HHS Public Access

Author manuscript

J Am Coll Health. Author manuscript; available in PMC 2024 August 01.

Published in final edited form as:

J Am Coll Health. 2023 ; 71(6): 1879–1886. doi:10.1080/07448481.2021.1950161.

What Undergraduates Want in Campus Sexual Assault Prevention Programming: Findings from a Formative Research Study

Meredith L. Philyaw-Kotov[a,*], **Maureen A. Walton**[a,b], **Brianne Brenneman**[b,c], **Miriam Gleckman-Krut**[d], **Alan K. Davis**[a,e], **Erin E. Bonar**[a,b]

[a]University of Michigan Addiction Center and Department of Psychiatry, University of Michigan School of Medicine, 4250 Plymouth Road, Ann Arbor, MI 48109

[b]University of Michigan Injury Prevention Center, University of Michigan School of Medicine, 2800 Plymouth Road, NCRC10-G080, Ann Arbor, Michigan, 48109

[c]Department of Health Behavior and Health Education, University of Michigan School of Public Health, 1415 Washington Heights, Ann Arbor, Michigan 48109

[d]University of Michigan Department of Sociology, 3115 LSA Building, 500 S. State Street, Ann Arbor, Michigan, 48109

[e]Behavioral Pharmacology Research Unit, Department of Psychiatry and Behavioral Sciences, Johns Hopkins School of Medicine, 5510 Nathan Shock Drive, Baltimore, Maryland, 21224

Abstract

Objective: Campus sexual assault (SA) prevention programs are widely implemented, despite few having strong empirical support. To inform the development and refinement of prevention programs, we collected pilot qualitative data to capture undergraduates' perspectives regarding desirable program characteristics.

Participants: Undergraduates completed an audio-taped interview (n=19) or a focus group (n=16) in June – November 2016.

Methods: We double-coded transcripts for a priori and emerging themes using NVivo 11. A third coder resolved disagreements; we assessed intercoder reliability using Cohen's Kappa.

Results: Participants preferred SA prevention programming to be delivered in-person to small, co-ed groups of unfamiliar students. Students preferred programming with peer-facilitated, candid conversation about SA outcomes and prevention strategies. Participants also preferred for the tone of these training sessions to match the serious subject matter.

Conclusions: Students' perceptions of desirable program characteristics differ somewhat from current evidence-based programs in several ways, highlighting important future directions for SA prevention research.

*Corresponding author: mphilyaw@med.umich.edu.

Disclosure statement: The authors have no financial or other conflicts of interest to disclose.

Keywords

health education; sexual assault; college

Introduction

The term “sexual assault” refers to a spectrum of unwanted or coerced sexual actions, ranging from kissing and touching to oral, vaginal, and anal penetration.[1] Due to underreporting and varied study methodologies, the accurate prevalence of campus sexual assault (SA) is unknown,[2] yet previous work estimates that as many as 1 in 4 women (22%) and 1 in 20 men (5%) are sexually assaulted while in college.[3] Given the staggering individual and societal costs attributable to SA ($122,461 per affected individual and $3.1 trillion in societal costs, respectively[4]), there is a dire need for effective primary and secondary prevention programs which intervene during the high-risk time of the college years.

As part of a coordinated effort to prevent and respond to campus SA, the American College Health Association’s guidelines call for campuses to integrate prevention efforts that are evidence-based (when available).[5] Although a number of campus SA prevention programs have been developed, few have demonstrated sustained changes in behavioral outcomes.[6,7] Efficacious programs[8–14] primarily consist of multiple, in-person[8–10,12,13] intervention sessions which are administered to small groups of students[8–10,13] and led by trained peer facilitators (i.e., undergraduate[9,10,12,13] or graduate[8] students). One efficacious program is administered to men and women together.[12] The rest are either administered to men and women separately[9,10,13] or selectively target one sex.[8,11,14] Most programming is exclusively bystander-focused[12,13] or victimization-focused (for female audiences).[8,10,14] Two programs for male audiences[9,11] include content addressing multiple roles in a SA incident (i.e., bystander-focused and perpetration-focused content). Notably, of the programs to date that produced sustained behavioral change, two (e.g., RealConsent) were administered online.[11,14]

Despite the availability of these few efficacious programs, campuses often develop and implement their own campus-specific programs which are typically not represented in the SA prevention literature.[15] Although these campus-specific programs have the potential benefit of being personalized to unique aspects of campus culture,[16,17] which is desirable to students,[18] prior research suggests that students may find some elements of traditional campus-based programming off-putting.[18] For example, in a previous qualitative inquiry about student perceptions of sexual health programming on their campus, undergraduates expressed that they disliked mandatory programming.[18] These students further advocated for program content to enhance – and not simply reflect – their campus culture regarding sex and sexual health.[18]

More recent studies advocate for participatory research to inform the design, refinement and/or implementation of campus SA prevention programs.[16] To the authors’ knowledge, only one study reported involving students in program development.[19] Qualitative research is central to enhancing program format and content.[20] Consequently, this pilot study used

a participatory approach involving qualitative interviews and focus groups with college students to better illuminate college students' perceptions of various prevention program elements.

