The Relationship Between Men's Sociosexuality, Drinking Intake, and Blackouts

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Abstract

Sociosexuality—attitudes, behaviors, and desires related to casual sex—partly predicts drinking behavior in both men and women because drinking is thought to facilitate interactions that lead to casual sex. It follows that sociosexuality would predict drinking intake (e.g., quantity consumed) —but perhaps not drinking consequences (e.g., blacking out)—on the premise that drinking large quantities with high frequency (but not to such high degrees/levels of intoxication that negative consequences occur) would facilitate casual sex. This set of studies evaluated whether baseline measures of sociosexuality predict drinking intake (i.e., frequency, quantity, and binge drinking) but not experiencing blacking out at follow-up in two samples (Study 1, $N = 172$; Study 2, $N = 1,039$) of college-aged men. As predicted, men's sociosexuality prospectively predicted drinking frequency, quantity, and binge drinking. Contrary to our predictions, men's sociosexuality also predicted blacking out. College men's drinking interventions should be tailored to high-risk groups and consider individual differences like sociosexuality.

Keywords

sociosexuality; alcohol; alcohol consequences; binge drinking; college students

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College students—especially men—consume alcohol more than any other non-clinical demographic (Harding et al., 2016; Hingson et al., 2017). Drinking is thought to facilitate casual sex (Derme et al., 1998; Lefkowitz et al., 2016), most hookups occur after alcohol use (Garcia et al., 2019) when students are intoxicated (Fielder et al., 2013), and level of intoxication predicts sex with new partners (Howells & Orcutt, 2014). Thus, college men highly motivated to engage in casual sex (i.e., high in sociosexuality—attitudes and behaviors related to casual sex; Simpson & Gangestad, 1991) may seek out drinking contexts that facilitate interactions with potential new partners and may drink strategically to increase the likelihood of casual sex after drinking. They may drink frequently, but not

to the extent that they experience negative consequences that preclude sexual activity. In the present study, we test whether sociosexuality predicts drinking intake but not necessarily one particular drinking consequence—blacking out (i.e., partial or full memory loss during a drinking episode; Labrie et al., 2011)—in college-aged men.

Sociosexuality is an individual difference that reflects one's attitudes, behaviors, and desires related to casual sex (Simpson & Gangestad, 1991). People with an unrestricted sociosexual orientation (i.e., high sociosexuality scores) tend to favor short-term relationships (as opposed to long-term relationships characterized by commitment), seek multiple, novel, concurrent sex partners (Ostovich & Sabini, 2004), and are more likely to use casual dating apps to solicit sex (Botnen et al., 2018; Moran et al., 2018). College-aged men and women high in sociosexuality also drink more than their peers low in sociosexuality (Cleveland et al., 2019; Corbin et al., 2016; Testa & Hone, 2019), and alcohol use mediates the relationship between sociosexuality and risky sexual behavior (Lopez et al., 2023).

College students high in sociosexuality drink more than their peers, and they likely do so strategically. For example, students high in sociosexuality seek out specific drinking venues (e.g., college parties and bars) that facilitate interactions with potential new sex partners who might also be seeking alcohol-involved casual sex and hookups (Hone et al., 2020). Accordingly, longitudinal research has revealed that men's sociosexuality (measured in their first year of college) predicts their drinking at parties and bars (measured in their second year; Cleveland et al., 2019). Students high in sociosexuality report drinking in social contexts like "at a party" and "at a bar" for sexual reasons (e.g., "to build up the courage to talk to someone of the opposite sex" and "to make it easier to go to bed with someone" (Brenman & Wade, 2020). Moreover, men high in sociosexuality report participating in drinking games (Hone et al., 2013) to "loosen people up for fooling around or having sex later" and "hit on people they're interested in." Finally, drinking at parties and bars partially mediates the relationship between college men's sociosexuality and sexual activity with new partners (Hone et al., 2020).

