Research Article

Why Underage College Students Drink in Excess: Qualitative Research Findings

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ABSTRACT

Background: *Excessive alcohol consumption by underage students is a serious and persistent problem facing most U.S. colleges and universities.* ***Purpose:*** *This qualitative study explores why underage students engage in high-risk drinking and examines motivational cues that may serve as behavioral deterrents.* ***Methods:*** *Focus groups were conducted with college students under the age of 21 years (N=59) attending a large university in the southeast. All participants reported consuming five or more drinks in one sitting within the last two weeks (four or more for a female).* ***Results:*** *Participants attach positive expectancies to alcohol use, including peer influence/support and reduction of social anxiety. Negative social consequences such as embarrassment and relationship issues, including perceived sexual opportunities, were cited as disincentives for excessive drinking. Gender distinctions were present among the referenced costs and benefits of excessive alcohol consumption.* ***Discussion:*** *Overall, the negative consequences associated with excess drinking by underage college students are outweighed by positive expectancies such as social approval and acceptance by their peers.* ***Translation to Health Education Practice:*** *Understanding the language, motives and expectancies young people attach to alcohol use can enhance the efficacy of health education and prevention efforts.*

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BACKGROUND

The practice of high-risk drinking may be regarded as the most serious health problem faced by U.S. colleges and universities.[1,2] Recent findings by Hingson and colleagues indicate a lack of overall progress in attempts to reduce alcohol-related mortality and morbidity rates among 18-to-24-year-old college students.[1] National College Health Assessment data collected in the fall of 2006 indicate that approximately 32% of female and 47% of male college students engage in high-risk drinking,[3] defined as the consumption of at least five or more drinks for men or four or more drinks for women on at least one occasion in the past two weeks.[4] Previous studies also reveal that high-risk drinking rates among college students are greater than rates among their same-age peers not attending college.[1,5,6] This pattern of high-risk drinking results in serious negative consequences for college students including unintentional injuries, risky sexual behavior, violence, academic difficulties and trouble with the law.[1,8] Further, based on the Diagnostic and Statistical Manual of Mental

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Disorders, 4th Edition, nearly one-third of college students meet the criteria for a formal diagnosis of alcohol abuse, and one in 17 can be classified as alcohol dependent.[4] In order to address this problem, the U.S. Surgeon General established a national health goal aimed at reducing high-risk drinking among college students by 50% by the year 2010; [6,7] a goal that is unlikely to be achieved.

A specific problem for senior administrators at colleges and universities involves the high percentage of underage students who engage in drinking. Wechsler and colleagues estimate that underage alcohol consumption by college students represents about half of the overall alcohol consumption among college students.[9] However, of particular concern are estimates indicating that 90% of underage alcohol consumption occurs under conditions meeting the criteria for "binge" or high-risk drinking.[10] As a result, institutions of higher education are an important setting for reaching young people and improving their health status.

The increased national attention focusing on high-risk college drinking has prompted universities to initiate or increase their prevention efforts.[4] Yet, several national studies indicate little or no change in the high-risk drinking rate among college students.[1,4,10-12] Given the continued pervasiveness of high-risk drinking among college students, recent efforts have focused on understanding the nature of problem drinking.[13] However, current research on college drinking is dominated by large-scale survey-based (quantitative) studies such as the Monitoring the Future Survey and the CORE Alcohol and Drug Survey.[5,6,14] These studies have played an important role in directing alcohol education, prevention and promotion efforts through identification of the many social and cultural factors influencing excess alcohol consumption among college students. However, the unremitting rate of excess drinking among college students suggests that other forms of data, such as qualitative data, may be useful in augmenting present health education and prevention efforts.[6] A major challenge facing health education efforts in this arena is understanding what motivates underage students to engage in excess drinking and identifying factors that might serve as deterrents to the behavior. Previous research using a qualitative approach revealed complex perspectives regarding alcohol use among Hispanic college students and provided evidence that individual perspectives vary according to context and outcomes.[6]

PURPOSE

The purpose of this study was to gain greater insight into issues associated with excess drinking among underage college students. More specifically, our goal was to identify benefits and barriers relating to excessive drinking as perceived by underage college students. The overarching goal of this study was to gain a personally relevant perspective of excess drinking among underage college students for the purpose of designing highly targeted health messages to discourage the behavior and reduce associated negative consequences.

