

# Predictors of Risky Sexual Behavior With New and Regular Partners in a Sample of Women Bar Drinkers\*

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**ABSTRACT. Objective:** We designed the current study to assess the rates of risky sexual behavior among women bar drinkers, as well as differences in predictors of risky sexual behavior, based on partner type—new or regular. **Method:** We conducted comprehensive, in-person interviews with 241 young women who reported weekly drinking in bars. Several constructs (e.g., individual characteristics, social and sexual behavior, substance use) that we hypothesized would predict risky sexual behavior were assessed in two separate hierarchical regression models for new and regular sexual partners. **Results:** Rates of risky sexual behavior were significantly higher with regular partners compared with new partners. Increased risky sexual behavior with new partners was significantly associated with having had a riskier regular partner in the past 6 months, lower sexually transmitted disease (STD)/pregnancy prevention asser-

tiveness, increased expectations of sexual disinhibition when drinking, a greater history of prior sexual risk taking, and more frequent drinking in bars. Increased risky sexual behavior with a regular partner was significantly associated with being older, the use of oral contraceptives, lower assertiveness for STD/pregnancy prevention, a greater history of prior sexual risk taking, and increased drug use. **Conclusions:** Among young women who regularly drink in bars, sexual risk taking was significantly higher with regular partners than with new partners. The predictors of risky sexual behavior differed based on partner type. These findings have implications for including information about the role of alcohol, drinking context, and drug use, as well as individual difference characteristics and partner type in targeted prevention strategies to reduce sexual risk taking. (*J. Stud. Alcohol Drugs* 70: 197-205, 2009)

YOUNG WOMEN REPORT DRINKING IN BARS as a way to socialize, meet men for potential dating or sexual partnerships, and feel good about themselves (Parks et al., 1998). The combination of alcohol and heightened sexual expectations associated with the bar context has the potential to increase the likelihood that women will engage in sexual activity with a new (i.e., casual) partner. Intercourse with a casual partner has been characterized as a form of “indiscriminate” risky sexual behavior (Cooper, 2002).

Heavy drinking and drug use associated with the bar environment increase the likelihood that women who frequently drink in bars will engage in indiscriminate sexual activity when intoxicated (Buddie et al., 2003; Parks, 1999). In addition, some studies have found an association between heavy alcohol and drug use, and reduced use of condoms (Cooper, 2002; Leigh et al., 2008; Roberts and Kennedy, 2006); therefore, women bar drinkers are also more likely to engage in sex without the use of protection against HIV and sexually transmitted diseases (STDs). We designed the current study

to assess differences in predictors of risky sexual behavior based on partner type—new or regular—among a sample of women who reported weekly drinking in bars. We defined risky sexual behavior as sexual intercourse without the use of a condom.

## *High-risk sample*

The bar environment sets the stage for casual sexual encounters, perhaps more so than many other drinking contexts, through the often permissive social expectations of the patrons. Both women and men suggest that people go to bars to meet members of the opposite sex and to find sexual encounters (see Parks et al., 1998; Parks and Scheidt, 2000). In an earlier survey with young (18- to 30-year-old) women bar drinkers, Parks (1999) found that nearly one third (30%) reported ever engaging in sexual intercourse with a casual sexual partner they met in a bar. In addition, women who drink in bars on a regular basis tend to be heavy episodic drinkers, consuming more than five drinks, and report moderate to high intoxication on a usual night out (Parks and Miller, 1997; Parks and Zetes-Zanatta, 1999).

Given their high levels of alcohol consumption and their view of bars as a venue for finding romantic or sexual partners, women bar drinkers are likely to be at high risk for engaging in risky sexual behaviors. However, this issue has not been studied. In the current study, we conceptualize women who report drinking in bars on a weekly basis as a

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sample at high risk for engaging in increased sexual activity, particularly with casual partners, as well as at increased risk for unprotected sexual activity (i.e., noncondom use) when drinking or using drugs.

#### *Predictors of risky sexual behavior*

As Maisto et al. (2004) note, reviews of event-level studies find that the relationship between alcohol intoxication and the likelihood of risky sexual behavior appears to be dependent on individual characteristics and situational or contextual factors. Therefore, in our cross-sectional analyses in the current article, we focused on predictors that were specific to the individual, situation, or context. These factors fell within three categories: (1) women's individual characteristics (e.g., sexual assertiveness, alcohol expectancies), (2) history of risky behavior (e.g., sexual behavior, social behavior in bars), and (3) substance-use patterns (e.g., frequency in bars, drug use). The relevance of these factors to risky sexual behavior, as well as alcohol use and partner type, is described in more detail below.