Findings from research on men's sociosexuality and related alcohol use align with the biological theory of costly signaling (Zahavi, 1975). Costly signaling theory posits that across many species, females tend to prefer males that thrive despite maintaining a trait that might handicap them (e.g., growing an elaborate tail that predators might easily catch), especially in short-term mating contexts (Zahavi, 1975). This might include avoiding alcohol-related consequences despite binge drinking. For example, successfully playing drinking games—which typically involve binge drinking—to test who can drink the most without throwing up or passing out (Hone et al., 2013). Indeed, men high in sociosexuality report being motivated to play drinking games to display their fortitude in this way (Hone et al., 2013). For college-aged men, social drinking may not only increase the chances of interacting with a potential sexual partner, but it may also give these men an opportunity to signal to women that they can engage in risky drinking without experiencing negative consequences, which may be perceived as a sexually attractive costly signal.

Moreover, it is biologically conceivable that those high in sociosexuality may have a higher alcohol tolerance/low alcohol sensitivity due to their frequent drinking and may indeed

experience fewer consequences than their high sensitivity peers (low in sociosexuality) when in heavy drinking contexts (Gonçalves et al., 2018; Hone et al., 2017; Piasecki et al., 2012). That is, those high in sociosexuality drink more heavily than their peers, and alcohol sensitivity can decrease as a result of heavy drinking. Then, because those low in alcohol sensitivity require more drinks to feel the effects of alcohol, they tend to consume more alcohol and experience a greater number of negative consequences on average (Schuckit et al., 2008; Schuckit & Smith, 2001). But paradoxically, lower-sensitivity drinkers may be more resistant to consequences like hangovers (Piasecki et al., 2012) and regretted sex (Hone et al., 2017) than their higher-sensitivity peers at a given number of drinks because they require more drinks to feel the effects of alcohol. That is, at a given estimated Blood Alcohol Concentration, they do not feel as "buzzed" and report lower feelings of subjective intoxication than their peers in the moment despite drinking "too much, too fast" (Trela et al., 2016). Indeed, just as with hangovers and regretted sex, low alcohol sensitivity is associated with experiencing a greater number of past year blackouts (and passing out), but when controlling for typical consumption, low alcohol sensitivity is associated with fewer blackouts (Davis et al., 2021). Thus, in heavy drinking settings like parties and bars, drinkers low in alcohol sensitivity (and high in sociosexuality) may be less prone to consequences like blackouts, drink for drink, and have an upper hand in costly signaling.

Overall, many studies suggest that college students—especially men—high in sociosexuality not only drink more than their peers, but do so as a way to interact with potential new sexual partners strategically (e.g., at parties and bars where potential new sex partners may be present) to display their fortitude and facilitate casual sex. Since men high in sociosexuality likely enter drinking venues to find new sexual partners, it is also conceivable that they may engage in drinking breaks or limit their alcohol intake to maintain social and physiological sexual functioning. They may be more likely to drink only to the point at which they can still achieve their goal of finding a new casual sex partner. Thus, those high in sociosexuality may not only drink in specific places but also drink to certain levels that would not preclude sexual activity (i.e., resulting in consequences that would interfere with sexual activity).

As a first step in testing these ideas, this pair of studies aims first to replicate the robust relationship between sociosexuality and drinking intake and then to elucidate whether this relationship is specific to intake but not blacking out—a consequence known to preclude sex, but also to increase risk for unsafe and unremembered sexual behavior (Labrie et al., 2011). Approximately half of men (and a third of women) who reported blacking out later realized they engaged in sexual activity that they were unaware of at the time (White et al., 2004). Thus, blacking out is a consequence distinct from throwing up and passing out (which would preclude sexual activity) in that sexual activity might well occur during a blackout, but not be recalled until later. Given men high in sociosexuality perhaps drink only to levels that would preclude throwing up and passing out (thus preventing meeting new sex partners), we tentatively hypothesized men high in sociosexuality might also experience fewer blackouts—a consequence that does not always preclude sex—than their peers.

Current Studies

We present baseline and follow-up (i.e., two waves) of data from college men. Our primary aim was to determine whether sociosexuality is related to drinking intake but not to blacking out. In this process, our secondary aim was to replicate cross-sectional and prospective research indicating that sociosexuality is related to drinking (Cleveland et al., 2019; Corbin et al., 2016; Testa & Hone, 2019). We hypothesized that sociosexuality would be cross-sectionally and prospectively related to men's drinking intake but not blacking out on the premise that college students high in sociosexuality may evince low sensitivity to the effects of the alcohol, or may not drink to such excess that they experience negative drinking consequences that may interfere with sexual activity.

