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Students' Experiences with Web-Based Alcohol Prevention: A Qualitative Evaluation of AlcoholEdu

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Abstract

Aim—To provide more in-depth information about students' experiences with AlcoholEdu and in particular to assess if students perceive that the course gives them tools to better control their drinking-related behavior.

Methods—Focus group interviews with freshmen at three California universities.

Findings—1) The course provides so much information that everyone can find some of it relevant; 2) participants prefer information presented in ways they can identify with; 3) participants report problems with surveys in the program pointing to redundancy and length; and 4) participants did not expect the course to impact their behavior relating to alcohol.

Conclusion—AlcoholEdu provides valuable information for freshmen in college about how to avoid problems with alcohol. However, the course could have much more impact if closer to college reality.

Introduction

Heavy alcohol use and related problems such as drinking and driving continue to be prevalent among college students. A recent national study indicates that estimates for alcohol-related deaths among 18 to 24-year-old college students increased from 1,440 in 1998 to 1,825 in 2005, and that the majority of deaths could be attributed to driving after drinking (Hingson et al., 2009). From 1999 to 2005, the prevalence of past-30-day heavy or "binge" drinking increased from 42% to 45%, and the prevalence of driving after drinking in the past year increased from 26.5% to 28.9% (Hingson et al., 2009). Levels of heavy drinking and driving after drinking remained significantly higher among college students than among same-age peers who were not attending college (Hingson et al., 2009).

Many universities across the U.S. are now using web-based programs or courses to address this persistent problem (Nelson et al., 2010). Popular web-based courses such as AlcoholEdu for College emulate efficacious multi-component interventions led by trained clinicians (e.g., Brief Alcohol Screening and Intervention for College Students or BASICS) (Dimeff et al., 1999). Such interventions typically include: personalized feedback to change normative

beliefs about alcohol use, education about alcohols' effects on the brain and on behavior, risk awareness, challenges to expectations regarding the effects of alcohol use, and suggestions for alcohol-free activities and strategies to minimize alcohol-related harm (Dimeff et al., 1999; Larimer & Cronce, 2007). Although brief interventions such as BASICS with trained clinicians are now fairly well established, web-based interventions are still being developed and tested. Thus, questions remain about their potential for reducing student alcohol misuse and related consequences.

There have been several investigations on the effects of AlcoholEdu for College. In one randomized controlled trial (RCT), Croom and colleagues (2008) tested the effects of the program on incoming freshmen. Students assigned to the intervention group took the course during the summer prior to matriculation, and then completed a survey one month after they arrived on campus. In both the entire sample and among students who reported alcohol use at baseline, those assigned to the intervention group reported participation in fewer drinking games at follow-up, but were more likely to report unsafe sexual practices. Students in the intervention group who reported 30-day use at baseline were also more likely to experience a hangover than those in the control group. We note, however, that this study was based on an earlier version of AlcoholEdu for College, and intervention vs. control group comparisons did not adjust for baseline differences in alcohol-related behaviors. In a second study, Lovecchio and colleagues (2010) also used an RCT to examine the short-term effects of AlcoholEdu for College in a sample of all incoming freshmen, irrespective of baseline drinking status. Study results indicated that students exposed to the intervention reported a decrease, and those in the control group an increase, in a range of drinking-related behavioral but not psychological consequences.

A recent 30-campus RCT by Paschall and colleagues (2011a, b) investigated the effects of AlcoholEdu for College on the frequency of past-30-day alcohol use, heavy drinking, and alcohol-related problems among freshmen. The multi-campus design was used because AlcoholEdu for College is typically mandated for all incoming freshmen, and is therefore considered a campus-level prevention strategy (Outside The Classroom, 2011). Findings indicated significant reductions in these behaviors and consequences among freshmen at intervention schools relative to control schools during the fall semester immediately following course implementation. Stronger effects on these outcomes were observed at colleges with a higher percentage of students who completed the course. However, course effects on these behaviors did not persist into the subsequent spring semester, regardless of level of course completion. Further data analysis has also provided evidence for mediating effects of student perceptions of college drinking norms, such that freshmen at intervention schools reported lower levels of perceived drinking among college students than freshmen at control schools (Ringwalt et al., 2011).

