row). Each of the substance use items were recoded as a binary ever/never variable.

Demographics—The demographics included in this study were all verified by university records and included age (17, 18, 19 and older), race/ethnicity (white, non-white) and membership (yes, no) in a special living-learning program in which students study in an academic program together and reside on the same residence hall wing. Race/ethnicity originally included five forced categories: white (not Hispanic), black/African-American, Asian, Hispanic/Latino, and other/foreign. Because the frequency of the non-white student participants was so low, the non-white categories were collapsed into a single category for purposes of the analysis.

Analysis

All data were analyzed using SPSS version 14.0. Cross-tabulations were computed to estimate the prevalence of sexual-related outcomes by each independent variable (substance use, drinking motivation, and demographics) for the total sample of college student drinkers. Univariate logistic regression models were run to identify the relationships between the alcohol-related sexual outcomes and each independent variable. The unadjusted odds ratios (OR) and 95% confidence intervals were examined. Multivariate logistic regression analysis was then conducted by including the significant independent variables from the univariate to identify significant items related to unwanted sexual advances. Adjusted odds ratios and 95% confidence intervals were examined from the multivariate models.

Results

Prevalence

Among college student drinkers, the prevalence of having experienced an unwanted sexual advance was 15.6% (n=45); however, there was a marked difference across gender with females more than twice as likely as males to report unwanted sexual advances (n=34, 20.0% vs. n=11, 9.2% respectively) (see Table 1). Being white, a non living-learning member, a drug user, having a recent binge episode, drinking for social ease, to maintain social image, and to rid of emotional distress were all associated with a higher prevalence of students' experiencing an unwanted sexual advance.

Univariate Logistic Regression

The unadjusted odds ratios (OR) for the relationships between the independent variables and the outcome of interest are presented in Table 2. There were no significant relationships among males. Among females, having a recent binge episode (OR=10.54), drinking to maintain social image (OR=2.25) and to rid emotional distress (OR=4.49) were all significantly associated with experiencing an unwanted sexual advance. For the total sample, significant associations with unwanted sexual advances were found with those who had a recent binge episode (OR=4.55) and drank to rid of emotional distress (OR=3.36); however, these appear to be largely explained by gender.

Multivariate Logistic Regression

All variables which were significant in the univariate logistic regressions models were included in the multivariate logistic regression models. Regarding students' experiences with unwanted sexual advances, significant associations among females were found for those reporting a recent binge episode (OR=7.27) and drinking to rid emotional distress (OR=2.82). The same significant relationships existed among the total sample (again influenced by female risk) with recent binge episodes (OR=3.40) and drinking to rid emotional distress (OR=2.73) being related to experiencing an unwanted sexual advance.

Comment

About one in every seven (15.6%) college drinkers reported experiencing an unwanted sexual advance since arriving on campus for the respective semester. Furthermore, the data substantiated the claim that females are more vulnerable to experiencing unwanted sexual advances than males. Moreover, unwanted sexual advance was differentially associated with drinking motivations. Experiencing an unwanted sexual advance was significantly related to drinking in order to rid emotional distress. Having a recent binge drinking episode was also significantly related to experiencing an unwanted sexual advance.

It is important to note that experiencing an unwanted sexual advance was reported as a result of someone else's alcohol use. While it might be assumed the event occurred in the context of personal drinking as well, this cannot be verified. Yet, the sample did consist solely of recent drinkers and one might presume that drinking is not only a recent but also a regular occurrence, especially among college students. Clearly, drinking motivations may not only lead an individual to engage in behavior that is risky but it likely may place the student in situations where their own, or other people's, drinking may place them at risk for being victimized.

As noted previously, the theoretical constructs of behavioral intention, perceived behavioral beliefs, and behavioral expectations are important in understanding actual behaviors. This study posited that specific drinking motivations may increase college students' vulnerability to experiencing unwanted sexual advances. Indeed, our findings suggest that recent binge drinking and drinking to remove emotional distress is related to increased experiences of unwanted sexual advances even though a temporal relationship could not be examined due to the study being cross-sectional in nature.

