Where do College Drinkers Draw the Line? A Qualitative Study

Danielle L. Terry, M.S., **Lorra Garey, B.A.**, and **Kate B. Carey, Ph.D.**

Center for Health and Behavior, Syracuse University

Abstract

Alcohol use among college students has received nationwide recognition as a public health concern. The primary aim of this study was to explore students' opinions of when drinking "crosses the line" from acceptable to unacceptable. This study used qualitative methods to: (a) examine unappealing aspects of drinking by relationship type (potential dating partner, friend, self), and (b) determine whether this differs by gender. Seventy-eight interviews were conducted with college students who violated campus-alcohol policy. The semi-structured interview included open-ended questions related to reactions to other's excessive drinking. Qualitative analyses revealed that college males and females find lack of control as unappealing, including lack of physical, verbal, and sexual control. More females than males indicated negative perceptions of same-sex friends and self who displayed poor sexual control. Future research might also consider integration of themes in measures of negative expectancies and consequences to more accurately capture unappealing aspects of college drinking behavior.

Keywords

Alcohol use among college students has received nationwide recognition as a public health concern (NIAAA 2002; U.S. Department of Health and Human Services, 2009). Alcohol consumption data from 1998 to 2005 indicate the excessive use of alcohol is a persistent problem on college campuses. Nearly half of students report engaging in binge drinking within the past month (i.e., consumed five or more drinks in one sitting; Hingson, Zha, & Weitzman, 2009) approximately 30% meet diagnostic criteria for alcohol abuse, and 6% meet diagnostic criteria for alcohol dependence (Knight et al., 2002).

Excessive alcohol use is associated with a variety of short- and long-term physical, psychological and/or legal consequences (Park, 2004). Each year, approximately 1,800 students die and 600,000 experience injury from alcohol-related causes (Hingson, et al., 2009). In addition, heavy drinking often affects campus community members around the drinker who live with property damage, "babysit" intoxicated students, and experience assault or injury; as many as 743,000 physical or sexual assaults can be attributed to other's

Please Address Correspondence To: Danielle K. Seigers or Kate B. Carey, Department of Psychology, Center for Health and Behavior, Syracuse University, 430 Huntington Hall, Syracuse, NY 13244-2340, dkseiger@syr.edu, kbcarey@syr.edu, Phone: 315-443-2877, Fax: 315-443-4123.

drinking each year (Hingson et al., 2009; Wechsler et al., 2002; Wechsler, Moeykens, Davenport, Castillo, & Hansen, 1995).

Mallett and colleagues (2008a) challenged the assumption that all alcohol-related consequences typically assessed in college drinking research are perceived as unpleasant. Not all students perceive actions or behaviors like vomiting, waking up in someone else's bed, or leaving parties alone negatively. Furthermore, consequences like blackouts and physical or social embarrassment have been rated as neutral or even positively by some students (Mallett, Bachrach, & Turrisi, 2008b). Adolescents and young adults are highly peer-oriented and attuned to social evaluation and feedback (Borsari & Carey, 2001; Test, Kearns-Bodkin, & Livingston, 2009). Notably missing from many lists of negative consequences are behaviors that manifest in the social context of drinking that might reflect poorly on the drinker and/or the drinker's friends. The degree to which consequences are perceived negatively may also differ by gender, as women may have greater social sanctions against drinking compared to men (Nolen-Hoeksema & Hilt, 2006). Thus, students may not perceive "negative" consequences negatively, and perceptions of what is or isn't unappealing may be influenced by the gender of the individual experiencing the consequence.

Feedback-based interventions for college students often review alcohol-related consequences as a way to "tip the balance" and promote changes in drinking behavior (Dimeff, Baer, Kivlahan, & Marlatt, 1999). Typically, consequences are elicited via use of self-report measures. Providing feedback that includes self-reported consequences that students perceive positively may reduce the efficacy of the intervention (Mallett, et al., 2008b). Thus, research is needed to supplement conventional definitions of negative consequences (i.e., effects that might accumulate after-the-fact) with information about unappealing drinking-related actions in order to identify what college students perceive as unacceptable drinking behavior. To date, no qualitative studies were identified by this researcher that have examined the unappealing behaviors or actions displayed while drinking, that students perceive negatively, or that "cross the line" into being unacceptable.

Qualitative research may be a valuable tool for identifying styles and consequences of drinking that are deemed undesirable by student drinkers. One strategy for eliciting this information involves orienting respondents to consider acceptable and unacceptable drinking behavior by multiple actors (e.g., self, close friends, person of the opposite sex). The basis for this approach lies in research on perceived norms.

Student perceptions of alcohol use and acceptability differ according to reference group. Perceived use by peers who are more proximal (e.g., best friend) as opposed to distal (e.g., students at school) has been shown to be a stronger predictor of alcohol use than several other relevant beliefs related to alcohol (Yanovitzky, Stewart, & Lederman, 2006). More recent research suggests that students distinguish between behavioral attitudes held by multiple reference groups of varying similarity to students; thus interventions that provide normative feedback should consider normative feedback has some degree of specificity to the participant (e.g., gender, Greek status; Larimer, et al., 2009).