Although these RCTs provide evidence for the short-term effectiveness of AlcoholEdu for College, much less is known about students' experience with the course, and whether the effectiveness of the course might be improved through changes in its format and/or content. The present qualitative study was conducted to address these questions, and to improve our understanding of why the AlcohoEdu course apparently has beneficial short-term, but not long-term effects.

AlcoholEdu for College

AlcoholEdu for College is a 2- to 3-hour web-based alcohol prevention course designed for incoming freshmen (Outside The Classroom, 2011). The aim of the two-part course is to prevent heavy drinking and alcohol-related problems. Students typically complete Part I of the course in the late summer prior to the beginning of the fall semester. Part I consists of a baseline survey and four modules: *Introduction*, *Getting the Facts*, *Deciding for Yourself*, and *Review and Exam*. Thirty to 45 days later (by which time they have matriculated), students are prompted by e-mail to complete Part II of AlcoholEdu, which consists of one module that comprises review materials, some new content, and a follow-up survey.

The course includes attitudinal and behavioral surveys, tests of course-related knowledge, and multi-media components, including informational text with graphics, audio discussions of topics, interactive animations, case studies (scenarios) with streaming video clips of college students in different drinking situations, blog simulations, and self-reflection exercises. Some of the content of the course is tailored to respond to students' specific drinking status and gender. For example, students who report high-risk drinking are provided with feedback using national statistics concerning the prevalence of alcohol use among college students to help them recognize that their drinking is not normative, and to correct misperceptions they may have about drinking norms among college students.

Module 1 begins with an overview of the course, emphasizes why taking the course is important, and through a flash animation provides detailed information about a standard drink size in relation to different types of alcoholic beverages. Students then complete a pop quiz to assess their baseline knowledge about the information covered in the course, as well as a pre-intervention survey designed to measure their alcohol-related attitudes, beliefs, and experiences. Module 2 challenges students in regards to their perceptions of campus drinking norms and their knowledge of alcohol's effects on the brain and body, and includes a discussion about blood alcohol concentration (BAC) and a BAC calculator exercise. Module 2 also provides information about alcohol laws and policies, including consequences of alcohol law violations, and gives students the opportunity to explore policies that are specific to their state. Module 3 encourages students to set academic, social, and health-related goals for themselves concerning their next year of college and to develop strategies to help them meet those goals. Students select among a number of harm reduction approaches (e.g., setting a limit on drinks, planning for safe transportation) to develop a specific plan for themselves, which is then referenced in Part II of the course. Module 3 also teaches students how to deal with alcohol problems that they may encounter with friends, like alcohol poisoning and drinking and driving. Alcohol-related campus resources are provided at the end of the module. Module 4 consists of a course review and an exam; students may view their exam scores and then review the correct answers to the questions that they missed. Finally, Module 5 (Part II), taken 30–45 days after completion of Part I, includes a follow-up survey and an opportunity for students to review, reflect on, and revise the plan that they developed in Part I, and covers some new course material including segments on constructively managing stress and recognizing problems related to alcohol misuse. Part II concludes with a final quiz.

Methods

For the qualitative assessment of AlcoholEdu we collected data using focus group interviews with samples of freshmen attending three California public universities requiring that incoming freshmen take AlcoholEdu before the end of their first semester. We chose focus group interviews as our data collection method because the interactive approach would generate detailed information about the issues that we wanted to explore. By creating a supporting environment with simple questions developed to encourage discussions among the participants, issues that the participants were not necessarily very aware of could be developed and discussed in a dialogical way that we would not be able to achieve in one-on-one interviews (Marshall & Rossman, 2006). Interviews lasted between 1 and 2 hours and were recorded on a digital recorder.

Sample

We conducted the focus group interviews on campuses of three California public universities. We planned to conduct three focus group interviews on each of the participating campuses including 7 freshmen in each interview. On each campus we asked for a random sample of 200 freshmen. These students were contacted by e-mail inviting them to participate in a focus group interview about their experiences with AlcoholEdu. Every student responding to the invitation received an e-mail containing more information about the study and asking for a confirmation of their intention to participate in the study. We expected to make a random selection on each campus among respondents. However, given the number of respondents, everyone was invited to participate in the interviews. Prior to the interview, we sent a consent form and a short questionnaire about personal drinking behavior and possible changes after AlcoholEdu to each student for them to bring and sign at the interview. Table 1 presents a breakdown of the sample.

