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Effects of Typical and Binge Drinking on Sexual Consent Perceptions and Communication

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ABSTRACT

Young adults frequently engage in sexual activity after consuming alcohol and, consequently, may try to communicate sexual consent while intoxicated. We aimed to assess how people's drinking behaviors relate to their consent perceptions and communication with their current sexual partners. Using aggregated data from a 30-day daily diary study, young adults ($n=86$, 77.9% women, 86% in a monogamous relationship) reported instances of partnered sexual activity and their perceptions of whether that activity was consensual. For each partnered sexual event, participants reported what they said or did to perceive the sexual activity as consensual. Responses were coded as *active consent communication* (i.e., using verbal or nonverbal cues) or *tacit knowledge* (i.e., using context to understand consent). During an exit survey, participants retrospectively reported how many days they drank (i.e., typical drinking) during the 30-day study and whether they binge drank. Typical and binge drinking were associated with identifying sexual experiences as consensual. Participants who binge drank relied less on active consent communication and more on context compared with those who did not binge drink. Young adults who binge drink may rely more on tacit knowledge because alcohol impedes their ability to process complex stimuli—such as active consent cues.

Introduction

Sexual consent is part of healthy and safe sexual encounters; however, someone's ability to communicate and interpret sexual consent could be impeded by alcohol consumption. Specifically, alcohol consumption or perceptions of people's intentions in alcohol contexts may influence consent communication and perceptions of someone's willingness to engage in sexual activity (Drouin, Jozkowski, Davis, & Newsham, 2019; Jozkowski, Manning, & Hunt, 2018; Jozkowski & Wiersma, 2015). In turn, this could increase the risk of a nonconsensual sexual encounter occurring. Indeed, nearly 50% of nonconsensual sexual encounters involve both the perpetrator and victim consuming alcohol prior to or during the encounter (Abbey, 2002; Krebs et al., 2016), and nonconsensual sexual activity can occur with acquaintances, casual partners, and romantic partners (Abbey, 2017; Ullman, Filipas, Townsend, & Starzynski, 2006). Despite the increased risk of having an alcohol involved nonconsensual sexual encounter, young adults frequently report engaging in "consensual" alcohol-involved sexual activity (Herbenick, Fu, Dodge, &

Fortenberry, 2019; Jozkowski & Wiersma, 2015) and view alcohol as part of the consent process (Jozkowski et al., 2018). Yet, researchers' understanding of how drinking behaviors influence consent communication is underdeveloped. Understanding if and how aspects of sexual consent may vary across drinking behaviors can assist intervention programs with addressing risk factors for alcohol-facilitated nonconsensual sexual activity, such as decreasing high-risk or problematic drinking. Thus, the goal of this study was to assess how two types of drinking behaviors (typical drinking and binge drinking) were associated with young adults' perceptions of sexual activity as consensual and their consent communication.

Sexual consent

Sexual consent can be defined as one's freely given verbal or nonverbal communication of their sober and conscious feelings of willingness to engage in a particular sexual behavior with a particular person within a particular context (Hickman & Muehlenhard, 1999; Willis & Jozkowski, 2019). This willingness may be actively communicated through verbal or nonverbal cues that can be explicit or implicit (Muehlenhard, Humphreys, Jozkowski, & Peterson, 2016). For instance, young adults can communicate consent by reciprocating sexual activity, taking out a condom, saying yes, or asking if a partner wants to move to a private setting, such as a bedroom (Jozkowski, Peterson, Sanders, Dennis, & Reece, 2014; Jozkowski et al., 2018; Muehlenhard et al., 2016). Young adults also report assuming another person's consent based on context cues, such as relationship status, feelings of love, or routine behaviors (Willis, Murray, & Jozkowski, 2021); such understandings of consent have been referred to as tacit knowledge (Beres, 2010). Typically, young adults report relying on tacit knowledge and less on active consent communication the longer they are with a sexual partner (Willis & Jozkowski, 2019). Indeed, in a recent study about how couples' communicated consent at their most recent vaginal intercourse, the majority reported relying on context cues to understand consent with their partner (Willis, Murray, et al., 2021).

Alcohol and sexual consent

Recently, researchers have been assessing how alcohol consumption influences consent communication and perceptions (Jozkowski, Marcantonio, & Hunt, 2017; Jozkowski et al., 2018). For instance, single young adults, but not those in a relationship, are less likely to communicate their consent explicitly after consuming alcohol (Jozkowski & Wiersma, 2015). Stated differently, consuming alcohol prior to sexual activity did not influence use of explicit consent communication for young adults in a relationship. Additionally, young adults report perceiving alcohol-intensive environments (e.g., bars) as contexts in which consent might be assumed—thus, these environments can be another context cue used to infer tacit knowledge (Beres, 2010; Jozkowski et al., 2017, 2018). But how young adults' drinking behaviors relate to their consent communication or tacit knowledge is unclear. This is somewhat surprising as assuming consent—without active communication—could increase the risk of engaging in sexual activity with a person who is not actually willing; alcohol consumption may further exacerbate this risk.