Because excessive drinking behavior persists in college samples, it is important to explore new ways to motivate drinking reductions. The present study aimed to identify unappealing aspects of college drinking behavior while considering these two variables. The present study used qualitative methods to: (a) examine unappealing aspects of drinking by relationship type (potential dating partner, friend, self), and (b) determine whether this differed by gender. Identification of specific behaviors that "cross the line" or are deemed unacceptable will provide data to enhance interventions manipulating injunctive norms and/or feedback aiming to increase the salience of negative consequences.

Methods

Participants

Participants were 78 undergraduate students 18 years or older ($M = 18.6$, $SD = .78$) who were recruited from a larger study that examined the effects of two interventions designed to reduce risky alcohol use. All had completed an alcohol intervention subsequent to minor campus alcohol policy violations. Typical violations involved student's possession or consumption of alcohol on campus, most often within the dormitory. Most students were male ($n = 45$; 58%), and freshman ($n = 58$; 73%) followed by sophomores ($n = 16$; 20%) and juniors ($n = 5$; 6%). The majority of participants were Caucasian ($n = 61$; 77%) and Asian American ($n = 9$; 11%). At the time of the interview, 32% indicated they had not consumed alcohol in the past month. Those who drank consumed a mean of 12.6 drinks per week ($SD = 13.0$).

Procedures

At the final two-month assessment, students were invited to participate in a brief interview about their experiences with alcohol and the intervention. Participants were informed that participation in the supplemental interview was voluntary, confidential, and would take place in a private room with a research assistant. Participants also were informed that they would receive an extra $10 for participating in the interview. The University Human Subject's Committee approved all procedures conducted.

Two female facilitators conducted one-on-one interviews with participants. The semi-structured interview included open-ended questions related to opinions and preferences of educational program, as well as participant's reactions to excessive drinking by three different target groups: (a) potential dating partners (i.e., "What might a potential dating partner do while drinking that would make you less attracted to him/her?"), (b) same sex friends, (i.e., "What might a friend do while drinking that would make you lose respect for him/her?") and (c) self (i.e., "People have their own personal line that they don't want to cross, is there anything you could do while drinking that would make you lose respect for yourself?"). Facilitators asked follow-up questions for the purpose of clarifying and elaborating upon participant responses. The two facilitators discussed topics and themes emerging with project staff every two weeks, and interviews were conducted until the point of content saturation.

Data analyses

Digital audio recordings of the interviews were professionally transcribed and checked for accuracy by project staff. Analysis Software for Word-Based records (AnSWR) software was used for coding data and analysis (CDC, 2004). This software allows multiple coders to analyze text by highlighting themes and sources stored within a unique electronic codebook. Coders included one individual who administered the interviews and an outside coder who was familiar with the recordings and transcripts. Hypotheses and theories were developed based on interview data, consistent with the principles of grounded theory (Henwood & Pigeon, 2003). Regular meetings were held to discuss developing categories and subcategories. Themes were identified and included if three or more students indicated a particular topic or idea. As additional data were examined, categories were revised to reflect developing hypotheses related to the data. The final coding manual included 95 themes within the interviews. Both coders identified the presence or absence of a particular theme within an interview, overall interrater reliability (kappa) was .89. Discrepancies between coders were identified and resolved between the two coders.

Results

Participant's reactions to excessive drinking were examined using three reference groups: (a) potential dating partners, (b) same-sex friends, and (c) self. Coders identified an average of 2.3 (SD = .89) themes per participant for questions relating to potential dating partners, 1.9 (SD = 1.1) themes for questions relating to same-sex friends, and 1.7 (SD = 1.0) themes for questions relating to the self. All participants were able to provide reactions that were coded for at least two of the reference groups; 72 (92%) provided a reaction for at least one reaction for all three of the reference groups.

Table 1 shows the frequency of theme endorsement by relationship type and gender. General categories of aggression and control were identified for all three relationship types, with subcategories (e.g., physical, verbal, sexual, unspecified) within each general category. Males and females diverged in rank ordering of these concerns within each relationship subtype. Z-tests were calculated to determine whether the proportion of theme endorsement differed by gender. Alpha was set at .05. The primary reasons all participants provided for loss of attraction towards a potential dating partner was alcohol-induced lack of control (i.e., physical, verbal, sexual) and aggressive behavior (i.e., physical, verbal, sexual). A gender difference in endorsement emerged on only one theme; more females than males mentioned sexual aggression. Themes of control and aggression also figured prominently in the reasons why participants lost respect for same-sex friends. With regard to same-sex friends, females endorsed general and sexual control more than did males, but males emphasized general aggression as influencing opinions of same-sex friends. Finally, participants reported loss of respect for oneself if they exhibited loss of physical or sexual control, acted aggressively, and said or did things that embarrassed themselves in public. Genders differed only on the frequency of sexual control, with females mentioning this behavior more than males. Specific examples of these themes follow.