In sum, we conducted 9 focus group interviews, including 56 freshmen from three California campuses. On Campus 3, we experienced technical problems with the recording equipment resulting in one interview not being recorded. Hence, the final analyses are based on 8 focus group interviews, including 47 freshmen. It should be noted that the information revealed in the missing interview does not vary from the information revealed in the recorded interviews.

Data

For the interviews, the two principal investigators (P.I.s) on the project travelled to each campus and conducted them in closed rooms in the student facilities. The interviews were conducted in November 2009 (campus 1), January 2010 (campus 2), and October 2010 (campus 3). The big gap between the second and the third interview occurred because of a delayed IRB approval procedure on campus 3.

The interview guide covered all the different parts of AlcoholEdu. It followed the setup of the course itself and focused in particular on the students' recollection of information that was presented, how they felt about the information, and the way it was presented, and if

something had impacted their attitude or behavior concerning alcohol. After the interviews, each interviewee received \$40 for their participation.

Analyses

Interviews were transcribed verbatim and analyzed using the QDA Miner software that allows not only to code segments of the text but also to create a list of variables that can be used for specific searches of the coded segments. A coding manual based on the areas of interest covered in the interview guide was developed. Interviews were coded accordingly by the P.I. of the project, and during this process new codes were developed as new themes emerged from the interviews. Hence, the coding process could be described as a dynamic process between the coder and the text during which all themes of interest for the research questions were developed, refined, and coded.

Findings

The qualitative thematic analyses of the focus group interviews revealed 4 major groups of findings. These four areas reflect the focus of the interview guide as well as themes that emanated from the coding process. The four areas cover the general recollection of students about the course, issues relating to the presentation of the course, issues relating to how the course has impacted students, and finally how the course presentation and content relates to the students' reality.

Students' recollection

All interviews started with a general question about what the participants remembered from the AlcoholEdu course. In general, the participants did not remember much detail of the course when confronted with that open question. Mostly, the answers focused on more general issues, e.g., perceptions of videos or surveys:

R: I don't remember too much of what they were asking me, but the videos that they connected, they had student actors, and it didn't, it seemed a bit too cheesy so I really didn't care for it.

However, a few were also specific about what they remembered, e.g.:

R: I remember the blood alcohol content meter thing, you type in numbers and it tells you like what your blood alcohol content would be.

However, when we specified the questions and asked for specific content of the course, more memories emerged. These content specific memories mainly related to two areas presented in the course, 1) facts about alcohol and 2) safety tips.

Facts about alcohol

The most common fact about alcohol mentioned by the participants is the notion of a standard drink and more specifically the different alcohol contents of different kinds of drinks. However, even if they remember the notion of a standard drink, they don't always remember what it is:

I: One thing that a lot of students have told us that they didn't really understand was what a standard drink is. Do you remember that?

R: I don't remember what it is but I remember that when I took the test I like it was new information to me.

Furthermore, several participants questioned the feasibility of utilizing the knowledge of the standard drink in real life, e.g., at parties and limiting their own drinking:

R: I understood it because it's like okay, volume; well not volume but just all the concentration of alcohol that you drink. So I understood that but when you're at a party like who is really going to think like this is a standard drink so I'm not going to take another one, you know? Like nobody really thinks like okay I'm drinking a standard drink.

Another fact that the participants emphasized was information about BAC levels. In particular, the BAC calculator was well received by most:

I: And there was also something about blood alcohol level, the BAC, where you could sort of play around with...

R: Oh yeah. I remember playing with that actually for a long time, where you could see how much you could drink and how high your level would be.

I: Yeah.

R: Yeah. That was kind of cool. I don't remember anything about my scores or the stats or anything. I just remember it was cool.

The participants emphasized the interactive features of the BAC calculator as one of the things that really caught their attention:

R: ..., it was interactive so you could kind of like mess around and we put it to your personal settings and like to see how much like how much like certain amounts of alcohol affect you and like the side-like the physiological affects like at that point.

I: Yes. And why was that interesting to you?

R: I guess from like real life experience you could just kind of see like and compare like how you think that you felt at the time versus what it says you should have felt.

Many participants brought up the positive aspect of being able to "play" with the BAC calculator as one of the major features of this tool.