Study 1 Method

Participants and Procedures

Participants were 172 of 469 college men aged 16 to 24 ($M = 19.18$, $SD = 1.98$) enrolled in introductory psychology courses across two semesters at a large private Southeastern University in the United States. Parental consent was obtained for participants under 18. During the first week of both semesters, questionnaires were administered to all students in person (Time 1; T1). Twelve weeks later, during the last week of both semesters, students were provided a link to an online survey that contained the same questionnaires, which they completed a second time (Time 2; T2). At both time points, students were debriefed and granted credit for their participation as part of a course requirement. The analytic sample comprised 172 men who completed both baseline and follow-up surveys. Men in this subsample did not differ from men in the larger sample who completed baseline surveys only in frequency of drinking, binge drinking, blacking out, or sociosexuality. However, they did consume slightly more drinks on a typical drinking day ($M = 1.52$ [i.e., 4.61 drinks per week], $SD = 1.22$ [2.56 drinks]) than their peers who completed baseline surveys only ($M = 1.29$ [4.12 drinks], $SD = 1.12$ [2.32 drinks]), $t(440) = 2.02$, $p = .044$.

Measures

Sociosexuality.—Sociosexuality was measured at baseline via the seven-item Sociosexual Orientation Inventory (SOI; Simpson & Gangestad, 1991). The seven items (e.g., "Sex without love is OK.") were weighted and aggregated in accordance with published conventional standards (Simpson & Gangestad, 1991), with higher scores indicating a greater desire for casual sex ($a = 0.85$).

Drinking Intake and Blacking Out.—Drinking intake and blacking out were measured via items from a modified Alcohol Use Disorders Identification Test (AUDIT; Babor et al., 2001; T1 $a = 0.82$; T2 $a = 0.81$). The AUDIT includes items used to screen for alcohol use and assesses intake, dependence, and negative outcomes (Reinert & Allen, 2002). Intake items included: "How often do you have a drink containing alcohol?" (i.e., frequency; ranging from 'never' to 'four or more times per week'), "How many drinks containing alcohol do you have on a typical day when you are drinking?" (i.e., quantity; ranging from '1 or 2' to '10 or more'), and "How often do you have six or more drinks on one occasion?"

(i.e., binge; ranging from 'never' to 'daily or almost daily'). The blackout item was: "How often during the past year have you been unable to remember what happened the night before because of your drinking?" (ranging from 'never' to 'daily or almost daily').

Study 1 Results

Aim 1.

We sought to replicate the cross-sectional relationship between sociosexuality and drinking intake using frequency, quantity, and binge drinking measures. Table 1 depicts the means, standard deviations, and correlations between all variables. Replicating previous research (Corbin et al., 2016), sociosexuality was related to all intake measures ($0.47 < r < 0.60$; see Table 1). As expected, men who were high in sociosexuality reported more T1 drinking days per week (frequency), more T1 drinks per week (quantity), and more T1 binge drinking days per week (binge drinking).

We also sought to replicate the prospective relationship between sociosexuality and drinking intake. In line with prior work (Cleveland et al., 2019; Testa & Hone, 2019), we ran three separate hierarchical Poisson models (to account for the non-normal distributions of intake data) to assess whether T1 intake (frequency, quantity, and binge) predicts T2 intake (frequency, quantity, and binge) in Step 1, with the added predictor of T1 sociosexuality at Step 2 (Aim 1). Table 2 depicts results for T2 intake (i.e., frequency, quantity, binge drinking). After controlling for T1 levels of intake, men high in sociosexuality reported greater T2 drinking days per week, more T2 drinks per week, and more T2 binge drinking days per week. Analyses were performed in Mplus Version 8.6 (Muthén & Muthén, 2017). We used maximum likelihood estimation with robust standard errors, and all available data were analyzed using the full-information maximum likelihood.

Aim 2.