Several individual characteristics have been associated with increased risky sexual behavior. These include sexual assertiveness and sex-related alcohol expectancies (SRAEs). Assertiveness for STD/pregnancy prevention has been associated with increased self-efficacy and movement through stages of change for condom use (Morokoff et al., 1997). Reduced risky sexual behavior also has been associated with increased assertiveness in sexual communication about HIV risk-related information (i.e., prevention) but is not associated with assertiveness in communication about sexual preferences (i.e., initiation; Quina et al., 2000). Sexual assertiveness for STD/pregnancy prevention is likely to influence risky sexual behavior, particularly based on partner type. Sex with a regular partner, who is viewed as less risky for HIV/STDs, could lead to increased risky sexual behavior, as indicated by the failure to use condoms.

Higher SRAEs have been associated with increased sexual risk taking in people under the influence of alcohol at the time of first intercourse and most recent intercourse (Dermen et al., 1998). Strong, positive SRAEs also have been associated with reduced condom use during first intercourse with a regular partner (Corbin and Fromme, 2002). Gender, oral contraception, and relationship length were factors found to influence condom use with regular partners (Corbin and Fromme, 2002). These findings were interpreted as indicating that higher alcohol expectancies and alcohol consumption influence risky sexual behavior during new relationships but have less influence on condom use later in relationships. Using an experimental design with heterosexual women, Maisto et al. (2004) found that stronger alcohol expectancies and a higher dose of alcohol were associated with greater motivation to engage in risky sexual behavior with a new sexual partner.

Several factors that fall within the category of social patterns of behavior have been associated with increased sexual risk taking. A history of having a higher number of sexual partners, younger age at first sexual intercourse, and multiple sexual partners during a sexual event have been associated with later risky sexual behavior (i.e., noncondom use; Cerwonka et al., 2000). In addition, women with multiple sexual partners have been found to have a greater likelihood for risky sexual behavior and other negative outcomes (Quina et al., 2000). Parks (1999) found that women bar drinkers who had more social interactions with men were more likely to report physically aggressive experiences in bars, whereas women who were more likely to report sexually aggressive experiences in bars were those who reported engaging in riskier behaviors with men they found attractive (e.g., leaving the bar with him, going to his place, having sexual intercourse). Therefore, a woman's pattern of social behavior in bars can influence her likelihood of engaging in risky sexual behavior.

#### *Differences in substance use and risky sex based on partner type*

A limited number of studies have compared condom use based on partner type. In a large diary study, Macaluso et al. (2000) found that the odds of women using a condom with new partners or casual partners were significantly higher than with regular partners. They further found that consistency of condom use decreased when new sexual partners became regular sexual partners. In a study of adolescents (15-21 years of age), Lescano et al. (2006) found that the number of unprotected sexual acts in the past 90 days did not differ based on partner type (main vs casual). Findings have been mixed with regard to risky sexual behavior (predominantly noncondom use) when the combined influence of alcohol use and partner type (casual vs regular) has been assessed. In a study of college students (67% female; Brown and Venable, 2007) and a study of men who have sex with men (Venable et al., 2004), alcohol use was associated with a decrease in condom use with nonsteady or nonprimary partners. However, in a study of women only, Cooper and Orcutt (2000) found that drinking and condom use were more common with casual partners. In a recent study of college students' risky sexual behavior with casual partners, Abbey et al. (2007) found that condom use when sober was the strongest predictor of condom use when drinking.

#### *Current study*

We designed the current study to assess risky sexual behavior among women bar drinkers. Given that risky sexual behavior has not been assessed in this population, we had two primary goals. The first was to describe rates of drinking, other substance use, and risky sexual behavior of women

bar drinkers. These descriptions included comparisons of risky sexual behavior with “regular” sexual partners and new partners. The second goal was to assess differences in the situational factors that predicted risky sexual behavior with regular and new sexual partners among this sample of women bar drinkers.

We specifically assessed the impact of individual characteristics (e.g., sexual assertiveness, SRAEs) as well as behaviors (e.g., history of risky sexual behavior, interactions with men in bars) and substance-use patterns (e.g., frequency in bars, drug use) that we hypothesized could influence a woman’s likelihood of engaging in risky sexual behavior based on partner type. The following hypotheses were developed based on the existing literature and our previous work with women bar drinkers. The hypotheses are organized by partner type given that previous research suggests that several of our chosen predictors influence risky sexual behavior differentially based on partner type.