METHODS

Based on their ability to add depth to research findings, focus groups were conducted to better understand college students' attitudes and expectations regarding excessive drinking (consuming five or more drinks in one sitting for a male and four or more drinks in one sitting for a female). Prior to implementation, the protocol for this study was approved by the University's Institutional Review Board (IRB). Focus group questions were designed to: (1) determine student motives for drinking in excess, (2) identify deterrents to mitigate alcohol consumption, (3) explore the psycho-social differences between male and female drinking patterns, and (4) determine how and where students acquire alcohol-related information.

Focus groups (4 male and 3 female) were conducted during the 2006 fall semester. Participants were recruited for the study through a classified ad in the school newspaper and flyers distributed on-campus. Inclusion data required participants to be currently enrolled in university classes, between the age of 18 and 20 years, and to have consumed five or more drinks in one sitting within the last two weeks (four or more drinks for a female). Volunteers were prescreened prior to being appointed to a focus group. Focus groups were conducted in the early afternoon and were approximately 60 minutes in length; a light lunch was included. As an incentive for participating in the focus groups, students received a $20 university book store gift card. Prior to the start of each group, participants read and signed the IRB-approved consent form.

The initial male focus group served as a pilot group for testing the content and flow of questions. Based on suggestions received from the group, minor changes to the discussion guide were made and the script and format revised. Each male focus group was moderated/co-moderated by trained male graduate students who were part of the research team. The four focus groups (N=35) consisted of male students ages 18 to 20 years. Because the main purpose of our study was to gain personally relevant, perspectives of excess drinking demographic data other than gender was not collected. At the time of this study many students on campus held a common misperception that the current administration intended to make the campus "dry." Therefore, our intent was to avoid collecting any information that would make students suspicious of our motives, especially since each focus group was audio-recorded, students were underage, and asked to complete the Alcohol Use Disorders Identification Test (AUDIT) [14] immediately prior to the start of the focus group

The AUDIT is a 10-item criterion validated measure with good construct validity designed to measure the frequency, intensity and alcohol-related consequences associated with excessive drinking, as well as assessing one's risk for alcohol abuse and dependence.[15] Validity of the AUDIT is similar to that of other self-reported screening tests (e.g., CAGE) and is appropriate for both males and females and has high sensitivity and specificity relative to alcohol use disorders for youth.[16] A cut-off score of 8 has been cited as demonstrating sensitivity and

specificity for detecting high-risk drinking among college students.[17,18] A score of 8 to 18 indicates a participant may be experiencing negative health consequences due to their drinking and a score of 19 or above signifies possible alcohol dependence.[4]

On average, male participants reported consuming five to six drinks on a typical drinking occasion, and drinking two to three times per week. The overall mean AUDIT score for the male groups was 23.69 (SD=4.05).

Each female focus group was moderated/co-moderated by trained female graduate students who were part of the research team. The three focus groups (*N*=24) consisted of women ages 18 to 20. On average, females reported consuming three to four drinks on a typical drinking occasion and drinking approximately two to four times per month. The overall mean AUDIT score for the female groups was 19.17 (SD=3.54).

The focus groups were conducted in an on-campus conference room which was conducive for privacy and audio recording of focus group discussions. Focus group moderators used a semi-structured focus group guide with fixed discussion items (Table 2) and identical sequences for each focus group. Questions were designed to augment university-specific quantitative findings from annual administration of the Core Institute's Alcohol and Drug Survey (http://www.core.siuc.edu). At the conclusion of each focus group, the co-moderator synthesized and paraphrased participant responses to each discussion item to ensure the absence of misunderstandings or gaps in the discussion themes. The audio tapes were transcribed verbatim by a professional transcriber and reviewed by three research team members for accuracy. Two trained research assistants, familiar with the published literature in alcohol use among young adults and current research goals and objectives, developed an initial list of common themes expressed in response to each question. Due to the high involvement of all research team members and general agreement regarding expressed themes, inter-rater reliability was not quantified. Both research assistants reviewed the transcripts utilizing the final coding scheme to extract pertinent subject matter and supporting quotes. Throughout the process coding discrepancies were reviewed and resolved by discussion among the principal investigators.