Next, we sought to discern whether the relationship between sociosexuality and drinking is specific to intake or whether it is also related to blacking out (i.e., a negative consequence that may or may not preclude sexual activity). In this modest sample, contrary to predictions, sociosexuality was positively related to blacking out ($r = 0.40$; see Table 1). That is, men who were high in sociosexuality reported more T1 blacking out than their peers who were low in sociosexuality.

We ran a hierarchical Poisson model to assess whether T1 blacking out predicts T2 blacking out in Step 1, with the added predictor of T1 sociosexuality at Step 2 (Aim 2). After controlling for T1 blacking out, men high in sociosexuality reported more T2 blackouts than their peers low in sociosexuality, $b = 0.047$ (0.015), 95% CI = [0.017, 0.077], $p = .002$ (Table 2).

Study 2 Method

Participants and Procedures

Participants were 1,039 of 2,037 college men aged 18 to 19 ($M = 18.10$, $SD = 0.30$) enrolled in introductory psychology courses across five semesters at a large public Northeastern

University in the United States. During the first week of all semesters, questionnaires were administered to all students online via email. Participants were compensated $25 for completing the surveys and entered into a lottery drawing for $400. The analytic sample comprised 1,039 men ($M = 18.11$, $SD = 0.31$) who completed both baseline (first semester 1; T1) and follow-up (third semester; T2) surveys. This subsample did not differ from men in the larger sample who completed baseline surveys only in frequency of drinking, quantity consumed, binge drinking, or blacking out (ps > .249). However, subsample ($M = -0.06$, $SD = 0.78$) was lower in sociosexuality than men in the larger sample who completed the baseline survey only ($M = 0.16$, $SD = 0.85$), $t(2,032) = -5.42$, $p < .001$.

Measures

Sociosexuality.—Sociosexuality was assessed at baseline via the SOI (Simpson & Gangestad, 1991). Items (e.g., "Sex without love is OK.") were standardized and a mean score was calculated in line with published methods ($a = 0.84$; Testa & Cleveland, 2017).

Drinking Intake and Outcomes.—All intake items were identical to those administered in Study 1 (AUDIT; Babor et al., 2001), but the blacking out item was not administered. So, to measure blacking out, we used a single binary (i.e., yes/no) item from the Young Adult Alcohol Problem Screening Test (Hurlbut & Sher, 1992): "Have you awakened the morning after a good bit of drinking and found that you could not remember a part of the evening before?" In Study 2, we used the same analytical plan as in Study 1; however, we used zero-inflated Poisson models due to the zero-inflated nature of the blacking out outcome (0 = never; 1 = blacking out; at T1, 30.2% yes; at T2, 30.1% yes).

Study 2 Results

Aim 1.

Replicating results from Study 1, sociosexuality was related to all measures of intake ($0.44 < r < 0.45$; see Table 3). As expected, men who were high in sociosexuality reported more T1 drinking days per week (frequency), more T1 drinks per week (quantity), and more T1 binge drinking days per week (binge drinking).

Replications of the prospective relationship between sociosexuality and intake are depicted in Table 4. Men who were high in sociosexuality reported greater T2 intake, including more T2 drinking days per week, more T2 drinks per week, and more T2 binge drinking days per week after controlling for T1 levels of intake.

Aim 2.

In this larger sample, we tested whether the relationship between sociosexuality and drinking is specific to intake or whether it is also related to blacking out. Contrary to predictions, sociosexuality was again positively related to blacking out ($r = 0.35$). Men who were high in sociosexuality reported more instances of T1 blacking out than their peers who were low in sociosexuality.

A follow-up binary logistic regression model (see Table 4) was conducted to assess the prospective relationship between sociosexuality and T2 blacking out. After controlling for T1 blacking out, men high in sociosexuality reported more blackouts than their peers low in sociosexuality, $b = 0.414$ (0.095), 95% CI = [0.227, 0.601], $p < 0.001$.