We anticipated that higher SRAEs would be associated with increased risky sexual behavior with new partners. In addition, having a greater history of risky sexual behavior is likely to be associated with current risky sexual behavior with a new partner. The opportunity to meet a new sexual partner is likely to be higher in the bar context than other social drinking contexts; therefore, the social behavior of women in the bar setting could be an important predictor of the likelihood of engaging in sexual encounters with new partners. We hypothesized that women who had more interactions with men and who called more attention to themselves when drinking in bars would be likely to engage in risky sexual behavior with a new partner. Roberts and Kennedy (2006) found that substance use was inversely correlated with having a regular sexual partner. Thus, we hypothesized that women who were not in a relationship with a regular sexual partner went to bars more often than women who were in a relationship with a regular partner. Women who engaged in sex with a new partner were likely to be consuming more alcohol weekly and using more illicit drugs. We hypothesized that the frequency of going to bars, usual alcohol consumption in a bar, and drug use would be associated with risky sexual behavior with a new sexual partner.

We did not anticipate that the frequency of going to bars, usual alcohol consumption in a bar, or drug use would be associated with risky sexual behavior with a regular partner. In addition, we did not anticipate that SRAEs would be associated with risky sexual behavior with a regular partner. We hypothesized that sexual assertiveness, particularly STD/pregnancy prevention, was likely to be negatively associated with risky sexual behavior with a regular partner. It is likely that a pattern of prior sexual risk taking would lead to sexual risk taking with regular partners. We used a hierarchical linear regression approach to test these hypotheses.

## Method

### *Participants*

Participants were 241 women who took part in a comprehensive interview about their own substance use and social and sexual behaviors. Women telephoned the project in response to advertisements placed in the local entertainment newspaper or flyers hung in local coffee shops and on college campuses. The advertisements indicated, “Women who drink in bars needed for study of alcohol use and social interactions. Must be 18-30 years old to participate.” Upon calling the study, the women were provided with a description of the project as a “confidential study of women who drink in bars, their alcohol and other substance use and sexual activity.” Women were further told that participation involved coming to the Research Institute for four interviews and providing daily telephone reports over a 12-week period. Women who indicated interest in the study were screened by telephone for eligibility. Women were eligible to participate in the project if they (1) were between the ages of 18 and 30 years, (2) reported drinking in bars a minimum of once each week over the past 12 months, (3) were single (not married) and not currently living with a romantic or sexual partner, (4) were heterosexual, (5) were not currently abstaining from drinking alcohol, (6) were not currently pregnant or attempting to become pregnant, and (7) reported their mental and physical health as currently good.

A total of 1,256 women called the project. Of those women, 130 (10.4%) were not interested in participating in the study. Among those women interested in participating in the study, 524 (46.5%) met all eligibility criteria. Women were most likely to be ineligible for the study because they did not frequent bars one or more times each week (20.2%). Other reasons for ineligibility included sexual orientation (15.5% nonheterosexual), marital status (15% married or cohabiting), and not having been sexually active in the past 6 months (6.3%). Less than 4% of women endorsed the remaining eligibility criteria. The majority (64.7%) of women were excluded from the study based on endorsement of one criterion, with 15% endorsing two criteria. Of the women eligible to participate, 287 (54.8%) women completed an initial interview. Nearly one quarter ( $n = 129$ ; 24.6%) of eligible women either did not show up for their initial interview or were unavailable to schedule an appointment. An additional 74 (14.1%) women were determined to be ineligible for the study either on review of their screening data or during the initial interview, and a small number of women ( $n = 34$ ; 6.5%) declined participation after they were found to be eligible. Among those women who completed an initial interview, 40 (13.9%) were removed from data analyses because of inconsistent responses, and 6 (2.1%) women did not have complete data for all variables and were deleted listwise from the hierarchical linear regression analyses. Thus, for the

current article, all findings are based on the initial interview data for 241 women.

The average (SD) age of the participants was 22.01 years (2.43). The majority (80.1%) of the women were white; a further 9.3% were black, 3.2% Asian American, 2.4% Hispanic, and 4.9% from other or multiple ethnic groups. Half (51.0%) of the women reported having some college education, and 32.7% were college graduates. Having only a high school education was reported by 13.7%, and small percentages reported having less than a high school education (2.4%) or a postgraduate degree (4.0%). A majority of women reported working part time (61.5%) and being a student (61.1%), whereas 44.5% of women reported working full time. A small percentage (8.9%) were unemployed. The median annual household income was \$20,000 to \$30,000.