Alcohol consumption may impact young adults' consent communication due to alcohol's pharmacological effects on cognitive functioning. More specifically, alcohol could impede people's ability to accurately *interpret* or *perceive* consent cues by diminishing people's ability to attend to and process complex stimuli (Steele & Josephs, 1990), such as the nonverbal and implicit consent cues that young adults generally report using (Jozkowski et al., 2014; Muehlenhard et al., 2016). Indeed, misperceptions of sexual intent (i.e., perceiving someone as more sexually interested than they are) occurs when people consume alcohol (Abbey, 2002; Benbouriche, Teste, Guay, & Lavoie, 2019) and may increase the risk of perpetrating nonconsensual sexual activity (Abbey, McAuslan, & Ross, 1998).

Despite alcohol consumption being a potential barrier to effective consent communication, young adults do not perceive alcohol as influencing their perceived ability to engage in consensual sexual activity. For instance, Drouin and colleagues (2019) interviewed bargoers about their perception of their ability to consent to sex based on how intoxicated they felt in the moment. In that sample of 160 adult bargoers, 87% believed they could consent to sex based on how they were feeling, even though the average Breath Alcohol Content was .08—a level of intoxication that is associated with impaired judgment and reasoning (National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2020). Drouin and colleagues suggested that feeling only *some* of the effects of alcohol did not result in people feeling incapable of consenting or engaging in consensual sexual behavior.

Additionally, when young people were asked *why* they felt confident to consent to sex after consuming alcohol, some suggested their confidence was contextual (Marcantonio & Jozkowski, 2021). For example, confidence to consent to sex after consuming alcohol was influenced by one's sexual partner. Specifically, people in more established relationships with their sexual partners reported that their relational context increased their confidence in their ability to consent to sex after consuming alcohol. Young people discussed that, by having an established relationship, their sexual partner had a deeper awareness or understanding of when they were or were not able to consent after consuming alcohol. Some people's reasons for why they could consent to sex after consuming alcohol reflected aspects of tacit knowledge, such that, by two people being in a relationship and understanding one another, consent is implied—even when alcohol is involved.

Typical and binge drinking

Prior work with alcohol and sexual consent has focused on how people perceive alcohol-intensive environments or the consumption of alcohol as signs of consent (Jozkowski et al., 2017, 2018; King et al., 2020); researchers have also explored how people's acute intoxication levels related to their hypothetical perceived ability to consent (Drouin et al., 2019). Yet, researchers rarely examine how people's drinking behaviors relate with their perceptions of sexual activity as consensual or consent communication, even though the pharmacological effects of alcohol may alter how people communicate sexual consent—effects that may become more pronounced the more alcohol someone consumes (Willis, Marcantonio, & Jozkowski, 2021).

People's drinking behaviors can be measured in a variety of ways, including people's typical use and their binge drinking. Typical drinking entails how frequently people consume an alcoholic beverage in a typical week or month (Collins, Parks, & Marlatt, 1985; Sell, Turrisi, Scaglione, Hultgren, & Mallett, 2016). Binge drinking is defined as consuming four or more drinks for women and five or more drinks for men in one two-hour sitting (NIAAA, 2018). Both behaviors have been implicated as risk factors for nonconsensual sex (Abbey, 2002; Messman-Moore, Coates, Gaffey, & Johnson, 2008; Sell et al., 2016; Testa, 2002; Testa & Hoffman, 2012); yet, the potential influence typical or binge drinking has on perceiving sexual activity as consensual or consent communication is unclear. Thus, the goal of this study was to explore how typical and binge drinking behaviors relate to consent communication to inform intervention programs which aim to address risk factors associated with nonconsensual sex, such as high-risk or problematic drinking.

Current study

This study is part of a larger project that assessed young adults' daily sexual consent perceptions and behaviors over 30 days (Willis & Jozkowski, 2019). In the current study, we assessed if and how different patterns of drinking behaviors were associated with sexual consent perceptions and communication. Our first research goal was to assess if retrospective typical and binge drinking over 30 days was associated with perceptions of sexual activity as consensual.

Because alcohol-involved sexual encounters may be perceived as consensual or nonconsensual, we did not make a directional hypothesis. Instead, we hypothesized (H1) that typical and binge drinking behaviors would be related to perceptions of sexual activity as consensual. Our second research goal was to assess whether young adults reported relying on active consent communication or contextual factors to infer consent for partnered sexual events that occurred during the 30-day period. Given that alcohol can be a context cue for consent (Beres, 2010; Jozkowski et al., 2017; Marcantonio & Jozkowski, 2021), we hypothesized (H2) that drinking behaviors (i.e., typical and binge drinking) would be negatively associated with using active consent communication.

Method

Participants

We recruited 205 students from a large university in the southern United States to participate in an eligibility screener that was conducted via email. Eligibility criteria for the study included (1) being between the ages of 18 and 24 years, (2) being enrolled as a college student at the time of the study, (3) having daily access to a smartphone that supported the application used to deliver the daily surveys, and (4) being sexually active. To increase the probability of obtaining several days of data for each participant, we defined “sexually active” as having had participated in at least two sexual behaviors (i.e., making out, breast stimulation, manual genital stimulation, oral genital stimulation, vaginal-penile intercourse, or anal intercourse) on at least 3 days in the preceding week. Based on these criteria, 100 students were ineligible. Eight did not complete the study, and six others were excluded from the analyses for not providing responses for the key constructs of this study. The final sample comprised 86 participants.