Reactions to Potential Dating Partners

Lack of control

Overwhelmingly, both males and females found lack of control while drinking in potential dating partners to be unattractive (91% of the sample mentioned this). For most participants, lack of control most often included poor physical control (e.g., stumbling, slurred speech, vomiting) and verbal control (e.g., being "obnoxious" or saying "stupid things"). One male stated, "I think it's like pretty stupid when you like drink too much and then you can't control what you're saying and you like let out your business to everybody." A female acknowledged that it would be unattractive if a potential dating partner was

> "Calling somebody on the phone after drinking a lot saying some things you're not supposed to say. Yeah, I mean yelling at people probably that's the same thing, that is just stupid."

For males, lack of physical control in dating partners was often related to how it reflected on the male participant. One male participant commented, "whoever you date is like a big part [of you] …so you know you won't want to be walking with someone stumbling around." For females, poor physical and verbal control was associated with decreases in perceived attractiveness. One female participant stated, "I think that people that respect you view you as not having control over yourself, people will lose a lot of respect…if you know a grown man can hold himself and he's stumbling and mumbling I don't think that's attractive."

Lack of sexual control

Men and women both indicated that lack of sexual control in a potential partner was unappealing. One male responded that it was unappealing when

> "…girls have hooked up with people that had boyfriends…I just lose respect for people who can't like take responsibility for a relationship or know that they want to be in one, and just don't want to be in one taking advantage of other people who are in one."

Males and females both cited that potential dating partners who initiate sexual relations with random others in their presence was unappealing. One female stated, "It seems like guys that I've seen drinking excessively here kind of just throw themselves at girls they don't know very well. So if that were to happen with a dating partner and they were going all over girls, I would just say like you can't control yourself, and that puts me in an awkward situation."

Aggression

Both male and female participants found aggressive behavior as a result of drinking as unattractive. Aggressive statements were divided by content related to verbal aggression (e.g., being rude, saying "hurtful" things), physical aggression (e.g., hitting others, "getting physical") and sexual aggression (e.g., saying unwanted sexual comments, forceful or unwanted sexual contact, including kissing, touching, or excessive pressure to engage in intercourse). Both male and females identified verbal aggression as unattractive; however, only females identified sexual aggression as a characteristic they found unappealing and this significantly differed from males ($p = .01$). Some females stated that it was unattractive for

males to "just try and force themselves on you." One participant elaborated that sexual aggression involved "being really forceful and really pushy to take you back to their dorm room…or make them dance with you…when you don't really want to be around them. They just get really forceful and just that's a lot less attractive."

Reactions to Same-Sex Friends

Lack of general control

Both males and females reported that they would lose respect for a same-sex friend who displayed signs of being "sloppy" or lack of physical or verbal control while drinking (76%). However, females indicated this significantly more frequently than males (40% vs. 36%; p = .01). Verbal control often included inappropriate or erroneous conversation during a party. One male participant described lack of verbal control as "saying something that's not what we're talking about, like not part of the conversation or maybe something at random."

Both males and females found lack of physical control displayed by a same-sex friend as unappealing. One female described physical control as "just being like sloppy or throwing up or just being like annoying, or like yeah just basically annoying." Another stated "… stumbling all over the place and being just really over the top and not having any control over her body I guess and just kind of being obnoxious. Stuff like that would make me lose respect."

Lack of sexual control

A quarter of participants indicated that if a same-sex friend hooked up with a random sexual partner they would lose respect for him/her. Of the 20 students that endorsed this theme, nearly all were females (85%; $p < .00$). Statements about sexual control commonly referred to two themes: (a) sexual contact with a partner that was unplanned and/or involved a disregard for safety, and (b) cheating on a significant other or betraying another friend. One male participant stated that he would lose respect for a friend who was "… having sex with someone who has a boyfriend."

Some female participants also indicated that they would experience loss of respect for a friend who engaged in sexual activity with the participant's boyfriend. For instance, one female participant stated that she would be upset if her friends "flirt[ed] with my boyfriend or something like that," while another stated that a friend would have to "go and have sex with somebody that they wouldn't normally have sex with."

When explaining this to the facilitators, female participants spoke of a need to take responsibility for one's sexual conduct. One female said,

> "the behavior with guys in general I don't understand where it comes from. It is obviously the alcohol that really provokes it but I mean I don't agree with…making mistakes and blaming it on alcohol. Like I have no sympathy for like these mistakes that some girls think are funny, like I woke up in his bed last night."

