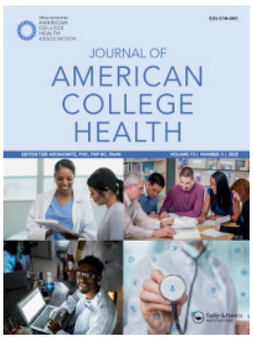

Journal of American College Health

ISSN: 0744-8481 (Print) 1940-3208 (Online) Journal homepage: www.tandfonline.com/journals/vach20

Students' perceptions of the relationship between sexual violence and alcohol use: qualitative findings from three public university campuses

Claire Amabile, Kathryn M. Barker, David Stoddard Carey, Stephanie Sumstine-Felice, Eunhee Park, Sabrina C. Boyce, Laury Oaks, Dallas Swendeman & Jennifer A. Wagman

To cite this article: Claire Amabile, Kathryn M. Barker, David Stoddard Carey, Stephanie Sumstine-Felice, Eunhee Park, Sabrina C. Boyce, Laury Oaks, Dallas Swendeman & Jennifer A. Wagman (2025) Students' perceptions of the relationship between sexual violence and alcohol use: qualitative findings from three public university campuses, Journal of American College Health, 73:3, 1156-1167, DOI: 10.1080/07448481.2025.2459754

To link to this article: https://doi.org/10.1080/07448481.2025.2459754

JOURNAL OF AMERICAN COLLEGE HEALTH
2025, VOL. 73, NO. 3, 1156–1167
https://doi.org/10.1080/07448481.2025.2459754

Routledge
Taylor & Francis Group

RESEARCH ARTICLE

OPEN ACCESS Check for updates

Students' perceptions of the relationship between sexual violence and alcohol use: qualitative findings from three public university campuses

Claire Amabile, MPH, MSW[a,b], Kathryn M. Barker, ScD, MPH[c], David Stoddard Carey[d*], Stephanie Sumstine-Felice, MPH[e], Eunhee Park, MPH[a], Sabrina C. Boyce, PhD, MPH[f], Laury Oaks, PhD, MA[g], Dallas Swendeman, PhD, MPH[h] and Jennifer A. Wagman, PhD, MPH[a]

[a]Department of Community Health Sciences, University of California Los Angeles, Jonathan and Karin Fielding School of Public Health, Los Angeles, CA, USA; [b]Department of Social Welfare, University of California Los Angeles, Meyer and Renee Luskin School of Public Affairs, Los Angeles, CA, USA; [c]Center on Gender Equity and Health, Division of Infectious Diseases and Global Public Health, University of California San Diego, CA, USA; [d]Department of Orthopedic Surgery, Stanford University School of Medicine, Stanford, CA, USA; [e]University of California Office of the President, University of California Global Health Institute, Oakland, CA, USA; [f]Divisions of Epidemiology and Community Health Sciences, University of California, Berkeley School of Public Health, Berkeley, CA, USA; [g]Department of Feminist Studies, University of California, Santa Barbara, Santa Barbara, CA, USA; [h]Semel Institute for Neuroscience and Human Behavior, University of California Los Angeles, Los Angeles, CA, USA

ABSTRACT

Objective: Examine undergraduate students' perceptions of the connections between alcohol consumption and sexual violence, associated campus-based prevention efforts, and recommendations for improvements. **Participants**: Undergraduate students ($n=244$) at three large public universities. **Methods**: Qualitative thematic secondary analysis was conducted using data from 86 in-depth interviews and 27 focus group discussions conducted January – June 2019. **Results**: Student responses depicted complicated connections between alcohol use, consent, and sexual violence. Students indicated confusion about consent when both parties were intoxicated and stated that existing prevention programming was inadequate. Students recommended integrating elements of consent into campus alcohol prevention and information about alcohol's effects into sexual violence prevention programming. **Conclusion**: This study centers undergraduate students' perceptions of the connection between sexual violence and alcohol, and their recommendations on how to address the often-co-occurring harms. Universities must integrate alcohol and sexual violence prevention programming to respond to the realities of undergraduate students more effectively.

ARTICLE HISTORY
Received 8 June 2022
Revised 27 December 2024
Accepted 23 January 2025

KEYWORDS
Sexual violence; sexual assault; alcohol; college; university; prevention

Introduction

Sexual violence is a pervasive public health issue on college and university campuses in the United States (U.S.). Estimates suggest between 20-26% of female and 6.8-12.5% of male students experience sexual violence at some point while enrolled at a college or university campus.[1–5] It is well established that sexual violence is associated with a range of adverse physical and mental health outcomes, including migraines, post-traumatic stress disorder, suicidal ideation, depression, anxiety, disordered eating, and substance abuse.[4,6,7] Additionally, college students exposed to sexual violence are more likely to have lower grade point averages and increased academic difficulties, compared to undergraduate students unexposed to sexual violence.[8]

Sexual violence is defined as a sexual act that is committed or attempted by another person without freely given consent of the victim or against someone who is unable to consent or refuse. There are multiple types of sexual violence (eg forced sex/rape, unwanted sexual contact, sexual harassment) and the term is used to reference a range of behaviors referred to as sexual abuse, sexual assault, and other sexual violations. Sexual violence also includes completed or attempted alcohol-facilitated (1) penetration of a victim and (2) acts in which a victim is made to penetrate a perpetrator or someone else.[9] A review of the literature suggests half of the sexual violence reports made by college students occur when the perpetrator, the survivor, or both have been drinking alcohol.[10]

Research suggests that excessive alcohol consumption or binge drinking, defined as the consumption of four or more drinks for females and five or more drinks for males within one occasion,[11] is linked with increased experiences of sexual violence in college students.[3,12] A 2020 study found that, for people who had already experienced sexual violence one or more times, the chances of experiencing sexual violence again increased nearly two times when binge drinking within the past 30-days was reported.[13] Excessive alcohol consumption can impact how people perceive verbal and non-verbal cues made during interpersonal interactions. Thus, in

CONTACT Jennifer A. Wagman jennwagman@ucla.edu Department of Community Health Sciences, University of California Los Angeles, Jonathan and Karin Fielding School of Public Health, Los Angeles, CA, USA
Supplemental data for this article can be accessed online at https://doi.org/10.1080/07448481.2025.2459754.
*Present address: Levels Health Inc., Austin, TX, USA.

situations of discordant interest in a sexual encounter, alcohol can impact cognitive functioning and contribute to the misperception of nonverbal social cues, creating what has been referred to as "blurred lines" surrounding sexual consent.[14] In these situations, the person pursuing sex (mis)perceives their advances as welcomed and encouraged while the person being pursued (mis)perceives their actions as clearly indicating lack of interest.[14] Additionally, alcohol consumption increases sexual aggression in some situations because the cues that inhibit aggressive behavior during sobriety (such as concerns about the consequences of fighting in public) are disinhibited under the influence of alcohol.[15,16] Excessive alcohol consumption is also thought to pose a threat to college students' ability to prevent sexual violence from occurring among their peers, and alcohol has been found to lower individuals' ability to identify potentially risky scenarios.[17,18] In addition, due to stigma and internalized blame, those who have experienced sexual violence while intoxicated are less likely to report the event and less likely to seek support services.[19]

