



Article

Sexual Victimization and Hypersexuality in College Women: Examining Alcohol Use as a Potential Mediator

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Abstract: The past two decades have yielded a large body of literature that uncovered an unfortunate reality: sexual victimization is more prevalent than previously thought. This body of literature has also indicated a number of the negative consequences of experiencing sexual victimization, including mental illness, substance abuse, and sexual dysfunction. Recent research has also indicated that sexual victimization may lead to hypersexuality. What has yet to be researched is how other negative consequences of sexual victimization, such as substance abuse, may contribute to elevated levels of hypersexuality. Since these behaviors are associated with experiencing future instances of sexual violence, it is important to understand the relationship between these factors. The purpose of the current study is to address this gap in the research by examining whether alcohol use mediates the effect between sexual victimization and hypersexuality. Results indicate that alcohol use does partially mediate the relationship between sexual victimization and hypersexuality, but that sexual victimization still accounts for a significant amount of variation with respect to hypersexuality. These findings indicate that sexual victimization experiences may lead some to engage in problematic coping behaviors, such as risky sexual behavior and increased alcohol consumption, which may place individuals at an increased risk of future victimization experiences.

Keywords: sexual victimization; victims; substance use; alcohol; hypersexuality



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1. Introduction

Over the last several decades, researchers have established that sexual violence is a common experience, especially for women and girls (Basile et al. 2014; Borumandnia et al. 2020; Dartnall and Jewkes 2013). The center for Disease Control and Prevention (CDC) states that about one in every five women experience sexual violence at some point in their lives. In addition, sexual victimization rates tend to be higher among racial and ethnic minority groups (Smith et al. 2017). Sexual violence includes any sexual activity where consent is not given (Basile et al. 2014; Smith et al. 2017). The negative consequences of sexual abuse have also been well-documented by researchers. Mental illness, substance abuse, sexual dysfunction, and many other negative consequences have been associated with experiencing sexual victimization across the life course (Ferguson et al. 2008; Leonard and Follette 2002; Loeb et al. 2002; Thompson and Kingree 2010). Of concern to the current study is the association that has been consistently found between sexual victimization, alcohol consumption, and hypersexuality.

Individuals who experience sexual victimization, either as an adult or as a child, report higher levels of hypersexuality relative to those who have not experienced sexual victimization. Hypersexuality is defined as elevated levels of sexual thoughts, urges, and behaviors that someone may use to deal with negative emotional states, such as stress, anxiety, or depression (Bothe et al. 2019). Though an association exists between victimization and hypersexuality, less is known about why this seems to happen in some individuals and not others. Even more perplexing is the fact that sexual victimization experiences may also result in sexual dysfunction, which can be characterized by a range of behaviors, including

a lack of interest in sex to experiencing pain during sexual activity (Jepsen et al. 2023). While conjecture regarding why sexual victimization may result in either sexual dysfunction or hypersexuality has centered around the timing of sexual victimization (see Aaron 2012), the answer could lie in another negative consequence of sexual victimization: problematic alcohol use. While the link between sexual victimization and substance abuse has been widely researched over the past decades, more recent research has revealed associations between alcohol use and hypersexuality (see Reid and Meyer 2016). In addition to these concerns, both hypersexuality and alcohol use have been found to be associated with future instances of sexual victimization, meaning that, for individuals who experience sexual victimization, the negative consequences, if left unaddressed, may lead to future sexual victimization experiences (Caamano-Isorna et al. 2021; Mellins et al. 2017). What has yet to be examined is the potential role that alcohol use plays in the association between sexual victimization and hypersexuality.

The current study aims to fill this gap in the research by examining whether or not alcohol use mediates the association between sexual victimization experiences and hypersexuality. The results of the study will provide insight into the relationship between sexual victimization and hypersexuality to inform treatment and counseling services aimed at helping to prevent problematic coping mechanisms later in life.