Methods

Study site and procedures

Undergraduate students at the end of their first year/beginning of their second year of study at a large Midwestern university were recruited between June and November 2016 to participate in a qualitative study about campus life. At the time of data collection, SA victimization rates on this campus resembled national prevalence estimates, with nearly 1 in 4 female undergraduates and 1 in 14 male undergraduates reporting a nonconsensual sexual experience in the past year.[21] During the first year, students at this university complete a sequence of programs geared toward preventing SA. This programming consists of a student-led theater performance at orientation addressing micro-aggressions; two online courses about sexual assault prevention and alcohol misuse, respectively; an in-person, small-group, mixed-gender training addressing upstream correlates of SA; and an in-person, large-group, mixed-gender theater-enhanced bystander intervention training. We specifically targeted students who had completed their first year to obtain feedback when program experiences and details would be easiest to recall.

Following procedures approved by the university's Institutional Review Board, students were recruited using campus flyers and two registrar emails sent to a random sample of second year students. In the advertisement, students were invited to complete a brief online screening survey with questions about their demographics, enrollment status and campus involvement. Interested students were eligible to continue to the next part of the study if they were at least 18 years old, registered for full-time study as a second-year student in the Fall 2016 semester, and did not belong to a student organization that administered campus SA prevention programming.

Study staff selected eligible students to participate in qualitative data collection based on their gender, sexual orientation, race/ethnicity, involvement in campus athletics, and Greek Life membership. To ensure that a diversity of opinions from high-risk groups were represented in study findings, sexual minorities[22], students involved in Greek Life (social fraternities and sororities)[23], and those with involvement in binge drinking[24,25] or marijuana use[25] were oversampled. For all other characteristics, study participants were selected to mirror campus demographics.[21] We sent invitations to selected students asking that they complete an online web form to indicate their preference for participating in either an in-person, 2-hour mixed-sex focus group, a 2-hour single-sex focus group, or a 1.5-hour individual interview. Qualitative data collection could be conducted in-person or over the phone/Skype. This allowed for the inclusion of interested students who could not meet on campus during the summer. Qualitative data collection was conducted by trained research staff (2 doctoral students, 1 post-doctoral fellow, and 1 Master's-level research coordinator). In all but two cases (due to staff medical emergency), interviews and focus groups were facilitated by a study team member of the same sex as the participant(s).

Participants provided informed, written or verbal consent (for phone/Skype interviews) prior to beginning their interview or focus group. All interviews and focus groups were audio-recorded and followed a comparable, semi-structured guide. As part of the guide, students were asked how sexual assault should be addressed on campus, where to start and what the format of a new program should be (i.e., in-person/online, groups/one-on-one, etc.). They were given the opportunity to provide feedback about current campus sexual assault prevention programming and describe desired features of a new prevention program. Additionally, students were asked how technology and social media could be used as part of a new program. This part of the guide responded to fact that social media is an increasingly common platform for delivering health interventions focused on young adults[26–28] and could be a logical next step for SA prevention programming. Participants received $45 for participating in a focus group or $30 for participating in an individual interview. Study recruitment continued until saturation was reached.

Data analysis

Undergraduate Research Assistants (RAs) transcribed audio files and quality-checked their accuracy. Our study team developed an initial codebook of a priori themes based on a preliminary review of the transcripts. We subsequently refined this codebook to include themes that emerged during data analysis.[29] Under the supervision of a doctoral student and the research coordinator, RAs read each transcript at least once and manually coded transcripts for themes using NVivo 11. Each theme was independently coded by two RAs and inter-rater reliability was calculated using Cohen's Kappa coefficient. For themes with a Kappa coefficient at or below 0.60 (indicating weak or minimal coding agreement[30]), a trained graduate student independently reviewed the text coded under each sub-theme and resolved any coding disagreements.

Table 1 provides an overview of themes included in the current analysis, which captures the desirable characteristics of a new campus SA prevention program. As done in prior research, a theme must have been mentioned in at least 25% of the transcripts from either data collection method in order to be included in this analysis.[31,32] The first author reviewed coded transcripts a final time to identify representative quotes for each theme. For each quote, we identify the gender and data collection method (I=Interview participant, FG = Focus Group participant) of the speaker.

