

Do drinking consequences predict sexual revictimization in a college sample of binge-drinking women?

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**Abstract**

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Sexual victimization is prevalent on college campuses in the US. A proportion of women experience multiple sexual assaults, and sexual assault risk in college is heightened among those with prior victimization histories. One risk factor for sexual revictimization is victims' alcohol use. Most research has focused on associations between alcohol consumption per se and revictimization. The current study's objective was to understand some potential mechanisms by which drinking confers risk for revictimization. We hypothesized specific drinking consequences would predict risk for revictimization above and beyond the quantity of alcohol consumed. A randomly selected sample of binge drinking female college students was assessed for baseline victimization (categorized as childhood versus adolescent victimization), quantity of alcohol consumed, and drinking consequences experienced. A subset of 162 women was assessed 30 days later for revictimization. Of the subset, 40 (24.6%) women were revictimized in the following 30 days. Blackout drinking at baseline predicted incapacitated sexual revictimization among women previously victimized as adolescents, after accounting for quantity of alcohol consumed. Other drinking consequences examined were not predictive of revictimization. Results support previous findings that adolescent sexual assault is an important predictor of sexual revictimization in college and blackout drinking may confer unique risk for revictimization.

Sexual victimization – attempted or completed rape or sexual assault – is prevalent among women on college campuses in the US and has received recent national attention (White House White House Task Force to Protect Students From Sexual Assault, 2014). In a web-based survey of 5,446 undergraduate women, 19% of respondents reported experiencing completed or attempted sexual assault since entering college (Krebs, Lindquist, Warner, Fisher, & Martin, 2007). Additionally, a nationally representative sample of 4,446 women found a victimization rate of 27.7 attempted or completed rapes per 1,000 female students (Fisher, Cullen, & Turner, 2000), a rate much greater than the victimization rate of 2.1 per 1,000 women found in a community sample (Planty, Langton, Krebs, Berzofsky, & Smiley-McDonald, 2013).

Importantly, sexual revictimization – the recurrence of sexual victimization – is also common on campuses. Among college-aged females who were raped, for example, 23% were multiple-rape victims (Fisher et al., 2000). Women who have already been victimized are more likely to be victimized in the future than women who have not been previously victimized (e.g., Desai et al., 2002; Messman-Moore & Long, 2003). Revictimization is associated with having mental health disorders including depression, posttraumatic stress disorder (PTSD), and other anxiety disorders as well as interpersonal problems, such as problems being assertive or being intimate (Classen, Palesh, & Aggarwal, 2005). Women who are revictimized also experience higher levels of shame, blame, and powerlessness than women who have experienced one sexual assault (Classen et al., 2005). Thus, these women may constitute a particularly high-risk group in need of potential intervention to prevent revictimization and its detrimental consequences.

### **Role of Drinking in Sexual Victimization and Revictimization**

A number of studies have highlighted the link between alcohol use and risk for sexual victimization and revictimization among college students (e.g., Gidycz et al., 2007; Testa,

Hoffman, & Livingston, 2010). Specifically, college women who “binge” drink (consume four or more drinks on a given occasion; Wechsler et al., 2002) may be at increased risk for victimization. In one prospective study, women who were victimized during the study reported more than three times as many average binge-drinking days at baseline compared to women who were not victimized during the study (Combs-Lane & Smith, 2002). In another prospective study of college women with a history of rape, binge drinking significantly increased risk for subsequent rape (McCauley, Calhoun, & Gidycz, 2010). One of the consequences of binge drinking can be that the drinker becomes incapacitated, or extremely intoxicated to the point where decision-making and other functioning is compromised. *Incapacitated* sexual assault – or sexual assault that occurs when the victim is too intoxicated to provide consent – is more common than forcible assault among college students (Lawyer et al., 2010) and can also result in more problem drinking, more alcohol-related consequences affecting social and health domains, and higher drinking expectancies post-assault (Bedard-Gilligan et al., 2011; Littleton et al., 2009; Kaysen et al., 2006). These consequences incapacitated sexual assault may increase risk of future revictimization as well as problem drinking.

