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Student suggestions for addressing heavy episodic drinking

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ABSTRACT

Objective: This study examines student suggestions for other students, campuses, and society to address heavy episodic drinking (HED) and associated harms. **Participants:** Included 110 post-secondary students (27 males, 83 females), ages 17 to 30 years, from five universities across four Canadian provinces. **Method:** Purposeful sampling was used to screen in participants who drank in excess of Canada's Low-Risk Alcohol Drinking Guidelines. As part of a larger study, focus groups were held with qualifying students examining HED behaviors, suggestions and potential barriers to addressing HED among post-secondary students. **Results:** Suggestions included providing earlier education on harms, receiving messages from respected peers and adults, and teaching how to drink in moderation. Barriers included peer pressure, not knowing own limits, and post-secondary drinking culture. **Conclusions:** Campuses might not be using the most effective methods to reduce HED, may be facing unknown barriers, and need to understand perspectives of students in order to reduce HED.

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Introduction



Heavy episodic drinking (HED) is a high-risk behavior carried out by many post-secondary students. Also sometimes referred to as high-risk drinking, binge drinking, excessive drinking, or hazardous drinking, HED is defined as consuming four or more (for females) or five or more (for males) standard drinks on a single occasion.¹ The issue has been studied across a variety of dimensions including the reasons, consequences, perceptions, attitudes, and expectations associated with alcohol consumption.²⁻⁴ In contrast, very little research has been conducted exploring ideas and suggestions from students on how to address HED. The research presented here, which was derived from a larger exploratory study on student HED,⁵ used focus groups to collect and examine student suggestions and ideas for other students, campuses, and society to help reduce HED among post-secondary students.

Post-secondary students drink more frequently and consume greater quantities of alcohol than their non-student peers.^{6,7} In the short term, HED has been associated with blacking out, impaired driving, injuries or physical or sexual violence;^{1,8,9} while in the long term, consequences can include significant cognitive, structural and functional brain changes in young adults, as well as potential health issues such as liver disease or cancer.^{10,11} A recent survey conducted with approximately 44,000 Canadian post-secondary students found that 69.3% reported consuming alcohol within 30 days of the survey, and 35% reported drinking five

or more drinks on at least one occasion within two weeks of the survey.¹²

There are several gaps in the research regarding student HED. The majority of studies examining this issue have been conducted at campuses in the United States, yet, there could be important differences between Canadian and American contexts,¹³⁻¹⁶ such as different minimum legal drinking ages or different levels of Greek affiliation. As a result, there is limited, outdated, or non-existent information and resources to guide HED interventions on Canadian campuses. More studies also examine the HED issue through quantitative methods (e.g., surveys) rather than qualitative (e.g., interviews, focus groups). Although quantitative methods are a useful means to gather large amounts of data, complementary methods such as interviews or focus groups provide detailed data and insights from the target audience, in their own words, and allow for clarifying participant responses.^{17,18}

A critical gap in the available research on student HED is the near absence of studies that seek student's own ideas and suggestions to address HED. In one study, youth aged 12 to 18 in Ireland were consulted to find out their views on solutions for problematic alcohol use. Participants provided and prioritized recommendations that included ideas such as offering alternative alcohol-free activities, providing age-appropriate education programs, considering peer-mentoring programs, and examining the role of media.¹⁹ In another study conducted in the United States, post-secondary students who had violated their institution's alcohol

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policies and had been sanctioned by the university were surveyed to learn more about the effectiveness of restrictions to deter future violations.²⁰ From these sanctioned students' perspective, effective restrictions included receiving an alcohol assessment, participating in an alcohol treatment program, notifying parents, and involvement in the criminal justice system (e.g., arrest, court case, jail, etc.). It is also important to remember that not all student suggestions are appropriate (e.g., lower the drinking age)¹⁹ and suggestions should be considered in light of best practices or examined for effectiveness. Beyond these studies, very little appears to be known about student suggestions and ideas to address HED. Student suggestions may inform initiatives to educate other students on effective and ineffective policies and practices, or they may provide insights into why some interventions that could be effective are not supported by students (e.g. restricting alcohol availability on campus).