Results

Sample Characteristics

A total of thirty-five undergraduates completed qualitative data collection (54%: one-on-one interview; 46%: focus group; see Table 2). Because participant responses were similar across data collection methods, data are presented in aggregate. Sample demographics resembled characteristics of the Fall 2015 first-year class at the study university (e.g., 49% men; ~60% of White, Non-Hispanic race/ethnicity[33]) from which participants were recruited. At-risk groups were well-represented among the sample, with approximately one-third of participants (34%) reporting being a fraternity/sorority member and roughly 15% of participants identifying as a sexual minority. Health behavior characteristics also varied, as

just over half of participants (51%) reported lifetime sexual activity and just over half of participants (51%) reported past 3-month binge drinking (measured as 5+ drinks on one occasion). Nearly one-third (31%) reported past-month marijuana use.

Program Format

When asked to describe the ideal format of a campus SA prevention program, participants generally preferred in-person programs to online programs. Although a few participants acknowledged that online programs are more convenient, most participants perceived the independence facilitated by this approach to undermine the program's effectiveness.

> Female I: "*If it's online, people skip through it…we've had [online trainings] in the past…and part of it's timed, so you can't hit the 'next' button until a certain amount of seconds. I would just go on Facebook until that time allotment was over. People turn off their sound for videos. If it's online, it's so much more annoying and less significant to people.*"

The social aspect of in-person programming helped students to be more engaged with the program content. Being among peers also underscored the importance of the topic, whereas online courses might feel impersonal or abstract.

> Female I: "*I feel that it would be more effective if done in person because a lot of people might not really understand the seriousness of it all.*"

> Male I: "*I feel like a person is way more apt to pay attention when they have people presenting in front of them, rather than when they're just sitting in front of a computer.*"

Participants had differing ideas regarding whether in-person programs should be delivered one-on-one or in groups. Some participants asserted that delivering the program on a one-on-one basis would be preferable, as this format would allow discussion that targeted each student's knowledge, attitudes, and risk behaviors.

> Male I: *"I think one-on-one would be best to directly talk about it. And I guess that could be with the RA [Resident Advisor] or the dorm manager…They could have a direct conversation about the sexual misconduct policy and talk about if the person understands it and how to file a report."*

In contrast, the majority of participants (e.g., 76.5% of individual interviews and mentions in two focus groups) felt that the topic of SA is better suited to talk about in a group setting. For some participants (e.g., 17.6% of individual interviews and mentions in two focus groups), this perception stemmed from a concern that talking about SA one-on-one would be awkward and uncomfortable. Other participants asserted that administering a program in groups would allow students to learn from each other by hearing different perspectives.

> Male I: *"As a group, you get a pool of more people's ideas and it kind of makes you think of stuff differently too."*

> Genderqueer I: "*It would be best to learn…in the presence of other people…If you're in a bystander position, you're not gonna be alone, so you need to learn how it [SA] looks with other people around you.*"

Almost all students who spoke to group size preferred programs administered in small groups of 15–30 students. Many students expressed disinterest in auditorium-style presentations.

> Female I: *"I'm envisioning one person, or two people [facilitating the program], with a group of 20–25 students."*
>
> Male I: "*I'd try to keep it smaller, because when you have a bigger audience, more people can just zone out and be like, 'Oh, someone else can just answer that question.' So maybe like 30 people?"*

Several focus group participants envisioned a slightly different configuration, with programming that featured a large-group presentation followed by a breakout session.

> Female FG1: *"I don't think it should be large-scale, but I think small groups [of 20 people] can make people uncomfortable, especially with a topic as heavy as [SA]. I think having someone on the stage, like a motivational speaker type thing…people would still get it…[without] that uncomfortable feeling."*
>
> Female FG2: *"You [could] have a room of 150-something people, hear that person speak and then split off into groups."*
>
> Facilitator: *"What do you think is the ideal number of people to have in each group?"*
>
> Female FG3*: "For the speaker, I think there should be at least 100. And then splitting off into groups of 20 or 30 is fine."*

The majority of participants preferred for an in-person program to be offered to a co-ed audience, rather than separated based on sex or gender. Mixed-gender trainings were perceived to be more inclusive of gender and sexual minorities and also dispel stereotypes about the roles that men and women play in a SA incident.

> Female I: *"I think co-ed, because it happens to both men and women, and it's a pretty universal problem. You don't want to just blame men for doing it, or blame females. I think it's important to have both sides know it's bad to do it and it's okay to get help."*

A handful of interview participants, however, perceived that it would be valuable for an in-person program to include same-gender discussions led by a facilitator of the same gender.