2. Review of the Literature

2.1. *Victimization, Sexual Dysfunction, and Hypersexuality*

Women generally experience more sexual dysfunction than men (Hendrickx et al. 2014), with between 24% and 44% of general population women in the United States reporting some kind of sexual dysfunction (Bancroft et al. 2003; Shifren et al. 2008). Among college women, less is known regarding the prevalence of sexual dysfunction, but estimates from the small body of studies in this area indicate that the prevalence ranges from 13% to 65% among North American and European college-aged women (Garneau-Fournier et al. 2017; Turchik and Hassija 2014; Spencer and Zeiss 1987). Correlates of sexual dysfunction in women have generally centered around sexual inhibition, biological factors (e.g., hormones, genetics), mental health issues (e.g., personality emotional pathologies), and issues with relationships (Berry and Berry 2013; Garneau-Fournier et al. 2017; Giraldo et al. 2013; Kao et al. 2012; Luo et al. 2008; Lykins et al. 2012). More recent research by Garneau-Fournier et al. (2017) has revealed that victimization also plays a key role in sexual dysfunction, specifically among college-aged women. Among the three areas of sexual dysfunction measured in the study, sexual victimization was most strongly associated with sexual interest/arousal problems. For these women, it could be that experiencing victimization may lead to sexual inhibitions, which in turn may result in elevated scores on measures of sexual interest/arousal problems.

Sexual victimization can have the opposite effect on sexuality, where individuals who experience sexual victimization may respond by displaying levels of hypersexuality (Annerback et al. 2012; Ecott et al. 2020; Luo et al. 2008; Perera et al. 2009). In other words, relative to demonstrating sexual dysfunction, some individuals may engage in more risky sexual behaviors and do so in a compulsive manner. According to Maniglio (2011), sexual trauma may lead individuals to pursue coping strategies through unhealthy behaviors, which may include sexual activities. While it is generally accepted that the connection between sexual victimization and hypersexuality is stronger for men than women (see Aaron 2012), research tends to support the idea that sexual victimization may lead to hypersexuality in women (Annerback et al. 2012; Ecott et al. 2020; Luo et al. 2008; Perera et al. 2009). These findings have been demonstrated in clinical, sexual offending, general-population, and college-aged samples across multiple countries. Less is known regarding why some individuals may demonstrate internalizing behaviors (e.g., sexual dysfunction), while others demonstrate externalizing behaviors (e.g., hypersexuality). Aaron (2012) notes that the timing of the victimization may play a role in the consequences of the victimization, but other coping strategies, such as alcohol abuse, have yet to be

studied as a potential mechanism that could influence the relationship between sexual victimization and hypersexuality.

2.2. *The Role of Alcohol Use*

Substance abuse is one of many negative consequences that has consistently been found among victims of sexual violence (Donovan et al. 2004; Dube et al. 2006; Ferguson et al. 2008; Lown et al. 2011). The link has been found across several measures of sexual victimization, as well as measures of problematic drinking (e.g., binge drinking) and alcoholism. In addition, research indicates that many individuals seeking treatment for substance abuse issues related to alcohol report experiencing some kind of sexual victimization at some point in their lives (Parisi et al. 2022). In addition to the link between sexual victimization and later alcohol use, alcohol use has also been identified as a potential risk factor for experiencing further sexual victimization (Caamano-Isorna et al. 2021; Mellins et al. 2017). This means that alcohol plays a multifaceted role in sexual victimization, where experiencing sexual victimization results in increased alcohol use, and that alcohol use increases the chance that someone will experience a sexual victimization event at a later time.

Alcohol use has also been linked to levels of hypersexuality (Ballester-Arnal et al. 2020; Reid et al. 2016; Sussman et al. 2011). Among individuals who report risky use of alcohol, nearly half reported problematic hypersexual behaviors, and approximately 16% reported having alcohol dependence. Similarly, individuals who have been diagnosed with substance abuse disorders score significantly higher on measures of hypersexual behaviors compared to those who have not. Antonio and colleagues (Antonio et al. 2017) also provide evidence showing that, as the severity of the substance abuse disorder increases, the level of hypersexual behaviors demonstrated by an individual increases. The consistent association found between hypersexuality and a range of alcohol-use behaviors, ranging from risky use to severe alcoholism, could be attributed to a similarity in these behaviors (Antonio et al. 2017), specifically when looking at individuals who are coping with the stress and trauma that has followed their victimization. Substance abuse disorders and stress-related disorders often occur simultaneously (Ballester-Arnal et al. 2020), due to the desire to cope with the stress that has resulted from their victimization, and hypersexuality could serve as an additional outlet for coping. The correlation between all three of these factors, however, has yet to be studied, but researchers have pointed to a need to examine the interrelated nature of these variables in order to provide a more thorough understanding of this phenomenon (Jepsen et al. 2023).