### *Procedures*

Women attended an initial face-to-face interview at the Research Institute. All interviews were conducted by trained female interviewers. All procedures were approved by the institutional review board. Participants were asked to provide informed consent before beginning the interview. The typical length of the interview was 75 minutes and each woman received \$25 for her participation. The interview was extensive and encompassed historical as well as current information, including demographics, history of victimization (childhood, adolescent, and adult physical and sexual), physical and psychological health and symptoms, substance use and misuse, bar drinking practices and behavior, sexual history, sexual assertiveness, alcohol-related expectancies, and risky sexual behavior.

### *Measures*

For the current analyses we were interested in several constructs (i.e., individual characteristics, social and sexual behavior, substance use) that we hypothesized would differentially predict risky sexual behavior with a new sexual partner compared with a regular sexual partner. We therefore chose one or two measures from the interview to represent each of these constructs in our regression models.

*Risky sexual behavior.* We used items from the Risky Sexual Activities subscale of the Cognitive Appraisal of Risky Events Questionnaire (CARE; Fromme et al., 1997) to measure risky sexual behavior, or failure to use a condom during sexual intercourse, with regular and new partners over the previous 6-month period. We asked women to provide their own definition of a regular partner by indicating how many weeks they would date someone before considering him a regular partner. We defined a new partner as someone just met or not known well—this would be an accurate description of a man met in a bar that she chose to have sex with on the same night. The items asked the woman to indicate

how many times she had engaged in each behavior over the past 6 months with a regular partner and with someone she just met or did not know well (i.e., a new partner). The first behavior was “sex without protection against sexually transmitted diseases.” The second behavior was “using condoms for sexual intercourse.” The third behavior was “sex without a condom.” Each item was scored on a 5-point scale: 0 = 0; 1 = 1; 2 = 2-4; 3 = 5-9; 4 = 10 or more. The second item was reverse scored and the three items were summed for use as a scale score. Internal consistencies for these three items for new and regular partners were good (Cronbach’s  $\alpha = .87$  and  $\alpha = .76$ , respectively) for the current study.

*Oral contraception.* Women were asked how often they had used oral contraceptives during the past 6 months. This item was scored on a 7-point scale from 1 (none of the time) to 7 (all of the time). A dichotomous variable was created in which women who indicated using this form of contraception most of the time or more frequently were scored as using oral contraception (1), whereas the remaining women were scored as not using oral contraception (0). Given that the use of oral contraceptives could impact concern about pregnancy and might reduce the use of other forms of birth control (i.e., condoms) with a “trusted” regular partner, this dichotomous variable was included in the regression analyses.

*Sexual risk of regular partner.* Three items from the CARE (Fromme et al., 1997) asked women to indicate whether their partner(s) was (were) monogamous, free of STDs and HIV, or an intravenous drug user over the past 6 months. Responses included yes, no, or uncertain. These three items were summed as a risk score for recent partners. Affirmation or uncertainty of risk was scored as a 1, with affirmation of no risk scored as 0. This variable was included in the regression analyses as a pseudomeasure of “trust” or knowledge of a partner’s sexual risk and the influence on condom use.

*Individual characteristics.* Two measures were used to assess participants’ individual characteristics. The first measure, the Sexual Assertiveness Scale (SAS; Morokoff et al., 1997), consists of 18 items that fall within three subscales: assertiveness in initiating sexual activity, assertiveness in refusing sexual activity, and assertiveness in STD/pregnancy prevention. Items were scored on a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree). Means were calculated for each of the subscales. Morokoff et al. (1997) found that the SAS had good overall internal consistency ( $\alpha = .75$ ), as well as good construct validity and stable factor structure for use with both university and community samples. Internal consistencies for the three subscales of the SAS were acceptable for the current study ( $\alpha = .66, .67, .86$ ).

We assessed sex-related alcohol expectancies with Dermen and Cooper’s (1994) 13-item measure. Expectancies assessed by this measure fall within three subscales: sexual enhancement, risk, and disinhibition. Items were scored on

a 6-point Likert-type scale (1 = strongly disagree to 6 = strongly agree) and mean scores were obtained for each subscale. In a study of young (20-35 years old), single women drinkers, Testa and Dermen (1999) found that the three subscales for this measure had good reliability (Cronbach's  $\alpha = .82-.90$ ). Internal consistencies for the subscales of the measure used in the current study were good ( $\alpha = .86, .86, .79$ ).