> Female I: *"I think that if you have a dude get up in front of a group of a bunch of guys and get real serious with them, they're going to take it—they're going to act differently because they're in a group with a bunch of other males."*
>
> Male I: *"I think there should be room for both. Like certain topics you might want to separate [men and women], but then you also want to combine them together to also understand how the other side might see things."*

Participants disagreed about their ideal proposed facilitator. Most participants were adamant that a program should be facilitated by a trained, yet relatable, peer. Participants were

particularly interested in speaking with older students (i.e., third and fourth years), stating that their understanding of the campus culture would make the content resonate more.

> Male I: *"I feel like [it should be led by] a student. [For] a lot of students, as soon as a person of authority comes up, they shut down. It's like, "I know you're just going to like spew something from a script, something I've heard before, I just don't want to deal with you."*
>
> Female I: *"[It could be led by] Resident Advisors…or someone… [who makes you think], 'Oh man, they've got it all figured out, like a junior or senior, they're telling me this, it's gotta be something right.' Someone who is more personal to the students, rather than someone they just met."*

Other participants explained that having an authority figure lead the training, such as a university staff member or a health professional, would command greater respect from attendees.

> Female I: "*The other thing I think I hated about the [previous in-person prevention programs] was that they were student-led. Like, no… You need to get adults up there…you need somebody with that position of authority to get up and talk about it [SA]."*
>
> Male FG: *"I think it might actually be more effective to not have students [lead the program] at all…the younger students don't actually give them the respect that they might give to someone who's not a student."*

Participants likewise expressed mixed feelings about whether and how to use social media to intervene in the sexual assault epidemic. Although some participants expressed that SA is generally a challenging subject to address on social media, others envisioned social media potentially being used to increase participation in programming or even spark a campus dialogue about the topic.

> Female I: *"If it was organized…[as] a private event on Facebook…then it's a more open dialogue because everyone's doing it and you can see which people are going which day."*
>
> Male I: *"If you get a fraternity guy and a girl in the business school and someone else to be part of a social media campaign, where people see them and respect them…if the message is coming from someone that people respect and can relate to, that's big."*

Teaching Modality

When asked to describe how prevention programs should convey information about SA, some participants asserted that the program should facilitate a free-flowing, honest, and serious conversation. Participants perceived that such a discussion would make SA less taboo to discuss on campus.

> Male FG: *"I would much rather have a conversation that's organic and less restrictive, where the responses aren't limited."*

Male FG: *"As an example, in the discussion we're having right now, everything is kind of being generated…It's a discussion that's more free form, it's a discussion that's moving. Rather than some pre-formed questions with a list of responses that need to be given before the discussion can proceed."*

Several participants also provided suggestions for how to establish conversational settings that are conducive to this type of dialogue. Participants suggested collaboratively setting ground rules for the discussion and not offering the program to groups of students who already know each other (e.g., to dorms or student organizations).

Male FG: "*When you're sitting in a room of your peers that you actually know, it might actually make you feel less comfortable talking about those things [SA, alcohol misuse]."*

Similarly, several students envisioned that technology could be used to make the discussion more dynamic and inclusive of students who are hesitant to speak up in a group setting.

Female I: *"Maybe some interactive, like iClicker type deal...to have the audience involved and answering surveys."*

Male I: *"If people aren't comfortable asking questions, they could type a response or question into a Google Form and anonymously ask it, rather than raising their hand."*

Program Content

Participants had a variety of ideas about what content should be included in sexual assault prevention programming. For example, some participants expressed the importance of a program clearly defining what behaviors fall under the umbrella of SA.

Female FG: "*A lot of students might not know what that [SA] means."*

Female I: *"I would emphasize that sexual assault can be on a spectrum*."

Female I: *"Definitely defining the grey line between…being flirty and actually slipping into sexual assault."*

Survivor testimonies were mentioned by some participants as a way to set a serious tone for the program and help students connect with the topic on a deeper level.

Female I: *"When I hear stories about individuals [who've been involved in a SA incident], that shakes me to the core way more than any generic content."*

Female I: *"As soon as you have someone [in the room] that's actually experienced [SA], all the joking, all the 'Oh my gosh, I have to go to this program' stops. Because you have someone in real life who has experienced the pain and consequences of sexual assault."*

Several participants perceived the link between substance use and SA to be an important discussion topic, but emphasized the value of taking a harm reduction approach when talking about substance use.