Additional Analysis

Our primary analyses were based on the subsamples that completed both baseline (i.e., T1) and T2 surveys (that is, 172 out of 469 in Study 1, and 1039 out of 2,037 in Study 2). There may be potential biases when using only complete-case analysis (e.g., Ender, 2010). Therefore, we conducted additional analyses by first carrying out multiple imputation with missing values using Bayesian analysis to create ten imputed data sets (Asparouhov & Muthén, 2022; Muthén et al., 2016), and then replicating our Tables 2 and 4. The missing data analyses with multiple imputation method using Bayesian analysis replicated the regression results for both Study 1 and Study 2, with one exception that sociosexuality did not predict drinking frequency ($p = .052$) or drinking quantity ($p = .150$) in Study 1. Full results are shown in Supplemental Tables S1 – S2.

Discussion

Both two-wave studies replicated evidence that men's unrestricted sociosexuality cross-sectionally (Corbin et al., 2016) and prospectively predicts drinking frequency, quantity, and binge drinking (Cleveland et al., 2019; Testa & Hone, 2019) in samples from a large private Southeastern University (Study 1) and a large public Northeastern University (Study 2) in the United States. In both studies, we found an unanticipated relationship between men's sociosexuality and blacking out, which we consider below.

Binge Drinking.

Men high in sociosexuality might binge drink to signal to women in their environment that they are competitive and, thus, a suitable or highly sought-after sex partner. Indeed, research suggests that in U.S. counties with more men in the area than women (i.e., a biased operational sex ratio that favors women having more choices than men), men reported more binge drinking (Aung et al., 2019). In this vein, gender-specific binge drinking behavior aligns with the costly signaling theory.

That is, costly signaling theory (Zahavi, 1975) posits that women prefer men who can sustain the harmful consequences (e.g., throwing up) of maintaining a trait that might handicap them (e.g., binge drinking). Thus, to advertise desirability as a partner, men will engage in risky behaviors like binge drinking (Aung et al., 2019). This effect (i.e., men engaging in binge drinking as a form of sexual competition) has been observed when assessing college-aged men's reports of participating in drinking games. Men, to the extent that they are high in sociosexuality, tend to participate in drinking games for sexual, competitive, and fortitude-display reasons (Hone et al., 2013; Hone & McCullough, 2015). If binge drinking among men is a costly signal, then we would expect this behavior to be more common among men who are high in sociosexuality as these men evince short-term

mating strategies more so than their low sociosexuality peers (Aung et al., 2019), and this is indeed what we observed.

Blacking Out.

We hypothesized that men's sociosexuality would be negatively related to blacking out on the premise that men high in sociosexuality likely enter drinking venues to find new sexual partners and may engage in drinking breaks or limit their alcohol intake to maintain physiological sexual functioning. That is, although they are more likely to binge drink, they might perhaps also be more likely to drink only to the point at which they are still able to achieve their goal of finding a new casual sex partner. However, our two studies revealed that men's unrestricted sociosexuality was *positively* related to blacking out. A positive relationship between sociosexuality and blacking out has profound implications that warrant further exploration to assess whether or not sexual activity occurs during blackouts for men high in sociosexuality, and if blackout sex occurs, whether or not it was pre-meditated by these men.

If high sociosexuality men are blacking out and missing sexual opportunities with new partners (e.g., 38% of men report having an argument or fight while blacked out; White et al., 2004), a relationship between sociosexuality and blacking out may reflect a failed attempt at a costly signal. Indeed, the relationship between men's sociosexuality and AUDIT scores is partially explained by their fortitude-display drinking motivations (i.e., "to show who can go the longest without passing out"; Hone et al., 2013), and the relationship between their sociosexuality and participation in social drinking games is partially mediated by competitive drinking motivations (e.g., "I like to play drinking games that have clear winners and losers"; Hone & McCullough, 2015). Since men high in sociosexuality are motivated to drink for fortitude-display and competitive reasons (perhaps to impress potential sex partners; Hone et al., 2013; Hone & McCullough, 2015), this positive relationship between blacking out and sociosexuality could reflect a consequence of over drinking in the presence of women (Hone et al., 2013). However, our prospective results reveal that sociosexuality is still related to blacking out at time two after controlling for blacking out at time one, so future research should consider more nuanced predictors of men's blackouts. For example, given men high in sociosexuality drink more than do their peers and thus are likely lower in alcohol sensitivity, future studies should test whether men higher in sociosexuality are less likely to blackout and experience other negative consequences at a given dose of alcohol or estimated Blood Alcohol Concentration.