Although it is known that alcohol is related to increased risk for sexual victimization and revictimization, the means by which it may do so is not yet clear. Specifically, there is a question as to whether alcohol use uniquely contributes to revictimization or if it is part of a cycle such that initial victimization leads to alcohol use as a method to cope, which in turn leads to an increased risk for future victimization. One review of empirical studies concluded alcohol did not appear to mediate the relationship between child sexual abuse and adult revictimization but was an independent predictor of revictimization (Messman-Moore & Long, 2003). However, more recent evidence that suggests alcohol may moderate (Gidycz et al., 2007) and substance use

may mediate (Messman-Moore, Ward, & Brown, 2009) the relationship between prior victimization and revictimization for women with sexual assault histories. More longitudinal research is needed to further parse out the role of alcohol in sexual revictimization.

### **Revictimization of Adolescent Versus Child Sexual Assault Victims**

Additionally, risk for revictimization may differ for women who have been victimized in childhood versus those who have been victimized in adolescence. Adolescent and childhood assault may differ qualitatively because different developmental tasks during these periods may result in higher risk of assault for women victimized as adolescents. During childhood, developmental tasks revolve around development of cognitive, behavioral, and emotional control, or executive functioning (Anderson, 2002). In contrast, adolescents begin a process of developing, cognitive, behavioral, and emotional (sometimes referred to as individuation) autonomy (Zimmer-Gembeck & Collins, 2003). Adolescence is a developmental period of increased risk-taking more generally (Steinberg, 2004), and increased individuation is predictive of adolescent alcohol use (Bray, Getz, Baer, 2007), which may increase the likelihood of assault.

Two early studies found that adolescent victimization was more strongly related to victimization in college than child sexual abuse (Gidycz et al., 1993; Himelein, 1995). Although childhood sexual abuse has been found to predict revictimization before college (Himelein, 1995; Humphrey & White, 2000), sexual victimization in college seems to be best predicted by adolescent sexual assault; one study found sexual revictimization in college was most common for those who had been first assaulted in early adolescence (Humphrey & White, 2000).

### **Examining Specific Drinking Consequences as They Impact Risk for Revictimization.**

Most research on alcohol and victimization to date has focused on the *presence or quantity* of alcohol consumed by women (e.g., Messman-Moore et al., 2008; McCauley &

Combs-Lane, 2010; McCauley, Calhoun, & Gidycz, 2010). However, it remains unclear whether and to what extent factors besides the *quantity* of alcohol consumed increases risk for victimization. These factors include physical dependence, impaired control, blackouts, and other risky behaviors.

The objective of the current study was to gain a better understanding of the mechanisms by which drinking confers risk for revictimization. Specific drinking consequences – or behavioral and physiological sequelae associated with drinking – may have differential effects on risk of revictimization. Among substance-dependent women, 50% had experienced an episode of sexual assault in their lifetime (Grice et al., 1995). It is possible that symptoms associated with physical dependence may be related to increased exposure and risk for assault. However, the symptoms of alcohol dependence have not been explored as potential predictors of risk of revictimization. An individual's physiological dependence on alcohol may be related to increases in the frequency of drinking episodes (Dawson & Archer, 1993), which in turn, may increase the number of situations in which an individual may be victimized.

In addition to the frequency of drinking episodes, specific consequences associated with drinking quantities may influence the potential for sexual assault (Testa & Parks, 1996). For example, blackouts may increase risk of victimization as individuals are incapacitated, may be unaware of their surroundings, and may be unable to escape from unwanted or unsafe situations or may be more perceived as more vulnerable by perpetrators while blacked out. In an email survey of 772 college students, of those who had blacked out at least once in their lives, 25% of males and 24.6% of females later learned that they had engaged in some form of sexual activity during a blackout (White, Jamieson-Drake, & Swartzwelder, 2002).

Finally, individuals whose drinking results in increases in other risky behaviors (e.g., smoking marijuana or having sex with someone a person just met) may increase exposure to dangerous situations and thus be at increased risk for victimization (Fargo, 2009). In one prospective study of revictimization, alcohol use and expected involvement in risky activities at baseline were associated with new sexual victimizations at follow-up (Combs-Lane & Smith, 2002).

### **Present Study**

The present study examined whether or not specific drinking consequences experienced by binge drinking college age women predict revictimization in the month following completion of a baseline survey. We hypothesized that specific drinking consequences, including higher impaired control and physiological dependence, higher rates of blackout drinking, and engaging in other alcohol-related risky behaviors would result in a greater likelihood of being revictimized within the 30 days following the baseline assessment, above and beyond quantity of alcohol consumed. Additionally, we hypothesized these relationships would be most predictive for women who had adolescent or young adult sexual assault histories compared to those who experienced child sexual abuse.