Aggression

Males responded more often than females that they would lose respect for a same-sex friend who acted aggressively (26% vs. 8%; p = .02). Both genders reported that they would lose respect for a same-sex friend because of three specific types of aggression: (a) sexual (b) physical and (c) verbal. Overall, male friends who took advantage of or sexually assaulted females were perceived negatively by men in this sample. For instance, male participants stated that, "…taking advantage of women, not cool" and "kind of forcing themselves on girls" resulted in a loss of respect for a friend. Physical aggression often included starting fights for no reason. One male noted,

> "I mean it depends on how close of a friend it is but I mean probably like trying to fight me or something like that. I don't know… causing physical harm to somebody that's probably for no reason at all would be something I'd lose respect over."

In addition, males described verbal aggression while drinking as negative, especially when it involved derogatory comments related to one's race or ethnicity. One male stated,

> "I've been around people who are my best friends. They get so belligerent but not really physical just they say things that are kind of cutting, and hurtful, sometimes racist… they just say it and not really give it a second thought. So that right there is just … like racist comments and …when you're actually trying to insult someone. It's not something I like to be around even if it's not me."

Embarrassment

Female participants stated that they would lose respect for female friends if they did things to embarrass themselves. Descriptions most often included verbal or physical behaviors that were done in a public setting that drew attention to the individual. Verbal behaviors included "saying stupid things," while other embarrassing behaviors may have included activities like dancing on a table. One female said she would think less of a friend "…if she just starts making a fool out of herself and you know she's doing things that she wouldn't do regularly, that you know she would regret probably." This theme did not emerge in the male students' responses.

Reactions to self

Lack of Control

Most participants cited that an overall lack of control would result in a lack of respect for oneself. For both genders, this included a lack of physical control (e.g., stumbling, slurring words, vomiting). One male student stated, "I don't like to lose my inhibitions" while another stated, "I don't like to throw up." In addition to the physical side effects of intoxication, males often stated that blacking out was a negative side effect of drinking, "if I black out and then I would like feel sick the next day" or "just throwing up in general." One male stated he would be upset with himself "if I don't remember what happened the night before, and then it makes me conscious about what happened, but I just don't remember."

Lack of sexual control

Lack of sexual control was endorsed as a common reason that one would lose respect for him/herself, particularly for women ($p < .00$). Of the men that endorsed lack of sexual control, two types of situations characterized this theme. First, men described situations that involved sexual behavior that showed a lack of respect to a current romantic interest. For instance, on male stated, "…if I was with a girl I was interested in I wouldn't want to go around and just start flirting and being all friendly to other girls and kind of disrespecting her." Second, like females, male participants described losing respect for themselves if they engaged in sexual situations they later regretted. One male stated, "I would regret maybe hooking up with someone that like I didn't want to." For females "hooking up," or engaging in regretted and/or unplanned sexual activity as a result of drinking characterized lack of sexual control. Although women described lack of sexual control in similar ways as men, women often described an undesirable sense of powerlessness or being "taken advantage of." For instance, one female stated,

> "I would lose respect for myself if I did something with someone like a guy that I would regret. I would be very disappointed in myself if something like that happened or if I let someone take advantage of me."

Aggression

Fewer participants (18%) endorsed aggressive behavior as a reason they would lose respect for themselves. Aggressive behavior included verbal or physical acts that harmed others. Only males mentioned that either physical or sexual aggression as something that would result in a lack of respect for oneself. One male stated that he would lose respect for himself if he "was sexually aggressive or I was being really drunk and treating people badly," while a female stated that she would lose respect for herself if "I hurt anyone that I was friends with." Often, students stated that they would lose respect for themselves if they had engaged in the same aggressive behaviors (listed above) that would cross a line for friends.

Embarrassment

Approximately 13% of participants stated that engaging in behaviors that made them look "foolish" or "stupid" as well as behaviors that embarrassed themselves would result in a lack of respect for oneself. Student's tended to use non-descript language that indicated feelings of embarrassment, but did not identify specific behaviors that resulted in embarrassment as often. When identified, feelings of embarrassment appeared to result from a lack of physical or verbal control in a public setting. For instance, one male participant suggested that "degrading people or making a fool of myself" would be embarrassing. Another would not feel good about himself if "I need people to take care of me and people see me throwing up or like falling asleep on the couch or whatever."

Other themes

Less often, participants endorsed two other themes. First, engaging in behaviors that were risky was occasionally raised as something that would result in a loss of respect for their friends (5%) and self (9%). Specifically, the behaviors described put one at risk of death or

of severe negative consequences, such as drinking and driving. Second, a few participants mentioned illegal behaviors as an unappealing activity. Although specific illegal behaviors were not often discussed, occasionally participants indicated that stealing or vandalizing property was unacceptable.

Discussion

This study revealed three primary themes regarding college students' negative reactions to excessive drinking. These included (a) negative reactions to a lack of control, (b) female participant's dislike of uncontrolled sexual behavior by self and others, and (c) alcohol-induced aggression. First, the majority of male and female participants found behaviors that indicated a lack of general control (e.g., being "sloppy," stumbling, impaired consciousness, etc.) as unappealing in a potential dating partner, in same-sex friends, and in oneself. The indication that visible intoxication is unappealing is notable in light of data that college samples report high rates of heavy drinking (4 or more drinks for women, 5 or more drinks for men within a 2 hour period) that typically raise the blood alcohol content (BAC) over the legal limit for driving (National Institute on Alcohol Abuse and Alcoholism, 2004). This theme is consistent with a recent study that revealed misperceptions held by female students in how much males wanted potential dating partners to drink (Labrie, Cail, Hummer, Lac, & Neighbors, 2009). A potentially compelling reason for students to keep consumption and BAC in lower ranges may be the negative impact of sloppy drunken behavior on potential dating partners.