Current study

This research was developed from a larger study that explored various factors associated with post-secondary student HED,⁵ which used focus groups to obtain student ideas and suggestions to help address HED. This article reports on and examines the results of student suggestions for other students, campuses, and society to address HED and its associated harms.

Method

To examine issues related to HED among post-secondary students, the researchers conducted focus groups with students enrolled in Postsecondary Education Partnership—Alcohol Harm (PEP-AH) institutions. PEP-AH is a partnership of Canadian institutions working with students to build an understanding of student drinking culture, developing best practices and sharing them to promote student health and safety (www.pepah.ca.) Since PEP-AH's structure and governance is organized around four regions (Western Canada, Ontario, Quebec and Atlantic Canada), focus groups were conducted on one campus per region, and two from Ontario. As part of this research, this article examines the data that were specifically collected pertaining to student ideas and suggestions to reduce HED. As this study appears to be the first in Canada to examine HED using focus groups, this research is exploratory in nature.

Recruitment

Participants for the study were recruited from post-secondary students enrolled in Canadian institutions from four PEP-AH regions. The study was also piloted with another Ontario post-secondary institution in order to test and revise the methods (e.g., recruitment, screening, discussion questions, etc.). The pilot results are not reported in this study. To recruit students, the researchers collaborated with members of PEP-AH and other university faculty and health professionals. Recruitment methods included use of posters;

emails to students, student groups, faculty or departments; recruiting from booths in high-traffic areas; postings on student display or virtual boards; and social media. Students who participated in the focus groups received a \$25 gift card as an incentive. In order to reduce potential stigma associated with terms such as HED, excessive drinking or problematic drinking, and because most students do not view themselves as heavy episodic drinkers,²¹ the term "heavy drinking" was used in advertising and consent forms.

Students were required to complete a screening questionnaire first to determine if they met the criteria for HED and also collected basic demographic information (e.g., sex/gender, year of study, program, etc.). If they were a post-secondary student and reported exceeding the Canadian Low-Risk Alcohol Drinking Guidelines (LRDG) for special occasions (i.e. consumed four or more standard drinks for women or five or more drinks for male),²² they were invited to participate.

Discussion questions

The focus group guide and questions were developed through a review of the published gray and peer-reviewed literature related to HED and high-risk drinking behavior (e.g., alcohol-induced blackouts). A total of 28 open-ended questions were developed, including warm-up and de-escalation questions to initiate and moderate discussions. Two of these questions probed for student suggestions and recommendations to address HED: On occasions where you drank more than you wanted, what could have made it easier for you to not drink more? What are some things that you think would be useful or could be done to help reduce heavy drinking while in school? These questions were followed up by probing and clarifying questions in order to ensure the researchers understood their suggestions and recommendations as clearly as possible. The participants were also provided a handout with pictures and quantities of standard drink sizes to ensure everyone had the same understanding of drink quantities.

Participants

A total of 110 students participated, 27 males and 83 females, with approximately 20–25 students participating from each of the five universities. Participants ranged in age from 17 to 30 years and included both undergraduate and graduate students from different programs, though the majority were undergraduate students aged 18 to 22. Purposeful sampling was used to help develop the sample where students were only invited to the study if they met the criteria for exceeding the LRDG (see above).²³ Although males were heavily recruited, some were not interested in participating and many of those who were recruited to participate did not attend the focus group. As such, a higher proportion of females than males self-selected to participate. Given that this was an exploratory study aimed to provide initial context and insight into Canadian student drinking,

the results from the available participants still supported these aims.

Focus groups

Focus groups ranged in size from one to 10 participants each, with the majority comprising between four and six participants. Approximately 12% of these discussions consisted of only one person. This was not considered an issue since the percentage was small and individual responses were consistent with responses from the larger sample. Ethics approval was obtained from the research ethics board at each individual university involved in data collection and participants completed consent forms prior to the discussion. Discussions lasted between 30 and 90 minutes (dependent on the size of the group) and were audio recorded. Participants were debriefed at the end of the discussion, which included answering their questions, explaining next steps, providing them with a list of local resources for support related to alcohol use, and receiving a \$25 gift card for their time. The recordings were transcribed into text and any potential identifying information (e.g., names, places) were removed during transcription. Focus groups were conducted in English in February 2017 and October 2017.