The average age was 20.1 years ($SD=1.4$), and the sample primarily included women (77.9%). Regarding racial identity, 77.9% of participants indicated that they were White; 9.3% identified as multiracial, 5.8% as Asian American, 4.7% as African American, and 2.3% as Native American. Our sample was also primarily heterosexual (91.9%), with 7.0% indicating that they were bisexual and 1.2% questioning. Further, most participants were in an exclusive, monogamous relationship (86.0%); 8.1% were in a non-exclusive, non-monogamous sexual relationship, and 5.9% were engaging in mainly casual sexual encounters.

Procedure

We recruited participants using flyers and a daily campus-wide e-newsletter. Interested students emailed our lab and were then sent the screener survey. Eligible students were invited to schedule an in-person appointment with the second author to complete the baseline survey and download the daily diary application on their smartphone in person. The baseline survey included sociodemographic items and was administered on a lab computer using Qualtrics survey software.

The daily survey was loaded onto the Participation in Everyday Life (P.I.E.L.) Survey application, a platform designed for iOS devices (Jessup, Bian, Chen, & Bundy, 2012). The P.I.E.L. Survey application prompted participants to complete the daily surveys, time-stamped the responses, and stored the data. The P.I.E.L. Survey application does not record any identifying information from the participant’s smartphone and permits participants to delete their data at any time, allowing participants the option to delete their data before sending it at the end of the study. The daily survey was made available on participants’ own smartphones at the same time every day for 30 days—ensuring the 24-hour periods would be essentially mutually exclusive. Participants received a single notification on their phones when the survey became available each day; they then had a two-hour window to start the survey, which took approximately two minutes to complete.

After the daily diary phase, participants returned to the lab to confirm they had correctly sent their data, to complete an exit survey, and to obtain their compensation. Participants who

completed all thirty daily surveys received \$25; otherwise, their compensation was prorated based on the number of daily surveys completed. This procedure was approved by the institutional review board at the university where data were collected.

Measures

Sexual consent perceptions

On days when participants reported engaging in sexual activity, they were then asked their perceptions of the sexual activity as consensual. First, they were asked “Were these sexual acts that happened in the past 24 hours consensual?” Response options were on a seven-point Likert scale (i.e., 1 = “Definitely not” to 7 = “Definitely”). These ratings were recoded into a dichotomous variable that indicated whether participants had at least one sexual experience during the 30-day study period that was nonconsensual or questionable regarding sexual consent (Willis & Jozkowski, 2019). Participants whose sexual experiences were all rated as “Definitely consensual” or “Consensual” were coded as 0; those who responded “Definitely not” to “Probably consensual” at least once were coded as 1. Similar categorization approaches to consent have been used in previous research (e.g., Marcantonio, Willis, Jozkowski, Peterson, & Humphreys, 2020).

Sexual consent communication

After providing this close-ended response, participants were asked “What was said, done, or felt to make you give this rating for consent?” This prompt primed young adults to provide the salient cues that they used to perceive whether each day’s sexual behaviors were consensual. Drawing on themes from previous research (Beres, 2010, 2014; Muehlenhard et al., 2016), the authors coded each day’s open-ended data as consent communication or tacit knowledge. Responses received the *active consent communication* code if the participant reported that they or their partner actively did something—verbal or nonverbal, explicit or implicit—to indicate their consent to sexual activity. Example responses are, “I asked if she wanted to have sex and she said yes,” “Both parties verbally consented,” and “We were both doing it, and smiling/laughing/talking.” Responses received the *tacit knowledge* code if they clearly did not implicate communication but offered some other indicator that the sexual activity was consensual. Reasons or justifications coded as tacit knowledge relied on context (e.g., relationship status, routine), emotions (e.g., love, feeling right), spontaneity (e.g., it just happened), or even the absence of active consent communication (e.g., no response cues). See Willis and Jozkowski (2019) for more information regarding this coding process.

Responses coded as active consent communication were given a value of 1, those coded as tacit knowledge were valued 0, and those coded both were valued 0.5; responses coded as not enough information were deemed invalid and not included in the analyses. We then summed the daily codes’ values across the 30 days and divided this aggregate by the number of days the participant provided a codable response (Willis & Jozkowski, 2019). Therefore, a ratio of 1 indicates that participants only reported actively communicating consent (e.g., verbal or nonverbal cues) for every sexual encounter they reported; a ratio of 0 indicates that only tacit knowledge cues were reported (i.e., using context to understand consent) for every sexual encounter reported.

Alcohol behaviors

In the exit survey, participants were retrospectively asked to report their alcohol consumption during the 30-day study period. First, they were asked about typical drinking, “During the past 30 days, on how many days did you have at least one drink of alcohol?” Response options were on a seven-point ordinal scale: 0 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, 20 to 29 days, and all 30 days (Chen, Hsiao-ye, & Faden, 2013).