Alcohol features heavily in the lives of many undergraduate students. Undergraduate students frequently report alcohol consumption and binge drinking at social events, parties, and college bars.[20] As compared to non-college-attending peers, college and university students are more likely to take part in higher rates of alcohol consumption, perhaps due to living independently (ie not with their parents) for the first time, and/or group norms that encourage high rates of alcohol consumption at social events.[21] In a 2019 national survey of full-time undergraduate students, 53% reported consuming alcohol and 33% reported binge drinking within the past month.[22] A similar or higher proportion of students reported past month alcohol use on a survey conducted in 2019 at three large public universities in Southern California. Alcohol was the most commonly reported drug on all three campuses.[23–25]

Despite the intersection of alcohol and sexual violence on college campuses, and increased programming designed to prevent sexual violence on U.S. college campuses, very few interventions address how consumption of alcohol may connect to instances of sexual violence.[16,26] Further, many college and university programs that aim to reduce alcohol consumption do not collaborate with campus sexual violence prevention programs.[16,26] In addition, much of the existing sexual violence prevention programming on college and university campuses focuses on bystander intervention[27] without recognizing and addressing how alcohol hampers students' ability to recognize dangerous situations and intervene.[28,29] Given these existing gaps, a better understanding of the interactions of alcohol consumption and sexual violence has been recommended as an integral part of creating effective prevention and intervention programs on college campuses.[30,31]

The current study was conducted on three Southern California campuses to address gaps in understanding of the interactions between alcohol use and sexual violence on college campuses and to generate programmatic recommendations. We used qualitative methods to address three research aims: 1) examine undergraduate students' perceptions of the connections between alcohol consumption and sexual violence; 2) assess awareness of and opinions about current campus prevention and response efforts; and 3) generate recommendations for how existing campus-based alcohol and sexual violence prevention programming could be improved.

Methods

Research design and setting

This article presents findings from in-depth interviews (IDIs) and focus group discussions (FGDs) conducted with undergraduate students participating in a parent study, the UC Speaks Up Project, a mixed-methods study conducted at three large Californian university campuses between January and June 2019.[32] The universities included in this study are three campuses that are located in Southern California and total undergraduate student enrollment by campus at the time of the study was as follows: campus 1 (31,543), campus 2 (30,794), and campus 3 (23,349).[33] The parent study aimed to assess students' understanding of sexual violence on their campus and their knowledge of and perceptions about the prevention, response, and educational efforts around sexual violence on each campus. Participants were also asked questions about alcohol use on their campus, both in and out of the context of experiences of sexual violence. The research was carried out by a team of investigators from the three campuses, including seven faculty investigators, three staff researchers, and sixteen student researchers. The current study conducts a sub-analysis of these data.

Research participants and procedures

Trained staff and student researchers conducted a total of 86 IDIs and 27 FGDs with undergraduate students from the three campuses ($n = 244$ total participants). IDIs were conducted in an accessible and convenient location where privacy could be ensured, such as in a private study room in the campus library, and typically lasted 60-90 min. We conducted interviews until saturation was reached, which we defined as the point when conducting additional interviews only produced previously discovered data. FGDs were conducted with five to ten participants per group (averaging around eight a group) and each session was led by a moderator with facilitation and note-taking assistance from another student researcher. Each FGD was composed of a different stratum of students, including, for example: male athletes, female athletes, sorority members, fraternity members, students of color, students who identify as sexual minorities, and student leaders. FGDs were conducted in a private space, such as a conference room or a group study room at a campus library, at each of the three campuses and lasted between 60-120 min. FGD participants were given a piece of paper with a number on it and were asked to state their assigned number each time they spoke, to assist with the transcription process later on. Like with the IDIs, we conducted FGDs until we deemed saturation was reached and additional discussions were only providing results we had already found. Semi-structured guides were used to

facilitate the IDIs and FGDs and included open-ended questions that allowed for flexible conversation about topics of interest. The guide included probes and follow up conversation to solicit detailed responses or clarification from participants. The semi-structured guides did not differ significantly between IDIs and FGDs, and were designed to elicit information on: students' knowledge and attitudes about the prevalence of and factors surrounding alcohol use and sexual and intimate partner violence on campus; perceived links between alcohol and violence; understanding of and participation in bystander intervention; awareness of and opinions about campus-based sexual violence reporting services; and community responses to sexual violence. Overall, the guides were designed to solicit information about how students felt the university could better create a learning environment that is free from sexual violence. All IDIs and FGDs were audio-recorded with consent of the participant(s).

Study recruitment

Eligibility criteria for study participants included current enrollment at one of the university campuses (confirmed *via* use of official school email address), being 18 years of age or older, and English speaking. To obtain a sample of participants with varying background and identities, participant selection proceeded using both self-selection sampling and purposive sampling. To advertise for the study, the research team posted study flyers around each of the three campuses and also shared it through email listservs and social media. Interested individuals who self-selected to participate in the study were invited to complete an online eligibility screening form. The research team then stratified eligible participants by demographic strata to ensure a diverse sample by gender, sexual orientation, year in college, and fraternity membership. Purposive snowball sampling was subsequently used to recruit students with lower self-selection status, such as fraternity members and male student athletes. The study team then invited all eligible students to participate in either an FGD or an IDI. All participants were offered a $25 gift card to compensate them for their time.

Research ethics

The study protocol was approved by campus 2's Human Research Protection Program (HRPP), following which the Institutional Review Boards at campus 1 and campus 3 approved reliance agreements from the campus 2's HRPP. All researchers received training on the safe and ethical conduct of research on violence against women, based on recommendations developed for the World Health Organization Multi-Country Study on Women's Health and Domestic Violence.[33] Researchers also received training on the ethical conduct of human subjects research, compliance, and data management *via* a collaborative institutional training initiative for biomedical research. A certificate of confidentiality was obtained from the National Institutes of Health (NIH), to protect identifiable, sensitive research information from compulsory legal disclosure (eg unwanted sexual contact). All IDI and FGD participants provided written consent to participate in the study and have the session audio recorded.

Data analysis

IDI and FGD audio recordings were transcribed verbatim by student and staff researchers and enhanced with notes taken by the facilitator and/or notetaker. The notes were used to capture nonverbal cues, such as body language and facial expressions, to help the research team contextualize what participants shared and allow for a more robust understanding of the data.[34] Multiple safeguards were placed to ensure data confidentiality. All personal identifying information was redacted from the transcriptions which were stored in an encrypted, password protected folder only accessible by the research team. Transcriptions were assigned a numeric code that was used as a reference for participant identification. The file linking transcripts and participants' contact information was stored separately in a secured folder that was only accessible to the study's principal investigators.

Thematic analysis was utilized to ensure a rigorous and transparent process. Our analysis was meticulously structured to identify, examine and interpret emerging themes and patterns in alignment with the study's objectives.[35,36] Our analytical process was grounded in a combination of emic and etic coding strategies, facilitating a nuanced exploration of the data from both insider and outsider perspectives.

Codebook development and application

A subset of the research team embarked on developing the codebook by engaging in a series of iterative discussions to identify emergent themes from the preliminary data analysis. The resulting comprehensive codebook was structured to include broad "parent" codes, under which more specific "child" codes were categorized, capturing the nuanced sub-themes present in the data. The development of emic codes was primarily driven by the participants' narratives, focusing on the social contexts and interactions that characterized their experiences. In contrast, etic codes were informed by the seminal work of Abbey and colleagues, particularly in categorizing responses related to the role of alcohol in sexual assault incidents, delineated into two critical temporal phases: pre-assault and during the assault.[37–39]

To validate and refine the codebook, the study's PIs reviewed all themes identified by research staff, as well as the initially coded transcripts before approving the final codebook for systematic analysis. This meticulous review process culminated in the approval of the final codebook, which served as the foundation for the systematic analysis of the dataset. To further enhance transparency and facilitate replication, a detailed account of our coding protocol, including the final codebook and examples of coded transcripts, is provided in the supplemental materials section. This addition aims to offer comprehensive insights into our analytical framework, highlighting the rigor and systematic nature of our thematic analysis.