The last fact that came up in the interviews was the information presented in the course about the prevalence of drinking and particularly heavy drinking among students. Some students were quite surprised about these statistics, but some participants also questioned the truthfulness of the information:

R: The main thing I remember is they said something about, they asked like a percentage and they were like, "This is the percentage that people are actually drinking heavily and it's super low," and that kind of hit home. I was like, "All

right, so maybe I don't need to get trashed." But then it was like, that percentage is completely off. When I go to a party, it's like it is completely off. I don't know.

But overall, students found that information surprising and important and made them feel more comfortable starting in college.

Presentation

The course utilizes a variety of media in presenting the different aspects of alcohol in college, e.g., reading material, animations, video clips pretending to follow students conducting a project on alcohol ("project" videos), video clips of different scenarios of drinking situations ("scenario" videos), quizzes, and surveys. In the interviews we asked the students about all of these media to measure their perception of them and to find out which ones had the biggest impact on the students' approach to the course. In general, the students were very satisfied with the different usage of media. They enjoyed the variations in providing the knowledge in the course. However, when it came to individual media, the opinions were more critical.

Videos

There was some critique of the setup and the use of the videos pretending to follow a group of students conducting a project on student drinking. The main problem seemed to be that the actors were non-believable, which made it difficult to relate to them or identify with them:

R: I think the characters were a little extreme on both ends. They were like the girl, I think it was a girl, somebody seemed like that they had never taken a drink of alcohol in their life and then the guy who was just over the top, like partying which isn't really what people are like. I think there needs to be more of like a middle and more of a like a realistic portrayal of how it actually works, I mean, because like a lot of people drink, but not a lot of people like crazy like that guy and like weird. I think if they had characters we could identify with more it would be a little more interesting.

Or even worse for some participants who found the characters so unbelievable that it impacted her experience with AlcoholEdu in a negative way and resulted in them trying to skip the videos during the course or at least develop strategies to avoid having to watch them:

R: Some of the videos I could not pay attention to and I would just watch it, but also watch my TV at the same time.

While the negative opinions about the "project" videos were shared by almost all the participants, the opinions about the "scenario" videos were more mixed. Some participants found some of the advice and information presented in this format useful and applicable to real-life situations:

I: And so, was there any of the information that you found helpful, that has stuck with you and that you consider in situations where some of your friends are drinking?

R: There's actually situations I've already had where I've had to go over to a friend's house, and help them out because they've had too much or one of them is trying to take off while trying to go home drunk and those tactics at any stage, those were actually very, very helpful

Often the participants compared the "project" videos to the "scenario" videos and there was no doubt which ones were rated highest:

R: ... but I liked the scenario ones better where like the girl was throwing up drunk and how to take care of situations like that. Because I'm a freshman here and like I'm kind of new to the whole party scene and everything and I have some pretty crazy friends who go out and drink heavily, like binge drinking. Sometimes I don't know how to deal with them.

Even if the "scenario" videos were more positively received, the overall impression from the interviews is that participants were not enthusiastic about them. In fact, many participants were quite critical about the content and felt that the situations presented in the videos were often seen as unrealistic:

R: I totally agree because I just felt like the scenarios depicted were really unrealistic because like in a lot of the videos they acted like most college students haven't been exposed to like alcohol or like parties before and I felt like that was unrealistic.

One of the videos depicted a situation where the "responsible" student was supposed to call an ambulance to assist a friend who had had too much to drink. This specific video was discussed extensively throughout all the interviews, and most students did not agree with the action that was recommended:

R: ... I never would imagine like when they would just say that, "Oh, they can't really walk in a straight line or something, then call 911." It was like, well, that's really not necessary and I just feel like they could have been more like specific as to how you could actually like yourself help somebody instead of resorting to like such high measures as like getting paramedics there, because I feel like I'm sure there are ways that one could help their friend out by themselves.

However, even if many students did not agree with the recommendation, it certainly made them think about situations like that. The following quote depicts really well the thought process that this specific video produced for some of the students:

R: I think like it's difficult to call it or not. Like should we call or not do it. But then again it is a life you know? Like we're going to do let your friend take the bet of like dying because of alcohol poisoning which is a pretty sad death, you know what I mean? Like actually like going to talk to them and getting help and getting it over with and actually trying to save his life because if he did die, then wouldn't you feel really bad about it? Like you'll feel guilty about it all of your life and I think that's why RA's call 911, just to be safe.

In general the videos were considered a nice break from reading materials but the students were generally very critical about the content of the videos even if some of them created a lot of food for thoughts.