It must be stressed that neither the data nor the researchers are inferring that victims are to blame for unwanted sexual advances. Rather, in an effort to protect youth from harm, students must be made aware of the risks associated with alcohol use and be taught how to stay safe, if they elect to drink. Knowledge of the relationship between alcohol use and sexual assault (both as perpetrator and victim) needs to be placed within an appropriate developmental framework and relevant context, ie the college milieu (Abbey, 2002; Milgram, 1993). Drinking and the risk of negative sexual-related consequences, in the context of forging relationships and socializing on or near campus, needs to be more effectively communicated to students. More efforts must be made to develop and promote non-alcohol related social activities which facilitate socialization and reduce stress, yet do so in an environment that is safe.

This study is not without limitations. The use of a purposive sampling frame limits the generalizability of the study findings to other college students and may have inadvertently produced a selective sample. Also, the self-report nature of the data may have led to some reliability and validity issues because of the potential for subjectivity in defining unwanted sexual advance or ascribing motivations. It should be underscored, however, that this subjectivity is meaningful. The perceptions of having experienced unwanted sexual advances are valid and consequential for the victims and may precipitate additional psychosocial trauma. Additionally, the use of a single item to measure the outcome of interest of unwanted sexual advances was not ideal. While additional and more valid behavioral measures could have been utilized, these data were taken from a larger study. Therefore, the single item was the only measure representing the phenomenon of the unwanted sexual advances. Thus, while the study lacks data as to the exact nature of the unwanted sexual advances these experiences are important to document and contextualize. Social desirability may also have lead students to under-estimate their experience of unwanted sexual advance. The outcome of interest was also reported as a result of someone else's drinking. Therefore, it must be assumed that the victim was correct in identifying the perpetrator having had consumed alcohol. Furthermore, as noted earlier, a sizable number of college students are often too drunk to be able to accurately recall their behavior or its consequences, after a night of drinking, and this lapse of memory may not simply be inadvertent, but at times deliberate (Hingson et al., 2005).

Despite these limitations, the results from this study shed additional light on the role that drinking motivations may play in the experience of negative sexual outcomes. The fact that, among this sample of undergraduates almost 1 in 7, experienced unwanted sexual advances

is reason for concern. Students who drank out of the desire to maintain their image in social situations or to deal with emotional distress were more likely to experience negative sexual-related outcomes. This adds further validation to the claim that drinking motives are independently associated with negative outcomes (Carey & Correia, 1997; LaBrie et al., 2007; Martens, Cox, & Beck, 2003). By focusing on sexual-related outcomes, this study was able to underscore and substantiate these important relationships.

While much is known about the quantity, frequency, and outcomes of alcohol consumption among college students, more research is needed to fully understand the pathways and significance of the relationships between drinking motivations and sexual-related outcomes. A better understanding of the role of drinking motives in predicting sexual-related outcomes may help researchers develop and implement more effective and efficient risk reduction programs for college students. Rothman and Silverman (2007) have suggested that a primary line of defense against sexual victimization for college students, without a prior history of such exposures, would be college sexual assault prevention programming. Programs that include activities, such as harm reduction and behavioral skills training and initiated at the start of college, should also highlight for students the socio-emotional motivations for consuming alcohol and its relationship to unwanted sexual advances. Raising students' awareness and educating them about the risks associated with consuming alcohol and being in alcohol situations where others alcohol use can be detrimental is a critical first step in changing alcohol-related behaviors. In this way students can be empowered, through focused education and skills training, to reduce their vulnerability to unwanted sexual outcomes, on and around the college campus. Rather than an exclusive focus on abstinence-only programming, strategies for staying safe in the context of social drinking may be more effective for those students who are determined to drink and to put themselves in situations in which other people may drink to intoxication. These programs should address drinking motivations, moderate alcohol consumption, drinking refusal skills and other strategies to reduce personal harm when drinking.