RESULTS

AUDIT scores for both the male and female groups indicate the presence of high-risk drinking and the concomitant risk for experiencing issues related to alcohol abuse and/or dependence. In addition to the implication of the AUDIT scores, two multi-faceted themes emerged from the qualitative analysis of focus group transcripts. The first theme relates to college students' motivations for drinking, while the second theme

Table 1. AUDIT Findings by Gender [1]

AUDIT Item	Male (n = 35)	Female (n = 24)
Frequency of drinking	2-3 per week	2-4 per month
Number of drinks typically consumed	5-6	3-4
Frequency of high-risk drinking	Weekly	Less than Monthly
Inability to stop drinking once started [2]	Never	Never
Inability to do what was expected due to drinking [2]	Less than Monthly	Never
Had the need for a drink in the morning after a night of heavy drinking [2]	Never	Never
Felt guilty or remorseful after drinking [2]	Never	Never
Been unable to remember the night before due to drinking [2]	Less than Monthly	Never
Been injured as result of drinking [2]	Never	Never
Had a relative, friend, or health worker express concern about your drinking [2]	Never	Never

Notes:
All Participants were college students ages 18-20.
(1) All results reported represent the mode.
(2) Responses indicate frequency within the past year.

Table 2. Focus Group Discussion Items

1. Where do you get most of your information about the activities and events happening in the community?
2. It is _____ for me to keep up with the drinking patterns of others.
3. When you drink, what are your reasons for drinking?
4. What did you like best about having five or more drinks at one time?
   - What did you like least about having five or more drinks at one time?
5. How do your closest friends feel about you having five or more drinks in one sitting?
6. When you consume five or more drinks what specifically are you hoping will happen?
7. Name something that you would NOT want to happen when you have consumed more than five drinks?
8. To what extent, if any, do you think consuming five or more drinks makes you more social?
9. To what extent if any do you think consuming five or more drinks increases your chances of hooking up?
10. To what extent does a severe hangover make you think twice about your drinking behavior?
11. To what extent are you concerned about the calories associated with alcohol consumption?
12. Take a few seconds and think back to your last drinking experience. What, if anything, could have happened to make you drink less?
    - How about not drink at all?
13. What are some things that might motivate a college student to cut back on their drinking?
14. What is the best place to reach college students with health education messages?
15. What suggestions do you have to increase the effectiveness of responsible drinking campaigns?

delineates various deterrents for moderating one's drinking behavior; gender distinctions are present in both themes.

WHY COLLEGE STUDENTS DRINK

Alcohol expectancies

Focus group respondents described a variety of expectancies associated with alcohol consumption including an opportunity to have fun, celebrate, relieve stress and take a break from academics. They listed having fun as one of the primary reasons for drinking because it releases them from the mundane activities of everyday life. One male student declared, "*I like the stories that come from a night of drinking. If you have a sober night it is pretty dull. But the next morning when I wake up after drinking, there are always like 10 stories, craziness, fun stuff.*" Both males and females also described celebrations such as birthdays and college sporting events as occasions to seek out alcohol. In addition, respondents described drinking alcohol as a way to relax or take a break from academics: "*I drink to reward myself if I have a hard week of testing or classes*" (female respondent).

Though both genders agreed "*drinking is a social thing. It loosens people up and it just seems to be what everyone does,*" (male respondent) each had different reasons for doing so. Several female respondents reported that, when it comes to drinking alcohol, ladies usually drink for free: "*I don't ever pay for anything. All the guys usually pay.*" In addition, drink specials such as "2 for 1" and "ladies drink free" also compelled females to drink: "*Sometimes you go out to drink just because it is 2 for 1.*"

Male respondents report drinking to relieve boredom and to learn their alcohol limits. Several males described the importance of knowing personal alcohol limits in the business world. One male respondent stated, "*You are learning now what your limits are so that you are not the drunk guy at the company party. It's like perfecting your golf game before you get your job.*"