Data analysis

For the analysis, transcribed participant responses were loaded into, and analyzed using, NVivo 11 for Windows, Pro edition. For this article, student responses to the two questions described above, as well as any suggestions and recommendations given by students during other parts of the discussion, were identified and coded using a combination of inductive and deductive methods. “Hybrid thematic analysis” has been demonstrated as having rigor and validity in qualitative analysis, where data are analyzed and classified according to a set of pre-determined themes under investigation (deductive), and where data are also analyzed for common emergent themes (inductive) that may not be captured by the pre-determined themes.^{24,25} In this study, student suggestions were coded according to pre-determined deductive themes that pertained to students, campuses, or society. An inductive thematic analysis identified a number of recurring sub-themes, such as peer pressure, what not to do, or campus culture. To validate the analysis, the second author of this study reviewed the coding and any inconsistencies or issues were resolved through an iterative process.

Results

Suggestions for students

Protective behaviors

Participants recommended various strategies that they sometimes use or they thought would help other students reduce the harms of HED. Many were familiar with, and recommended, common protective behavioral strategies (i.e., actions used to reduce the negative consequences associated

with drinking alcohol),²⁶ such as eating before or while drinking and alternating drinking alcohol with water to pace their consumption,^{27,28} although some thought staying hydrated with water would help them avoid a hangover. A number of participants suggested students set limitations for themselves in advance, such as bringing a set quantity of alcohol they want to drink to a party, bringing a set amount of money (no debit or credit cards) to a drinking event, or planning to come home by a certain time so that they do not continue drinking. “Just bring the amount [of money] that would be like the most you imagine like would make it like before a bad time,” or another student who said, “I always take \$40, and that’s like, at most \$40 ... put it in my purse. That’s my cab home, that’s mozza sticks if I want it.”

Most students admitted that tracking consumption was very difficult for them. To reduce this issue, some participants mark their arms for each drink they consume, a few suggested alternating nonalcoholic beverages with alcohol—including during drinking games, and others ask a friend to monitor their drinking and cut them off. As one participant explained, “people put marks on their arm of how many drinks they’ve had, so ... you can kind of count how many drinks you’ve had, and okay, two more drinks before I black out, so maybe I should stop for a little bit”; while another recommended, “set an agreement with your friend that you’re not going to go past this number of drinks.” Nonetheless, some participants said that they would be annoyed if someone tried to cut them off and that this technique would not work for them. “If my friend was like, ‘You’ve had enough to drink,’ like, ‘Stop it,’ ... drunk me would be angry with that ... I would be, like, ‘You don’t know my limits.’”

A number of participants also suggested strategies that would, in fact, increase the harms of alcohol consumption rather than decrease them. One of the most frequent recommendations was to alternate drinking alcohol with cannabis use. “To me, if there’s weed involved, and someone’s like, ‘Do you want another drink?’ I’m like, ‘Actually, no, I’ll just go smoke,’ ... It’s like safer. It’s like an excuse to get out of drinking.”

Peer pressure

Managing peer pressure to drink was a common issue experienced by participants, either as a challenge (e.g., being mocked for not drinking or not drinking enough) or socially (e.g., friends buying a round of drinks). As one participant stated, “I think even if you don’t drink, and your friends do, you’re kind of seen as like a loser ... Like, you’re not fun. Why aren’t you doing that?” Most participants were unsure how to address peer pressure, but they offered some suggestions. A few recommended that students tell their friends to not offer or buy them drinks. Two participants suggested consuming nonalcoholic drinks that look like alcohol, “if you could just get like a thing of cranberry juice for free, you know? ... And just like ... not pretend there’s alcohol in there but it has like the look of it ... Nobody knows ... so then, you’re not getting pressured.” Another emphasized, “I think it [would have been] really important if somebody had

told me like, ‘Drinking is not mandatory, it does not make you cooler...’... It’s like your own decision rather than doing it for others.” Beyond these suggestions, participants frequently reported that they would like recommendations on how to address the peer pressure they experience.