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Table 1

Percent Prevalence of Personal, Psychological and Behavioral Risk Factors for College Freshman Who Report Unwanted Sexual Advances

Risk Factors	Unwanted Sexual Advance		
	Total Sample % (n)	Females % (n)	Males % (n)
Age			
19+	23.2 (22)	27.8 (15)	17.1 (7)
18	11.5 (22)	15.7 (18)	5.2 (4)
17	50.0 (1)	100 (1)	0 (0)
Ethnicity			
White	16.0 (31)	22.0 (24)	8.2 (7)
Non-White	14.7 (14)	16.4 (10)	11.8 (4)
Living-Learning Member			
No	18.9 (20)	17.4 (20)	7.4 (5)
Yes	13.7 (25)	25.5 (14)	11.8 (6)
Illicit Drug Use			
Yes	16.3 (8)	31.8 (7)	3.7 (1)
No	15.7 (37)	18.6 (27)	11.0 (10)
Combined Alcohol & Drug Use			
Yes	20.0 (7)	35.3 (6)	5.6 (1)
No	15.3 (38)	18.7 (28)	10.2 (10)
Recent Binge Drinking			
Yes	19.5 (41)	28.1 (32)	9.4 (9)
No	5.1 (4)	3.6 (2)	8.7 (2)
Drinking Motivation			
Social Ease			
Ever	16.5 (43)	21.7 (33)	9.3 (10)
Never	6.9 (2)	5.6 (1)	9.1 (1)
Social Image			
Ever	18.9 (28)	26.5 (22)	9.2 (6)
Never	12.1 (17)	13.8 (12)	9.3 (5)
Emotional Distress			
Ever	24.8 (30)	32.5 (25)	11.4 (5)
Never	8.9 (15)	9.7 (9)	8.0 (6)

Table 2

Unadjusted Odds Ratios for Relationships Between Unwanted Sexual Advances and Personal, Psychological and Behavioral Risk Factors among College Freshman who Report Unwanted Sexual Advances

Risk Factors	Unwanted Sexual Advance		
	Total Sample OR (95% CI)	Females OR (95% CI)	Males OR (95% CI)
Age			
19+	0.30 (0.02, 5.02)	0.00 (0.00,)	0.00 (0.00,)
18	0.13 (0.01, 2.14)	0.00 (0.00,)	0.00 (0.00,)
17	1.00	1.00	1.00
Ethnicity			
White	1.10 (0.56, 2.18)	1.44 (0.64, 3.25)	0.67 (0.18, 2.47)
Non-White	1.00	1.00	1.00
Living-Learning Member			
No	0.68 (0.36, 1.30)	0.62 (0.28, 1.34)	0.60 (0.17, 2.07)
Yes	1.00	1.00	1.00
Illicit Drug Use			
Yes	1.05 (0.46, 2.42)	2.04 (0.76, 5.49)	0.31 (0.04, 2.55)
No	1.00	1.00	1.00
Combined Alcohol & Drug Use			
Yes	1.38 (0.56, 3.39)	2.38 (0.81, 6.97)	0.52 (0.06, 4.31)
No	1.00	1.00	1.00
Recent Binge Drinking			
Yes	4.55 (1.57, 13.16) **	10.54 (2.42, 45.79) **	1.09 (0.22, 5.41)
No	1.00	1.00	1.00
Drinking Motivation			
Social Ease			
Ever	2.68 (0.61, 11.67)	4.71 (.61, 36.74)	1.02 (0.12, 8.81)
Never	1.00	1.00	1.00
Social Image			
Ever	1.70 (0.89, 3.27)	2.25 (1.03, 4.92) *	1.00 (0.29, 3.46)
Never	1.00	1.00	1.00
Emotional Distress			
Ever	3.36 (1.72, 6.58) ***	4.49 (1.94, 10.36) ***	1.47 (0.42, 5.15)
Never	1.00	1.00	1.00

*
p < 0.05,

**
p < 0.01,

p < 0.001

Table 3

Adjusted Odds Ratios for Relationships Between Unwanted Sexual Advances and Personal, Psychological and Behavioral Risk Factors among College Freshman who Report Unwanted Sexual Advances

	Unwanted Sexual Advance	
Risk Factors	Total Sample OR (95% CI)	Females OR (95% CI)
Recent Binge		
Yes	3.40 (1.15, 10.07) *	7.27 (1.62, 32.60) *
No	1.00	1.00
Drinking Motivation		
Social Ease		
Ever	N/S	N/S
Never		
Social Image		
Ever	N/S	1.26 (0.52, 3.06)
Never		1.00
Emotional Distress		
Ever	2.73 (1.37, 5.43) **	2.82 (1.11, 7.14) *
Never	1.00	1.00

*
p < 0.05,

**
p < 0.01,

p < 0.001

Note: All variables entered in single regression.