## **Method**

### **Participants**

Participants for the present study included 162 undergraduate women at a large metropolitan university who participated in a baseline survey and an additional follow-up survey one month later for a larger study on daily assessment of post-traumatic stress and alcohol use. For a description of the larger study see Kaysen, Atkins, Simpson, Stappenbeck, Blayney, Lee, and Larimer (2013) and Naragon-Gainey, Simpson, Moore, Varra, and Kaysen (2012).

## Procedure

Study participants completed a screening survey and met study criteria which included reporting drinking four drinks or more on one occasion at least two times in the past month (i.e., binge drinking criteria). Participants also reported victimization at screening, either as children, adolescent/young adults, or both. Drinking was assessed via the Daily Drinking Questionnaire and victimization was assessed using the Sexual Experiences Survey, described below. In a baseline survey, participants were also assessed for alcohol use in the past week and drinking consequences experienced in the past three months. Two hundred and two participants were then randomly selected for follow-up 30 days later and completed a survey that assessed any new sexual victimization that had occurred within the past month (since their baseline assessment), a follow-up time frame in line with other prospective studies of college student revictimization (e.g., Messman-Moore, Ward, & Zerubavel, 2013). Of the 202 women randomly selected for the one-month follow-up, 40 were excluded because they did not have a trauma history at baseline. Participant demographics are included in Table 1.

## Measures

Participants' *alcohol use* was measured using the Daily Drinking Questionnaire (DDQ; Collins, Parks, & Marlatt, 1985). The DDQ has demonstrated modest convergent validity ( $r = .50$ ) with other measures of college student drinking (Collins et al., 1985). Participants reported the average number of drinks they consumed each day of a typical week during the past three months. The typical quantity of alcohol consumed in the past week was measured by summing an individual's total drinks per day from this measure.

*Drinking consequences* were assessed using the Young Adult Alcohol Consequences Questionnaire (YAACQ; Read, Kahler, Strong, & Colder, 2006). The YAACQ consists of 48

items, with 6 items each representing eight domains of drinking consequences: social interpersonal; academic/occupational; risky behavior; impaired control; poor self-care; diminished self-perception; blackout drinking; and physiological dependence. The YAACQ subscale scores are calculated by totaling the 6 items comprising the scale, with higher scores indicating more consequences in that domain. The YAACQ has demonstrated strong concurrent validity ( $r = .57 - .85$ ) and test-retest reliability ( $r = .86$ ) (Read, Merrill, Kahler, & Strong, 2007).

*Initial childhood sexual victimization* was assessed using the Childhood Sexual Victimization Questionnaire (CSVQ; Finkelhor, 1979). The CSVQ asks about experiences occurring before the age of 14 with an individual at least five years older than the victim. The 10 items ask whether or not events had occurred, with events ranging from “kissing and hugging in sexual way” to having intercourse.

*Initial adolescent and young adult sexual victimization* was assessed using an 18 item modified version of the Sexual Experiences Survey (SES; Koss & Oros, 1985). The SES has demonstrated acceptable internal consistency (Cronbach’s alpha = .74) and test-rest reliability of 93% in a college sample (Koss & Oros, 1985). The SES asks about events that have happened after the age of 14. Three domains of sexual victimization were assessed: unwanted attempted or completed oral-genital contact, vaginal or anal intercourse, or penetration of the vagina or anus by other objects. Participants reported whether they could not provide consent because they were under the influence of alcohol or drugs, and whether the perpetrator used their position of authority, threatened or used physical coercion to facilitate the assault. For both the CSVQ and the SES, participants were considered to have been sexually victimized if they endorsed one or more incidents of unwanted attempted or completed sexual assault or rape.

*Sexual revictimization* in the past 30 days (since baseline assessment) was assessed again using the SES. Sexual revictimization was measured using two dichotomous (yes/no) variables that were a composite of the questions on the SES: non alcohol-related rape or sexual assault and incapacitated rape or sexual assault.