*Social and sexual behavior.* Two subscales from the Behavior Change Measure (Parks, 1999)—interactions with men (e.g., "I accept drinks from men I don't know") and calling attention to oneself (e.g., "I talk, laugh, and sing loudly")—were used to assess women's self-reported changes in behavior when drinking in bars. Each subscale consists of six items. Each item was scored on a 5-point scale ("After your usual number of drinks how likely are you to behave in the following way?"; -2 = less likely, 0 = no change, 2 = more likely). Item scores were summed within subscales and the means were used as the subscale scores for each woman.

Several items from the Sexual History Questionnaire (Corbin et al., 2001) were used to assess lifetime risky sexual behavior. These included age at first consensual vaginal sexual intercourse, number of lifetime sexual partners (vaginal, oral, anal), number of one-night stands, and number of multiple-partner episodes. Each item was dichotomized and a sum score was created for sexual risk history.

*Substance use.* Several items from the Daily Drinking Questionnaire (DDQ; Collins et al., 1985) and the Activities and Behavior in Bars measure (Parks, 1999) were used to characterize women's general substance-use patterns, as well as those associated with the bar context. The DDQ provides quantity and frequency data on daily, weekly, and monthly drinking, and drinking context. In addition, a single item from the DDQ was used to determine which drugs a participant had used ("Which of the following drugs have you used in the past year?" marijuana, cocaine, opiates, designer drugs [e.g., Ecstasy, GHB (gamma-hydroxybutyrate)], stimulants, hallucinogens, other drugs). For each drug used, the participant was asked to indicate how often she had used that drug (once to every day). Drug use was generally low in this population; thus, women were scored as either having used a drug or not, and the number of illegal drugs used over the past year was summed and used as the variable for drug use. The usual number of drinks per occasion in a bar and number of drugs used over the past year were included in the regression analyses for recent substance-use patterns.

The Activities and Behavior in Bars measure was specifically developed for use with women bar drinkers (Parks, 1999). It asks women to indicate how often they frequent bars on a monthly basis. It also assesses the atmosphere of the bar in which women typically spend their time (e.g., the level of legal and illegal activities present, types of patrons, location). The measure also assesses high-risk sexual behav-

iors that women engage in following a social drinking event (e.g., leaving a bar with a man just met; having consensual sex with a man just met in a bar; Buddie et al., 2003; Parks et al., 1998). For the current study, descriptive statistics on the rates of high-risk sexual behaviors that women engaged in associated with drinking in bars over the past year were derived based on this measure. In addition, the frequency with which women went to bars was included in the regression analyses.

### *Data analyses*

We conducted two separate hierarchical multiple regression analyses to test the specific hypotheses regarding the differential influence of the predictor variables on risky sexual behavior with new partners and with regular partners. Risky sexual behavior (noncondom use) with each type of partner served as the dependent variable. The order of entry of predictor variables was based on temporal proximity to the dependent variable, with the exception of the two control variables entered in Step 2. In each hierarchical multiple regression, age, ethnicity, education, and household income were entered in Step 1. We chose household income, rather than individual income, to reflect the financial resources available to the majority of women at this point in their lives, given that 61% indicated they were still students. Step 2 included two variables designed to control for current sexual practices that could influence sexual risk taking with new and regular partners. This step included the use of oral contraceptives and known sexual risk of regular partners during the previous 6 months. Individual characteristics were entered in Step 3, followed by patterns of social and sexual risk behaviors in Step 4 and substance use in Step 5.

## **Results**

One in four women (25.5%) reported engaging in consensual intercourse with a man they had just met in a bar that night an average of 2.3 (2.0) times in their lifetimes. Nearly half (49.2%) reported engaging in this risky behavior (i.e., indiscriminant sex) in the past year. Among these women, 17.5% reported being moderately intoxicated, and 77.8% reported being very intoxicated when they engaged in this behavior. Women reported a regular sexual partner as a man they had known for an average of 8.2 weeks (9.4, range: 1-52 weeks).