A second theme emerging from these qualitative interviews related to how females in the sample viewed a lack of sexual control by same-sex friends or themselves such as engaging unplanned sexual behavior, and/or betraying a friend by having relations with his/her romantic partner. Negative perceptions of casual or spontaneous sexual encounters are consistent with data exploring perceptions of casual sexual encounters. Research examining gender differences in sex or "hook-ups" among young adults suggests that females are less likely to report the experience as positive compared to men (Owen, Rhoades, Stanley, & Fincham, 2010). Qualitative data suggest that women are aware of a double standard and believe that other women who engage in casual sex are disrespected and stigmatized (Bradshaw, Kahn, & Saville, 2010; Paul, 2006). Therefore, overall disapproval of women who have poor sexual control while drinking is consistent with data that suggest both females have more negative perceptions of women who engage in casual encounters as compared to men.

Third, both male and female students noted that alcohol-induced aggression was a behavior that "crossed the line." Females identified that dating partners who were sexual aggressive or "pushy" were unattractive, and males indicated that they would lose respect for a same-sex friend who acted in a sexually aggressive way. Acts of sexual aggression and assault are most prevalent among women ages 16–24 years, with an estimated 38% of women reporting some form of sexual violence during the previous academic year (Nasta, et al., 2005). Furthermore, an estimated 39–50% sexual assault victims and 50% of perpetrators report using alcohol at the time of the assault (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001; Gross, Winslett, Roberts, & Gohm, 2006). More recent estimates have suggested that 96%

of drug-related assaults involved use of alcohol prior to assault (Lawyer, Resnick, Bakanic, Burkett, & Kilpatrick, 2010). Alcohol use and sexual assault often occur in conjunction with each other; both genders reported prohibitions related to alcohol-induced aggression. Reinforcing these prohibitions may aid in prevention efforts that target early warning signs and ways to avoid situations likely to lead to aggressive behavior.

These findings have implications for alcohol prevention. Brief interventions (BIs) that combine skills-based approaches and motivational interviewing (Miller & Rollnick, 2002). have been identified as efficacious strategies for curbing risky drinking behavior. Recent reviews of college drinking interventions confirm that interventions at the individual-level usually provide personalized assessment feedback, normative feedback, information related to alcohol, protective behavioral strategies and goal setting (Carey, Scott-Sheldon, Carey, & DeMartini, 2007; Larimer & Cronce, 2007; Larimer, Cronce, Lee, & Kilmer, 2004).

Interventions that reduce risky or harmful drinking often utilize strategies for motivational enhancement. These strategies are particularly useful for individuals who are ambivalent about changing their hazardous drinking patterns (Miller & Rollnick, 2002). Student-generated consequences that have been experienced, and/or are unappealing may be used to develop discrepancies between the student's current behavior and his/her values. As these discrepancies increase, the value becomes more salient and the inconsistent behaviors are reduced (Maio, Olson, Allen, & Bernard, 2000). Often, these strategies can be used to aid in the development of risk reduction goals. Typically, they are identified via assessment measures prior to the session or are elicited during the intervention. Thus, effective intervention requires the interventionist's ability to identify and create a discrepancy between the student's personal values (e.g., academic, social relationships) and the current behavior or consequence (e.g., blacking out, vomiting, unplanned sexual encounters). Clearly identifying behaviors that students deem as "unacceptable," may facilitate the process of discrepancy generation.

Normative feedback is another common component of hazardous drinking interventions. Perceived norms mediate the relationship between intervention and outcomes among college samples (Neighbors, Dillard, Lewis, Bergstrom, & Neil, 2006). In alcohol research, this includes two dimensions, "injunctive" norms, which refer to the perceived extent of approval or disapproval of a particular behavior, and "descriptive" norms, which refers to quantity or frequency of a given behavior, in this case alcohol use among college students (Cialdini, Reno, & KallGren, 1990). In general, students tend to overestimate both descriptive and injunctive norms of college drinking, which results in pluralistic ignorance, or the belief that their own attitudes regarding the acceptability of drinking are more conservative than other students (Borsari & Carey, 2003; see Prentice & Miller, 1993 for complete discussion of pluralistic ignorance). Strong support exists suggesting that changes in perceived descriptive norms mediate the effects of norms-based BIs on alcohol consumption (Borsari & Carey, 2000; Carey, Henson, Carey, & Maisto, 2010; Mattern & Neighbors, 2004; Neighbors, Larimer, & Lewis, 2004). Although little research has examined the impact of injunctive norms on drinking outcomes, Prince and Carey (2010) determined that perceptions of peer approval can be modified with brief corrective information. Thus, identifying themes or consequences that are considered unacceptable

could be used to reduce student's beliefs that consequences of drinking are acceptable and work towards developing efficacious interventions targeting injunctive norms.