Suggestions for campuses

Prevention

One of the most frequently mentioned prevention recommendations from participants was for campuses to improve the provision of alternatives to drinking as an activity. Participants reported drinking because they were bored; because nothing else (e.g., the gym, libraries, recreational rooms, food establishments, etc.) was available or open late that allowed them to socialize; because the university did not provide alternative activities on campus (e.g., workshops, social activities); or because the campus lacked inexpensive transportation (e.g., bus services) to alternative activities off campus on evenings and weekends. “If you have something else to focus on because I find a lot of times people will just be like ‘oh, it’s a Friday night, I’m bored, what do I do? Let’s go out to a bar.’” Another explained, “everything ends at 10 or 11 and nobody is really ready to go to bed yet and you’re not done hanging out with your friends, so what do you do?” Additionally, participants noted that campus groups and activities typically use alcohol as the incentive or draw for students (e.g., fundraisers, alcohol discounts for belonging to a club). Students suggested making something else about the group or activity the primary draw and alcohol a subsequent focus; however, a few commented that they did not see how these groups/activities would survive without using alcohol as the incentive.

Some students also suggested that campuses model harm reduction strategies on bystander interventions such as those used for safety and sexual violence prevention programs found on some campuses. For instance, some suggested campuses create programs that teach students how to prevent, monitor for, and address unsafe intoxication. “Maybe just like teach them skills for like, if one of their friends ends up throwing up, like, what are you going to do? How are some ways to make sure that next time you don’t end up throwing up?”

Education

Many participants in this study emphasized the importance of education and how campuses deliver harm reduction messages to students. One frequent recommendation was for campuses to provide education on alcohol consumption, the varying effects, the associated health risks, and methods to drink safely. For instance, a number of participants reported that when they first began drinking alcohol, they did not know it affects individuals differently due to height, weight, sex, etc., particularly when they were trying to keep up with friends. As one female explained, “all my friends are, like, at least a foot taller than me, and especially, like, male friends, like, I couldn’t keep up. But no one told me that, ‘Hey,

you’re 5’2”. You can’t keep up.’” Several participants suggested that students needed to know the facts about alcohol, along with potential consequences.

The majority of participants also suggested providing education on what moderate drinking means instead of telling students not to drink. Some feedback included, “give everyone, like, a drinking 101,” “I think really just educating people on how to drink and how to be safe with it,” and, “so, you want to drink. Here’s how to do it safely.”

The source of the message and medium of delivery was very important. In the former, one of the most frequent comments was the desire to receive information and education from respected peers, such as residential assistants or students in upper years of school. Students reported that they were more likely to respond to messaging from people they felt they could relate to, as one student stated:

Hearing the dean say, “Maybe don’t drink this much, or try not drinking at all...” I probably wouldn’t have listened. But having like other students [give you information],... people might respond to that better because they see someone their age who’s saying, like, you don’t have to drink, or you don’t have to drink that much.

Some participants also recommended receiving information and education from well-respected older adults, such as certain professors. To ensure students received the education, a number of participants stated it should be mandatory and the campus offer an incentive (such as course credit) or reward (e.g., fun activity) for attending, otherwise students were not likely to attend.

In the latter, many participants wanted information and education to be engaging, realistic, unexaggerated, and delivered through personal stories, videos and other mediums of interest. “I think the only thing that I think would really have an impact on myself would be to hear stories, anecdotes of like really negative consequences of drinking.” However, a few students cautioned that scare tactics turned them off from listening, like this one, “it [stories] doesn’t really feel realistic in a sense, especially when they bring the worst case scenario, and they’re just trying to scare you.”

Upon showing participants images and quantities of standard drinks for different types of alcohol (after three to four warmup and drinking perception questions), many expressed surprise at the sizes. As a result, a few participants recommended educating students on what standard drinks were²², especially how many standard drinks were in beer pitchers or wine bottles, since they often buy alcohol in bulk quantities.