2.3. *The Current Study*

Researchers have demonstrated that there is a connection between sexual victimization and alcohol use, as well as a connection between sexual victimization and hypersexual behaviors. Discussions of the relationships between these variables have provided conjecture regarding the interrelated nature of victimization, alcohol use, and hypersexuality, but researchers have yet to specifically explore how these factors are connected. In particular, the other factors that may contribute to the connection between sexual victimization and hypersexuality have yet to be investigated. Jepsen et al. (2023) highlight that this connection may exist, and, more specifically, focus on the idea that alcohol use and hypersexuality are both attempts to cope with the stress that results from one's victimization experience. Thus, the purpose of the current study is to examine this relationship more closely, and, to examine whether alcohol use has a mediating effect on the association between sexual victimization and hypersexuality.

3. Materials and Methods

3.1. *Sample*

The sample for the current study consisted of 323 undergraduate women from a university in the southern United States. The average age of the sample was about 20 years old, and the largest portion of students identified as being Hispanic (40.6%), followed

by White (37.8%), Black (14.9%), and those who selected “other” (6.8%). Most students indicated that they identify as heterosexual (84.1%), followed by bisexual (12.8%) and homosexual (3.1%). Additional descriptive statistics, including all the variables of interest included in the study, can be found in Table 1.

Table 1. Descriptive Statistics for Sample—N = 323.

Variables	Mean (SD)	N (%)	Range	α	Skewness	Kurtosis
Age	20.51 (3.57)	-	18–47	-	-	-
Race						
White	-	131 (40.60)	-	-	-	-
Hispanic	-	122 (37.80)	-	-	-	-
Black	-	48 (14.90)	-	-	-	-
Other	-	22 (6.80)	-	-	-	-
Sexual orientation						
Heterosexual	-	272 (84.20)	-	-	-	-
Bisexual	-	41 (12.70)	-	-	-	-
Homosexual	-	10 (3.10)	-	-	-	-
Sexual victimization	-	97 (30.00)	-	-	-	-
HBI	25.54 (10.12)	-	19–87	0.94	1.98	3.68
HBI Coping	9.89 (4.88)	-	7–32	0.92	2.16	4.63
HBI Control	10.98 (4.79)	-	8–30	0.88	1.94	3.31
HBI Consequences	4.67 (1.68)	-	4–16	0.76	3.44	3.61
Alcohol use	-	2.80 (1.44)	1–7	-	0.69	−0.28
Never	-	58 (18.00)	-	-	-	-
Less than monthly	-	106 (32.80)	-	-	-	-
At least monthly	-	72 (22.3)	-	-	-	-
Less than weekly	-	32 (9.90)	-	-	-	-
At least weekly	-	42 (13.00)	-	-	-	-
Several times a week	-	10 (3.10)	-	-	-	-
Daily	-	3 (0.90)	-	-	-	-

3.2. Measures

3.2.1. Independent Variable

The independent variable for the current study included two items written to assess whether the respondent experienced sexual victimization. Respondents were asked to answer “yes” or “no” to whether someone had put their penis, fingers, or foreign objects into their vagina, and if someone had put their penis, fingers, or foreign objects into their butt without their consent. These two dichotomous items were combined into one item indicating whether the respondent had experienced sexual victimization. Approximately 30.0% of the sample reported that they had experienced one of these types of victimization at some point in their life.

3.2.2. Dependent Variable

The Hypersexual Behavioral Inventory (HBI) (Reid et al. 2011) was used to assess hypersexuality. The tool consists of 19 statements on sexual activities, with responses marked on a Likert scale. These items are designed to assess hypersexuality across three dimensions, which include the consequences of hypersexuality, control, and coping. Examples of items from each dimension include “I sacrifice things I really want in life in order to be sexual” for the consequences subscale, “Sexually, I behave in ways I think are wrong” for the control subscale, and “Doing something sexual helps me feel less lonely” for the coping subscale. Response options across the 19 items include (1) Never, (2) Rarely, (3) Sometimes, (4) Often, and (5) Very Often. Psychometric assessments of the instrument indicate that the HBI demonstrates strong reliability and validity among general population samples of men and women from several nations (Ballester-Arnal et al. 2019; Rettenberger et al. 2016). In the current sample, the Cronbach’s alpha for the entire instrument is excellent ($\alpha = 0.94$). For the individual scales, the coping scale demonstrated excellent reliability ($\alpha = 0.92$),

while the control scale demonstrated good reliability ($\alpha = 0.88$), and the consequences scale demonstrated acceptable reliability ($\alpha = 0.76$).