Ensuring inter-rater reliability

We followed procedures outlined by Campbell et al. (2013) to ensure inter-rater reliability and agreement.[39] To assess the degree of consistency in how the coding system was applied between members of the research team, a minimum of two reviewers coded each of the transcripts. The reviewers then manually examined the coding decisions that each had made and held a consensus inter-rater discussion to clarify areas of disagreement and to identify codes requiring refinement. Discrepancies among reviewers were resolved through ongoing discussion with the research team and subsequent codebook revisions.

Analysis was conducted in Dedoose, an online mixed-methods analysis platform which enables rigorous qualitative research across research sites.[40] The research team utilized Dedoose to create a codebook of emerging themes, collaborate on transcripts, and track demographic trends. Multiple team members coded each transcript and, to ensure inter-rater reliability, met regularly to compare codes assigned to each passage, discuss any discrepancies between coders, and agree upon which codes to assign.

Results

Findings are organized under three domains that emerged from the research. We begin with a description of the research sample, providing key demographic characteristics of participants. Next, we present data on the first domain, which is student perceptions of alcohol use and its associations with sexual violence at two distinct points: during the early stages of a sexual violence interaction and during the actual interaction. Findings on alcohol's intersection with gender norms and situational factors are also presented. The second domain is perceptions of existing efforts to prevent and respond to sexual violence in the context of alcohol use. Finally, we present student recommendations for improving campus response to and prevention of alcohol use and related sexual violence. Quotes are used throughout to provide insight into dominant patterns in the data. Given that the IDI and FGD guides were methodologically similar, there were little overall differences in consensus between individual interviews and focus group conversations. We followed the principle of authenticity[38] to select quotes that were succinct, represented patterns in the data and illustrated the point we were trying to make about the data.

A total of 244 undergraduate students participated in this study. However, demographic information was only collected from 213 participants as a result of errors made by members of the research team. This was a three-site study with three research teams (ie one team per site). Almost all team members were doing research for the first time. Thus, despite having a detailed study protocol, we had problems

Table 1. Characteristics of the 213 students whose demographic information we collected that participated in IDIs ($n=74$) and FGDs ($n=139$) on the three campuses.

	N	*%*
Campus		
Campus 1	60	28%
Campus 2	73	34%
Campus 3	80	38%
Mean age	20	
Age range	18-34	
Gender identity		
Cisgender female	136	64%
Cisgender male	70	33%
Agender	2	1%
Nonbinary	2	1%
Transgender	3	1%
Sexual orientation		
Heterosexual/ straight	137	64%
Homosexual/ lesbian/ gay	19	9%
Bisexual	24	11%
Mostly heterosexual/ straight but somewhat attracted to people of the same sex	13	6%
Mostly homosexual/ gay but somewhat attracted to people of the opposite sex	6	3%
Pansexual	8	4%
Asexual	2	1%
Queer	2	1%
Questioning	1	0.5%
Nonbinary	1	0.5%
Race/ ethnicity		
White	79	37%
Asian	45	21%
Latino/ Spanish/ Hispanic	29	14%
Black or African American	28	13%
Middle Eastern	5	2%
More than one race	22	10%
American Indian/ Alaska Native	1	0.5%
Hawaiian/ Pacific Islander	1	0.5%
Other	3	1%
Involvement in Athletics and Greek Life		
Student-athletes	58	27%
Part of a fraternity or sorority	49	23%

establishing procedures for monitoring data collection in real-time at each site. As such, demographic data collection was done improperly for the first ~30 participants enrolled which resulted in missing data. Available demographic characteristics are provided in Table 1. The sample was distributed relatively equally across the three campuses, with a slight overrepresentation by campus 3 (38%). The mean age of participants was 20 years. Slightly less than two-thirds (64%) of the participants identified as cisgender female (63%), with one third cisgender male (33%), and a small proportion (3%) of participants identifying as agender, nonbinary, or transgender. A majority (64%) of participants identified as heterosexual, followed by 11% as bisexual, and 9% as homosexual (lesbian/gay). Pertaining to racial/ethnic identity, White students represented the most common racial identity among participants (37%), followed by students who identified as Asian (21%). Roughly a quarter of the participants indicated they were involved in campus athletics or a Greek society (27% and 23%, respectively).

Student perceptions of alcohol use and its association with risk of experiencing and perpetrating sexual violence

The majority of participants agreed that drinking alcohol was an accepted part of the college experience. While it was recognized that not all students consume alcohol, it was felt that the widespread availability and frequent use of alcohol greatly influenced the structure or 'culture' of social events and social interactions, both on and off campus. Participants posited this could be due to numerous factors, including increased independence and control over one's life decisions, limited interaction with parents and adults, freedom to structure one's own time and schedule, and active and ongoing social opportunities of college life. Participants repeatedly talked about the links between alcohol use at college and "party culture," which was referred to as a normative social behavior that involved attending parties to have fun, hook up with sexual partners, and see how much alcohol can be consumed with friends.

> Given that it's a college campus, you have a bunch of young, inexperienced, drunk - you know - high kids who are in a party environment. Like, you don't have any experience in life. Not a lot of chaperones or anything like that. So sh*t's gonna happen. (IDI Participant, cisgender male)

In addition to perceiving alcohol use as commonplace, participants recognized sexual violence as a major, concurrent problem on college and university campuses. Further, the majority of students who participated in our study considered alcohol consumption (and the location or social situation in which drinking occurs) to be closely linked with increased risk for nonconsensual sexual contact or attention.

> I think alcohol is a huge part of it [sexual violence]. (IDI Participant, cisgender female)

> While I do think the party culture is a fun aspect of the school, I recognize that it leads to a lot of these kinds of [sexually violent] situations, just because of alcohol and drugs. It kind of leads to sexual assault. It tends to be like a stepping stone almost just because drunk people make dumb decisions. (FGD Participant, cisgender male)

Alcohol's effect on sexual violence during the early stages of an interaction between a victim and perpetrator

Students identified alcohol as something that increases sexual violence risk during the early stages of an interaction (eg on a date or at a party) when a potential perpetrator is observing and assessing a potential victim's verbal or non-verbal cues to assess their interest in a sexual encounter. Students referenced the way in which alcohol impaired cognitive functioning by distorting an intoxicated pursuer's impression of whether the person being pursued is truly interested in the sexual advances being made. Participants narrated how this often leads to the person seeking sex to misinterpret cues as being more encouraging than they truly are.

> Because they [person instigating a sexual encounter] think sometimes you're like picking up what they're putting down. Just the alcohol gets in the way. And I think that's sort of what the vibe is like, you're feeling it and you're not sure, but the alcohol is just like prohibiting you from seeing if they're really okay with it or not. (IDI Participant, cisgender female)

Participants explained how potential victims of violence can also experience cognitive deficits, if consuming alcohol, and may be unable to discern if their cues have or have not been misread by the person pursuing sex. Participants believed that alcohol causes ambiguity in both giving and receiving sexual consent, referencing the "blurred lines" concept, between what is and what is not considered violence.