Education of what a [standard] drink is because, like, pouring your tumbler cup half full of rum and half full of Coke – I thought in first year was still one drink.... I just had absolutely no idea, and I know I’m not the only one who is uneducated on what a standard drink is. And, it’s different for different types of alcohol, which I also did not realize.

First-year students

Overwhelmingly, participants recommended that campuses focus on addressing HED with first-year students. Based on their own experiences and observations of other first-year

Table 1. Summary of student suggestions to reduce HED for students, campuses, and society.

Suggestions for students*	
Behaviors	<ul style="list-style-type: none"> • Set limits ahead by bringing a set amount of money, a set quantity of alcohol, determining a pre-set time to go home • Track consumption (such as mark arm for each drink), alternate alcohol with water • Ask a friend to monitor intake or agree with a friend to only drink a certain amount
Peer pressure	<ul style="list-style-type: none"> • Ask friends to not offer or buy drinks, consume nonalcoholic drinks that look like alcohol (e.g., juice), and reinforce that drinking is the student's own decision and not others
Suggestions for campuses*	
Prevention	<ul style="list-style-type: none"> • Offer other activities, especially late-night, that do not focus on alcohol and are appealing to students (e.g., recreational activities, food establishments, keep the gym/ library open) • Do not make alcohol the primary focus of group memberships or fundraisers • Model other harm reduction programs (e.g., sexual violence interventions) to teach students how to recognize unsafe intoxication and how to intervene
Education	<ul style="list-style-type: none"> • Educate on alcohol consumption, quantities, the effects particularly on different people (e.g., sex, height, weight), and the risks • Educate on what moderate drinking is and methods of safer drinking • Education and prevention methods delivered by respected peers and respected adults • Make education engaging; use various messages as some may be appealing or a turn off depending on the student (e.g., scare tactics) • Work with peer educators to deliver valid messages to fellow students
First-year students	<ul style="list-style-type: none"> • Focus on first-year students, suggest mandatory education for this group at the beginning of the year
What not to do	<ul style="list-style-type: none"> • Reconsider dry events as students might increase other risks such as hiding consumption, attempting to rebel against policies by drinking more, or not asking for help for fear of repercussions
Barriers to campus efforts	<ul style="list-style-type: none"> • Consider student perspective—students expect to drink and party; students would like to learn their own limits; their goal is to become drunk • Consider student recommendation to normalize consumption by educating on how to drink in moderation or changing expectations
Suggestions for society*	<ul style="list-style-type: none"> • Educate on alcohol consumption at a much earlier age, before students are exposed to alcohol and competing with the partying atmosphere on campus • Increase alcohol costs or do not make alcohol taste good

*Qualitative interviews with students were conducted to collect their ideas on how to address HED. The student suggestions summarized above should be evaluated for appropriateness and effectiveness for students, campuses and society.

students in general, participants thought that first-year students were inexperienced in drinking and experienced the majority of the harms and risks. Participants recommended that first-year students undergo mandatory education on alcohol consumption, risks, and harms at the beginning of the year (discussed above).

Likewise, a number of participants self-reported that their drinking declined substantially once out of first year, “once we were able to get out of that [environment] and live in our own house and create our own norms of drinking, it was like way less.” Or another participant who observed,

I’ve seen [heavy drinking] reduce every year to be honest. Like, first year, everyone I know drank heavily. Second year, like, school started getting tougher, and so we all curbed on it, and now, by fourth year, we’re like, okay, honors thesis, we have to apply to graduate. Like ... that’s not really a thing anymore.

What not to do

During discussions, participants also provided information on what they thought campuses should not do or what they think does not work in reducing HED. For instance, although some campuses might be good models for hosting dry events, a number of participants recommended that campuses should not hold these types of events. Their reasons included that it does not prevent drinking but rather encourages students to rebel and drink off campus or in secret. Several participants felt that this was risky since students who hide their drinking may not be found or identified if they experience a serious health risk or situation. As one participant suggested,

[Dry frosh weeks] encourages [students] to drink fast, a lot and encourages them to show off to their friends behind closed doors ... but, if we had a wet frosh week, the residence assistants will be able to be actually there to support students who need help instead of having to have them hide it.