Second, participants were asked about binge drinking, “During the past 30 days, what is the largest number of alcoholic drinks you had in a row, that is, within a couple hours?” From these responses, we created a dichotomous binge drinking variable that captured women who indicated they consumed at least four drinks in one sitting in the past 30 days and men who had had at least 5 (NIAAA, 2018): 0 = no binge drinking experience during 30-day study period; 1 = at least one binge drinking experience during 30-day study period.

Analysis plan

Due to the different scales inherent to our measures, we conducted different types of statistical analyses to examine the associations between alcohol behaviors and sexual consent. Regarding typical alcohol consumption, we assessed its association with perceptions of a sexual experience as consensual or nonconsensual/questionable using a logistic regression model. We also assessed if typical alcohol consumption was associated with the continuous ratio of active consent communication to tacit knowledge across the past 30 days using a simple linear regression model. We assessed binge drinking’s association with perceptions of a sexual experience as consensual or nonconsensual/questionable using a chi-squared test of independence as well as binge drinking’s association with consent communication or tacit knowledge using an independent samples *t*-test. All tests were conducted at an α -level of .05. SPSS 26 was used for all analyses.

Power analysis

The larger study was designed to assess sexual consent communication using a 30-day daily diary methodology. Daily diary methodology can be burdensome to participants and requires extensive resources to collect larger samples (van Berkel, Ferreira, & Kostakos, 2017). Despite our sample size, the logistic and linear regressions were adequately powered using post-hoc power analyses ($1-\beta = .80$, $\alpha = .05$). Yet, for the chi-square test of independence and *t*-test, we were underpowered ($1-\beta$ was .50 and .54, respectively) based on post-hoc power analyses (i.e., $\alpha = .05$, $1-\beta = .80$, and small to medium effect sizes [$V = .22$ and $d = .46$]).

Results

Descriptive statistics

Across all sexual experiences during the 30-day study, 26.9% of women and 26.3% of men had at least one sexual experience that was nonconsensual or questionable regarding sexual consent. During this period, women relied on consent communication 61.3% of the time and men 55.7% of the time. Regarding typical alcohol consumption during the 30-day study, 24.4% of participants consumed at least one alcoholic drink 0–2 days; 24.4% did so 3–5 days, 24.4% did so 6–9 days, and 26.8% did so at least 10 days. Regarding heavy alcohol use, 58.2% of women and 63.2% of men engaged in at least one binge drinking experience during the 30 days.

Before conducting analyses, we assessed for differences in gender and relationship status by our independent and dependent variables. There was no difference between women and men in how consent was communicated or perceptions of consent ($ps > .05$); there were no differences between their self-reported typical alcohol consumption or binge drinking behaviors. Similar to gender, there was no difference in relationship status for any of our variables ($ps > .05$).

Hypothesis 1 (H1): perceptions of sexual activity with a partner as consensual

We assessed whether drinking behaviors were associated with perceiving sexual experiences as consensual (H1). Regarding typical drinking, participants who drank alcohol more frequently

during the study period had significantly lower odds of reporting a sexual experience during that same 30 days that they identified as nonconsensual or questionable regarding sexual consent, $OR = .64$, 95% CI [.45, .91], $p = .014$, pseudo- $R^2 = .11$. In other words, with each decrement in typical drinking consumption, participants were 1.6 times more likely to report a nonconsensual or questionable sexual experience. Binge drinking was also associated with sexual consent. Participants who engaged in binge drinking less frequently reported a sexual experience during that same 30 days that they identified as nonconsensual or questionable regarding sexual consent, $\chi^2(1) = 5.29$, $p = .021$, $\phi_C = .25$. Specifically, 17.6% of participants who engaged in binge drinking reported at least one questionable or nonconsensual sexual experience compared with 40.0% of those who did not engage in binge drinking.

Hypothesis 2 (H2): sexual consent communication

We first tested whether drinking behaviors were negatively associated with using active communication rather than tacit knowledge to infer sexual consent (H2). Typical alcohol consumption was not associated with whether people tended to communicate or use context (i.e., tacit knowledge) to assess sexual consent, $B = .03$, 95% CI [-.02, .07], $p = .237$, $R^2 = .02$. However, participants who engaged in binge drinking tended to rely less on communicating sexual consent—and more on context (i.e., tacit knowledge)—than those who did not engage in binge drinking. While this difference was medium to large in effect size and in the hypothesized direction, it was not statistically significant, $t(84) = 1.93$, $p = .057$, Cohen's $d = .43$.

Discussion

The goal of this study was to assess how two types of drinking behaviors, typical and binge drinking, were related to people's perceptions of sexual activity as consensual and consent communication. In line with H1, we found that both typical and binge drinking were positively associated with perceiving sexual encounters during the study period as consensual. Supporting H2, young adults who engaged in binge drinking also reported relying relatively more on context to assume consent than those who did not binge drink; however, typical drinking was not associated with people's use of tacit knowledge as predicted. Our findings further highlight the complicated relationship between alcohol and sexual consent. We suggest two potential explanations for our findings based on the larger alcohol and consent literature.