### **Analysis Strategy**

Logistic regression analysis was used to determine the effect of drinking consequences on sexual revictimization. To first assess for multicollinearity between the drinking consequences, bivariate correlations were run and Variance Inflation Factors (VIFs) were calculated. Correlations ranged from .39 to .47 and the VIFs were all below 2.0, suggesting they did not meet threshold for multicollinearity (Mason, Gunst, & Hess, 1989). Two logistic regressions were run with non-alcohol-related rape or sexual assault (yes/no, coded as 1,0) and incapacitated rape or sexual assault (yes/no, coded as 1,0) 30 days after baseline as the dependent variables. In each regression, alcohol quantity (drinks per week) was entered in the first step. Drinking consequences, baseline trauma status, and the interaction between drinking consequences and baseline trauma status were then entered in the second step.

### **Results**

Of the 162 women with known victimization status at baseline who were assessed one month later, 40 (24.6%) had been revictimized in the following 30 days. Of these, 27 women (16.6%) experienced a non-alcohol-related rape or sexual assault and 24 women (14.8%) experienced a rape or sexual assault when they were incapacitated. Eleven women (6.7%) experienced both non-alcohol-related and incapacitated rapes or sexual assaults.

Regarding non-alcohol-related rape or sexual assault, none of the drinking consequences reliably predicted revictimization 30 days later. See Table 2. As seen in Table 3, regarding

incapacitated rape or sexual assault, an interaction was found between developmental period when the prior victimization occurred and blackout drinking. When the interaction was probed, blackout drinking predicted revictimization 30 days later for women with only a history of adolescent or young adult sexual assault (not child sexual assault), above and beyond quantity of alcohol consumed, as shown in Figure 1.

### **Discussion**

Blackout drinking at baseline predicted incapacitated rape or sexual assault in the following 30 days above and beyond the quantity of alcohol consumed only for women who experienced adolescent or young adult sexual assault at baseline. Blackout drinking did not reliably predict non-alcohol-related revictimization. Additionally, participants' reports of their impaired control when drinking, their physiological dependence on alcohol, and their engagement in alcohol-related risky behaviors did not reliably predict either incapacitated or non-alcohol-related sexual assault following the baseline assessment.

#### **Blackout drinking**

The results of the present study argue for an increased focus on understanding blackout drinking and their role in revictimization. Blackouts – or alcohol-induced amnesia – are a relatively common occurrence among college students, with slightly over half (51%) of undergraduates reporting experiencing at least one blackout in their lives (White, Jamieson-Drake, & Swartzwelder, 2002). Blackout drinking results in problems forming new memories after intoxication but does not involve a loss of consciousness (Hingston & White, 2012). The majority of blackouts are fragmentary, meaning individuals are able to recall bits and pieces of events when they were blacked out (White, Signer, Kraus, & Swartzwelder, 2004).

In the present study, blackout drinking predicted only alcohol-related revictimization. Blackouts usually occur after an individual has consumed large quantities of alcohol and are believed to occur due to a rapid rise in blood alcohol content. However, blackout drinking differs from heavy drinking in that simply consuming a large quantity of alcohol is often insufficient to produce blackouts, and individuals seem to have different thresholds for when they blackout (for review, see White, 2003). Significantly, when considering risk for sexual victimization and revictimization, there is evidence that because women process alcohol differently than men, they may be more likely to blackout than men, even when they drink smaller quantities of alcohol and less frequently (White, Jamieson-Drake, & Swartzwelder, 2002; Rose & Grant, 2010). Thus, women may be at higher risk for alcohol-related sexual assaults due to their greater vulnerability to blackouts as compared to men.

Blackouts appear to affect the hippocampus and interrupt the transfer of memory from short-term to long-term storage (White, 2003). They also begin relatively quickly: in one classic study, intoxicated individuals who blacked out did not remember stimuli that had been presented to them 30 minutes before (Goodwin, Othmer, Halikas, & Freemon, 1970). This sudden memory impairment has clear implications for risk for revictimization. Blacked out women may have no recollection of how they got to campus parties, who they may have met while drinking, and other warning signs they might have remembered if not blacked out. Additionally, a preliminary animal study suggests that blackout drinking may impair certain types of hippocampal-dependent fear conditioning (Weitemier & Ryabinin, 2003), which suggests blacked out individuals may experience additional impairment beyond acute intoxication that may interfere with crucial learning associated with cues that signify danger.