Finally, if high sociosexuality men are blacking out and engaging in sexual activity, whether the actions were pre-meditated by these men will warrant future examination and could potentially inform tailored sexual assault interventions for perpetrators. Efficacious sexual assault prevention programs are mainly victim focused and labor-intensive, and there is a lack of perpetrator-focused programs (Testa, 2023). Future confirmatory studies should first directly test whether sociosexuality predicts blackout sex as this has implications for these men as both victims and perpetrators of sexual assault (Wilhite et al., 2018; Yost & Zurbriggen, 2006).

Implications

Based on our results, and prior studies that focus on sociosexuality and drinking (Cleveland et al., 2019; Corbin et al., 2016; Testa & Hone, 2019), we suggest drinking interventions might reasonably consider men high in sociosexuality as candidates for tailored alcohol use intervention and prevention programming. Previous individual difference measures such as impulsivity (Leeman et al., 2014) have been used to create novel prevention strategies (Anderson et al., 2021). Our findings confirm and highlight the importance of sociosexuality in men's drinking and, importantly, their risk for blacking out. Consequently, given what we know about high sociosexuality men's sexual motives, it may be important to avoid emphasizing sex as a common "negative" outcome of drinking (Mallett et al., 2008) in tailored interventions on the premise that this emphasis could inadvertently increase drinking in this particular group. Alternatively, it could be efficacious to highlight the sex positive benefits of maintaining low levels of intoxication or even sobriety to facilitate sexual functioning and sexual consent given these men's high desire for willing casual sexual partners. That is, highlighting the negative effects of high levels of intoxication on sexual functioning (e.g., erectile issues) could promote use of protective behavioral strategies and safer sex practices in this high-risk population.

Limitations

The analyses presented here were conducted using existing data collected from 2010 to 2012 to explore novel relationships between sociosexuality and drinking, and thus are subject to certain limitations. Our measures included the original version of the Sociosexuality Orientation Inventory (Sampson & Gangestad, 1991). A revised SOI (SOI-R) has since been created because the original SOI evinces issues with skew, open response methodology, and low internal consistency (Penke et al., 2008). Even so, our alpha for Study 1 was acceptable ($a = 0.85$) when using conventional scoring methods outlined in Simpson and Gangestad (1991). Our alpha for Study 2 was lower when using conventional scoring methods, so we calculated the SOI using previously published conventions which involved Winsorizing out-of-range responses (Testa & Cleveland, 2017), resulting in an acceptable alpha ($a = 0.84$).

Moreover, although the new SOI-R measure comprises three subscales (i.e., desires, behaviors, attitudes), they are commonly collapsed and a global score is often used, as we have done here. The SOI and the SOI-R (global score) exhibit similar patterns of relationships to things like sexual behaviors, mate choices, sex drive, personality (Penke & Asendorpf, 2008), and, we presume, alcohol use and consequences. Given some subscales of the SOI-R exhibit stronger (and weaker) relationships to certain variables than the global SOI-R score, it would be useful to replicate these findings and examine the relationship between SOI-R subscales and drinking in this population. Indeed, Corbin et al. (2016) found that sociosexual attitudes are indirectly related to drinking via sociosexual behavior in a sample of college men, indicating that this is a fruitful line of research.

The men who completed our baseline surveys only differed from the men who completed our follow up surveys in quantity of alcohol consumed (Study 1 men who completed follow up tended to drink slightly more), and sociosexuality (Study 2 men who completed follow

up tended to be lower in sociosexuality). Future studies should examine these relationships in a large, targeted sample of men high in sociosexuality as it could be the case that the relationship between sociosexuality and blacking out operates differently in men higher (or lower) in sociosexuality that we did not capture in our follow-up survey.

Finally, tests of costly signaling among men high in sociosexuality might be better accomplished using negative consequences other than blacking out as outcomes. Blacking out is not under much control—it can occur to any student who drinks in excess (White et al., 2004). Indeed, two thirds of college students report having at least one black out during college (Marino & Fromme, 2015). Moreover, blacking out does not preclude having sex— sex is the most common blackout-related problem (White et al., 2004), and it is unclear whether men high in sociosexuality experience more or less frequent blackout sex than their peers. Other negative consequences like throwing up and passing out—which likely preclude sexual activity—would be good future candidates for tests of costly signaling among men high in sociosexuality.