> It's kind of a blurred line in some cases about, like, is this actually assault? Especially if there's alcohol involved. (IDI Participant, cisgender female)

In addition to believing alcohol could reduce someone's ability to think clearly and assess potentially risky situations, participants recognized alcohol use, particularly in large quantities, as a contributor to impaired decision-making skills. Some students specifically narrated how being intoxicated led many people to take risks they normally would avoid.

> When people are intoxicated, they're obviously more likely to do things that aren't okay. (…) they can deem it as, 'Oh, yeah, I was drunk. I did that. Sorry.' That kind of way and just waive it off easily. It's kind of like an easy card to play. (IDI Participant, cisgender female)

Alcohol's effect on a sexually violent interaction between a victim and perpetrator

Participants also believed alcohol contributed to sexual assaults occurring when the perpetrator was fully aware that the victim did not want the encounter to happen. Numerous explanations were suggested.

First, it was felt that perpetrators of violence commonly interpret a person of sexual interest's decision to get drunk as a signal of implicit agreement to any and all of his advances. Participants explained how students often equated

drunk sex to consensual sex when both parties were intoxicated.

> A lot of people aren't very serious about consent. It's like 'OK. You're drunk. I'm drunk.' They think that if they have sex like it's fine, when in reality there wasn't consent. It's just that they're not aware of it. So, it's like it's really difficult to kind of think about. (IDI Participant, cisgender female)

> [Students feel that] Just because someone is drunk, or just because I'm drunk, someone did something that I didn't give consent to, that it is totally fine, because I'm just drunk. (IDI Participant, cisgender female)

Although less common, participants narrated how some students, usually men, and often part of the Greek system, felt entitled to misuse their power (eg physical strength) or situation (eg if a woman is drunk) to force someone into sex, especially if they feel they have been "led on," including in the context of intoxication of the victim.

> There's a common thread of just predatory [sexual] behavior, specifically from fraternities (…) They [members of fraternities] find a way to take advantage of individuals. (IDI Participant, cisgender female)

Another theory for understanding why sexual violence occurs in the context of alcohol use is that aggressive behavior is exacerbated when a victim is intoxicated because the perpetrator realizes alcohol's effects on motor skills limit her ability to resist effectively.

> It [sexual violence] comes with the territory of partying or party culture, which it shouldn't. But you know, it does. Unfortunately, people take advantage of people when they're powerless or weak. (FGD Participant, cisgender female)

Participants also suggested that cognitive deficits associated with alcohol consumption often enhance a perpetrator's likelihood of assaulting someone or behaving aggressively because, when intoxicated, the person causing harm prioritizes immediate sexual gratification and sense of entitlement over any internalized moral compass or concern about being punished. Common knowledge that a victim's own intoxication increases likelihood that they won't clearly remember an incidence of violence only serves to exacerbate this type of scenario.

> You need a group of people looking out for you all the time. Because the people at these parties, they carry such a sense of entitlement. They've just met you, but they behave like they can do whatever they want with you and everything's gonna be fine. (IDI Participant, cisgender female)

Alcohol's intersection with gender norms and situational factors in the social environment

Participants were asked where they thought the likelihood of alcohol use and sexual violence was highest. Bars and other alcohol-selling venues were mentioned in a few discussions, but these references were limited, given that most participants were not yet of legal age to purchase/consume alcohol. On all three campuses, Greek organizations and events/parties were the most common venue reported for both drinking and assault/harassment.

> Greek life could be a huge entryway, like a gateway. Because guys are always around girls. They're always drinking around girls in Greek life. It's like a huge party scene. (IDI Participant, cisgender female)

It is important to clarify that students did not equate Greek life to alcohol consumption and sexual assault but noted how certain situational factors (such as gender norms related to relationship dynamics and alcohol use) may lead to both outcomes. Many students explained how accepted norms in some fraternities and male athletic teams encouraged excessive drinking, use of other drugs, and toxic masculinity, which often condones sexual exploitation of women.

> You're constantly hearing stories about, 'Did you hear this girl got roofied or something last night?' (…) It's either a fraternity or like a sports team, sometimes a combo of both, which makes me think it [sexual assault] always involves drugs and alcohol. (IDI Participant, cisgender male)

Student-athletes said they commonly drank together (ie with other student-athletes) and frequently consumed excessive amounts of alcohol because they only had short periods of time when they were able to party, between seasons and games. Although this pattern of drinking was normalized, it contributed to numerous risks for the students, especially women who were at heightened vulnerability for adverse alcohol consequences and sexual violence, as illustrated by the quote below, from a male student-athlete discussing parties in which the attendees are athletes.

> At every party I've been to here, the guys [male athletes] are kind of drunk and having a good time, but the girls [female athletes] are blacked out. (IDI Participant, cisgender male)

Although not investigated in detail, compelling findings emerge on why some students thought sexual violence is more likely to occur in situations dominated by fraternity members and male athletes. Participants believed some fraternities and men's sports teams placed pressure on male student members to uphold and endorse masculine norms, including the objectification of women (and acceptance of sexual violence). Alcohol was thought to facilitate all of these factors.

> I know fraternities that have quotas for the people in their fraternity, they have to hook up with or at least attempt to hook up with X amount of people within a period of time. (…) There's a pressure on your reputation sexually to be up there [ie have sex with a large number of people]. There's a pressure to continue drinking. (FGD Participant, cisgender female)

Misogynistic, gendered inequitable attitudes about women's alcohol use were also thought to influence both perpetration and justification of sexual violence against women. Participants did not necessarily express views that college students disapproved of women drinking and having sex, but many described how women who drank, particularly if they became inebriated, were more likely to be targeted (for sexual aggression) and/or blamed if victimized. This was attributed to harmful societal sentiments rooted in patriarchal believes, often prevalent in male-dominated spaces like fraternities, where the female survivor is perceived as being

guilty of contributory negligence (ie because she was drunk) and blameworthy for the rape.

> Girls are definitely shamed for being raped, they're more likely to be blamed for the way they were dressed, for being drunk, for putting themselves in a situation where they went to a party and kind of enabled themselves to be raped, which isn't true at all but because of that kind of blame culture that surrounds like rape. (IDI Participant, cisgender female)

Amidst normalization of increased risk for sexual violence against women in situations where there is excessive alcohol use, female participants expressed how they had learned it was necessary for them to continually remain aware of their surroundings and be cautious not to consume too much alcohol or allow their drink to be spiked.

> I think it's just a thing that girls are taught when they go to college that you don't let yourself get to that point [of intoxication]. You don't leave your drink by itself. (IDI Participant, cisgender female)

Perceptions of existing efforts to prevent and respond to sexual violence in the context of alcohol use

Bystander intervention was thought to be the most commonly implemented sexual violence prevention approach used on the three campuses. Participants shared their opinions on what impact alcohol use might have on college students' ability to recognize risk for the perpetration of sexual violence and step in to interrupt the abuse from happening, either before, during, or after an incident.

Participants agreed that alcohol's contribution to risky (including aggressive or violent) behavior in social situations where people are drinking increased the value of the presence of a third-party witness who could intervene in high-risk sexual situations. Students understood the concept of bystander intervention and many recalled instances where alcohol was consumed and perceived to have increased risk for violence. Further, some participants retrospectively narrated situations where they thought they *could have* stepped in (but did not) or *did* step in to try to prevent an incident of alcohol-related violence from happening.