Surveys

A big part of the course consisted of surveys. Initially, the students were asked about their drinking habits, attitudes towards drinking, knowledge about alcohol, experiences with alcohol or with friends' drinking, and consumption of other drugs. Throughout the course, the students were asked to fill out very similar surveys two more times. During the focus group interviews it became obvious that the students were very critical of these surveys. Some respondents even stated that their answers were impacted by the repetitiveness of the surveys:

R: Going back to answering the questions honestly. The first, I guess I would say, 20 minutes, I took the time to read the questions.

I: Right.

R: But then after I started noticing it was repetitive, I just started just clicking the middle because I, so if you get what I'm trying to say, that's what happened.

Also, the length of the surveys made participants give up on answering the questions truthfully:

I: Right. Did you answer the questions truthfully, all of them? Also, pertaining to your own behavior?

R: I probably did like one survey truthfully and I thought it was the only one and then I realized it wasn't, so then I kind of just marked it off. It was kind of dumb, but it was way too long and I just didn't really care too much, you know? I just wanted to take the test and pass it. Like I got all the information and the survey was just kind of like random. They said it was random and it didn't really matter, so I didn't care about it, you know?

However, even with the repetitiveness and the experienced length of the surveys, some of the respondents thought they were helpful:

R: The questions at the end that were 50 questions took for days and they're repetitive, but it gets the point across and I think that's important.

In general, the surveys did not sit well with the participants. Even if a few respondents thought that they were necessary and "got the message over", the general impression was that people did not care for them, thought that they were too long and too repetitive, leading them to lose concentration and starting to respond incorrectly.

Impact

When looking at the impact of AlcoholEdu on the participating students, we focused mainly on behavioral and attitudinal changes that the students reported. However, we decided to go beyond these traditional parameters and also include more indirect messages about how the students rated the course and positive and negative aspects of the course. All these areas

would give a broader picture of the students' experiences with the course and how it impacted them and their college experience.

Behavioral changes

The first area we looked at was behavioral changes. In general, the students reported very little impact on their behavior in situations involving alcohol:

I: Has it impacted your behavior or attitudes you know towards other people drinking or you know looking more after your friends when you're out and stuff like that?

R: I don't think AlcoholEdu has influenced like my habits or behavior. I think that R29 (other participant, red.) said this earlier, but you know it wasn't so influential. I mean it was good information to have, but it wasn't influential like, okay I'm going to do what they tell me to do now.

And if influence was reported, the students were not sure if that could be attributed to the course:

I: Has it impacted your behavior in any way when going out in any, looking a little more after each other or whatever?

R: Well me and all my friends up here, we will always look after each other. If we're at a party, every five minutes or so, we always scan the area, make sure we see all our friends. Especially girls, we keep a very good eye on them because there have been circumstances where we've had to intervene aggressively and so really we just, basically we just know that everyone's got each other's backs because we just don't go to a party by ourselves, we go in groups. So I don't know if that was AlcoholEdu that had brought people's attention to that, but it's just kind of something that we do and I hope that everyone else does also.

One area in which students reported some impact was on the notion of a standard drink because for some it helps to keep track of their drinking:

I: But has it changed your behavior when you know that you're going out and that there probably will be alcohol? Has it made you think more about what you will be facing when you go out?

R: Maybe about just the standard drinks.

One of the most interesting parameters of behavioral impact is the question about drinking behavior. Unfortunately, due to issues of confidentiality and anonymity we were not allowed to ask questions about the students' own drinking behavior in the focus group interviews, so we do not have any reliable data on that.

Attitudinal Changes

The focus group interviews touched upon the students' perception of issues in the AlcoholEdu course that might have changed their attitudes towards their own drinking or the drinking of other students as well as their expectations about drinking situations and experiencing peer pressure in college.

An issue that several students mentioned as impacting their expectations about alcohol when starting in college was the normative issues about excessive drinking among students and how drinking is viewed among other students. Even if some students stated that those statistics did not seem believable, it did have a positive impact for other students who felt that it alleviated the drinking pressure somewhat:

R: Well, some of the statistics actually said that not a lot of people did drink, that did shock me, and actually made me feel more comfortable about coming because, I mean, I have friends that drink but I don't particularly like to drink or anything. So, I mean, it made me feel more comfortable in the sense that not everybody's going to be wasted walking down the street, and so it gave me that kind of comfort I guess.