3.2.3. Mediating Variable

Alcohol use was measured by asking respondents to respond to one statement on the frequency with which they consume alcohol, with responses marked on a Likert scale. Response options were (1) Never, (2) Less Than Monthly, (3) At Least Monthly, (4) Less Than Weekly, (5) At Least Weekly, (6) Several Times a Week, and (7) Daily.

3.3. Procedure

Participants for the study were recruited through soliciting face-to-face courses in an undergraduate criminal justice program. The researcher provided the research protocol, a description of the purpose of the study, and the informed consent document to faculty who were teaching undergraduate criminal justice courses. Instructors who agreed to participate in the study invited the researcher to visit their classes, where the author presented the purpose and details of the study. Students interested in participating were given informed consent forms to read and sign, and the survey to complete. Students in all but one of the classes surveyed were offered extra credit for participation. The survey took about 30 minutes on average for the students to complete, and the study was approved by the Institutional Review Board of the institution where the study took place.

3.4. Analytic Plan

First, bivariate analyses were run to assess whether any significant bivariate associations exist between the independent, dependent, mediating, and control variables. These analyses included Pearson's correlation coefficients, independent sample t-tests, and one-way ANOVAs. Effect sizes for significant findings were reported using the appropriate interpretation of magnitude for Cohen's *d* (Cohen 1988) and Pearson's correlation coefficients (Gau 2018). The results of these analyses were used to determine which variables were included in the multivariate models. Four structural equation models (SEM) were used to assess the potential mediating role that alcohol use has in the relationship between sexual victimization and hypersexuality (see Figure 1): one model for the total score on the HBI, and three models for each of the individual subscales. The "medsem" package (Mehmetoglu 2018) was used to test for mediation within Stata version 14. The output was based on the strategy presented by Iacobucci et al. (2007), which is ideal for determining the magnitude of indirect effects.

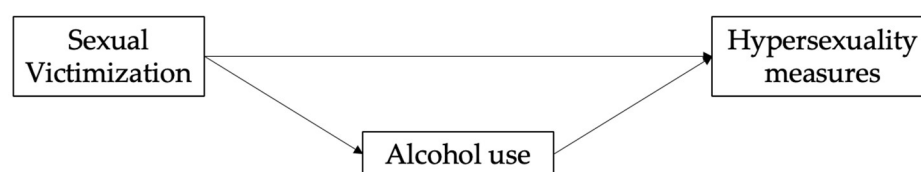


Figure 1. Proposed structural equation model.

4. Results

4.1. Bivariate Analyses

The first set of bivariate analyses involved examining whether there was an association between victimization and scores on the HBI, as well as victimization and alcohol consumption. The results of the independent sample t-test can be found in Table 2. For all five analyses, significant differences were observed on HBI scores and alcohol use frequency between those who had experienced sexual abuse at some point in their life and those who had not. Women who reported victimization at some point in their lives scored significantly higher on the total HBI, as well as on the coping, control, and consequences subscales, and reported more frequent alcohol use ($p < 0.01$). Cohen's *d* values indicated that this effect was moderate for the total HBI score ($d = 0.64$), the coping subscale ($d = 0.61$), and

control subscale ($d = 0.58$), and small for the consequences subscale ($d = 0.42$) and alcohol consumption ($d = 0.34$).

Table 2. Independent sample t-test for sexual victimization, dependent, and mediating variables.

	Sexual Victimization	No Sexual Victimization	T (df)
HBI total score	29.85 (13.17)	23.61 (7.76)	5.29 (322) *
HBI Coping	11.86 (6.54)	9.01 (3.64)	4.99 (322) *
HBI Control	12.85 (6.00)	10.16 (3.91)	4.78 (322) *
HBI Consequences	5.14 (2.25)	4.45 (1.32)	3.47 (322) *
Alcohol use	3.14 (1.49)	2.66 (1.39)	2.80 (322) *

Note. $N = 323$. * $p < 0.01$.