> I see this stuff at parties and (…) at the bars, there's been a series of circumstances where I've seen a girl that's a little too drunk that's misplaced from her friends and a guy that's hitting on her a little too aggressively. And that there are certain points where I feel that somebody should step in. (FGD Participant, cisgender female)

However, despite the perceived value of bystander intervention in settings where alcohol is being consumed, participants viewed drinking, in and of itself, as a barrier to effective intervention. A few explanations were provided. First, participants explained that although some people might otherwise have every intent to intervene and help someone at risk for harm or sexual violence, if that person is drinking, the effects of alcohol on their brain and body (ie the pharmacological effects) could reduce or eliminate their ability to notice the event in the first place.

> One of the biggest proponents of sexual assault is the lack of even recognizing what is sexual assault and what is not. And, with drinking, I think that hinders that even worse. (FGD Participant, cisgender female)

Second, participants expressed how alcohol made it hard to interpret an event as high-risk and to also feel certain there is true need for bystander intervention. While students felt confident about the need for intervening on blatantly problematic situations, there was less certainty on how to act when a peer's safety was hard to determine, such as in situations characterized by ambiguity or mixed signals. Noting how it was, at times, difficult to identify inappropriate sexual behavior *when sober,* participants narrated how it became even more challenging to recognize if a potential victim was freely providing (or able to freely provide) consent if the potential bystander was intoxicated. In other words, students who would otherwise intervene said they might miss or misinterpret cues for needed intervention if they were drunk.

> I'd say that alcohol is a barrier. I think just identifying that there is a situation to step into can be challenging. Like if there's a private interaction it could be worse than, what you would assume is going on (or) it could be the same as what you would assume. It is challenging to figure out what's going on. (FGD Participant, cisgender male)

Narratives about the aftermath of alcohol-related sexual violence, as it pertained to discussion about existing campus "responses," suggested use of existing support and prevention services was fraught with problems. The most commonly shared challenges related to disclosing and formally reporting incidents of sexual violence.

Many felt alcohol consumption deterred survivors from reporting instances of sexual violence because they thought they would not be believed (by friends, as well as officials) and/or that they would be blamed for having used alcohol and failing to protect themselves. Sentiments of doubt and 'victim blaming' came up in some interviews.

> It's not so black and white, it's not like 'Oh, he raped me last night.' There are a lot of other, other factors that play into it, especially if it's like (…) you were really drunk, and you don't remember exactly. (IDI Participant, cisgender female)

Some participants believed alcohol made it hard to discern the truth during the reporting process after an experience of sexual violence had occurred. For example, people who had engaged in sexual activities while intoxicated were sometimes uncertain if they had experienced sexual violence.

> I do know a friend who was [accused of sexual assault] (…) There was a lot of alcohol involved, and the truth couldn't really be discerned from either party. (FGD Participant, cisgender male)

Student recommendations for improving campus response to and prevention of problematic alcohol consumption and alcohol-related sexual violence

Participants had varying levels of awareness about their school's official alcohol policies and alcohol abuse and sexual violence education and prevention programs. A few recalled how first-year and transfer students are required to complete

a mandatory, two-hour online substance abuse training program, with modules on harmful alcohol use, underage drinking, vaping and cannabis use, use of other drugs (including prescription medications), policies and prevention. Although the mandatory online alcohol prevention training did touch upon the relationship between alcohol and consent, when describing sexual violence prevention programming, participants explained that it seemed to be based on the assumption that students were not of legal drinking age and would therefore not be engaging in alcohol consumption.

> I feel like whenever I took the [sexual violence prevention] training, they wouldn't even talk about parties, because it was like well, you're underage so you're never going to one so we're not going to cover this [alcohol consumption]. (IDI Participant, cisgender female)

For the most part, these online trainings were not considered effective (or memorable, as many students had forgotten the trainings entirely). Further, many students felt these trainings were only offered so their campus could comply with university and/or state/federal policies and procedures related to harm reduction and protection of students. Instead of using human resources to teach students about alcohol and substance use, participants felt the online course enabled the administration to ensure compliance and document that students received (and acknowledged receipt) of the university's policies and procedures. Many students equated the mandatory online alcohol and substance use prevention training to a parallel mandatory online sexual violence and sexual harassment prevention training that UC students are required to complete.

> It [prevention training] is very much one of those things that they just do to say, 'We tried if anything goes wrong!' It's a liability dodge. It's not actually anything functional. (FGD Participant, cisgender male)

In light of these perceived deficiencies, participants felt additional education was needed on the complexities of how alcohol and sexual violence are related. Participants suggested that combined violence and alcohol prevention programming be offered to address gaps in students' collective knowledge about how alcohol impacts decision-making, increases risk for violence, and contributes to the "blurred lines" and "gray areas" of sexual consent.

> I think maybe more education on the consequences of drinking a lot, because that sometimes leads- could lead- to a sexual assault case. So, if the public is more educated on the consequences and risks of drinking, I think that can help lower the chances [of sexual violence]. (FGD Participant, cisgender male)

Students also recommended that university-mandated sexual violence training be revised to ensure that lessons are provided to address what students should do in situations of alcohol-related risk for sexual violence. Finally, many student participants suggested that the UC campuses design and implement tailored prevention programming specific to participation in or affiliation with Greek organizations. Although such programming would be limited to a subsection of the population, participants felt its administration would benefit overall campus prevention efforts, due to the perceived magnitude of alcohol consumption and alcohol-related sexual violence among these communities.

> I think especially for fraternities and sororities, where those social gatherings happen very frequently and (…) there is going to be alcohol involved, but maybe teach them that you do not necessarily have to consume alcohol to enjoy each other's company. And then also kind of let them know that sexual assault is not okay. Like it impairs, it damages a person's life psychologically, permanently. (FGD Participant, cisgender female)

Discussion

This study used qualitative data from undergraduate students enrolled in three large public universities to: examine perceptions of the relationship between alcohol consumption and sexual violence; understand opinions about campus prevention efforts; and identify recommendations for prevention programming efforts. We find that students perceive alcohol use to be commonplace on their campuses and its consumption to be linked to increased risk of unintentional and intentional nonconsensual sexual contact. Students noted that alcohol played a role in limiting understanding of others' nonverbal cues thereby leading to ambiguity in both giving and receiving consent in sexual encounters. In addition, given perceptions that alcohol blurred the lines between consensual and nonconsensual sexual behaviors, participants noted concerns about not being believed by friends and campus staff when reporting instances of sexual violence. Further troubling, participants noted that alcohol use signaled to others that it was acceptable to take advantage of the inebriated person. Online trainings for alcohol and sexual violence prevention and bystander intervention trainings were the most common campus prevention efforts with which students had experience. Participants found, however, the online trainings to be perfunctory and bystander training approaches to be difficult to implement.