First, the feelings that underlie assuming a person's sexual consent may assist with explaining the relationship with binge drinking and tacit knowledge. Specifically, feelings of closeness, romance, or arousal are feelings that can be the basis for inferring sexual consent (Beres, 2010; Willis & Jozkowski, 2019; Willis, Murray, et al., 2021); young adults also expect alcohol to increase these feelings (Brown, Talley, Littlefield, & Gause, 2016; Lefkowitz, Waterman, Morgan, & Maggs, 2016). Relating this to our findings, if young adults perceive that alcohol enhances feelings associated with tacit knowledge, then those who binge drink may misidentify or over-identify alcohol-induced feelings as feelings of consent. This could result in a decreased reliance on active consent communication and an increased use of tacit knowledge.

Second, that most of the participants in this study were in a romantic relationship with their sexual partner (86% of the sample) may explain the associations with binge drinking and tacit knowledge. Indeed, young adults report that romantic partners “just know” when they can consent after drinking, suggesting young adults perceive romantic partners as being able to determine when someone can or cannot consent when alcohol is involved (Marcantonio & Jozkowski, 2021). Even though single people are three times as likely to drink alcohol before engaging in sexual activity (Thompson, Eaton, Hu, Grant, & Hasin, 2014), those in committed relationships may have had more opportunities in the past to engage in alcohol-involved sexual activity with their current partner. This is important because researchers have shown that

previous sexual experiences with a particular person are important for consent to future ones with that same person—a precedent is set. For example, people rely less on active consent communication with a partner the more they have engaged in past sexual behaviors with that person (Willis & Jozkowski, 2019). Building on these previous findings, there may similarly be a precedent set for alcohol-involved sexual activity. More specifically, committed partners who have past experiences with using alcohol during sexual activity (and perceived it to be consensual) would be less likely to rely on active consent communication than are casual sexual partners who have little or no prior experience of alcohol-involved sexual activity with each other. Such a precedent for mixing alcohol and sexual activity may explain why binge drinking behaviors were associated with a decreased reliance on active consent communication in this sample that primarily comprised young adults in romantic relationships.

Implications

Prevention implications

The relationship among alcohol, sexual consent, and nonconsensual sexual activity is complex. Indeed, young adults experience nonconsensual sexual activity that involves alcohol (Abbey, 2002); however, our results also suggest that the drinking behaviors of young adults relate with perceiving sexual experiences as consensual. Thus, sexual health and consent educators are at a juxtaposition. On one hand, educators attempt to teach young adults about the concerns of combining alcohol and sexual activity. On the other, young adults have sexual experiences that involve alcohol and are perceived as consensual (Herbenick et al., 2019)—potentially negating messaging from sexual health educators. Messages from sexual health educators about alcohol and sexual consent may be ignored if people are in committed relationships and do not view alcohol-involved sexual activity with their partner as a potential risk.

To properly consider the complicated situation with alcohol and consent, educators may want to develop nuanced discussions with young adults about alcohol and sexual consent. Specifically, sexual health educators may want to focus on the subjective effects of alcohol and how this could impede consent communication. Educators could discuss how young adults perceive alcohol as increasing feelings of closeness or arousal (Brown et al., 2016; Lefkowitz et al., 2016), which are also context cues for tacit knowledge but may contribute to someone overperceiving consent. Thus, educators could focus on how alcohol consumption creates subjective physiological effects that can make it difficult to parse what is consent and what are effects brought on by alcohol consumption—especially in the context of a committed relationship where these feelings may become heightened as well. Certainly, young adults can, and are reporting that they, engage in consensual alcohol-involved sexual encounters. Yet, if they rely on tacit knowledge rather than active consent communication during these encounters, that can be concerning and potentially increase the risk of engaging in sex with someone who is not willing—especially when refusal communication is often nonverbal and implicit (Marcantonio & Jozkowski, 2020). Increasing young adults' active consent communication when combining alcohol and sexual activity—regardless of the sexual partner—may assist with ensuring everyone is engaging in sexual activity they consent to.

Research implications

Our results provide several steps for future research with alcohol and sexual consent. First, researchers rarely examine how drinking behaviors relate with sexual consent communication, which is surprising given the relationship between alcohol and nonconsensual sexual activity. Therefore, more work is needed to assess how consent communication varies by how much and how often young adults consume alcohol to better inform interventions on how to address these two behaviors' relationship. Researchers could conduct within-person studies where they query young adults about how they communicated sexual consent in alcohol-involved versus

non-alcohol-involved sexual encounters to assess if consent communication varied by someone's alcohol use.

Second, researchers could conduct alcohol and consent studies that involve participants who are in a relationship and those who are casually dating to assess if consent communication varies by alcohol use and relationship status between partners. Indeed, our sample primarily comprised participants in a relationship—would these findings replicate with a sample of young adults who are single or casually dating? Further, assessing the different consequences (both positive and negative) of alcohol-involved consent communication for young adults in various types of relationships would be beneficial to develop a more tailored intervention approach to alcohol and sexual consent.