Blackout drinking may also be problematic in that it may deter women from reporting

sexual assaults to campus authorities because they are unable to recall full details of the event; a pattern in assaults in which the victim was using substances (Fisher, Daigle, Cullen, & Turner, 2003). Because blackout drinking results in memory loss, victims may not be able to recall the information necessary to report an assault. Additionally, even if victims do have sufficient information to report an assault, they may not feel justified in doing so because they do not remember the entirety of the assault or the events leading up to the assault. This may result in sexual assaults being underreported (Fisher et al., 2000), which may in turn result in insufficient resources necessary to address sexual assault on an individual or systemic level.

### **Adolescent or Young Adult Sexual Assault**

Blackout drinking predicted incapacitated rape or sexual assault only for women who were first victimized as adolescents or young adults, but not for those who were victimized as children. These findings are in line with recent literature suggesting that adolescent victimization is more predictive of college victimization than childhood abuse (Humphrey & White, 2000). This highlights the importance of distinguishing between child sexual abuse and adolescent sexual assault in understanding the role of development and revictimization.

Revictimization for women first victimized as adolescents or young adults may qualitatively differ from revictimization for women victimized as children. For instance, in an extended longitudinal study of child sexual abuse survivors, women who were victimized as children were more likely to be revictimized by older, non-peer perpetrators than women who were first victimized as adolescents or adults (Barnes, Noll, Putnam, & Trickett, 2009). On college campuses, however, in approximately 90% of sexual assaults, the individual is acquainted with the perpetrator (Fisher et al., 2000; Abbey, Ross, McDuffie, & McAuslan, 1996). Because women who are first victimized as adolescents or young adults may be in an

environment more similar to the one in which they were first victimized, which may include drinking and the presence of peer perpetrators, they may be at a heightened risk for revictimization. Although research is beginning to accumulate on the risk factors and outcomes of adolescent sexual assault (McCauley, Aajac, & Begle, 2013), most research on revictimization has focused on victims of childhood sexual abuse. Results of the current study support previous findings that adolescent sexual assault is an important predictor of sexual revictimization in college. More work is needed to determine the specific risk factors associated with adolescent and young adult sexual assault that increase risk for revictimization in college.

### **Limitations and Future Directions**

This study included only a relatively small subset of revictimized participants, perhaps due in part to the relatively short (30 day) follow-up period. However, given the short follow-up period, our findings may be more robust as compared to those with a longer follow-up window. Additionally, the sample was comprised exclusively of women who had engaged in at least some binge drinking, as well as women who had past histories of adult or childhood sexual victimization. This precludes us from examining whether these results hold for non- or light-drinkers. Further research using a sample with more variability in alcohol consumption and no previous victimization history is needed to determine if these relationships still hold for other college women. However, given rates of both binge drinking among college women and rates of child or adult sexual victimization, the results do apply to a relatively large proportion of women. Additionally, the data from this study was collected via retrospective self-report, which may have affected validity since blackout drinking impairs memory. It is possible that some individuals did not report revictimization because they were blacked out at the time of the assault and did not remember it, suggesting that the rate of revictimization in the study may be

underreporting actual rates of revictimization.

Additionally, more research is needed to help identify women who are at greatest risk for experiencing blackouts. Better knowledge of women's physiological vulnerability to blackouts could be used in both alcohol use and sexual assault prevention efforts. A more thorough understanding of the physiology of blackouts could aid in developing strategies to reduce their occurrence as well as more reliable methods of identifying when an individual is blacked out. Importantly, education efforts targeting men are also needed to reduce victimization of intoxicated women.

Despite limitations, the current study adds to our knowledge of specific alcohol-related risk factors for sexual revictimization and the unique risk posed by adolescent sexual assault. "Binge" drinking continues to be a problem, even as early as high school (Patrick et al., 2013) and most certainly on college campuses. Educational programming for college students on "binge" drinking and blackout drinking in particular – including risk for sexual victimization and revictimization – is needed to better educate college students about the risks associated with these patterns of drinking. Lastly, continued work is needed on the effects of alcohol-related sexual assaults on women who have experienced them. Often law enforcement and college administrators may treat these sexual assaults as less severe rather than treating them as comparable with non-alcohol-related assault.