To improve existing campus prevention activities, participants recommended that people implementing and facilitating sexual violence prevention programs be trained to recognize and address alcohol-related risk factors, and educate students on how alcohol can make it hard to distinguish between consensual and nonconsensual sex. Integrating alcohol prevention and harm reduction strategies is increasingly recognized as a necessary next step to advance and improve sexual assault prevention on college campuses.[41] Participants also recommended that targeted prevention programming efforts be created for individuals participating in Greek societies, especially fraternities. While fraternity members' propensity to commit sexual violence has been documented extensively,[42–44] current literature indicates that many sexually violent experiences happen in college communities outside traditionally scapegoated groups like fraternities and athletes, and is often experienced by someone the person who experiences the harm knows.[42,45,46] Thus, while our findings do not reflect the existing quantifiable data related to who perpetrates sexual violence, the present study's implication is a nuanced understanding regarding the

contradicting empirical evidence and students' perceptions. This parallels contemporary qualitative research that indicates college students believe fraternity members are more at-risk to perpetrate violence.[47,48] Providing an expanded form of bystander programming that also incorporates strategies to shift norms of male alcohol consumption and non-intervention in sexual contexts is needed and has been called for in other research.[49]

Although many participants believed in the importance of bystander intervention, it was also commonly felt that excessive alcohol consumption hindered students' ability to intervene in potential sexual violence incidents. This perceived limitation in self-efficacy to recognize a risky situation and intervene to offer assistance while under the influence of alcohol is one that has been documented in previous research.[49] Additionally, a recent systematic review of studies that investigated how alcohol affects campus sexual assault bystander outcomes found that college students are less likely to intervene and help an intoxicated victim, relative to a sober victim.[50] These findings collectively indicate a need for bystander intervention programs to be enhanced by adding strategies that can be used to account for situations in which the victim or bystander is or may be intoxicated. In our study, participants indicated these types of enhancements have not yet been sufficiently made. While some students mentioned that bystander training programs on their campus *did* talk about preventing alcohol-related sexual violence, only very basic information was provided. Thus, students felt inadequately prepared to intervene or train others to intervene as bystanders in the context of more nuanced, realistic scenarios of sexual violence where alcohol was used by all parties involved. Despite alcohol's role as a risk factor for sexual violence, college sexual assault prevention programs typically do not include a focus on alcohol, with most campuses having separate programs for sexual violence and substance abuse prevention.[49] We support the growing call for integrated training and prevention programs. For example, bystander training could include elements that teach bystanders how to effectively intervene when alcohol is involved.[28] In developing this expanded or integrated programs, care must be taken to use survivor-centered messaging in creating any programming because incapacitation from alcohol is often seen as a reason to blame the survivor for experiencing sexual violence.[51,52] Integrated programming could also be greatly beneficial in helping students to understand the role of alcohol in providing sexual consent. Our findings highlight that participants felt that alcohol blurred the lines of sexual consent for both the survivor and the perpetrator, and many students expressed confusion about what constitutes sexual assault while intoxicated. Our findings are consistent with other studies that found college students had limited understanding of how to navigate sexual encounters when one or both parties had been consuming alcohol,[53] as well as research that unique student norms that were permissive of consent to sex after consuming alcohol.[54–56] This suggests a need for prevention programming to focus more strongly on alcohol's role in judgment impairment as it pertains to sexual consent.

Limitations

The study was designed to examine a broad range of student perspectives to expand understanding of how current undergraduate students perceive connections between alcohol and sexual violence in their lives, and campus prevention efforts. The findings included in this paper may not accurately reflect the impact(s) that the COVID-19 pandemic had on perceptions of how students experience and respond to campus sexual assault, as well as what campus leadership can do to prevent campus sexual assault. Emerging research suggests that the pandemic altered campus sexual cultures and exposed persistent gaps in prevention programming. For example, pandemic-related restrictions on social gatherings were found to temporarily reduce opportunities for alcohol-facilitated sexual violence, yet underlying cultural norms surrounding alcohol and consent remained largely unchanged.[57] Similarly, the pandemic exacerbated challenges in delivering effective violence prevention programming, with many institutions transitioning to virtual formats that may have diminished the impact of bystander training.[58] Other research found that the COVID 19 pandemic disrupted prevailing campus sexual culture, offering young adults—particularly women, sexual and racial minorities, and individuals with disabilities—a temporary reprieve from thepressures and risks of hookup culture.[59] While our findings provide valuable pre-pandemic insights, future research should explore how these dynamics evolved during and after the pandemic, including shifts in drinking behaviors, reporting patterns, and prevention program delivery.

Although the breadth of the sample for this qualitative research allows for increased understanding of these connections within a more diverse population, it does not allow for in-depth examination of certain sub-populations. For example, the research focus was not on populations that are commonly accused of perpetrating sexual violence on college and university campuses, such as football players.[58] Additionally, while the study employed a large qualitative sample and purposive sampling to include diverse student voices, the analysis was limited to thematic approaches to address the primary research objectives. This precluded a more intersectional analysis that could have provided deeper insights into how experiences and perceptions of alcohol-related sexual violence vary across different demographic, cultural, or social identities, including differences by sex, gender, or disability status. Future research should explore these intersections to better understand the nuances of these experiences and ensure that prevention programming is tailored to meet the needs of diverse populations. For instance, given persistent gender-disparities in experiences of sexual violence and rates of alcohol use,[60,61] additional research to examine the gendered pathways to each is necessary but beyond the scope of the present research. Further, acknowledging that students with disabilities are at an increased risk of experiencing sexual violence,[62] future research should specifically examine how these risks intersect with alcohol-related harm. Additionally, the IDI and FGD guides were structured similarly, creating space for an inaccurate understanding of the differences between individual thoughts and group-level thinking regarding alcohol consumption and sexual violence.

Our findings may have limited generalizability outside of the United States and even within smaller, private, or more demographically homogeneous university settings, as the data were from three large public universities in Southern California with diverse demographics. Future research is needed within these other contexts (ie private universities with more homogenous demographics) to replicate our findings. More so, given that the present findings come from a larger study, this sub-analysis may not offer a full understanding of the students' beliefs regarding the links between alcohol and substance use and sexual violence. Thus, future research would benefit from looking distinctly at students' perceptions of the connection. Finally, the study was not designed to understand whether there may be differences in responses to what is needed in campus prevention programs between individuals who have experienced sexual violence versus those who may have perpetrated sexual violence. We did not ask participants whether they had experienced or been exposed to any form of sexual violence. This also limits our data, as there are likely important differences in the way in which students who had been exposed to sexual violence responded as compared to those who have had no direct or indirect experience with sexual violence. While this was beyond the scope of our study, we understand that future research should incorporate this distinction. Additional research in the area of sexual violence prevention designed specifically for those who may be at risk of perpetrating nonconsensual sexual contact would be beneficial.

Conclusions

This study not only highlights student perceptions that campus sexual violence is exacerbated by alcohol use, but also their desire for improved campus-based prevention efforts and trainings. As prevention efforts and survivor support systems grow across college and university campuses, effort must be made to create synergies between substance abuse prevention and sexual violence prevention programming. This will include efforts to foster a campus and reporting environment where student survivors are supported, believed, and listened to, regardless of whether they were using alcohol at the time of experiencing sexual violence. Finally, expanding survivor-centered discussion about how and why alcohol may blur issues surrounding consent, will promote more honest conversations without falling into a common trap of blaming the victims of sexual violence for their use of alcohol. These steps, in addition to those currently being taken to reduce problem alcohol use and campus-based sexual violence, will help to shift the problematic norms and contexts within college and universities, and make these learning environments safer for students across the US.

Conflict of interest disclosure

The authors have no conflicts of interest to report. The authors confirm that the research presented in this article met the ethical guidelines, including adherence to the legal requirements of the United States. This study was approved by the UC San Diego Human Research Protection Program (HRPP) and the Institutional Review Boards at UCLA and UC Santa Barbara gave reliance agreements that were linked to the UC San Diego HRPP approval.

Funding

This research was supported in part by the Centers for Disease Control and Prevention (NUF2CE002403), the California Department of Public Health (16-10844), and the National Institute on Alcoholism and Alcohol Abuse (NIAAA) [K01AA028557, PI: Barker]. The funders had no role in the design, analysis or interpretation of this research.