Finally, researchers may benefit from qualitative studies that assess people's perceptions of alcohol and sexual consent—independent of, as well as alongside, quantitative methodology. For instance, researchers could follow up with participants from daily diary studies to interview them about their experiences with alcohol and sexual activity. From these interviews, researchers could glean how young adults determined whether their sexual experiences with alcohol were consensual and the influence relationship status may have on these perceptions.

Limitations

There are a few important limitations to note with this study. First, given the time and resources involved in a daily diary study, the present study's sample size was smaller than those of cross-sectional survey methodologies. Further, participants were mostly White young adult women, consistent with most extant research on sexual consent (Willis, Blunt-Vinti, & Jozkowski, 2019). More work is needed to include diverse populations in sexual consent studies so results can be generalized further. Additionally, we did not assess the length of time people were in a relationship, which could influence consent communication (Willis, Murray, et al., 2021). Future consent researchers should assess the type of relationship and length of time people are together.

Second, our measurement of alcohol behaviors was limited. For example, we did not assess alcohol use at the event level. We also did not assess the type of alcohol consumed, duration of alcohol consumption, drinking history, and how often alcohol was consumed prior to sexual activity. Therefore, our results should be taken with caution as we cannot state that typical alcohol use or binge drinking is directly related with consent perceptions or type of consent cue.

Third, because these data are from a daily diary study, our consent perception and communication questions were broad and brief. As such, we did not have detailed or consistent data regarding the contextual factors that led to someone perceiving sexual activity as consensual or not (e.g., Did their partner respond with an affirmative yes for sex and that was why it was perceived as consensual? Was it the relationship between the two that made them perceive the encounter as nonconsensual?). Further, our consent communication question allowed the participant to report on what they or their sexual partner did to communicate consent. Moving forward, asking participants to report on their consent communication and how they interpreted their partner responded to this communication would be helpful to inform future intervention work focused on increasing communication among partners.

Fourth, our consent data were aggregated to assess the relationship among alcohol behaviors, consent communication, and perceptions of sexual activity as consensual. While previous studies have similarly used this approach to assess daily data on sexual consent (O'Sullivan & Allgeier, 1998; Vannier & O'Sullivan, 2011), information regarding within-person variability is lost when data from daily diaries are aggregated (Shiffman, Stone, & Hufford, 2008). Given that alcohol behaviors were only assessed at the end of this study, we are unable to explore within-person variation across experiences related to sexual consent and alcohol.

Finally, consistent with most consent research, we only included one member of the sexual dyad in the study. Thus, we do not know if the other member of the dyad consumed alcohol,

their self-reported consent communication behaviors, or their perceptions of the sexual behavior being consensual. Despite the challenges associated with recruitment, it would be fruitful for researchers to include both members of a dyad in consent studies to better understand how consent is experienced, communicated, and perceived.

Conclusion

Young adults' alcohol behaviors appear to be related with perceptions of consent and use of certain consent cues—specifically tacit knowledge to infer sexual consent. Relying on context to assume consent can be concerning as these cues may not directly reflect what a person is consenting to—thus, increasing the risk of nonconsensual sex. Moving forward, researchers should continue to assess how young adults navigate alcohol and consent to further inform intervention and prevention efforts targeting alcohol intoxication and nonconsensual sex. Additionally, researchers should assess how alcohol-involved sexual consent communication varies across different relationship statuses as the consequences and outcomes from this behavior may vary by whom someone is engaging in sexual activity with.

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References

- Abbey, A. (2002). Alcohol-related sexual assault: A common problem among college students. *Journal of Studies on Alcohol, Supplement*, 14, 118–128. doi:10.15288/jsas.2002.s14.118
- Abbey, A. (2017). Alcohol-related sexual assault on college campuses: A continuing problem. In C. Kaukinen, M. H. Miller, & R. A. Powers (Eds.), *Addressing violence against women on college campuses* (pp. 78–94). Philadelphia, PA: Temple University Press
- Abbey, A., McAuslan, P., & Ross, L. T. (1998). Sexual assault perpetration by college men: The role of alcohol, misperception of sexual intent, and sexual beliefs and experiences. *Journal of Social and Clinical Psychology*, 17(2), 167–195. doi:10.1521/jscp.1998.17.2.167
- Benbouriche, M., Teste, B., Guay, J. P., & Lavoie, M. E. (2019). The role of rape-supportive attitudes, alcohol, and sexual arousal in sexual (mis)perception: An experimental study. *Journal of Sex Research*, 56(6), 766–777. doi:10.1080/00224499.2018.1496221
- Beres, M. A. (2010). Sexual miscommunication? Untangling assumptions about sexual communication between casual sex partners. *Culture, Health & Sexuality*, 12(1), 1–14. doi:10.1080/13691050903075226
- Beres, M. A. (2014). Rethinking the concept of consent for anti-sexual violence activism and education. *Feminism & Psychology*, 24(3), 373–389. doi:10.1177/0959353514539652
- Brown, J. L., Talley, A. E., Littlefield, A. K., & Gause, N. K. (2016). Young women's alcohol expectancies for sexual risk-taking mediate the link between sexual enhancement motives and condomless sex when drinking. *Journal of Behavioral Medicine*, 39, 925–930. doi:10.1007/s10865-016-9760
- Chen, C. M., Hsiao-ye, Y., & Faden, V. B. (2013). *Trends in underage drinking in the United States 1991–2001* (Vol. 96). National Institute of Alcoholism, Alcohol Abuse. <https://pubs.niaaa.nih.gov/publications/surveillance96/Underage11.htm>
- Collins, L. R., Parks, L., & Marlatt, G. A. (1985). Social determinants of alcohol consumption: The effects of social interaction and model status on the self-administration of alcohol. *Journal of Consulting and Clinical Psychology*, 53(2), 189–200.