Even if it did impact some students, most participants stated that it did not impact their attitude towards drinking at all:

I: Has it altered your attitude towards drinking at all? Have you not, I mean...

R: No.

However, the same person who was comfortable not drinking found that the course generally made it more acceptable to drink alcohol:

R: Anyway, for me AlcoholEdu made me more acceptable, made it more acceptable to be drinking, that's kind of sad. For me, the more you know the more you can understand it. Now that I know that much more, I understand it, so I accept it, which I kind of regret that.

In general, the impression from the interviews was that the course impacted students with less alcohol experience more than students who had more experience with alcohol. However, most students also stated that there was useful information in the course that everybody could benefit from; it just did not necessarily result in behavior change.

Rating AlcoholEdu

The issue of rating also emerged under the headline of impact. In answering questions about how they would rate AlcoholEdu, participants would talk about how the course had impacted them and bring up issues that had left an impression on them. One of the participants expressed the sentiment of many students that there was a lot of good information but you can't really recall it "on command":

R: I thought it was informative. I got a lot of information out of it. I don't remember specifics, not all of it stayed but there was; I still know stuff.

One of the interesting things that came up in the interviews was about which people it could impact. Many participants thought that it might benefit other students more than themselves:

R: I think it would have helped a lot more too if I hadn't had the experience like because I've been around that kind of stuff like all my life kind of so it's like I knew a lot of what I could see that some people wouldn't know. So I could see that it would be kind of tough because for AlcoholEdu you have to reach all the students and some students really have like followed the rules and never drank

before or anything so they don't know that much about it so I think that it was probably good for those students too.

Even if many students found the information in the course interesting and valuable, the main sentiment seemed to be that it would have only a limited impact on student drinking behavior at best:

I: Does it have any impact, is it a good thing that there is something like AlcoholEdu or is it irrelevant or do you feel that it is a good opportunity to learn something and, you know, that it may have an impact on alcohol abuse among students or high risk drinking among students?

R: I would have to say in between, although I didn't agree with most of the tactics of the course or whatever you want to call it. I thought the fact that it even existed and they even attempted to do something you know made kids think about alcohol consumption so I thought that was a good thing.

The overall impression from the interviews is that even if many students found some of the information in AlcoholEdu relevant and interesting, most students thought that it would not impact their behavior or attitudes towards drinking.

Positive and Negative Aspects of AlcoholEdu

We also talked to the participants about positive and negative aspects of the AlcoholEdu course, and some of the answers revealed issues that added to our understanding of what might or might not impact students.

Among the positive aspects of the course, participants emphasized the value of the tips of how to help friends and others who have had too much to drink:

I: And so, was there any of the information that you found helpful, that has stuck with you and that you consider in situations where some of your friends are drinking?

R: There's actually situations I've already had where I've had to go over to a friend's house, and help them out because they've had too much or one of them is trying to take off while trying to go home drunk and those tactics at any stage, those were actually very, very helpful because my brother also took it. If I forgot something, he'll remember something. If he forgets something, I'll remember it. So, it really helps. It does.

The other positive aspect of AlcoholEdu that students emphasize is the information about pacing your drinking:

R: Pacing was very valuable to me, pacing your drinking. I mean, like I said before, nobody is going to count their standard drinks but that was good information to have so you'll always have that and eye ball, whatever.

In general, students thought that the course covered so much ground that there was some new information for everyone.

One of the negative issues that came up frequently in the interviews was the length of the course, and how this could affect the impact it might have:

R: But at the same time, AlcoholEdu really takes, the first part, took so long to do that by the end of it people really had forgotten what they'd learned in it, just because of the fact that they are so ticked off that the last two hours are spent watching those goobers in the video and so really when I talked to people on my dorm floor about, when AlcoholEdu comes up, they just go, it just took too long.

Another issue that came up was the appropriate audience for this kind of course and who might be impacted by it. Some participants thought it might only impact a certain group of people, and not the people who would really need an "intervention":

R: I guess I just feel like it would have—I don't think it would have an impact on people. I think that the people who are going to get in the car with a drunk driver or who have driven drunk themselves, I don't think it would affect that. I think if you're somebody who is really against drunk driving before going into it, it might have solidified your views on it, but I don't think it was a strong enough argument to change anybody's mind.