Some participants also cautioned against the manner of discipline used to address HED as they felt students were more likely to hide excessive drinking, hide serious incidents, or not ask for help for fear of punishment by the law or the campus. Their suggestion was to make it safe for students to reach out or report problems. One student explained, “there is a lot of resistance as well to call for help, the first response team or the police. You don’t want your friend to get charged ... So maybe if there is less of a risk [of getting in trouble] for everyone involved when you call for your friend, I think that would really help.” This was reinforced by another student, “you get the occasional officer who is gonna make you feel bad about what you did and actually dis-encourage you to call for help and that’s not what we want.”

Barriers to campus efforts

Campuses are also likely to face several barriers to their efforts to reduce HED according to participants. The majority of them considered drinking alcohol as part of the post-secondary experience, and therefore part of campus culture. One participant explained, “there’s an expectation when you come to university that like it’s going to be partying all the time and drinking all time,” and another commented, “it has become a cultural thing ... getting behind, like,

[reducing] binge drinking and stuff, I think it would take a long time.”

Another barrier reported by most participants was that they feel students want to learn their own drinking limits through their own experiences. Being told what their limits should be is not enough. Participants also indicated that the goal for many students, at least for some occasions, is to become drunk. As stated by one student, “I don’t drink unless I’m getting drunk essentially.”

In all of these cases—post-secondary culture, learning their own limits, and the goal to become drunk—participants generally did not think campuses could do very much to address these issues. Instead, many recommended an alternative—to normalize the consumption of alcohol, rather than condemning it or banning it. Suggestions for normalizing consumption included those discussed above, such as educating on how to drink in moderation or changing the expectations for drinking—that you do not need to be drunk to have fun. This sentiment was expressed by one participant, “I think that if we normalize like drinking... you know, like a couple [drinks], instead of associating it either with drunk driving, like wrapping a tree around a car scare tactics, or with like party really hard-type stuff... if we could find a way to just get like a middle ground in the culture.”

Suggestions for society

At the societal level, the most frequent suggestion from participants to address HED was preventive education at an earlier age, before students enter post-secondary schools. These participants felt that any education they receive at the beginning of the year is competing against an environment where they have a lot more freedom and independence from parents, the atmosphere is about partying and fitting in, and many are newly of legal age. “Just like more education on it like at a younger age,” or another student, “I find it’s like not talked about a lot, at least in my high school, because then I find when people get [to campus],... it becomes like goal oriented, like I’m going to drink and get drunk because I’m allowed to get drunk now.”

With respect to sales and manufacturing of alcohol, a couple participants mentioned that increasing the costs of alcohol and not making drinks taste good (e.g., sweet tasting drinks) could also possibly reduce HED.

The above suggestions are summarized in Table 1.

Discussion

Student suggestions to help reduce HED revealed a number of valuable ideas, as well as some challenges, that are pertinent to other students, the post-secondary institution, and society more broadly. The results at the student level demonstrated that a number of participants were aware of some of the common protective behaviors to reduce HED. However, students admit to not using some of the behaviors (e.g., not tracking consumption) or some strategies were not used properly (e.g., drinking water to rehydrate to avoid a hangover rather than to reduce alcohol consumption),

suggests that there are gaps in adoption and understanding. As found in some studies,^{29–31} this has important implications because it appears that knowing about protective behaviors may not be enough, but rather, students reported needing the skills or incentives to apply the knowledge in order to counter peer pressure. For instance, in line with student suggestions, campuses could consider requiring servers to provide water when serving drinks, or organize events that offer free food or low-alcohol content drinks to reinforce protective strategies while providing incentives to use them. Studies also support our findings that some students want to become drunk, some do not view negative consequences as negative,³² and that, despite some being aware of potential negative effects, drinking is viewed as a fun, social activity that they want to do.^{5,33–35} These varied findings mean that both protective behavioral knowledge and skills to counter peer pressure will be important to helping students reduce the harms of HED.