Descriptive statistics for the predictors and dependent variables are provided in Table 1. Scores for all three subscales of the SAS indicated that women tended to be sexually assertive. For SRAEs, women agreed that alcohol enhanced sex but tended to disagree that it increased sexual risk taking and increased disinhibition. Women reported drinking in bars, on average, more than twice each week and consuming five drinks per occasion. In addition, women reported being

TABLE 1. Descriptive statistics for predictor and dependent variables included in the regression analyses ( $N = 241$ )

Continuous variables	Mean (SD)	Range
Sexual assertiveness		
Initiation	3.71 (0.61)	2-5
Refusal	3.87 (0.76)	1-5
STD/pregnancy prevention	3.58 (1.05)	1-5
Sex-related expectancy		
Enhancement	4.15 (0.99)	1-6
Sex risk	2.63 (1.16)	1-6
Disinhibition	3.01 (1.09)	1-6
History of risky sex	2.54 (1.60)	0-6
Behavior in bars		
Contact with men	0.74 (0.62)	2-2
Calling attention to self	0.73 (0.58)	2-2
Usual drinks in a bar	5.17 (2.25)	2-20
Frequency in a bar, days/month	9.44 (4.69)	4-30
No. of drugs used, past year	1.31 (1.80)	0-10
Risky sex		
Regular partner	6.21 (3.97)	0-12
New partner	1.02 (2.07)	0-10
Categorical variables		
	% Yes	% No
Use oral contraception	49.2	50.8
Had risky regular partner, past 6 months	35.3	64.7

Notes: STD = sexually transmitted disease.

more likely to have contact with men and to call attention to themselves after drinking their usual number of drinks in a bar. Over the past year, women reported using an average of more than one illicit drug. Among those women who reported using drugs, the most frequently used drugs were marijuana (74.9%), cocaine (24.6%), and psychedelics (e.g., lysergic acid diethylamide [LSD], mushrooms; 16.8%).

Regardless of the context or alcohol consumption, women reported greater risky sex (i.e., decreased condom use) with regular partners compared with new partners ( $t = 19.16$ , 240 df,  $p < .001$ , two tailed). Nearly half of the women reported using oral contraception on a regular basis, and more than one third had a risky regular sexual partner during the past 6 months.

To examine the predictors of risky sexual behavior with new sexual partners and regular sexual partners, we conducted two separate hierarchical multiple regressions. The results are presented in Table 2. For risky sexual behavior with a new partner, the change in  $R^2$  for the background variables entered in Step 1 was not significant. In addition, none of the individual predictors were significantly associated with condom use. The change in  $R^2$  for Step 2 (oral contraceptives, regular partner risk) was significant ( $F = 22.61$ , 2/234 df,  $p < .001$ ). Oral contraceptive use did not influence condom use with a new partner. However, having had a more risky regular partner in the past 6 months was associated with decreased condom use with a new partner

TABLE 2. Hierarchical multiple regression summary of variables predicting risky sexual behavior with a new partner and with a regular partner ( $N = 241$ )

	New partner			Regular partner		
	$B$ (SE)	$\beta$	$\Delta R^2$	$B$ (SE)	$\beta$	$\Delta R^2$
Step 1: Demographics			.01			.03
Age	-0.02 (0.06)	-.02		0.20 (0.09)	.12*	
Ethnicity	0.35 (0.31)	.07		-0.01 (0.52)	.00	
Education level	-0.02 (0.13)	-.01		-0.34 (0.22)	-.09	
Household income	-0.07 (0.06)	-.06		0.09 (0.11)	.04	
Step 2: Current sex practices			.16 <sup>‡</sup>			.06 <sup>‡</sup>
Oral contraception use	0.20 (0.25)	.05		1.07 (0.41)	.14 <sup>†</sup>	
Risk regular partner (6 mos.)	1.27 (0.28)	.29 <sup>‡</sup>		-0.84 (0.46)	-.10	
Step 3: Individual differences			.13 <sup>‡</sup>			.38 <sup>‡</sup>
Sexual assertiveness						
Initiation	0.04 (0.21)	.01		0.05 (0.34)	.01	
Refusal	0.12 (0.17)	.05		0.27 (0.28)	.05	
STD/preg. prevent.	-0.39 (0.13)	-.20 <sup>†</sup>		-2.22 (0.21)	-.59 <sup>‡</sup>	
Sexual expectancies						
Enhancement	-0.17 (0.15)	-.08		-0.22 (0.25)	.06	
Risk	-0.03 (0.13)	-.02		0.26 (0.22)	.08	
Disinhibition	0.58 (0.17)	.31 <sup>†</sup>		-0.22 (0.28)	-.06	
Step 4: Behavior			.02			.02*
History risky sex	0.17 (0.08)	.13*		0.36 (0.14)	.14 <sup>†</sup>	
Interact with men	0.30 (0.23)	.09		0.08 (0.38)	.01	
Call attention to self	-0.30 (0.24)	-.09		0.21 (0.40)	.03	
Step 5: Substance use			.02			.01
Usual drinks in bar	-0.07 (0.06)	-.08		-0.04 (0.10)	-.03	
Frequency in bars	0.07 (0.03)	.16 <sup>†</sup>		0.02 (0.04)	.03	
No. drugs used	-0.03 (0.07)	-.03		0.25 (0.11)	.11*	