Female I: *"Informing students about the linkage between alcohol and SA is also important, but it should be done in a way so that it's not seen like the university is telling students to not drink. If a student interprets it as someone telling them not to drink, then they'll disregard what's being told."*

Strategies for preventing SA were mentioned by some participants as useful content to include in programming. Although some students mentioned specific tips to help avoid risky situations (e.g., "staying in groups", "late night options for driving"), others spoke about how programming can take an upstream approach to prevention and change the narrative about who is responsible for preventing SA incidents.

Female I: *"I would like to see more, 'You can't assault somebody because it's not right and it's not okay.' We place a lot of pressure on how not to get sexually assaulted instead of how not to sexually assault."*

Female I: *"I would emphasize respect of all individuals in all circumstances."*

Genderqueer I: *"A new program should [cover] how to prevent it [SA] as a bystander, how to prevent it as a potential victim, how to prevent it as a potential perpetrator…the three different spots that anyone could be in."*

Some students perceived that having a serious discussion about the ramifications of being involved in a SA incident could be a powerful deterrent for potential perpetrators.

Female I: *"We need to sit down and have a serious talk with people and be like 'Hey, listen, sexual assault is something that happens and, if you're the perpetrator, it can ruin your life and somebody else's life.'"*

Lastly, some participants expressed that it would be helpful to teach students what to do following a SA incident.

Male I: *"I would focus more on the outcomes…of sexual assault…Showing that, if you're a victim, there's a process…and you can stay anonymous. And reporting is better than not reporting."*

Female I: *"[It should discuss] what you should or shouldn't do if your friend confides in you. For example, don't be like 'Oh, were you really drunk?' or 'Well, what were you wearing?' What you should do is listen to them, be like 'Oh my gosh, I'm so sorry that happened to you' and know what numbers to call."*

Comment

As part of a participatory approach to inform development of campus SA prevention programming, consistent with ACHA guidelines[5], college students provided perspectives on their desired design and delivery of such programs. We learned that students welcome and desire opportunities for free-flowing, serious and honest discussions about SA as part of their campus health education. Such a discussion could employ multi-modal formats, occurring in person in small, mixed-gender groups with additional one-on-one follow-ups and/or opportunities to have questions answered privately (e.g., electronic question submission), led by a relatable peer facilitator who is attuned to the dynamics of campus

life. Students see a discussion of this nature as a valuable opportunity to reset norms, correct misinformation about SA, and shed light on the reality of SA. As part of the discussion, students expressed a desire to receive prevention and outcome information about the possible roles that they could play in a SA incident, instead of only receiving content that is perpetrator-, bystander- or survivor-focused. Furthermore, instead of using humor, survivor testimonies and live anonymous polls were mentioned as alternative ways to keep students engaged in the program without undermining the seriousness of the discussion. Although students described the potential utility of social media, no students spontaneously mentioned social media being incorporated into programs without first being queried. Social media could be a way of organizing events or promoting some engagement in the programming, which was preferred to occur in person.

For this sample, students' views on what they would like to experience in campus SA prevention programs differs somewhat from the current programs available on their own campus[34,35] and from the SA prevention evidence-base, yet bolsters findings from previous qualitative inquiry.[18] For example, although programs are easier to scale for campus-wide implementation if administered online or in-person to large groups of students, students expressed that the impersonal nature of these formats is less desirable than programs administered in-person to small groups of students. It may be that online programs and auditorium-style presentations are best suited for inclusion in a multi-pronged SA prevention strategy, rather than being administered as standalone programs, and perhaps can be accompanied by breakout sessions as suggested by participants. Likewise, although previous research has generated mixed findings regarding the efficacy of peer-led prevention programs[36–38], we found that students generally prefer for SA prevention programming to be led by relatable and respected peers. The efficacy of some peer-led programs (e.g., the Ohio University SA Risk Reduction Program[10,39] and Bringing in the Bystander[13]) suggests that, with adequate training and supervision by professionals, peer facilitators can play an important role in resetting norms and attitudes about SA.[40] Because some students prefer to have a trained professional or authority figure lead prevention programming, programs that utilize both peer and professional facilitators are promising for satisfying student preferences.

Most notably, we found that students desire for SA prevention programming to be administered to co-ed audiences. Although previous work provides some evidence to suggest that single-gender programs may be more effective[36,38] and have advantages from an ethical perspective[39] relative to mixed-gender programs, such an approach could be perceived as antiquated by younger generations given their more fluid understanding of social constructs like gender and gender roles.[41] This preference for co-ed audiences could likewise explain why some students expressed that universal prevention programs which include perpetrator-focused, survivor-focused, and bystander-focused content are preferable to selective prevention programs which only address one role that students would be expected to play in a SA incident, based on their demographic characteristics. Future program developers may consider incorporating a universal prevention lens and administering sessions to mixed-gender audiences, and also including opportunities for single-gender breakout sessions to discuss sensitive topics or teach more targeted prevention tools (e.g., risk reduction and self-defense strategies[42]; resocialization of rape-supportive

attitudes and empathy building[9]). Such an approach could better convey the message that SA is a campus-wide problem, rather than an issue only affecting certain groups.