- Drouin, M., Jozkowski, K. N., Davis, J., & Newsham, G. (2019). How does alcohol consumption affect perceptions of one's own and a drinking partner's ability to consent to sexual activity? *Journal of Sex Research*, 56(6), 740–753. doi:10.1080/00224499.2018.1509290
- Herbenick, D., Fu, T.-C. (Jane), Dodge, B., & Fortenberry, J. D. (2019). The alcohol contexts of consent, wanted sex, sexual pleasure, and sexual assault: Results from a probability survey of undergraduate students. *Journal of American College Health*, 67(2), 144–152. doi:10.1080/07448481.2018.1462827
- Hickman, S., & Muehlenhard, C. L. (1999). "By the semi-mystical appearance of a condom": How young women and men communicate sexual consent in heterosexual situations. *Journal of Sex Research*, 36(3), 258–272. doi:10.1080/00224499909551996
- Jessup, G., Bian, S., Chen, Y. W., & Bundy, A. C. (2012). *Manual of P.I.E.E.L. survey application [iPhone/iPod Touch/iPad/iPad mini Application]*. Sydney: The University of Sydney
- Jozkowski, K. N., Manning, J., & Hunt, M. E. (2018). Sexual consent in and out of the bedroom: Disjunctive views of heterosexual college students. *Women's Studies in Communication*, 41(2), 117–139. doi:10.1080/07491409.2018.1470121
- Jozkowski, K. N., Marcantonio, T. L., & Hunt, M. E. (2017). College students' sexual consent communication and perceptions of sexual double standards: A qualitative investigation. *Perspectives on Sexual and Reproductive Health*, 49(4), 237–244. doi:10.1363/psrh.12041
- Jozkowski, K. N., Peterson, Z. D., Sanders, S. A., Dennis, B., & Reece, M. (2014). Gender differences in heterosexual college students' conceptualizations and indicators of sexual consent: Implications for contemporary sexual assault prevention education. *Journal of Sex Research*, 51(8), 904–916. doi:10.1080/00224499.2013.792326
- Jozkowski, K. N., & Wiersma, J. D. (2015). Does drinking alcohol prior to sexual activity influence college students' consent? *International Journal of Sexual Health*, 27(2), 156–174. doi:10.1080/19317611.2014.951505
- King, B. M., Fallon, M. R., Reynolds, E. P., Williamson, K. L., Barber, A., & Giovino, A. R. (2020). College students' perceptions of concurrent/successive nonverbal behaviors as sexual consent. *Journal of Interpersonal Violence*, 1–15. doi:10.1177/0886260520905544
- Krebs, C., Lindquist, C., Berzofsky, M., Shook-Sa, B., Peterson, K., Planty, M., & Stroop, J., *Campus climate survey validation study: Final technical report*. Washington, DC: BJS, Office of Justice Programs, 2016.
- Lefkowitz, E. S., Waterman, E. A., Morgan, N. R., & Maggs, J. L. (2016). College students' perceptions of the links between alcohol use and sexual experiences. *Emerging Adulthood*, 4(4), 272–283. doi:10.1177/2167696815610694
- Marcantonio, T. L., & Jozkowski, K. N. (2020). Assessing how gender, relationship status and item wording influence cues college students use to decline different sexual behaviors. *Journal of Sex Research*, 57(2), 260–272. doi:10.1080/00224499.2019.1659218
- Marcantonio, T. L., & Jozkowski, K. N. (2021). Do college students feel confident to consent to sex after consuming alcohol? *Journal of American College Health*, 1–8. doi:10.1080/07448481.2021.1943413
- Marcantonio, T. L., Willis, M., Jozkowski, K. N., Peterson, Z. D., & Humphreys, T. (2020). Assessing college women's experiences of nonconsensual first-time intercourse. *Psychology of Violence*, 10(4), 432–441. doi:10.1037/vio0000262
- Messman-Moore, T. L., Coates, A. A., Gaffey, K. J., & Johnson, C. F. (2008). Sexuality, substance use, and susceptibility to victimization: Risk for rape and sexual coercion in a prospective study of college women. *Journal of Interpersonal Violence*, 23(12), 1730–1746. doi:10.1177/0886260508314336
- Muehlenhard, C., Humphreys, T., Jozkowski, K. N., & Peterson, Z. D. (2016). The complexities of sexual consent among college students: A conceptual and empirical review. *Journal of Sex Research*, 53(4–5), 457–487. doi:10.1080/00224499.2016.1146651
- National Institute on Alcohol Abuse and Alcoholism (NIAAA). (2018). *Drinking levels defined*. National Institute of Alcohol Abuse and Alcoholism. <https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking>
- National Institute on Alcohol Abuse and Alcoholism (NIAAA). (2020). *Understanding the dangers of alcohol overdose*. National Institute of Alcohol Abuse and Alcoholism. https://www.niaaa.nih.gov/sites/default/files/publications/Alcoholoverdose_508.pdf
- O'Sullivan, L. F., & Allgeier, E. R. (1998). Feigning sexual desire: Consenting to unwanted sexual activity in heterosexual dating relationships. *Journal of Sex Research*, 35(3), 234–243. doi:10.1080/00224499809551938
- Patrick, M. E., & Maggs, J. L. (2009). Does drinking lead to sex? Daily alcohol-sex behaviors and expectancies among college students. *Psychology of Addictive Behaviors*, 23(3), 472–481. doi:10.1037/a0016097
- Sell, N. M., Turrissi, R., Scaglione, N. M., Hultgren, B. A., & Mallett, K. A. (2016). Examining the effects of drinking and interpersonal protective behaviors on unwanted sexual experiences in college women. *Addictive Behaviors*, 54, 40–45. doi:10.1016/j.addbeh.2015.12.003
- Shiffman, S., Stone, A. A., & Hufford, M. R. (2008). Ecological momentary assessment. *Annual Review of Clinical Psychology*, 4, 1–32. doi:10.1146/annurev.clinpsy.3.022806.091415
- Steele, C. M., & Josephs, R. A. (1990). Alcohol myopia: Its prized and dangerous effects. *American Psychologist*, 45(8), 921–933. doi:10.1037/0003-066X.45.8.921