Our study also revealed deeper insights into understanding peer pressure and student drinking where students reported experiencing two types of pressure, challenges that could harm their perceived social status if they decline to participate or social pressure that could harm friendships if they decline friend’s alcohol offers. Although other studies have often examined the effects of peer pressure through social enhancement or consequences to fitting in,^{29–31,36} they do not appear to have explored these different facets and their impact on student decisions to drink. The findings from this study suggest that it will be important to further explore types of pressure and to assist students in developing ways to respond to them.

It was clear from the findings that many students thought they did not know much about alcohol when they first began drinking, particularly as a first-year student, but also that some had incorrect knowledge (e.g., recommending co-use of cannabis as a harm reduction strategy, which has additive effects that increase impairment).³⁷ As such, students reported that effective education techniques need to be mandatory, engaging, realistic, accurate, and delivered by respected peers and respected adults, which has been supported by other studies.^{2,19} The importance of delivering harm reduction and education messaging by respected individuals was a prominent recommendation but appears to be understudied in the literature, which often focuses on student perceptions and behaviors rather than on their peer leadership potential. Given the strong influence of peers and that studies that have examined peer-delivered messaging show positive results,^{38–40} suggests that campuses and practitioners consider peer-led and peer-supported approaches to addressing HED.

Not surprisingly, participants revealed that types of messaging that would work for some students (e.g., scare tactics, dry events) would not work, or be a turn off, for other students, which has been found by other studies.^{41–43} Effective education techniques will therefore need to account for the potentially unique drinking cultures established in different contexts, such as varying social groups, first-year students, or those in residences.^{44,45} Even when campuses use

techniques that can be effective (if developed using best practices), such as dry frosh week, participants did not perceive these activities as helpful, which may mean reduced effectiveness if students do not understand the importance of campus efforts. Campuses will need to ensure that any efforts they undertake to reduce HED are not only evidenced-based but also multidimensional such as including education, prevention, appropriate messaging or other associated efforts.

As suggested by students, post-secondary institutions may be able to have a positive impact on HED simply by offering more opportunities to socialize where alcohol is not the primary focus, and by keeping other facilities (e.g., gym, library) open later. This seems to be supported by studies where students self-reported drinking less because they had other activities or responsibilities.^{5,45-47} Nevertheless, these studies also found that it will not be enough for campuses to simply offer alternatives, but they will need to work with students to determine what types of alternatives would be of interest and employ a multi-faceted approach (e.g., combined with an appealing campaign aimed at reducing consumption). It may also be the case that campuses do offer alternatives, but students may not be aware of them, thus greater campus efforts to promote alternatives may be needed.

At a broader level, the majority of participants emphasized the importance of educating youth before entering post-secondary institutions, where they feel expectations and pressure to drink. Student drinking behaviors are established at younger ages, before entering post-secondary education.^{35,48} This has important implications for post-secondary institutions, as they are limited in the ability to influence alcohol education before students come to their campus. Although students indicated that interventions need to occur long before youth are legal to drink, one opportunity campuses may seek is to engage students and their families regarding alcohol upon acceptance to a post-secondary institution. This means that institutions will likely need to form stronger partnerships with secondary schools and other youth-related organizations in order to address drinking-related issues at younger ages. Some technology-based interventions have also shown promise and may be able to reach a broader group of students, as well as possibly before entering post-secondary institutions.⁴⁹⁻⁵¹