Limitations

This study's findings should be considered in light of its limitations. Study participants were recruited from one university where the student body is generally progressive, open to discussions about timely issues, and well-educated about the topic of SA. Although these factors created a conducive environment for this study, as students had a wealth of previous experience to draw from, it is possible that our findings may not extend to other universities in other geographic regions with differing campus cultures. However, the desirable program format described by our study sample is consistent with the findings from a previous study[18] conducted at a university in a geographically and culturally different region of the country, speaking to the potential generalizability of these findings to other university settings. Additionally, recruitment efforts did not mask that the study focus was about SA. Although our study sample was demographically representative of the campus student body, it is possible that study findings could be biased if study participants were more educated or passionate about the issue of SA than the average student; furthermore, the small sample size limits the generalizability of our findings. It may be that the students least in need of prevention interventions were most likely to participate in this research; however, our inclusion of individuals from high-risk groups (i.e., Greek Life, sexual minorities, risky substance users) is a strength of this investigation.

Conclusions

As campus SA remains a problem on college campuses nationally, the implementation of effective prevention programming is critical. Although evidence-based programs exist and should be implemented, we have learned from participatory research that students are willing to give important feedback to shape programs. The inclusion of student voices in program development could not only result in enhanced program receptivity, but increase program engagement, potentially enhancing efficacy. Although students at varying campuses may differ in their suggestions for SA prevention programming, our findings can nonetheless inform future programs on the study campus as well as others, and could guide future research in this area or stakeholder interviews when creating campus-specific programs. Further, these suggestions from students may be useful as established programs could be updated for changing trends (i.e., new technologies) and the current social context (e.g., fluidity in gender identity and sexual orientation, which could impact traditional male perpetrator-female victim-oriented programming), resulting in more timely and relevant programs.

Acknowledgements:

The authors wish to acknowledge Matthew F. Benoit, Danielle Epstein, Nicole LaPlena, Christopher Foster, Tiana Huang, Laura Dent, Andrew Jackson, Stephanie Kostolansky, Brittnie Cannon, Maya Reyes, and Melanie Meisenheimer for their assistance with data collection, analysis and synthesis.

Funding:

This work was supported by a small pilot grant and center support from the University of Michigan Injury Prevention Center under Grant R49 CE002099. During his work on this study, Dr. Davis was initially supported by a NIAAA T32 training grant (#AA007747) and subsequently by a NIDA T32 training grant (#DA07209).