- Testa, M. (2002). The impact of men's alcohol consumption on perpetration of sexual aggression. *Clinical Psychology Review*, 22(8), 1239–1263. doi:[10.1016/S0272-7358\(02\)00204-0](https://doi.org/10.1016/S0272-7358(02)00204-0)
- Testa, M., & Hoffman, J. H. (2012). Naturally occurring changes in women's drinking from high school to college and implications for sexual victimization. *Journal of Studies on Alcohol and Drugs*, 73(1), 26–33. doi:[10.15288/jsad.2012.73.26](https://doi.org/10.15288/jsad.2012.73.26)
- Thompson Jr., R. G., Eaton, N. R., Hu, M. C., Grant, B. F., & Hasin, D. S. (2014). Regularly drinking alcohol before sex in the United States: Effects of relationship status and alcohol use disorders. *Drug and Alcohol Dependence*, 141(1), 167–170. <https://dx.doi.org/10.1016%2Fj.drugalcdep.2014.05.021>
- Ullman, S. E., Filipas, H. H., Townsend, S. M., & Starzynski, L. L. (2006). The role of victim-offender relationship in women's sexual assault experiences. *Violence Against Women*, 21(6), 798–819. doi:[10.1177/0886260506288590](https://doi.org/10.1177/0886260506288590)
- van Berkel, N., Ferreira, D., & Kostakos, V. (2017). The experience sampling method on mobile devices. *ACM Computing Surveys*, 50(6), 1–40. doi:[10.1145/3123988](https://doi.org/10.1145/3123988)
- Vannier, S. A., & O'Sullivan, L. F. (2011). Communicating interest in sex: Verbal and nonverbal initiation of sexual activity in young adults' romantic dating relationships. *Archives of Sexual Behavior*, 40(5), 961–969. doi:[10.1007/s10508-010-9663-7](https://doi.org/10.1007/s10508-010-9663-7)
- Willis, M., Blunt-Vinti, H. D., & Jozkowski, K. N. (2019). Associations between internal and external sexual consent in a diverse national sample of women. *Personality and Individual Differences*, 149(15), 37–45. doi:[10.1016/j.paid.2019.05.029](https://doi.org/10.1016/j.paid.2019.05.029)
- Willis, M., & Jozkowski, K. N. (2019). Sexual precedent's effect on sexual consent communication. *Archives of Sexual Behavior*, 48, 1723–1734. doi:[10.1007/s10508-018-1348-7](https://doi.org/10.1007/s10508-018-1348-7)
- Willis, M., Marcantonio, T. L., & Jozkowski, K. N. (2021). Internal and external consent during events that involved alcohol, cannabis, or both. *Sexual Health*, 18(3), 260–268. doi:[10.1071/SH21015](https://doi.org/10.1071/SH21015)
- Willis, M., Murray, K. N., & Jozkowski, K. N. (2021). Sexual consent in committed relationships. A dyadic study. *Journal of Sex and Marital Therapy*, 47(7), 669–686. doi:[10.1080/0092623X.2021.1937417](https://doi.org/10.1080/0092623X.2021.1937417)