The next set of bivariate analyses involved calculating Pearson's correlation coefficients for scores on the HBI and alcohol consumption. The results of these analyses can be found in Table 3. Results of the analyses indicate that scores on the HBI are significantly correlated with the frequency of alcohol consumption, with the direction of the relationship demonstrating that increased frequency of alcohol consumption is associated with an increase in the total score on the HBI and the three subscales ($p < 0.01$). The strongest correlation exists between alcohol use and the coping subscale of the HBI, though all correlations between the HBI and alcohol use are small in magnitude.

Table 3. Correlations of Dependent and Mediating Variables.

	1	2	3	4	5
1 Alcohol use	-	-	-	-	-
2 HBI	0.23 *	-	-	-	-
3 HBI Coping	0.24 *	0.90 *	-	-	-
4 HBI Control	0.20 *	0.91 *	0.66 *	-	-
5 HBI Consequences	0.15 *	0.81 *	0.64 *	0.69 *	-
6 Sexual victimization	0.15 *	0.23 *	0.27 *	0.26 *	0.19 *

Note. $N = 323$. * $p < 0.01$.

Finally, a set of bivariate analyses were run to test whether demographic variables were associated with the outcome variable to determine if they needed to be controlled for in the structural equation model. For race, an ANOVA was run to examine whether any significant differences existed for scores on the HBI, $F(3, 322) = 70.54$, $p = 0.56$. For age, Pearson's correlation coefficients were calculated, $r(323) = -0.08$, $p = 0.14$. For both, the results of the analyses indicate that there were no significant associations, indicating that they did not need to be controlled for in the structural equation model.

4.2. Structural Equation Models

A series of structural equation models were run to examine whether alcohol use mediated the relationship between sexual victimization and total scores on the HBI, as well as on the subscales (see Table 4).

The first model containing total scores on the HBI as the dependent variable fit the data well, according to the model fit statistics (CFA = 1.00; TLA = 1.00; RMSEA = 0.00); significant associations were demonstrated for sexual victimization ($p < 0.01$) and alcohol use ($p < 0.01$), indicating that they both account for the unique variance in the total scores on the HBI. Results of the Sobel test of indirect effects (see Table 4) indicated that there is a significant indirect effect of sexual victimization on HBI total scores through alcohol use ($p < 0.05$). This indirect effect accounted for about 11% of the effect that sexual victimization had on scores on the HBI. This indicates that, while some of the effects of sexual victimization were accounted for by alcohol use, a substantial majority of this effect of sexual victimization on HBI scores was still uniquely accounted for by sexual victimization. The second model included the coping subscale of the HBI. Like the previous model, the fit statistics indicated

that the model fit the data well (CFA = 1.00; TLA = 1.00; RMSEA = 0.00) and significant associations between sexual victimization and scores on the coping subscale ($p < 0.01$) were demonstrated, as well as between alcohol use and scores on the coping subscale ($p < 0.01$). The results indicate that sexual victimization had a significant indirect effect on scores on the coping subscale through alcohol use ($p < 0.05$). In this model, about 12% of the effect that sexual victimization had on scores on the HBI coping scale was accounted for by alcohol use.

Table 4. Structural equation models for HBI and subscales.

	Standardized Coefficient	Standard Error	95% CI
Model one ^a			
Alcohol use	0.20 **	0.05	0.96–0.30
Sexual victimization	−0.25 **	0.05	−0.35–−0.15
Indirect effects	−0.03 *	0.01	−0.06–−0.00
Model two ^b			
Alcohol use	0.21 **	0.05	0.10–0.31
Sexual victimization	−0.24 **	0.05	−0.34–−0.14
Indirect effects	−0.03 *	0.01	−0.06–−0.01
Model three ^c			
Alcohol use	0.16 **	0.05	0.06–0.27
Sexual victimization	−0.23 **	0.05	−0.33–−0.13
Indirect effects	−0.03 *	0.01	−0.05–−0.00
Model Four ^d			
Alcohol use	0.13 *	0.05	0.02–0.23
Sexual victimization	−0.17 **	0.05	−0.28–−0.07
Indirect effects	−0.02	0.01	−0.04–−0.00

Note. ^a HBI total score model. ^b HBI coping subscale model. ^c HBI control subscale model. ^d HBI consequences subscale model. $N = 323$. * $p < 0.05$. ** $p < 0.01$.