The general impression of the participants' perception of the potential impact of the course is that they did not have very high expectations in regards to achieving any changes among the audience. Even if most of them thought that the course contained valuable information and that there was some new information for everyone, the length of the course, the redundancy of surveys, the inability to identify with the characters in the videos were all factors that affected the potential impact in a negative way.

Reality

The last area of interest for these focus group interviews was how the course related to the students' own experiences and reality. As we saw above, many students had problems relating to the videos in the course because they experienced the actors as not believable. However, some of the content of the videos was perceived as interesting, particularly the content of the "scenario" videos. In order to understand the impact of AlcoholEdu it is necessary to listen to the students' perception of the relevance of the information in the course and the presentation to their own reality. There are three subareas of this main area of findings that are relevant to the overall goal of understanding the impact of AlcoholEdu on college freshmen. The questions of previous and current experiences with alcohol and alcohol issues are relevant in order to understand how the students relate to the messages of the course, and the question of suggestions for improving the course are valuable for understanding what may be good or bad with the course in its current form, and what could potentially improve the course in the sense of improving its impact on the students.

Previous Experiences

The area of previous experiences covered information about alcohol given to participants either by parents, school-based courses, or drivers' education classes in the past. It turned out that a lot of students had received some kind of training concerning alcohol in high school:

I: What were those classes?

R: Well my freshman year we took living skills and then just about the course of high school you kind of, at least in my high school, you kind of learned the ropes of alcohol, and over your four years you just started to learn more about it.

In high school, some students had participated in the “Every 15 Minutes” course, which is dramatization of alcohol-involved traffic accidents with students participating as actors:

R: The year that I graduated, last year, my senior year of high school, we did the every fifteen minute course there and I don’t know who knows this, but every fifteen minutes, a person dies. So, I got to be one of the kids that died and so they went over a lot of that stuff, too, during that and we got talked to and all that fun stuff.

Students who had a drivers’ license also had received some information about alcohol in drivers’ ed classes:

R: Yeah, I think kind of because before I took AlcoholEdu I already had a license and like one part on the written test there is like an alcohol education part in the handbook and they tell you about BAC and what amount is illegal and then like the sanctions or punishment you will get like if you like they catch you under a DUI and you get arrested and I think like that kind of scared me more than like the ones I took at AlcoholEDU.

The interviews show a mixed picture when it comes to parents talking to their teenagers about alcohol. Some students report that their parents told them not to drink, perhaps even raising the issue of drinking and driving, whereas other students report that their parents never talked to them about alcohol:

R: My parents always talked to me about stuff like that. We always had an open relationship where they would try and prepare me because when I did go out, it was always my choice what I did, whether there were consequences in the end when I got back, but I always had that choice. So they always wanted me to know about it especially coming to college. Regardless of the college you go to, it’s always going to be there, so my parents wanted to prepare me.

I: So what did they talk to you about?

R: Just, I don’t know, drinking, having too much. Drinking and driving, that was the main thing.

But as mentioned, others had not talked to their parents about alcohol at all:

R : It’s the same for me. My parents didn’t talk to me about excessive drinking. It was just the way I was raised. I knew better.

The findings in this area show a mixed bag; some students had participated in quite extensive courses about alcohol issues whereas others had received very little if any information at all.

“Reality Check”

During the interviews the students would often tell stories from their own life regarding experiences with alcohol, and how the information in AlcoholEdu would relate to these experiences. Clearly, the closer the information is to the audience's own experiences the higher probability of a positive impact. As we saw with the perception of the "project" videos, students are more likely to skip over information that does not seem relevant to them, than if they can recognize some of the situations presented in the course or if they can relate personally to the information or persons presented. In other words, if the students are not interested in the information in the course, the more likely we would expect them to be to skip over issues and specific parts of the course. However, if they are interested in the course we would expect them to take more time with those specific parts. Thus, the first issue of interest under this headline is the question about the students' involvement with the course. Clearly, many students felt that AlcoholEdu was more of a task than a "pleasure", and that they just had to go through the course so that they wouldn't be thrown out of school:

I: R4 said that is what I, I was looking for what would they want me to say and what would I really do, to differ between those two, did you all do that?

R2: Yeah. What we were given, when we received the e-mail that we had to complete it before, we were told that you have to pass it with a certain score. So it kind of puts you in the situation where at that point in time you're not thinking about what you would do, you're thinking about what's going to get you to pass it so you don't get kicked out of school.