Notes: Mos. = months; STD = sexually transmitted disease; preg. prevent. = pregnancy prevention. Significance of regression coefficients: \* $p < .05$ ; <sup>†</sup> $p < .01$ ; <sup>‡</sup> $p < .001$

during this same time period. The change in  $R^2$  for the individual difference variables entered in Step 3 was significant ( $F = 6.84$ , 6/228 df,  $p < .001$ ). Lower sexual assertiveness on the STD/pregnancy prevention subscale and a greater expectancy of sexual disinhibition when drinking were associated with decreased condom use with a new partner. The change in  $R^2$  for the behavioral variables entered in Step 4 was not significant. However, having a greater history of sexual risk taking was significantly associated with decreased condom use with a new sexual partner. In the final step, the change in  $R^2$  was not statistically significant. However, the frequency of going to bars was a significant individual predictor. The more often a woman went to bars in a month, the less likely she was to use a condom with a new partner. The five significant predictors accounted for 27% (adjusted  $R^2$ ) of the variance in risky sexual behavior (i.e., noncondom use) with a new partner.

For the regression analysis for risky sexual behavior with a regular partner, the order of entry of predictor variables was the same as the previous analysis (Table 2). The change in  $R^2$  was not statistically significant for the background variables entered in Step 1. However, the individual predictor, age, was significantly associated with decreased condom use with a regular partner. The change in  $R^2$  for Step 2 (oral contraceptives, regular partner risk) was significant ( $F = 7.64$ , 2/234 df,  $p < .001$ ). Women who used oral contraceptives were significantly less likely to use a condom with a regular partner. The change in  $R^2$  for the individual difference variables entered in Step 3 was significant ( $F = 27.01$ , 6/228 df,  $p < .001$ ). Lower sexual assertiveness on the STD/pregnancy prevention subscale was a significant predictor of risky sexual behavior with a regular partner. The change in  $R^2$  for the behavioral variables entered in Step 4 was small but significant ( $F = 2.81$ , 3/225 df,  $p < .05$ ). Having a history of greater sexual risk taking was a significant individual predictor of lower condom use with a regular partner. In the final step, the change in  $R^2$  for the substance-use variables was not significant. Unlike our findings for new partners, the frequency of going to bars did not predict condom use; however, having used a greater number of illicit drugs over the past year was associated with decreased condom use with a regular partner. The four significant predictors accounted for 46% (adjusted  $R^2$ ) of the variance in risky sexual behavior (i.e., noncondom use) with a regular partner.

## Discussion

A primary goal of the current study was to describe the rates of drinking and risky sexual behavior among women bar drinkers, particularly with regard to partner type. Similar to our previous findings with women bar drinkers (e.g., Buddie et al., 2003; Parks, 1999; Parks and Zetes-Zanatta, 1999), we found that heavy episodic drinking (more than four drinks) was normative on drinking occasions in bars,

and indiscriminant forms of risky sexual behavior associated with the bar environment (i.e., consensual sexual intercourse with a man met that same night) were reported by a notable proportion of women. In addition, rates of risky sexual behavior differed by partner type. Surprisingly, given the proportion of women who indicated engaging in sex with a man they just met while drinking in a bar, the rates of risky sexual behavior were higher with regular partners compared with new partners.