ORCID

Jennifer A. Wagman http://orcid.org/0000-0002-9957-1932

References

1. Cantor D, Fisher B, Chibnall S, et al. Report on the AAU Campus Climate Survey on Sexual Assault and Misconduct. 2020:1–433. https://www.aau.edu/sites/default/files/-Files/Key-Issues/Campus-Safety/RevisedAggregatereportandappendices 1-7_(01-16-2020_FINAL).pdf.
2. Conley AH, Overstreet CM, Hawn SE, Kendler KS, Dick DM, Amstadter AB. Prevalence and predictors of sexual assault among a college sample. *J Am Coll Health*. 2017;65(1):41–49. doi:10.1080/07448481.2016.1235578.
3. Mellins CA, Walsh K, Sarvet AL, et al. Sexual assault incidents among college undergraduates: Prevalence and factors associated with risk. Khan HTA, ed. *PLoS One*. 2017;12(11):e0186471. doi:10.1371/journal.pone.0186471.
4. Voth Schrag RJ, Edmond TE. Intimate partner violence, trauma, and mental health need among female community college students. *J Am Coll Health*. 2018;66(7):702–711. doi:10.1080/07448481.2018.1456443.
5. Fedina L, Holmes JL, Backes BL. Campus sexual assault: a systematic review of prevalence research from 2000 to 2015. *Trauma Violence Abuse*. 2018;19(1):76–93. doi:10.1177/1524838016631129.
6. Kewley S, Barlow C. Introduction. In: *Preventing Sexual Violence: Problems and Possibilities*. 1st ed. Bristol, UK: Bristol University Press; 2020:1–8. doi:10.46692/9781529203738.
7. Wood L, Voth Schrag R, Busch-Armendariz N. Mental health and academic impacts of intimate partner violence among IHE-attending women. *J Am Coll Health*. 2020;68(3):286–293. doi:10.1080/07448481.2018.1546710.
8. Brewer N, Thomas KA, Higdon J. Intimate partner violence, health, sexuality, and academic performance among a national sample of undergraduates. *J Am Coll Health*. 2018;66(7):683–692. doi:10.1080/07448481.2018.1454929.
9. Breiding MJ, Basile KC, Smith SG, Black M, Mahendra R. *Intimate Partner Violence Surveillance: Uniform Definitions and Recommended Data Elements*. Version 2.0; 2015:11–14. https://stacks.cdc.gov/view/cdc/31292/cdc_31292_DS1.pdf.
10. Abbey A, Wegner R, Woerner J, Pegram SE, Pierce J. Review of survey and experimental research that examines the relationship between alcohol consumption and men's sexual aggression perpetration. *Trauma Violence Abuse*. 2014;15(4):265–282. doi:10.1177/1524838014521031.
11. DeJong W. Definitions of binge drinking. *JAMA* 2003;289(13):1635; author reply 1636. doi:10.1001/jama.289.13.1635.
12. Walsh K, Sarvet AL, Wall M, et al. Prevalence and correlates of sexual assault perpetration and ambiguous consent in a representative sample of college students. *J Interpers Violence*. 2021;36(13-14):NP7005–NP7026. doi:10.1177/0886260518823293.
13. Anderson JC, Chugani CD, Jones KA, Coulter RWS, Chung T, Miller E. Characteristics of precollege sexual violence victimization and associations with sexual violence revictimization during college. *J Am Coll Health*. 2020;68(5):509–517. doi:10.1080/07448481.2019.1583237.
14. Jozkowski K, Wiersma-Mosley J. Does drinking alcohol prior to sexual activity influence college students' consent? *Int J Sex Heal*. 2015;27(2):156–174. doi:10.1080/19317611.2014.951505.