Assessment tools for alcohol-related consequences often examine effects on specific domains, including academic performance, interpersonal relationships, and impulsive behaviors (Kahler, Hustad, Barnett, Strong, & Borsari, 2008; Maddock, Laforge, Rossi, & O'Hare, 2001) and are often used as a data sources for feedback to enhance motivation for change (Dimeff, et al., 1999). Interventionists may want to consider examining additional negative aspects of excessive alcohol use that are salient to the drinker, particularly those behaviors that occur while drinking such as those mentioned by our participants; to increase motivation for change (Miller & Rollnick, 2002). Future research on assessment of consequences might consider inclusion of items that assess a lack of general control, including stumbling, slurring, inappropriate conversation, and being "sloppy."

Conclusions

Overall, these findings have clinical and research implications. First, students were able to generate a response of what alcohol-related behaviors they found unappealing, suggesting that these perceptions can be elicited with relative ease. The prevalence of heavy drinking co-exists with clear ideas of unattractive or unacceptable behavior under the influence. Interventions that utilize motivational enhancement and aim to develop discrepancies between student behaviors and values might recognize or probe for some of the themes listed here. Second, themes were often characterized by a lack of control, including physical, verbal and sexual actions. Consideration of these themes and/or specified behaviors in intervention settings might aid in the exploration of negative consequences and/or development of risk-reduction goals during brief motivational interventions. Specifically, interventionists may ask students to elaborate on the "downsides" of alcohol use (see BASICS; Dimeff et al., 1999) and themes identified here might aid in the elicitation of the negative effects of drinking. Third, themes indentified in these data might also be represented within current measures of negative expectancies and consequences to more accurately capture this construct. Finally, themes or behaviors that students disapprove of might be incorporated into future research examining injunctive norms. Current interventions use normative re-education to address inflated descriptive norms (the belief that drinking occurs more often and more intensely than data suggest). However, few interventions utilize normative re-education for injunctive norms (the perception that drinking is acceptable). Data presented here might aid in the development of injunctive norms interventions, and harness normative influence in the direction of less extreme drinking behaviors.

Acknowledgments

References

Abbey A, Zawacki T, Buck PO, Clinton AM, McAuslan P. Alcohol and sexual assault. Alcohol Research and Health. 2001; 25:43–51. [PubMed: 11496965]

Blume SB. Sexuality and stigma: The alcoholic woman. Alcohol Health and Research. 1991; 15:139–146.

Borsari B, Carey KB. Effects of a brief motivational intervention with college student drinkers. Journal of Consulting and Clinical Psychology. 2000; 68:728–733. [PubMed: 10965648]

Borsari B, Carey KB. Peer influences on college drinking: A review of the research. Journal of Substance Abuse. 2001; 13:391–424. [PubMed: 11775073]

Borsari B, Carey KB. Descriptive and injunctive norms in college drinking: A meta-analytic integration. J Stud Alcohol. 2003; 64(3):331–341. [PubMed: 12817821]

Bradshaw C, Kahn AS, Saville BK. To hook up or date: Which gender benefits? Sex Roles. 2010; 62:661–669.

Carey KB, Henson JM, Carey MP, Maisto SA. Perceived norms mediate effects of brief motivational intervention for sanctioned college drinkers. Clinical Psychology: Science and Practice. 2010; 17:58–71. [PubMed: 22238504]

Carey KB, Scott-Sheldon LA, Carey MP, DeMartini KS. Individual-level interventions to reduce college student drinking: A meta-analytic review. Addictive Behaviors. 2007; 32:2469–2494. [PubMed: 17590277]

CDC. Analysis Software for Word Based Records. Atlanta, GA: 2004.

Cialdini RB, Reno RR, KallGren CA. A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. Journal of Personality and Social Psychology. 1990; 58:1015–1026.

Dimeff, LA.; Baer, JS.; Kivlahan, DR.; Marlatt, GA. Brief alcohol screening and intervention for college students (BASICS): A harm reduction approach. New York: The Guilford Press; 1999.

Gross AM, Winslett A, Roberts M, Gohm CL. An examination of sexual violence against college women. Violence Against Women. 2006; 12:288–300. [PubMed: 16456153]

Henwood, KL.; Pigeon, NF. Grounded theory in psychological research. In: Camic, P.; Yardley, L.; Rhodes, JE., editors. Qualitative Research in Psychology: Expanding Perspectives in Methodology and Design. Washington, DC: APA publications; 2003.