Social lubricant

Respondents also considered alcohol to be a social lubricant, providing them with a greater ability to open up to and interact with others. Most respondents described how alcohol helps them come "out of their shell" and feel more at ease in social situations. This liberation of social anxiety is oftentimes described as "liquid courage" because it increases confidence and boosts their ability to approach strangers and begin conversations. When asked to describe how alcohol helps them be more outgoing one male participant stated "*I'm not a very good talker. If I don't have a couple drinks to loosen me up, I won't just randomly go up to people and start a conversation.*"

Respondents also described alcohol as a facilitator of sexual opportunities and the term "hooking-up" was commonly used to describe a spectrum of sexual activities. Both male and female respondents felt that alcohol increased their confidence in approaching members of the opposite sex and in seeking sexual opportunities. Interestingly, even though focus group participants did not know one another, female students

were guarded when discussing issues relating to "hooking up" and/or opportunities for sexual encounters. Audio recordings of the female focus groups demonstrate only a superficial discussion of this topic. Male respondents were more open in their willingness to discuss issues relating to hooking up. While male respondents believed high-risk drinking (5 or more drinks in one sitting) increased their chances of hooking-up, they also acknowledged that excessive drinking can lead to embarrassing behavior that can ultimately thwart one's chances of hooking-up. One male stated, "*If you get to 12, 15, 18 drinks, your chances go down dramatically because you are retarded and physiologically things don't work.*" Female participants did not express much concern associated with the amount of alcohol they consumed, but instead focused on their level of confidence (or lack of inhibition) toward the opposite sex. One female participant stated, "*I just know that if I am drinking I will be more likely to hook up with someone.*" Several respondents agreed that it was helpful to have both people drinking to "level the sexual playing field." One male stated, "*If you are drunk and the girl is not, it is like trying to beat a football team when they have your playbook. So I think that if you are wasted and the girl is not then you really hurt your chances of getting with her.*" Female participants report relying on their friends to "watch out for them" if they consume alcohol in excess; this includes making sure they are "safe" at the end of the evening.

Peer influence

In order to gauge the influence of peers, participants were asked to complete the following statement: "It is _____ for me to keep up with the drinking patterns of others." There was a distinction between the answers given by males and females. The majority of male respondents felt it was normal to keep up with the drinking habits of others. One male stated "*For me and my friends, it's like a competition*" to see who can drink the most. However, among the female respondents there was a general consensus that it is unimportant for them to keep up with the drinking of others. However, upon reflection and further discussion, the question for females should have been expanded upon with a probe relating to the competition among females to see who receives the most free drinks during the course of an evening.

All respondents reported the perception that their friends participate in high-risk drinking and that high-risk drinking typically takes place with friends in social situations. As one male participant stated, "*I think most of the time whenever I am drinking more than 5 beers, it's with friends. There's never a time when I'm doing it by myself.*" While drinking is usually encouraged by peers, several respondents discussed the actions of their "sober friends" who would encourage limiting the amount of alcohol consumed in order to prevent any problems from occurring.

Rite of Passage

An emerging theme in each focus group was the common belief that alcohol consumption is a rite of passage granted upon entering college. A common thread among the male groups was "*People have been telling me what to do for 18 years and it's over.*" When asked what suggestions they had for increasing the effectiveness of responsible drinking campaigns many students said the word "sober" should be avoided. One student succinctly described his attitude to prevention messages, "*If it says anything about sober I don't look at it.*"

DETERRENTS TO DRINKING IN EXCESS

Social consequences

All respondents described feelings of concern relating to the social consequences of excess drinking such as embarrassing behavior, annoying friends with drunken behaviors, being loud and obnoxious, or ruining the night for others. Both males and females expressed concerns relating to saying/doing things while intoxicated that they would later regret. A majority of the respondents specified "drunk dialing," defined as calling a former or current love interest while under the influence of alcohol, as a major concern. Additionally, females articulated high levels of concern regarding the appearance of embarrassing photos taken of them while intoxicated on Facebook or other social networking sites.