The third model included the control subscale of the HBI. Fit statistics indicated that the model fit the data well (CFA = 1.00; TLA = 1.00; RMSEA = 0.00), and that significant associations existed between sexual victimization and the control subscale ($p < 0.01$), as well as between alcohol use and the control subscale ($p < 0.01$). The results of the mediation analysis indicate that there was a significant indirect effect of sexual victimization on the control subscales through alcohol use ($p < 0.05$), and this accounted for about 10% of the effect of sexual victimization on the control subscale. The final model included the consequences subscale of the HBI. Fit statistics indicated that the model fit the data well (CFA = 1.00; TLA = 1.00; RMSEA = 0.00), and that significant associations existed between sexual victimization and the consequences subscale ($p < 0.01$), as well as between sexual victimization and alcohol use ($p < 0.01$). It should be noted that the standardized coefficients for the association between sexual victimization and the consequences subscale were considerably weaker than those seen in the first three models. The results of the mediation analysis indicate that there are no significant indirect effects in the model, meaning that alcohol use is not a significant mediator between sexual victimization and the consequences subscale.

5. Discussion

The prevalence of sexual victimization and the negative consequences of these experiences have been demonstrated across a large body of literature. Some of this literature has focused on how sexual victimization is associated with increased levels of substance abuse, including but not limited to increased alcohol use. Researchers have also examined whether sexual victimization affects the sexual health of individuals and have found that sexual victimization may lead to either sexual dysfunction or hypersexuality. Less is known about why some individuals experience a desire to use sexual behavior to cope with emotional difficulties, and in turn, engage in a variety of compulsive sexual behaviors. Because these negative consequences are shown to lead to an increase in the probability that women

experience sexual victimization in the future, it is integral to understand how some of these negative coping behaviors develop.

This study sought to bring a more complete understanding of the relationship between sexual victimization and hypersexuality by examining the mediating effect of alcohol consumption frequency. Results of the study indicated that, in line with previous research, sexual victimization is associated with both increased alcohol consumption and scores on the HBI. In addition, one novel finding from the current study was that alcohol use did partially mediate the relationship between sexual victimization and total scores on the HBI, as well as the coping and control subscales. First, the results of the bivariate analysis will be discussed.

5.1. Bivariate Analyses

Results of the bivariate analyses provided further evidence supporting the notion that sexual victimization is associated with hypersexuality and alcohol use. An interesting aspect of this association involves the magnitude of these associations: the association between sexual victimization and hypersexuality was moderate, while the association between sexual victimization and alcohol use was small. Several reasons may exist for the differences in magnitudes. College-aged individuals generally engage in risky sexual behaviors and alcohol use at a higher rate compared to individuals in other age ranges (Griffon et al. 2010; Scull et al. 2020). However, the desire to engage in risky sexual behaviors tends to be higher in men relative to women (Scull et al. 2020). Thus, for the women included in the study, it could be that experiencing sexual victimization leads to larger differences in hypersexual behavior relative to alcohol use frequency.

Another explanation involves the measure of alcohol use. Alcohol use was measured simply by asking individuals about their frequency of alcohol consumption. While the frequency of alcohol use is associated with substance abuse disorders, this is not a measure of substance abuse. Research examining the negative consequences of sexual victimization typically focuses on measures of alcohol abuse, not just the frequency of alcohol use (Lown et al. 2011; Olley 2008; Thompson and Kingree 2010). The small magnitude of the finding could be due to the net-widening effect of simply asking individuals the frequency with which they drink, especially in a sample of college students who, on average, report more frequent alcohol consumption (Hingson et al. 2005; Substance Abuse and Mental Health Services Administration 2020). Future research examining sexual victimization, hypersexuality, and alcohol use may benefit from including measures of substance abuse, as this may provide a more adequate distinction between sexual victimization and the resulting negative consequences.

The analyses also showed that hypersexuality and alcohol use. When looking at the individual subscales, the strongest correlations existed between alcohol use frequency and the coping subscale, followed by control and consequences. This provides further support for the idea that, for some individuals, the driving force behind engaging in sexual behaviors as a coping mechanism could be similarly driving an increased use of alcohol. The connection between alcohol use and risky sexual behaviors has been demonstrated in previous research (see Griffon et al. 2010), but research looking at hypersexuality has typically examined studies that measure alcoholism or substance abuse disorders more broadly. The results of this study do provide some indication that hypersexuality is associated with increased alcohol use, but the magnitude of this effect was small.