References

1. The United States Department of Justice. What is Sexual Assault? 2018; https://www.justice.gov/ovw/sexual-assault. Accessed December 20, 2018.
2. 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.
3. Rosenberg M, Townes A, Taylor S, Luetke M, Herbenick D. Quantifying the magnitude and potential influence of missing data in campus sexual assault surveys: A systematic review of surveys, 2010–2016. J Am Coll Health. 2018:1–9.
4. Peterson C, DeGue S, Florence C, Lokey CN. Lifetime economic burden of rape among US adults. Am J Prev Med. 2017;52(6):691–701. [PubMed: 28153649]
5. American College Health Association. Addressing Sexual and Relationship Violence on College and University Campuses. Silver Spring, MD;2016. Available at: https://www.acha.org/documents/resources/guidelines/Addressing_Sexual_Violence.pdf. Accessed May 3, 2019.
6. DeGue S, Valle LA, Holt MK, Massetti GM, Matjasko JL, Tharp AT. A systematic review of primary prevention strategies for sexual violence perpetration. Aggress Violent Behav. 2014;19(4):346–362. [PubMed: 29606897]
7. De Koker P, Mathews C, Zuch M, Bastien S, Mason-Jones AJ. A systematic review of interventions for preventing adolescent intimate partner violence. J Adolesc Health. 2014;54(1):3–13. [PubMed: 24125727]
8. Senn CY, Eliasziw M, Barata PC, Thurston WE, Newby-Clark IR, Radtke HL, Hobden KL. Efficacy of a Sexual Assault Resistance Program for University Women. N Engl J Med. 2015;372(24):2326–2335. [PubMed: 26061837]
9. Gidycz CA, Orchowski LM, Berkowitz AD. Preventing Sexual Aggression Among College Men: An Evaluation of a Social Norms and Bystander Intervention Program. Violence against women. 2011;17(6):720–742. [PubMed: 21571742]
10. Gidycz CA, Orchowski LM, Probst DR, Edwards KM, Murphy M, Tansill E. Concurrent administration of sexual assault prevention and risk reduction programming: Outcomes for women. Violence against women. 2015;21(6):780–800. [PubMed: 25845615]
11. Salazar LF, Vivolo-Kantor A, Hardin J, Berkowitz A. A web-based sexual violence bystander intervention for male college students: Randomized controlled trial. J Med Internet Res. 2014;16(9):e203. [PubMed: 25198417]
12. McMahon S, Winter SC, Palmer JE, Postmus JL, Peterson NA, Zucker S, Koenick R. A randomized controlled trial of a multi-dose bystander intervention program using peer education theater. Health Educ Res. 2015;30(4):554–568. [PubMed: 26135957]
13. Banyard VL, Moynihan MM, Plante EG. Sexual violence prevention through bystander education: An experimental evaluation. J Community Psychol. 2007;35(4):463–481.
14. Gilmore AK, Lewis MA, George WH. A randomized controlled trial targeting alcohol use and sexual assault risk among college women at high risk for victimization. Behav Res Ther. 2015;74:38–49. [PubMed: 26408290]
15. Richards TN. An Updated Review of Institutions of Higher Education's Responses to Sexual Assault Results From a Nationally Representative Sample. J Interpers Violence. 2019;34(10):1983–2012. [PubMed: 27402582]
16. Dills J, Fowler D, Payne G. Sexual violence on campus: Strategies for prevention. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention 2016.
17. Casey EA, Lindhorst TP. Toward a multi-level, ecological approach to the primary prevention of sexual assault: Prevention in peer and community contexts. Trauma, Violence, Abuse. 2009;10(2):91–114. [PubMed: 19383629]

18. Hubach RD, Story CR, Currin JM, Woods A, Jayne A, Jayne C. “What Should Sex Look Like?” Students’ Desires for Expanding University Sexual Assault Prevention Programs to Include Comprehensive Sex Education. Qual Health Res. 2019.
19. Ortiz RR, Shafer A. Unblurring the lines of sexual consent with a college student-driven sexual consent education campaign. J Am Coll Health. 2018;66(6):450–456. [PubMed: 29405854]
20. McMahon S, Wood L, Cusano J, Macri LM. Campus sexual assault: Future directions for research. Sex Abuse. 2018;31(3):270–295. [PubMed: 29320942]
21. University of Michigan. Results of 2015 University of Michigan Campus Climate Survey on Sexual Misconduct. 2015: Retrieved from: https://publicaffairs.vpcomm.umich.edu/wp-content/uploads/sites/19/2015/04/Complete-survey-results.pdf. Accessed December 20, 2018.
22. Coulter RWS, Mair C, Miller E, Blosnich JR, Matthews DD, McCauley HL. Prevalence of past-year sexual assault victimization among undergraduate students: Exploring differences by and intersections of gender identity, sexual identity, and race/ethnicity. Prevention Science. 2017;18(6):726–736. [PubMed: 28210919]
23. Herres J, Wang SB, Bobchin K, Draper J. A Socioecological Model of Risk Associated With Campus Sexual Assault in a Representative Sample of Liberal Arts College Students. J Interpers Violence. 2018:886260518785376.
24. Krebs CP, Lindquist CH, Warner TD, Fisher BS, Martin SL. College women’s experiences with physically forced, alcohol-or other drug-enabled, and drug-facilitated sexual assault before and since entering college. J Am Coll Health. 2009;57(6):639–649. [PubMed: 19433402]
25. Krebs CP, Lindquist CH, Warner TD, Fisher BS, Martin SL. The differential risk factors of physically forced and alcohol-or other drug-enabled sexual assault among university women. Violence Vict. 2009;24(3):302–321. [PubMed: 19634358]
26. Lelutiu-Weinberger C, Pachankis JE, Gamarel KE, Surace A, Golub SA, Parsons JT. Feasibility, acceptability, and preliminary efficacy of a live-chat social media intervention to reduce HIV risk among young men who have sex with men. AIDS Behav. 2015;19(7):1214–1227. [PubMed: 25256808]
27. Valle CG, Tate DF, Mayer DK, Allicock M, Cai J. A randomized trial of a Facebook-based physical activity intervention for young adult cancer survivors. J Cancer Surviv. 2013;7(3):355–368. [PubMed: 23532799]
28. Godino JG, Merchant G, Norman GJ, Donohue MC, Marshall SJ, Fowler JH, Calfas KJ, Huang JS, Rock CL, Griswold WG. Using social and mobile tools for weight loss in overweight and obese young adults (Project SMART): a 2 year, parallel-group, randomised, controlled trial. Lancet Diabetes Endocrinol. 2016;4(9):747–755. [PubMed: 27426247]
29. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative research in psychology. 2006;3(2):77–101.
30. McHugh ML. Interrater reliability: the kappa statistic. Biochemia medica: Biochemia medica. 2012;22(3):276–282. [PubMed: 23092060]
31. Cheney MK, Mansker J. African American young adult smoking initiation: Identifying intervention points and prevention opportunities. American Journal of Health Education. 2014;45(2):86–96.
32. Cheney MK, Maness S, Huber JK, Burt T, Eggleston L, Naberhaus B, Nichols B. Social influences on sorority and fraternity member smoking. J Am Coll Health. 2017;65(8):525–533. [PubMed: 28707984]
33. University of Michigan Office of the Registrar. University of Michigan Total Enrollment Overview. Ann Arbor, MI; 2015.
34. Bonar EE, Rider-Milkovich HM, Huhman AK, McAndrew L, Goldstick JE, Cunningham RM, Walton MA. Description and initial evaluation of a values-based campus sexual assault prevention programme for first-year college students. Sex Education. 2019;19(1):99–113.
35. Zapp D, Buelow R, Soutiea L, Berkowitz A, Dejong W. Exploring the potential campus-level impact of online universal sexual assault prevention education. J Interpers Violence. 2018:0886260518762449.
36. Brecklin LR, Forde DR. A meta-analysis of rape education programs. Violence Vict. 2001;16(3):303. [PubMed: 11437119]