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Table 1

*Participant Baseline Demographics, Trauma Status, and Drinking Consequences (N = 162)*

| <b>Demographic</b>  | <b>%</b>    |
|---|-------------|
| Women   | 100         |
| Age ( <i>M (SD)</i> )   | 20.2 (2.1)  |
| Year in school  |             |
| Freshman  | 11.9        |
| Sophomore   | 25.6        |
| Junior  | 36.9        |
| Senior  | 25.6        |
| Sexual orientation  |             |
| Straight  | 90.7        |
| Bisexual  | 4.3         |
| Lesbian   | 2.5         |
| Questioning   | 2.5         |
| Race/ethnicity  |             |
| White   | 71.3        |
| Asian/Pacific Islander  | 12.5        |
| Multi-Ethnic  | 9.4         |
| Black   | 1.9         |
| Other race  | 4.4         |
| Experienced child sexual assault only at baseline                             | 54.9        |
| Experienced adolescent/ young adult sexual only assault at baseline           | 7.4         |
| Experienced both child and adolescent/ young adult sexual assault at baseline | 37.6        |
| YAACQ impaired control subscale score ( <i>M (SD)</i> )                       | 2.63 (1.82) |
| YAACQ risky behaviors subscale score ( <i>M (SD)</i> )                        | 1.97 (1.82) |
| YAACQ physiological dependence subscale score ( <i>M (SD)</i> )               | 0.58 (0.79) |
| YAACQ blackout drinking subscale score ( <i>M (SD)</i> )                      | 3.35 (2.16) |

*Note.* YAACQ = Young Adult Alcohol Consequences Questionnaire

Table 2

*Drinking Consequences Predicting Non-Alcohol Related Assault or Rape 30 Days Post Baseline in a Sample of Undergraduate Binge Drinking Women.*

| Predictor   | OR   | 95% CI    | <i>p</i> |
|---|------|-----------|----------|
| Block 1   |      |           |          |
| Total drinks per week   | 1.00 | 0.94-1.07 | .91      |
| Block 2   |      |           |          |
| YAACQ impaired control subscale score                           | 1.01 | 0.75-1.35 | .98      |
| YAACQ risky behaviors subscale score                            | 1.07 | 0.81-1.42 | .62      |
| YAACQ physiological dependence subscale score                   | 1.28 | 0.64-2.54 | .48      |
| YAACQ blackout drinking subscale score                          | 0.63 | 0.83-1.87 | .30      |
| Adolescent sexual assault at baseline                           | 0.81 | 0.45-3.36 | .69      |
| Child sexual assault at baseline                                | 1.88 | 0.04-8.04 | .65      |
| YAACQ blackout drinking X Adolescent sexual assault at baseline | 1.05 | 0.61-1.48 | .82      |
| YAACQ blackout drinking X Child sexual assault at baseline      | 1.88 | 0.16-1.83 | .32      |

*Note.* YAACQ = Young Adult Alcohol Consequences Questionnaire

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

Table 3

*Drinking Consequences Predicting Incapacitated Assault or Rape 30 days Post Baseline in a Sample of Undergraduate Binge Drinking Women.*

| Predictor   | OR   | 95% CI    | <i>p</i> |
|---|------|-----------|----------|
| Block 1   |      |           |          |
| Total drinks per week   | 1.00 | 0.93-1.08 | 1.00     |
| Block 2   |      |           |          |
| YAACQ impaired control subscale score                           | 0.97 | 0.71-1.31 | .82      |
| YAACQ risky behaviors subscale score                            | 1.14 | 0.84-1.54 | .40      |
| YAACQ physiological dependence subscale score                   | 0.95 | 0.42-2.13 | .89      |
| YAACQ blackout drinking subscale score                          | 0.82 | 0.52-1.29 | .39      |
| Adolescent sexual assault at baseline                           | 1.03 | 0.33-3.26 | .96      |
| Child sexual assault at baseline                                | 0.55 | 0.35-8.69 | .67      |
| YAACQ blackout drinking X Adolescent sexual assault at baseline | 1.80 | 1.07-3.03 | .03*     |
| YAACQ blackout drinking X Child sexual assault at baseline      | 0.83 | 0.23-2.98 | .77      |

*Note.* YAACQ = Young Adult Alcohol Consequences Questionnaire

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

Figure 1

*Probability of Revictimization for a Sample of Undergraduate Binge Drinking Women With and Without Previous Adolescent Sexual Assault at Baseline at High and Low Levels of Blackout Drinking.*