The majority of female respondents expressed a great deal of concern over "making a scene," appearing "stupid," and/or fighting with friends while intoxicated. Several females expressed anxiety over becoming "that girl," which they described as the girl who embarrasses herself and her friends. As one female stated, "*I don't want to be that girl. You know, the girl who's totally passed out or barfing on everyone or needs her friends to pick her up and bring her home.*" Another participant described "that girl" as the "*walking down the street with only one shoe on, and crying with mascara smeared all over her face.*" According to the female respondents concern for avoiding the role of "that girl" is so great that girlfriends watch out for each other and "babysit" their drunken friends. As one female participant stated, "*My friends have to take care of me when I'm drunk and that is a pain for them.*" This sentiment was echoed by another female participant who said, "*You kind of ruin their night because they have to take care of you.*"

Males also expressed concern with alcohol-related social consequences. However, their main focus revolved around feelings of regret associated with sexual experiences and the negative impressions their alcohol-influenced actions made on females. Males conveyed apprehension over their sexual performance while under the influence of alcohol; one male stated, "*When you can't get it up, it is not good.*" In addition, males do not want to be viewed as a "sketchy drunk guy." Analogous to the female "that girl" concept, males worry about what others, particularly females, think of them when they are intoxicated. Male participants describe "sketchy drunk guy" behavior as standing very close to a girl while talking to her, uninvited touching, and being overly forward. Males appear highly aware that this behavior makes females feel uncomfortable. As one male stated, "*There are a couple of sketchy drunk guys in our fraternity. They get*

pretty drunk and creep girls out."

When students were asked what could be done to decrease the high-risk drinking on campus, both genders claimed little would motivate them to cut back on their drinking. However, they felt other students may be motivated by testimonials and scare tactics. Students also suggested using social networking sites such as MySpace and Facebook as channels for message distribution. One male participant proposed use of Facebook as an outlet for prevention messages since "*almost every student has an account.*" Furthermore, a female participant said "*I know there are tons of Facebook groups now that if you join they email you regularly.*" Both males and females encouraged health educators to communicate with students in non-traditional venues.

DISCUSSION

The literature focusing on alcohol consumption among college students offers extensive quantitative research, but findings from qualitative studies are scant. The persistent and complex nature of excessive drinking among underage college students requires continued inquiry especially via qualitative methods which can increase our understanding of the attached behavioral motivations and expectancies attached to alcohol use. This information is critical for crafting prevention messages which are relevant to this audience, and most notably, what might deter students from engaging in this high-risk behavior.

Regardless of gender, students have a variety of positive expectancies concerning alcohol use. Consistent with Quintero and colleagues[6] findings, college students in the present study report drinking for fun, relaxation and to facilitate and/or maintain social interactions. Students offered a variety of reasons for consuming alcohol including celebrations such as birthdays or sporting events, stress relief or a break from academics, as well as to forget problems in general and escape reality for a while. In addition, drinking behaviors are strongly influenced by the cost of alcohol, as is evidenced by the widespread availability of drink specials and other value-added alcohol-related items.[19]

Among college students social anxiety is cited as one of the strongest motivators for underage drinking and most students report using alcohol as a social crutch when interacting with one another, particularly when pursuing intimate relationships. While males were willing to openly discuss the role of alcohol in "hooking-up," female respondents' discussions in this area were limited. While it is likely that the need to provide socially desirable responses during the audio-taped discussion influenced their unwillingness to elaborate on this topic, post focus group comments by some participants reasoned that while they did not currently know the other girls in the group right then, they may have them in a class later on, or see them out at the bars. The women stated that they did not trust anyone to keep their comments private, even though prior to the start of the discussion, all participants were asked to agree to keep the information discussed in the groups confidential. Based on this information, when topics include questions relating to sexual behaviors, individual interviews with female college students may be more productive.

Males were quite forthcoming with their responses to this discussion topic. Males perceive increased chances of "hooking up" when their social acquaintance drinks along with them. Males also report a curvilinear relationship between alcohol consumption and perceived sexual opportunity. For instance, males believe that if they (males) drink too much, or considerably more than their potential partner, their chances of engaging in an intimate social experience will drastically decrease; therefore, males report trying to closely mirror the drinking of their partner. This behavior tends to result in lower levels of intoxication among males who are drinking from a "couples perspective;" conversely, females report using alcohol to increase their confidence and lower inhibitions.