Hingson R, Zha W, Weitzman ER. Magnitude of and trends in alcohol-related mortality and morbidity among U.S. college students ages 18–24, 1998–2005. Journal of Studies on Alcohol and Drugs. 2009; (Suppl 16):12–20. [PubMed: 19538908]

Kahler CW, Hustad J, Barnett NP, Strong DR, Borsari B. Validation of the 30-Day version of the Brief Young Adult Alcohol Consequences Questionnaire for use in Longitudinal Studies. Journal of Studies on Alcohol. 2008; 69:611–615.

Knight JR, Wechsler H, Kuo M, Seibring M, Weitzman ER, Schuckit MA. Alcohol abuse and dependence among U.S. college students. Journal of Studies on Alcohol. 2002; 63:263–270. [PubMed: 12086126]

Labrie JW, Cail J, Hummer JF, Lac A, Neighbors C. What men want: The role of reflective opposite-sex normative preferences in alcohol use among college women. Psychology of Addictive Behaviors. 2009; 23:157–162. [PubMed: 19290701]

Larimer ME, Cronce JM. Identification, prevention, and treatment revisited: Individual-focused college drinking prevention strategies 1999–2006. Addictive Behaviors. 2007; 32:2439–2468. [PubMed: 17604915]

Larimer ME, Cronce JM, Lee CM, Kilmer JR. Brief interventions in college settings. Alcohol Research and Health. 2004; 28:94–104. [PubMed: 19006997]

Larimer ME, Kaysen DL, Lee CM, Kilmer JR, Lewis MA, Dillworth T, et al. Evaluating level of specifity of normative referents in relation to personal drinking behavior. Journal of Studies on Alcohol and Drugs. 2009; 16:115–121. [PubMed: 19538919]

Lawyer S, Resnick H, Bakanic V, Burkett T, Kilpatrick D. Forcible, drug-facilitated, and incapacitated rape and sexual assault among undergraduate women. Journal of American College Health. 2010; 58:453–460. [PubMed: 20304757]

Maddock JE, Laforge RG, Rossi JS, O'Hare T. The College Alcohol Problems Scale. Addict Behav. 2001; 26(3):385–398. [PubMed: 11436930]

Maio GR, Olson JM, Allen L, Bernard MM. Addressing discrepancies between values and behavior: The motivating effect of reasons. Journal of Experimental Social Psychology. 2000; 37:104–117.

Mallett KA, Bachrach RL, Turrisi R. Are all negative consequences truly negative? Assessing variations among college students' perceptions of alcohol related consequences. Addictive Behaviors. 2008a; 33:1375–1381. [PubMed: 18639384]

Mallett KA, Bachrach RL, Turrisi R. Are all negative consequences truly negative? Assessing variations among college students' perceptions of alcohol related consequences. Addictive Behaviors. 2008b; 33(10):1375–1381. [PubMed: 18639384]

Mattern JL, Neighbors C. Social norms campaigns: Examining the relationship between changes in perceived norms and changes in drinking levels. Journal of Studies on Alcohol. 2004; 65:489–493. [PubMed: 15376823]

Miller, WR.; Rollnick, S., editors. Motivational interviewing: Helping people change. 2nd. New York: Guilford Press; 2002.

Nasta A, Shah B, Brahmanandam S, Richman K, Wittels K, Allsworth J, et al. Sexual victimization: Incidence, knowledge and resource use among a population of college women. Journal of Pediatric and Adolescent Gynecology. 2005; 18:91–96. [PubMed: 15897104]

National Institute on Alcohol Abuse and Alcoholism (Producer). NIAAA newsletter. Nov 29. 2010 2004retrieved from http://pubs.niaaa.nih.gov/publications/newsletter/winter2004/newsletter_number3.pdf

Neighbors C, Dillard AJ, Lewis MA, Bergstrom RL, Neil TA. Normative misperceptions and temporal precedence of perceived norms and drinking. J Stud Alcohol. 2006; 67(2):290–299. [PubMed: 16562412]

Neighbors C, Larimer ME, Lewis MA. Targeting misperceptions of descriptive drinking norms: Efficacy of a computer delivered personalized normative feedback intervention. Journal of Consulting and Clinical Psychology. 2004; 72:434–447. [PubMed: 15279527]

NIAAA, TF., et al. A call to action: Changing the culture of drinking at U.S colleges. 2002.

Nolen-Hoeksema S, Hilt L. Possible contributors to the gender differences in alcohol use problems. Journal of Gender Psychology. 2006; 133:357–374.

Owen JJ, Rhoades GK, Stanley SM, Fincham FD. "Hooking up" among college students: Demographic and psychosocial correlates. Archives of Sexual Behavior. 2010; 39:653–63. [PubMed: 18839300]

Park CL. Positive and negative consequences of alcohol consumption in college students. Addictive Behaviors. 2004; 29:311–321. [PubMed: 14732419]

Paul, EL. Beer googles, catching feelings, and the walk of shame: The myths and realities of the hookup experience. In: Kirkpatrick, DC.; Duck, S.; Foley, MK., editors. Relating difficulty: The process of constructing and managing difficult interaction. Mahwah, NJ: Lawrence Erlbaum; 2006. p. 141-160.