37. Anderson LA, Whiston SC. Sexual assault education programs: A meta-analytic examination of their effectiveness. Psychol Women Q. 2005;29(4):374–388.

38. Vladutiu CJ, Martin SL, Macy RJ. College-or university-based sexual assault prevention programs: A review of program outcomes, characteristics, and recommendations. Trauma, Violence, & Abuse. 2011;12(2):67–86.

39. Gidycz CA, Orchowski LM, Edwards KM. Primary prevention of sexual violence. In: Koss MP, White JW, Kazdin AE, eds. Violence against women and children. Washington, DC: American Psychological Association; 2011.

40. Weisz AN, Black BM. Peer education and leadership in dating violence prevention: Strengths and challenges. Journal of Aggression, Maltreatment & Trauma. 2010;19(6):641–660.

41. Kacen JJ. Girrrl power and boyyy nature: the past, present, and paradisal future of consumer gender identity. Marketing Intelligence & Planning. 2000;18(6–7):345–355.

42. Orchowski LM, Edwards KM, Hollander JA, Banyard VL, Senn CY, Gidycz CA. Integrating Sexual Assault Resistance, Bystander, and Men's Social Norms Strategies to Prevent Sexual Violence on College Campuses: A Call to Action. Trauma, Violence, & Abuse. 2018.

Table 1.

Key Analytical Themes and Subthemes

Key Themes	Select Subthemes
Program Format	• Administered in-person or online
	• Facilitated by a student or a non-student
	• Delivered in mixed-gender groups, single-gender groups or one-on-one
	• Ways to incorporate technology or social media
Teaching Modality	*Program should include…*
	• A natural flow of conversation
Program Content	*Program should include…*
	• Tips for preventing and coping with assault
	• Survivor stories of sexual assault
	• Consequences of sexual assault perpetration
	• Link between alcohol/drugs and sexual assault
	• Clear definition of sexual assault

Table 2.

Sample Characteristics (n=35)

Characteristic	n (%) or Mean (SD)
Sample Demographics	
Age	18.80 (0.53)
Gender	
Male	17 (48.60%)
Female	17 (48.60%)
Genderqueer	1 (2.90%)
Race/Ethnicity	
White, Not Hispanic	20 (57.10%)
White, Hispanic	3 (8.60%)
African-American, Not Hispanic	6 (17.10%)
Asian, Not Hispanic	6 (17.10%)
Sexual Orientation	
Heterosexual/Straight	30 (85.70%)
Gay	2 (5.70%)
Questioning	2 (5.70%)
Lesbian	1 (2.90%)
Campus Activities and Reported Health Behaviors	
Fraternity or Sorority Member	12 (34.30%)
Lifetime Sexual Activity	18 (51.40%)
Any Past 3-Month Binge Drinking	18 (51.40%)
Any Past 3-Month Marijuana Use	11 (31.40%)