Both genders appear keenly aware of the social drawbacks of over consumption. Females do not want to be known as "that girl;" the one who embarrasses herself and her friends by drinking too much. Males express a similar social milieu know as the "sketchy drunk guy," which they describe as an intoxicated male whose aggressive and unwanted social advances makes women feel uncomfortable. Males overwhelmingly agree that a "sketchy drunk guy" is the antithesis of cool or popular.

In addition to the previously noted gender differences, males seem more prone than females to peer influence. Males describe their perception of drinking as a competition where individuals monitor (and strive to exceed) one another's alcohol consumption. In direct contrast, women believe that it is unimportant to keep up with the drinking of others. However, this response should be considered in the context of its "social desirability" in the focus group setting especially since females report keeping track of "free drinks" received during the evening. Interestingly, females seem not to perceive this behavior as competitive "drinking behavior" but more as a competition for affirmation of their physical appeal. However, in general, both males and females describe high-risk drinking in social settings mirroring that of their friends. While both genders report drinking, their motivations differ as do their alcohol-related expectancies.

Gender differences are evident in the number of high-risk drinking occasions. In this sample, females report drinking in excess of two to three times per month versus two to three times per week for males. This discrepancy may be a reflection of the gender disparities present in excessive drinking among college students, but could also reflect the surfacing of social desirability within the groups. It should be noted that the AUDIT was used to quantify the number of excessive drinking occasions, and as a result, this information was not shared with the group or researchers at the time of the focus group. The validity of this information is not known and further research in this area is warranted. It is important for researchers to consider the amount of distortion social desirability can place on participant's responses. Additionally, the high degree of pressure students' feel to be

socially desirable provides ample fodder for use when designing prevention messages. Lastly, it is important to make certain that participants understand the definition of drinking "excessively" and are using a standard reference for the term a "drink."

When asked what could be done to prevent or minimize excessive drinking among college students, participants were extremely pessimistic that any intervention would influence *their* personal choice to imbibe. However, they did concede *others* may be more susceptible to intervention attempts. Students suggested health-promotion efforts most likely to change behavior would use scare tactics and peer-testimonials to highlight the harsh consequences associated with excessive drinking. While this response is common among college students, past use of these tactics has proven less than successful. In general, suggestions for changing alcohol-consumption behavior were sparse. However, this result should be expected and should not be viewed as an indication that the behavior cannot be changed. Upon consideration, it seems plausible that students who drink heavily and have no interest in changing their behavior would find it difficult to offer suggestions for behavior change, especially in a focus group discussion which probably provided inadequate time for individuals to reflect on the question. Future research with college students who do not drink or who do so moderately may yield more information relating to intervention designs. Students suggested using technology as a method of communicating with large numbers of students. They encouraged health educators and others to communicate prevention messages through web-based venues such MySpace, Facebook and/or other electronic forums.

This study contains several limitations. First, focus group participants were obtained from a large school in the southeast; consequently, their motivations for drinking may not be representative of other university students. Research demonstrates that quantitative drinking patterns differ by region;[20] the same could be expected with the qualitative findings reported in this study. Second, students voluntarily agreed to participate in the focus groups; thus, the answers they provided may differ from those students who were unwilling or unable to participate in this study. Third, the criteria for participation in the focus groups were all based on self-report. It is possible that some participants may have misrepresented their ages or drinking status to be eligible for the focus groups; although, every effort was made to discourage this behavior. Students were prescreened via e-mail and again immediately prior to the start of the focus group. Participants who showed up for their designated focus group but did not meet the inclusion criteria were still given the promised incentive. This was determined as the best way to avoid having ineligible students misrepresent their age in order to participate in the focus groups and receive the promised incentive, albeit a small one. Lastly, the focus groups were comprised of students who consume higher levels of alcohol than their peers, therefore their opinions and insights most likely differ as well.

In spite of these limitations, these findings contribute to the limited body of qualitative research on the motivations and deterrents related to high-risk drinking among underage college students. The information presented here can assist practitioners' efforts when designing health messages which discourage excessive drinking. Among this sample of college students the primary motivation for restraining their alcohol intake involves avoidance of embarrassment and fear of being socially ostracized. While males and females have very distinct reasons for drinking, both genders report anxiety surrounding social interactions; neither gender wants to be perceived as annoying or out of favor for excessive alcohol use. More research in the area of alcohol-related psychosocial phenomena is needed. A better understanding of these issues can guide sophisticated and more effective interventions which will strengthen future efforts to achieve goals such as the *Healthy Campus 2010* goal of reducing the high-risk drinking rate to less than 20%.