15. Abbey A, Zawacki T, Buck PO, Clinton AM, McAuslan P. Alcohol and sexual assault. *Alcohol Res Health*. 2001;25(1):43–51.
16. Abbey A. Alcohol-related sexual assault: a common problem among college students. *J Stud Alcohol Suppl*. 2002;(14):118–128. doi:10.15288/jsas.2002.s14.118.
17. Marcantonio TL, Willis M, Schisler ED. Associations of alcohol consumption, sexual assault history, severity, and revictimization with college women's bystander behaviors in alcohol-involved settings. *J Interpers Violence*. 2021;36 (23-24):11792–11807. doi:10.1177/0886260520983513.
18. Wiersma-Mosley JD, Ham LS, Marcantonio TL, Jozkowski KN, Bridges AJ. Intoxicated bystanders' alcohol expectancies and valuations and the ability to detect risk in a potential sexual assault. *Addict Behav*. 2020;108:106423. doi:10.1016/j.addbeh.2020.106423.
19. Ameral V, Palm Reed KM, Hines DA. An analysis of help-seeking patterns among college student victims of sexual assault, dating violence, and stalking. *J Interpers Violence*. 2020;35(23-24):5311–5335. doi:10.1177/0886260517721169.
20. Castaño-Perez GA, Calderon-Vallejo GA. Problems associated with alcohol consumption by university students. *Rev Lat Am Enfermagem*. 2014;22(5):739–746. doi:10.1590/0104-1169.3579.2475.
21. Quinn PD, Fromme K. Alcohol use and related problems among college students and their noncollege peers: the competing roles of personality and peer influence. *J Stud Alcohol Drugs*. 2011;72(4):622–632. doi:10.15288/jsad.2011.72.622.
22. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Results from the 2019 National Survey on Drug Use and Health: Detailed tables. Detailed Table 6.21B. https://www.samhsa.gov/data/report/2019-nsduh-detailed-tables. Published 2020.
23. American College Health Association. *National College Health Assessment Undergraduate Students Executive Summary 2019*; 2019. http://www.acha-ncha.org/docs/NCHA-II_WEB_SPRING_2015_UNDERGRADUATE_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf.
24. American College Health Association. *University of California San Diego Executive Summary Spring 2019*; 2019. https://healthpromotion.ucsd.edu/_files/about/ncha-ii-spring-2019-ucsd-executive-summary.pdf.
25. American College Health Association. *University of California Santa Barbara Demographic and Alcohol and Other Drugs Information, 2019*; 2019.
26. Abebe KZ, Jones KA, Rofey D, et al. A cluster-randomized trial of a college health center-based alcohol and sexual violence intervention (GIFTSS): Design, rationale, and baseline sample. *Contemp Clin Trials*. 2018;65:130–143. doi:10.1016/j.cct.2017.12.008.
27. Kettrey HH, Marx RA, Tanner-Smith EE. Effects of bystander programs on the prevention of sexual assault among adolescents and college students: a systematic review. *Campbell Syst Rev*. 2019;15(1-2):e1013. doi:10.4073/csr.2019.1.
28. Pugh B, Ningard H, Vander VT, Butler L. Victim ambiguity: bystander intervention and sexual assault in the college drinking scene. *Deviant Behav*. 2016;37(4):401–418. doi:10.1080/01639625.2015.1026777.
29. Schipani-McLaughlin AM, Salazar LF, Vivolo-Kantor AM. The relationship between binge drinking and prosocial bystander behavior among college men. *J Am Coll Health*. 2020;68(6):570–574. doi:10.1080/07448481.2019.1583656.
30. Bird ER, Gilmore AK, George WH, Lewis MA. The role of social drinking factors in the relationship between incapacitated sexual assault and drinking before sexual activity. *Addict Behav*. 2016;52:28–33. doi:10.1016/j.addbeh.2015.08.001.
31. Ford JV. Sexual assault on college hookups: the role of alcohol and acquaintances. *Sociol Forum*. 2017;32(2):381–405. doi:10.1111/socf.12335.
32. Wagman JA, Amabile C, Sumstine S, et al. Student, staff, and faculty perspectives on intimate partner and sexual violence on 3 public university campuses: protocol for the UC speaks up study and preliminary results. *JMIR Res Protoc*. 2022;11(4):e31189. PMID: 35380114. PMCID: 9019617 doi:10.2196/31189.
33. About Us. The regents of the University of California. https://www.universityofcalifornia.edu/about-us. Updated September 8, 2022.
34. World Health Organization. *Putting Women First: Ethical and Safety Recommendations for Research on Domestic Violence Against Women*. Geneva, Switzerland: World Health Organization; 2001. doi:10.2307/1289898.
35. Boyatzis RE. *Transforming qualitative information: thematic analysis and code development*. Thousand Oaks, CA: SAGE Publications; 1998.
36. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitat Res Psychol*. 2006;3(2):77–101. doi:10.1191/1478088706qp063oa.
37. Abbey A, Ross LT, McDuffie D. Alcohol's role in sexual assault BT - addictive behaviors in women. In: Watson RR, ed. Totowa, NJ: Humana Press; 1994. p. 97–123. doi:10.1007/978-1-4612-0299-8_4.
38. Lingard L, Watling C. Effective use of quotes in qualitative research. In: *Story, Not Study: 30 Brief Lessons to Inspire Health R esearchers as Writers. Innovation and Change in Professional Education*. Vol. 19. Cham, Switzerland: Springer Nature; 2021:35–43. doi:10.1007/978-3-030-71363-8_6.
39. Campbell JL, Quincy C, Osserman J, Pedersen OK. Coding in-depth semistructured interviews: problems of unitization and intercoder reliability and agreement. *Sociolog Method Res*. 2013;42(3):294–320. doi:10.1177/0049124113500475.
40. Andrade LR, Costa AP, Linhares RN, de Almeida CA, Reis LP. Qualitative data analysis software packages: an integrative review. *Adv Intelligent Syst Comput*. 2018;861:279–290. doi:10.1007/978-3-030-01406-3_24.
41. Abbey A, Ross LT, McDuffie D, McAuslan P. Alcohol and dating risk factors for sexual assault among college women. *Psychol Women Q*. 1996;20(1):147–169. doi:10.1111/j.1471-6402.1996.tb00669.
42. Barnes ML, Adams-Clark A, Rosenthal MN, Smith CP, Freyd JJ. Pledged into harm: sorority and fraternity members face increased risk of sexual assault and sexual harassment. *Dignity*. 2021;6(1):Article 9. doi:10.23860/dignity.2021.06.01.09.
43. Seabrook RC, McMahon S, O'Connor J. A longitudinal study of interest and membership in a fraternity, rape myth acceptance, and proclivity to perpetrate sexual assault. *J Am Coll Health*. 2018;66(6):510–518. doi:10.1080/07448481.2018.1440584.
44. Franklin CA, Bouffard LA, Pratt TC. Sexual assault on the college campus. *Criminal Justice and Behavior*. 2012;39(11):1457–1480. doi:10.1177/0093854812456527.
45. Sorenson SB, Joshi M, Sivitz E. Knowing a sexual assault victim or perpetrator. *J Interpers Violence*. 2014;29(3):394–416. doi:10.1177/0886260513505206.
46. Mouilso ER, Calhoun KS. Personality and perpetration. *Violence Against Women*. 2016;22(10):1228–1242. doi:10.1177/1077801215622575.
47. Greathouse SM, Saunders J, Matthews M, Keller KM, Miller LL. *RR-1082-AF, A review of the literature on sexual assault perpetrator characteristics and behaviors*. Santa Monica, CA: RAND Corporation; 2015. doi:10.7249/RR1082.
48. Kingree JB, Thompson MP. Fraternity membership and sexual aggression: an examination of mediators of the association. *J Am Coll Health*. 2013;61(4):213–221. doi:10.1080/07448481.2013.781026.
49. Leone RM, Marcantonio T, Haikalis M, Schipani-McLaughlin AM. Barriers to addressing alcohol use in college sexual assault prevention: where we stand and future steps. *Curr Addict Rep*. 2022;9(4):420–431. doi:10.1007/s40429-022-00455-2.
50. Fleming WM, Wiersma-Mosley JD. The role of alcohol consumption patterns and pro-social bystander interventions in contexts of gender violence. *Violence Against Women*. 2015;21(10):1259–1283. doi:10.1177/1077801215592721.
51. Zinzow HM, Thompson MP, Goree J, Fulmer CB, Greene C, Watts HA. Evaluation of a college sexual violence prevention program focused on education, bystander intervention, and Alcohol Risk Reduction. *Coll Stud Affairs J*. 2018;36(2):110–125. doi:10.1353/csj.2018.0019.
52. Rizzo AJ, Klein LB, Scaglione NM. Alcohol's role in campus sexual assault bystander behavior: a systematic review. *Trauma Violence Abuse*. 2023;24(5):3662–3677. doi:10.1177/15248380221134633.

53. Grubb A, Turner E. Attribution of blame in rape cases: a review of the impact of rape myth acceptance, gender role conformity and substance use on victim blaming. *Aggress Violent Behav.* 2012;17(5):443–452. doi:10.1016/j.avb.2012.06.002.
54. Brown AL, Horton J, Guillory A. The impact of victim alcohol consumption and perpetrator use of force on perceptions in an acquaintance rape vignette. *Violence Vict*. 2018;33(1):40–52. doi:10.1891/0886-6708.VV-D-16-00099.
55. Baldwin-White A. "When a girl says no, you should be persistent until she says yes": college students and their beliefs about consent. *J Interpers Violence*. 2021;36(19-20):NP10619–NP10644. doi:10.1177/0886260519875552.
56. Marcantonio TL, Valdez D, Jozkowski KN. An assessment of the cues college students interpret from a sexual partner to determine they are refusing. *J Interpers Violence*. 2022;37(13-14):NP12352–NP12374. doi:10.1177/0886260521997930.
57. Potter SJ, Moschella-Smith EA, Lynch M. Campus sexual violence prevention and response: Lessons from a pandemic to inform future efforts. *J Interpers Violence*. 2022;37(17-18):NP15037–NP15057. doi:10.1177/08862605221106191.
58. Wiersma-Mosley JD, Jozkowski KN. A brief report of sexual violence among universities with NCAA Division I Athletic Programs. *Behav Sci (Basel)*. 2019;9(2):17. doi:10.3390/bs9020017.
59. Blum LM, Eri Lee K, Binder O, Clifford E. Dating at a distance: does it take a pandemic to challenge campus sexual culture?. *In Sociological Forum*. 2023;38(3):616–636. doi:10.1111/socf.12922.
60. Basile KC, Smith SG, Kresnow M, Khatiwada S, Leemis RW. *The national intimate partner and sexual violence survey: 2016/2017 report on sexual violence*. 2022. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
61. Center for Behavioral Health Statistics and Quality. Results from the 2021 National Survey on Drug Use and Health: Detailed tables. 2022. Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/data/report/2021-nsduh-detailed-tables
62. Campe MI. College campus sexual assault and female students with disabilities. *J Interpers Violence*. 2021;36(15-16):NP7971–NP7996. 088626051984040. doi:10.1177/0886260519840405.