Future Directions

Understanding how demographic variables (e.g., racial/ethnic identity, sexual orientation, and gender) may moderate relationships between sociosexuality, drinking intake, and drinking consequences like blacking out should be addressed because these factors are known to impact drinking. According to Data USA (n.d.), both universities from which we drew samples of men are predominantly White (Study 1 = 40%; Study 2 = 47%) and consist of mainly White males (Study 1 = 22%; Study 2 = 27%); therefore these findings might reflect drinking norms of White college students who tend to binge drink and adhere to binge drinking norms more so than Black and Hispanic students (McCabe et al., 2019). Additionally, both universities were similar regarding the number of students living off campus (Study 1 = 63%; Study 2 = 70%) but differed with regard to Greek life involvement (Study 1 = 26%; Study 2 = 5%). Given racial and ethnic gaps in drinking are narrowing, future work should assess these relationships among minoritized race and ethnic groups, as both of these studies were conducted at predominately White institutions. Understanding how the relationship between men's sociosexuality and drinking might differ among gay and transgender men would also be necessary given the disproportionate rates of alcohol consequences experienced by sex and gender diverse people (Shipani-McLaughlin et al., 2022).

Future research should also assess the relationship between sociosexuality and blacking out among women. Sociosexuality prospectively predicts intake among college women, and women high in sociosexuality anticipate engaging in more alcohol-related hookups than their peers (Testa & Hone, 2019). Given women do not typically engage in costly signaling (Fisher, 2013), future work should assess how women's sociosexuality is related to blacking out, especially because alcohol-related sexual assault and alcohol-facilitated incapacitated rape risk is high in this group (Testa, 2023), and blackout drinking predicts incapacitated sexual revictimization (Valenstein-Mah et al., 2015). Although women do not engage in costly-signaling, women do sometimes compete for mates in other ways, such as self-promotion or competitor degradation (Schmitt & Buss, 1996). It would be productive to

test whether women—especially those high in sociosexuality—engage in more competition for mates in certain environments (i.e., where the number of unmarried men is low) and, thus, drink more and experience more alcohol consequences.

Conclusion

Men high in sociosexuality drink more than their peers and are more likely to experience blacking out. Given the high risk for blacking out in this population, future research should evaluate the utility of tailored interventions for this group. Future research should also examine other adverse consequences (e.g., throwing up, passing out) that may preclude sexual activity given the preponderance of evidence that men high in sociosexuality strategically drink to facilitate casual sex.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

Data availability statement:

Upon request.

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Table 1

Relationship between men's sociosexuality scores and their drinking intake and blacking out in Study 1

Variable	Descriptive Statistics		Correlations								
	Mean	SD	1	2	3	4	5	6	7	8	9
1. Sociosexuality	8.12	4.89	1								
2. T1 Frequency	1.95	1.20	.503**	1							
3. T1 Quantity	1.52	1.22	.466**	.509**	1						
4. T1 Binge	1.36	1.16	.596**	.771**	.683**	1					
5. T1 Blackout	0.52	0.75	.397**	.494**	.480**	.599**	1				
6. T2 Frequency	2.02	1.16	.530**	.853**	.455**	.704**	.432**	1			
7. T2 Quantity	1.39	1.19	.482**	.571**	.771**	.681**	.474**	.586**	1		
8. T2 Binge	1.44	1.19	.546**	.712**	.652**	.780**	.489**	.799**	.786**	1	
9. T2 Blackout	0.63	0.79	.390**	.497**	.481**	.528**	.574**	.571**	.578**	.634**	1

**
Correlation is significant at the 0.01 level (2-tailed).

Note: T1: Time 1; T2: Time 2

Table 2

T2 Drinking Intake and Blacking Out as a Function of T1 Intake and Blacking Out and Sociosexuality (N = 172 College Men)