TRANSLATION TO HEALTH EDUCATION PRACTICE

A recent article in *The Atlantic Online* described our societal approach to underage drinking as "about effective as a parachute that opens on the second bounce."[21] The writer alludes to the ineffectiveness of laws regulating underage drinking and his belief that legislation crafted to address this problem has stifled creativity in other areas of alcohol-related health prevention/promotion practice. While the MLDA (minimum legal drinking age) constitutes effective health policy, the stable rate of alcohol use among underage college students indicates the need for health educators to be more creative in their approach to this problem. Ultimately, policy approaches and individual based interventions are complementary not competing strategies.

Another critical component of behavior change is possessing a clear understanding of the target audience's perceived benefits and barriers to the desired behavior[22] since developing personally relevant messages is dependent upon an in-depth understanding of the behavior from the target audience's perspective; a perspective that can only be gained from members of the target audience. Understanding underage college students' motivations for drinking in excess are necessary for development of effective health promotion messages and strategies. The ineffectiveness of past health behavior change efforts in this area are somewhat attributable to health messages that students perceived as irrelevant; as a result, they did not attend to or believe the information as presented. Students reported their disbelief of the statistic that "7 out of 10 students drank 0 to 4 drinks when they partied," and described the "sober is sexy" campaign as inaccurate. When asked to explain further students overwhelmingly reported that if the word "sober" is used in a message they immediately disregard the information. In fact, for some students, until alcohol lowers their inhibitions they are sure they are not sexy. Therefore, from their perspective sober is not sexy.

Future Directions

Based on findings from this study, health messages targeting excessive drinking among college students are more likely to be noticed if messages do not directly condemn alcohol consumption, even among underage students. In addition, using students' words when providing information on moderating alcohol consumption to avoid becoming the "sketchy drunk guy" or "that girl" are less likely to be ignored. While past efforts have focused on the legal and academic costs associated with underage alcohol use, a shift in focus to the social costs of excessive underage drinking appear more relevant to today's college students. Thombs and colleagues report using student volunteers to collect field data and breath-alcohol levels of patrons exiting bars at closing.[23,24] Student research volunteers have described the exposure to intoxicated peers while they are sober as an effective deterrent to binge drinking (personal communication). Additionally, students who have been required to work in aid stations for impaired/intoxicated students exiting bars repeatedly report how the experience changes the way they view alcohol consumption. Providing novel ways for students to observe "up-close and personal" the negative social consequences discussed in health promotion messages appears to have promise as an intervention.

Health educators who understand the media preferences of their target groups can place relevant messages promoting behavior change in venues that are sure to be accessed by the appropriate population. Today's college students are connected through Facebook, MySpace and other social networking sites. Our ability to use these communication channels to "be there at the point of decision making" is largely untapped. However, while the reach and impact of these venues enhance our ability to successfully motivate behavior change, they also require researchers to work diligently to stay abreast, or ideally ahead, of rapidly changing electronic communication options; use of these venues while they are still unique can do much to gain the students' attention.

The importance of forming collaborative, respectful relationships with students is of utmost importance, as is the importance of treating them as respected members of the research effort. Initial efforts designed to gain the target audience's perspectives relating to the relevance and impact of alcohol consumption in their lives cannot be overemphasized. Health educators who respect the autonomy of the target audience and speak their "language of behavior change" will enhance the effectiveness of their efforts.

Lastly, it is important that prevention efforts are not thwarted by the legions of individuals loudly proclaiming their own personal experiences with alcohol as an "innocent rite of passage" and base their worldview of this issue on a narrow perspective. Public ignorance or denial of the vast and often serious nature of the consequences associated with binge drinking among college students does not mean that the problem is not worthy of continued vigilance. Successful behavioral change can occur if researchers determine intervention strategies that address students' motivations, opportunities, and abilities to binge drink. Ultimately, successful behavioral change efforts are expected to require a combination of educational, social marketing, legislative, and environmental approaches [25]

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