Similar to the discussion regarding the association between sexual victimization and hypersexuality, the small magnitude of this effect could be due to the way in which alcohol use was measured. Studies typically have yielded stronger effects between alcohol abuse and hypersexuality; however, the significant association between alcohol use and hypersexuality is still a notable finding, especially considering research highlighting the risk of future sexual victimization that results from frequent alcohol use (Caamano-Isorna et al. 2021; Mellins et al. 2017). Even if one does not suffer from alcoholism or other types of substance abuse disorders, women seeking help for hypersexuality may benefit from counseling and

prevention programs that highlight the increased risk of sexual victimization posed by engaging in frequent alcohol consumption.

5.2. Structural Equation Models

The final analysis for the study assessed whether alcohol use mediated the relationship between sexual victimization and hypersexuality. All the models demonstrated that, even when alcohol use was included in the model as a mediator, experiencing sexual victimization was still significantly associated with elevated scores on the total HBI and all the subscales. These findings provide further support for the idea that experiencing sexual victimization is associated with elevated levels of hypersexuality across all dimensions assessed by the HBI (Griffon et al. 2010; Reid and Meyer 2016; Scull et al. 2020). One issue that cannot be parsed in this analysis, though, is the time order of the relationship. This is the case for two reasons. First, the author did not have the ability to assess respondents' levels of hypersexuality prior to the victimization. Because of this, the researcher cannot be certain if the sexual victimization experience precluded the hypersexuality demonstrated by the individuals in the sample, or if the levels of hypersexuality precluded the initial sexual victimization experience. In addition, the author did not have a measure of when the sexual victimization experience took place. Regardless, the results do provide an important contribution to the literature in showing that, even when controlling for alcohol use, sexual victimization is still significantly associated with hypersexuality.

The results of the mediation analyses provided some support for the assertion made by Jepsen et al. (2023) regarding the interrelated nature of sexual victimization, substance abuse, and hypersexuality. There are two potential explanations for this finding. First, some individuals may use a litany of negative coping strategies following their sexual victimization experience, and the associated trauma and mental health issues. Research has shown that victimization leads to substance abuse (Donovan et al. 2004; Dube et al. 2006; Ferguson et al. 2008; Lown et al. 2011; Parisi et al. 2022), as well as hypersexuality (Annerback et al. 2012; Ecott et al. 2020; Luo et al. 2008; Perera et al. 2009), but this is the first study to include both in a mediation analysis. The mediation finding provides some support for this notion, particularly the idea that alcohol use may enhance one's propensity to engage in hypersexual behaviors. Another explanation could be that one of the responses to the sexual victimization experience is alcohol use, and alcohol use is what makes the hypersexual behaviors exhibited by the women in the sample more likely. Alcohol use, especially among college students, is associated with having an increased number of sexual partners and engagement in casual sex (Ballester-Arnal et al. 2020; Reid et al. 2016; Sussman et al. 2011). Thus, the women in the sample may be engaging in behaviors considered "hypersexual" due to their frequent use of alcohol, not necessarily the sexual victimization experience. However, this second explanation seems less likely since alcohol use only *partially* mediated the relationship between victimization and hypersexuality.

While there was still a significant direct effect of sexual victimization on hypersexuality, a portion of that effect was significantly partially mediated by alcohol use in all the models except for the final model that included the consequences subscale of the HBI. This indicates that for some individuals, alcohol use accounts for some of the effect that sexual victimization has on certain aspects of hypersexuality. Two implications can be derived from these findings. First, the hypothesis tested in this study was only partially supported, meaning that, while alcohol use does exert some influence on the association between sexual victimization and hypersexuality, there is still a unique variance accounted for by sexual victimization alone. Researchers have posited that other factors, such as age at sexual victimization, could exert an effect on the relationship between sexual victimization and hypersexuality (Aaron 2012), but this was not accounted for in the current study. Moving forward, researchers should consider including age at victimization to examine additional mediators that could exist between sexual victimization and hypersexuality. Finally, researchers have provided some evidence that individuals who engage in nega-

tive coping behaviors to deal with the stress and trauma from their sexual victimization experience may engage in multiple negative coping behaviors (Aaron 2012; Maniglio 2011; Reid and Meyer 2016). In other words, the motivating drive behind these negative coping behaviors is similar, though the behaviors themselves may be different. This could explain why subscales related to the use of sex as a coping mechanism and an inability to control sexual behavior were significantly mediated by alcohol use, but the negative consequences of hypersexuality were not. This finding may be of particular interest to individuals tasked with providing counseling services to victims of sexual violence, as well as for sexual violence prevention efforts on college campuses.