Variable	T2 drinking frequency		T2 drinking frequency	
	Estimate (SD)	95% CI	Estimate (SD)	95% CI
T1 drinking frequency	0.467 (0.037) ***	[0.394, 0.541]	0.440 (0.042) ***	[0.358, 0.523]
T1 sociosexuality			0.013 (0.006) *	[0.001, 0.025]

Variable	T2 drinking quantity		T2 drinking quantity	
	Estimate (SD)	95% CI	Estimate (SD)	95% CI
T1 drinking quantity	0.465 (0.043) ***	[0.382, 0.548]	0.427 (0.044) ***	[0.341, 0.513]
T1 sociosexuality			0.024 (0.010) *	[0.004, 0.045]

Variable	T2 binge drinking		T2 binge drinking	
	Estimate (SD)	95% CI	Estimate (SD)	95% CI
T1 binge drinking	0.579 (0.050) ***	[0.481, 0.677]	0.538 (0.057) ***	[0.425, 0.650]
T1 sociosexuality			0.016 (0.008) *	[0.001, 0.032]

Variable	T2 blacking out		T2 blacking out	
	Estimate (SD)	95% CI	Estimate (SD)	95% CI
T1 blacking out	0.762 (0.104) ***	[0.559, 0.965]	0.654 (0.106) ***	[0.447, 0.861]
T1 sociosexuality			0.047 (0.015) **	[0.017, 0.077]

*** $p < .001$

** $p < .01$

* $p < .05$

Table 3

Relationship between men's sociosexuality scores and their drinking intake and blacking out in Study 2

Variable	Descriptive Statistics		Correlations								
	Mean	SD	1	2	3	4	5	6	7	8	9
1. Sociosexuality	−0.03	0.81	--								
2. T1 Frequency	2.31	2.02	.451 **	--							
3. T1 Quantity	3.76	3.40	.449 **	.800 **	--						
4. T1 Binge	1.67	1.91	.439 **	.863 **	.823 **	--					
5. T1 Blackout	0.30	0.46	.347 **	.608 **	.610 **	.632 **	--				
6. T2 Frequency	2.27	1.96	.402 **	.746 **	.649 **	.679 **	.519 **	--			
7. T2 Quantity	3.88	3.32	.408 **	.673 **	.723 **	.662 **	.534 **	.776 **	--		
8. T2 Binge	1.67	1.86	.404 **	.688 **	.641 **	.693 **	.533 **	.862 **	.805 **	--	
9. T2 Blackout	0.30	0.46	.269 **	.476 **	.456 **	.461 **	.438 **	.497 **	.491 **	.497 **	--

**

Correlation is significant at the 0.01 level (2-tailed).

Note: T1: Time 1; T2: Time 2

Table 4

T2 Drinking Intake and Blacking Out and Sociosexuality (N = 1308 College Men)

Variable	T2 drinking frequency		T2 drinking frequency	
	Estimate (SD)	95% CI	Estimate (SD)	95% CI
T1 drinking frequency	0.330 (0.011) ***	[0.308, 0.352]	0.315 (0.012) ***	[0.291, 0.339]
T1 sociosexuality			0.082 (0.024) **	[0.036, 0.129]

Variable	T2 drinking quantity		T2 drinking quantity	
	Estimate (SD)	95% CI	Estimate (SD)	95% CI
T1 drinking quantity	0.106 (0.007) ***	[0.092, 0.121]	0.101 (0.007) ***	[0.086, 0.115]
T1 sociosexuality			0.072 (0.020) ***	[0.034, 0.111]

Variable	T2 binge drinking		T2 binge drinking	
	Estimate (SD)	95% CI	Estimate (SD)	95% CI
T1 binge drinking	0.341 (0.018) ***	[0.306, 0.376]	0.313 (0.018) ***	[0.279, 0.347]
T1 sociosexuality			0.176 (0.030) ***	[0.117, 0.235]

Variable	T2 blacking out		T2 blacking out	
	Estimate (SD)	95% CI	Estimate (SD)	95% CI
T1 blacking out	2.038 (0.148) ***	[1.748, 2.328]	1.815 (0.157) ***	[1.507, 2.123]
T1 sociosexuality			0.414 (0.095) ***	[0.227, 0.601]

***
$p < .001$

**
$p < .01$

*
$p < .05$