An additional goal of the current study was to assess differences in the individual, situational, and contextual factors that predict risky sexual behavior with regular and new sexual partners. We found that these predictors did differ based on partner type. As hypothesized, some individual characteristics were predictive of risky sexual behavior. We found that increased expectations of sexual disinhibition when drinking were associated with increased risky sexual behavior with a new partner but not with a regular partner. This finding is consistent with earlier studies that suggest greater alcohol expectancies and heavier alcohol consumption increase risky sexual behavior with new partners but have less influence with regular partners (e.g., Corbin and Fromme, 2002; Maisto et al., 2004). Lower STD/pregnancy sexual assertiveness was associated with increased risky sexual behavior with both a regular and a new partner. In addition, the use of oral contraceptives was significantly associated with increased risky sexual behavior (i.e., lack of condom use) with regular partners but not new partners. The use of oral contraceptives has been associated with decreased condom use in earlier studies (e.g., Corbin and Fromme, 2002; Parkes et al., 2007). These findings suggest that women viewed regular partners as less risky with regard to HIV/STDs and pregnancy. However, we cannot rule out the alternative hypothesis that women perceive a greater risk (e.g., damage to the relationship, argument, lack of sex) in discussing and insisting on condom use for STD/pregnancy prevention with a sexual partner (regular or new) than the risk of contracting an STD from noncondom use. Exploration of this alternative hypothesis is needed through future studies, particularly those employing event-level qualitative measures.

As hypothesized, having a history of risky sexual behavior was associated with increased risky sexual behavior with both new and regular partners. Counter to our hypotheses, women's behaviors in bars (more interaction with men and calling attention to self) were not associated with increased risky sex with either partner type.

A woman's usual number of drinks consumed in a bar was not associated with increased risky sexual behavior, regardless of partner type. However, the frequency of going to bars was associated with increased risky sexual behavior with new partners. This finding is consistent with earlier studies of the bar context that suggest that this is an environment in which women seek sexual relationships (Parks et al., 1998) and

engage in casual sexual encounters (Parks, 1999). Neither alcohol use nor frequency in bars was associated with risky sexual behavior with regular partners, but increased illicit drug use was. We had originally hypothesized that increased substance use would be associated with risky sexual behavior with only new partners, given heavier substance use and the availability of new sexual partners present in the drinking context (bars) frequented by this population. Our findings may indicate that drug use is less tied to social drinking contexts, such as bars, and thus occurs both independently and in conjunction with alcohol use before sexual activity, regardless of the context and partner type. Marijuana was the most frequently reported illicit drug used by women in our study. In a study by Sumnall et al. (2007) conducted in the United Kingdom, they found that the use of marijuana and Ecstasy was significantly associated with subsequent sexual activity. Marijuana use has been associated with risky sexual behavior among young adults in other studies (Guo et al., 2002; Roberts and Kennedy, 2006).

Our findings illuminate young women bar drinkers' risky sexual behavior. Even so, a few limitations of the current study should be noted. The measures of substance use and risky sexual behavior with new and regular partners were provided through retrospective self-reports. Although this is the standard manner in which these types of data are collected, they are not without minimal recall bias. The data presented in the current analyses are not daily or event-level and thus limit our ability to determine the specific nature of the acute relationship between each of the factors and risky sexual behavior. The sexual assertiveness subscales had poor internal consistency with our sample of women bar drinkers; it is unclear how this may have impacted the regression findings for these predictors. In addition, our sample was not a randomly selected group of women drinkers, nor a randomly selected sample of women bar drinkers. This was a voluntary, convenience sample of women who reported frequent (i.e., weekly) alcohol consumption in bars. Thus our findings are not generalizable to all women and may not be generalizable to all women bar drinkers.

Despite the limitations of this study, our findings are sufficiently consistent with previous research and our original hypotheses to suggest that, indeed, situational factors do differ based on partner type in predicting risky sexual behavior among women bar drinkers. These differences suggest reasons for the higher sexual risk taking with regular partners compared with new partners. A majority of women indicated that their regular partners over the past 6 months were not sexually risky. Therefore, women felt their regular partners were trustworthy. Nearly half of women indicated they were using oral contraceptives, therefore, they were most likely not concerned about becoming pregnant. Finally, women generally indicated that if they were less sexually assertive about STD prevention, they were not going to use a condom. Thus, a substantial number of women felt that

they were relatively safe from or at low risk for contracting an STD from their regular partners whom they were certain were "risk free," and they felt sure they were protected from pregnancy and did not need to use a condom.

The differences in the situational factors predicting condom use based on partner type also have implications for the development of prevention strategies, particularly with young women who frequent bars. It appears, given the low rate of sexual risk taking, that women bar drinkers are aware of the need to use condoms when engaging in sex with a new partner. However, prevention programs should include a range of variables to increase awareness of the role of substance use, drinking contexts, and partner type on the likelihood of using condoms. The emphasis on drug use before sexual activity and its influence on increasing sexually risky behaviors should be emphasized as well. In addition, skill-building exercises aimed at increasing women's sexual assertiveness associated with STD prevention (i.e., condom use) should be stressed as important, particularly with regular partners.

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