Prentice DA, Miller DT. Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. Journal of Studies on Alcohol. 1993; (S14):91–100.

Prince MA, Carey KB. The malleability of injunctive norms among college students. Addictive Behaviors. 2010; 35:940–947. [PubMed: 20598806]

Testa M, Kearns-Bodkin JN, Livingston JA. Effect of precollege drinking intentions on women's college drinking as mediated via peer social influences. Journal of Studies on Alcohol and Drugs. 2009; 70:575–582. [PubMed: 19515298]

U.S. Department of Health and Human Services. Healthy people 2020 public meetings: 2009 draft objectives. 2009. Retrieved from http://www.healthypeople.gov/hp2020/Objectives/files/Draft2009Objectives.pdf

Wechsler H, Lee JE, Kuo M, Seibring M, Nelson TF, Lee H. Trends in alcohol use, related problems and experience of prevention efforts among U.S. college students 1993–2001: Results from the

Harvard School of Public Health College Alcohol Study. Journal of American College Health. 2002; 5:203–217. [PubMed: 11990979]

Wechsler H, Moeykens B, Davenport A, Castillo S, Hansen J. The adverse impact of heavy episodic drinkers on other college students. Journal of Studies on Alcohol. 1995; 56:628–634. [PubMed: 8558894]

Yanovitzky I, Stewart LP, Lederman LC. Social distance, perceived drinking by peers and alcohol use by college students. Health Communication. 2006; 19:1–10. [PubMed: 16519587]

Table 1

Frequency of Theme Endorsement by Relationship Type and Gender ($N = 78$)

Theme	*Total Endorsed* (*N* = 78)	% each gender endorsing theme		*p*
		Males (*n* = 45)	*Females* (*n* = 33)	
Potential Dating Partner				
Control	71 (91%)	41 (53%)	30 (38%)	.688
Physical	50 (64%)	31 (40%)	19 (24%)	.269
Verbal	22 (28%)	12 (15%)	10 (13%)	.949
Unspecified	12 (15%)	6 (8%)	6 (8%)	.875
Sexual	10 (13%)	6 (8%)	4 (5%)	.932
Aggression	16 (21%)	6 (8%)	10 (13%)	.159
Verbal	6 (8%)	3 (4%)	3 (4%)	.914
Sexual	6 (8%)	0 (0%)	6 (8%)	.014*
Unspecified	3 (7%)	2 (6%)	1 (1%)	.823
Physical	1 (1%)	1 (1%)	0 (0%)	.898
Embarrassment	5 (6%)	3 (4%)	2 (2%)	.772
Same-sex Friend				
Control	59 (76%)	28 (36%)	31 (40%)	.016*
Physical	22 (28%)	8 (10%)	14 (18%)	.051
Sexual	20 (26%)	3 (4%)	17 (22%)	.000*
Unspecified	18 (23%)	12 (15%)	6 (8%)	.458
Verbal	9 (12%)	6 (8%)	3 (4%)	.755
Aggression	26 (33%)	20 (26%)	6 (8%)	.019*
Unspecified	12 (15%)	9 (12%)	3 (7%)	.269
Verbal	8 (10%)	5 (6%)	3 (7%)	.931
Sexual	6 (8%)	6 (8%)	0 (0%)	.069
Physical	5 (6%)	5 (6%)	0 (0%)	.116
Embarrassment	4 (5%)	0 (0%)	4 (5%)	.060
Extreme Risk	4 (5%)	4 (5%)	0 (0%)	.215
Illegal Activity	4 (5%)	3 (4%)	1 (1%)	.841
Self				
Control	66 (85%)	37 (47%)	29 (37%)	.714
Physical	30 (38%)	21 (27%)	9 (12%)	.132
Sexual	21 (27%)	4 (5%)	17 (22%)	.000*
Unspecified	15 (19%)	10 (13%)	5 (6%)	.623
Verbal	9 (12%)	5 (6%)	4 (5%)	.825
Aggression	14 (18%)	9 (12%)	5 (6%)	.800
Physical	6 (8%)	6 (8%)	0 (0%)	.080
Unspecified	4 (5%)	1 (1%)	3 (4%)	.401
Sexual	3 (4%)	3 (4%)	0 (0%)	.359
Verbal	5 (6%)	3 (4%)	2 (3%)	.719

	% each gender endorsing theme		
Theme	Total Endorsed (N = 78)	Males (n = 45)	Females (n = 33)	p
Embarrassment	10 (13%)	4 (5%)	6 (8%)	.384
Extreme Risk	7 (9%)	3 (4%)	4 (5%)	.666
Illegal Activity	3 (4%)	3 (4%)	0 (0%)	.259

Note. For each target (potential dating partner, same-sex fried, self) % endorsed within category that endorsed a given theme. Numbers sum to > 100% because multiple themes could be coded within each response.

*
p<.05