5.3. Limitations

To the author's knowledge, this study was the first to examine whether alcohol use mediates the relationship between sexual victimization and hypersexuality. However, this study is not without its limitations. The first limitation has to do with the measurement of sexual victimization and alcohol use. Sexual victimization was measured by asking individuals to respond to two questions indicating whether they had experienced someone either putting their penis, fingers, or any other foreign object into their vagina or anus without their consent. This did not account for several aspects of victimization: the timing of the victimization, the number of victimization experiences, and any attempted but not completed sexual victimization experiences. In addition, behaviors such as sexual harassment and non-penetrative sexual assault were not included in the measure. The timing of the victimization is important to assess to establish time order between the independent, mediating, and dependent variables, but it is also important due to research highlighting that the timing of the victimization may affect how victims respond to their victimization, specifically regarding the development of sexual dysfunction or hypersexual behaviors (Aaron 2012). Researchers have also noted that individuals who experience multiple sexual victimization incidents may experience elevated levels of negative consequences (Caamano-Isorna et al. 2021; Mellins et al. 2017). In addition, non-penetrative sexual assault experiences are traumatic and represent a type of sexual victimization that is not accounted for in this study. The omission of these variables may also contribute to endogeneity, which could bias the estimators within the path models presented in the analysis (Hill et al. 2021). In addition to the variables listed above not being included in the model, the model fit statistics provided in the analysis provide some indication that this might be the case, though other explanations, such as the low correlations between the independent, mediating, and dependent variables may have contributed to these results as well. Because of these concerns, the results of the model should be interpreted with caution. Future research should account for these factors regarding sexual victimization, to further test the research question posed by the current study and provide more stability and confidence in the findings.

The next limitation of the study has to do with the measure of alcohol use. As already indicated in the previous section, research examining sexual victimization and alcohol use, as well as hypersexuality and alcohol use, has typically centered around alcoholism or behaviors indicative of alcohol abuse (Lown et al. 2011; Olley 2008; Thompson and Kingree 2010). The results of the study do provide useful findings, particularly for college students, who are at a higher risk for engaging in more frequent alcohol use and experiencing the deleterious effects of such behaviors, but the current study does not include the number of drinks consumed at one time, the number of times an individual gets intoxicated, and other quantity and intensity aspects of alcohol use. Nevertheless, future research examining the mediating role that alcohol use has on the association between sexual victimization and hypersexuality should also include measures of alcohol abuse, in addition to measures of the frequency of alcohol consumption.

The final limitation of the study involves the sample for the study. The study was conducted at a rural college in the southern United States, which limits the generalizability of the study to this particular segment of the population. In addition, most of the par-

ticipants identified as being heterosexual, precluding the authors from generalizing the findings of this study to individuals in the LGBTQIA+ community. It should be noted that the sample did contain a more diverse sample of individuals, with the largest portion of individuals identifying as Hispanic. Sexual victimization rates tend to be higher in certain minority groups (Smith et al. 2017), so this was a benefit of the sample in the current study. Regardless, future studies should include members of the LGBTQIA+ community to elucidate sexual victimization experiences and the negative consequences of victimization among this population.

6. Conclusions

The rates of sexual victimization, especially among college-aged women, continue to be a troubling finding across academic endeavors in this area. This, coupled with the large body of research highlighting a myriad of negative consequences that may lead to future victimization experiences, provides further incentives for researchers to do their best to understand why certain victims experience certain negative consequences and not others. This study sought to provide further understanding regarding two negative consequences of sexual victimization: hypersexuality and alcohol use. The results of the study provided some insight into what is driving the relationship between sexual victimization and hypersexuality. Specifically, it seems that while alcohol use does account for some of the effects that sexual victimization has on hypersexuality, it does not fully account for why some women who experience sexual victimization experience higher levels of hypersexuality. Practitioners tasked with either providing counseling to victims or developing and implementing sexual violence prevention programs on college campuses should consider the roles that hypersexuality and alcohol use play for those who have previously experienced victimization, as well as the role that these factors may play in increasing the likelihood that someone may experience future instances of sexual victimization.

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