Participants clearly stated that post-secondary institutions had large barriers to overcome to reduce HED, such as campus culture. This drinking culture has been found in other studies that revealed students expect each other to be drinking, appear to find it unusual when other students choose not to drink, perceive their peers drink more frequently and higher amounts than they actually do, and will apply peer pressure to encourage drinking.^{2,26,45} Any efforts to reduce HED among students will be directly challenged by long-standing norms and that, despite some students knowing there are potential negative effects, drinking is viewed as a fun, social activity.^{5,33-35} Changing norms is possible (e.g., cigarette smoking, impaired driving), but requires a much larger and transformative shift that often occurs slowly at

the individual level.⁵² To respond to student suggestions to normalize alcohol consumption while reducing alcohol harms, post-secondary institutions may need to create an environment that discourages HED while providing opportunities for students to learn about and practice moderate, responsible drinking.⁴⁴ Changing norms will likely require a multi-institutional approach, which could be leveraged through groups such as the PEP-AH. This could be an important partner for post-secondary institutions to engage with in order to explore existing resources and share best practices in this area. Equally important, efforts will also be required at the federal and provincial/territorial levels to change or implement policies that address alcohol pricing, marketing, or impaired driving among others.

In comparison to American studies, we found that many student suggestions from Canadians were similar (e.g., desire for peer messaging, the need for alternative activities, and the influence of campus culture); however, it remains to be seen what impact the recent legalization of cannabis in Canada will have on student alcohol use. Some students reported alternating cannabis use while drinking alcohol.⁵ Although there is a possibility that this might lower alcohol consumption among some students, the perceptions reported by students that cannabis was safer, non-impairing, and would be a method to reduce alcohol impairment are concerning. Campuses will need to consider approaches that address combining or supplementing one psychoactive substance for another. More studies on polysubstance use will be necessary to better address this issue.

The findings of this study reinforce the importance of involving subjects (i.e., students) in the process of addressing issues that can have a significant impact on them, such as HED.⁵³ Given that very little research has sought student suggestions to address HED,^{19,20,54,55} in order to be useful, effective, and achieve buy-in, campus harm reduction strategies will benefit by involving students. Additionally, focus groups are an under-utilized method. Even when they are used, studies tend to focus on examining student reasons, consequences, and perceptions and miss asking for student ideas,⁵⁶⁻⁵⁹ or tend to focus on asking for student feedback and suggestions on pre-determined interventions rather than original student ideas.⁶⁰⁻⁶² One promising trend is co-design, where those looking to address HED issues not only seek the input of students, but also involve them in project design and implementation to reflect their suggestions, preferences, and response behavior throughout the process.⁶³ Better understanding of what students will respond to will likely increase the effectiveness of approaches used to improve student health in general.

Limitations

While considering the findings of this study, it is important to note several limitations. The use of purposeful sampling to capture specific groups of participants was still subject to a certain level of self-selection bias. Qualifying students could choose to participate or not. In an effort to reduce bias, students with different characteristics (e.g., year of

study, age, gender) were selected. Self-selection bias also had an effect on the ratio of males to females who participated, where there were substantially more qualifying females that chose to participate than males, which may not sufficiently reflect sex/gender differences. For instance, males often drink more than females, females who drink before an event (pre-drink) might be at higher risk for hospitalization, or transgender individuals might be more likely to use substances than heterosexual individuals.^{64–67} Future research would benefit from making additional efforts to ensure greater male participation since some studies have demonstrated that sex and gender differences play a role in post-secondary drinking.

Although this study examined student thoughts and suggestions to reduce HED in their own words, the results of the larger study demonstrated that students did not view themselves as heavy episodic drinkers or that many of their behaviors (e.g., pre-drinking) were in fact risky.⁵ This is consistent with other studies²¹ and future studies seeking their suggestions might obtain additional insights if they educate participants on the risks of HED prior to eliciting their recommendations.

Concluding remarks

This exploratory study provided insights into student-based ideas and suggestions to address HED while in post-secondary education. It was novel in two ways. By collecting data from students via focus groups, it was possible to learn more precisely what students think about HED, particularly their suggestions to address the issue, in their own words (in comparison to traditional survey methods). This study was also important as one of only a few studies, and the only Canadian study, that has asked post-secondary students for their suggestions to address HED. With further examination, development, and testing of these and other suggestions, these findings will be useful to university personnel, health professionals, and other practitioners seeking to reduce student HED. Importantly, to help reduce the risks and harms of HED, it will be necessary to involve students in the development of projects and programs that are intended to help them.

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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 Canada and received approval from the Research Ethics Boards of the Individual Post-Secondary Institutions in the study.

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