Many students felt that the course was too long and took too much time:

I: So did you get they were trying to give you ... it was trying to give you feedback based on the way you answered some of the questions? Did you notice that, or do you remember that at all?

R: Yes, I did realize it like there was probably a point to it, it was just like I wasn't necessarily willing to like put in time for surveyors on alcohol education. I just wasn't really and like I know a lot of my friends did it and like the first week of school like they weren't going to sit for like two, three hours, give the accurate responses. I mean, there's other things going on that are more important for them.

Some students also expressed doubt that the course would be taken seriously:

R: So, I don't know, I just think it's not something that people, I think the idea of it, what they're trying to do with it is good, I can understand that, but people just aren't going to take it serious.

However, even if the process was perceived as tedious some students felt that they did get some good information out of the course:

R: It required some time so it probably I would say a lot of people wouldn't do it voluntarily, but since we were forced to. You get some useful information out of it, but at the same time it got kind of tedious, like you feel like answering the little things where like they have the scale of what like bubbles you have to click in and it just felt like you did those forever.

In general, the interviews reveal a somewhat mixed picture of students' perceived value of AlcoholEdu. Many students express frustrations over the length, the redundancy, and the content of the course but at the same time we also hear about good and valuable information that can be utilized by a great number of students.

Suggestions

The final area of discussion that was introduced in the interviews was suggestions for improvements of the course. Combining the experiences from students who had gone through the course and their reality could provide valuable information about what changes to the course might increase its impact.

Clearly, the participants had many ideas for improvements. A lot of these ideas had to do with bringing the course closer to the reality of the students, e.g., making the videos more real, perhaps even using footage from real drinking situations:

R10: But, yeah, I'm sure there's ways of filming parties that you can't see, but it would be hilarious to watch that and I'm pretty sure everyone would watch that if they liked watching drunk people because drunk people are hilarious.

R8: You put educational stuff in the video.

I: No, but I mean my point is, would that impact you in any way?

R10: Yeah.

R8: Yeah, it's more relatable.

R10: And watching drunk people when you're sober and watching drunk people, you don't want to look like that when you drink. It's so funny to watch people do the stupid stuff they do and you're like, really, that's what you do when you're drunk, okay, at least for me.

Another issue that the students brought up was the focus on alcohol. Many participants missed the focus on alcohol in a broader context, i.e. the whole college experience, in particular including information specific to the actual college they are attending:

R: I wish AlcoholEdu did, though, when we select what school we're from, narrow all their information down to the school we're going to. That would be a lot more helpful in the sense that I would know exactly what I'm getting into and everyone else would too.

Some students would have liked an approach that would have focused more on deterrence:

R: I actually was kind of annoyed by AlcoholEdu because I didn't think it had scare tactics. At the time I was taking it I was like, the first character introduced is the guy who's like, "I don't care I go drink at a party, blah, blah, blah, blah, blah", except he's totally unreal. That's just, I don't know, I looked at that character and I just kind of shook my head and said, wait, is this course encouraging me to drink. I couldn't figure out what exactly the course wanted from me. I was like, wait a minute, this is weird. I mean, I know I shouldn't be drinking.

It should be mentioned, though, that many other students expressed an objection to more deterrence.

Many students expressed annoyance with the scenarios because they felt that there was only one right answer to the problems presented in the situations. However, they felt that there could have been other solutions that might have been more appropriate in some of the scenarios:

R: I agree. When I looked at those questions I thought of what I would actually do and then what it wants me to say I would do. So maybe on that part they could say, okay what would you really do and have a second part saying, what do you think is the right thing to do because that's two different things and then after that they can explain why the right thing to do is what they should want to do.

The last major issue that came up under the headline of suggestions was questioning the entire approach. Some students felt that the course should have focused solely on personal responsibility and social awareness:

R: And instead of those uhm lists like the strategies, like I said, just be responsible and just hammer that thing down because that's all you really can say to someone. Just be responsible for yourself and know how to handle a situation.

In general, the students had many suggestions for improvements to the course. These suggestions included ideas pertaining to the content, the presentation and the overall focus of the course.

Discussion

The extensive analysis of the focus group interviews shows a somewhat mixed bag of findings. However, four results stand out.

First, most participants found that AlcoholEdu contains so much information that everyone will be able to find some of it relevant to them. For example, many participants noted that the course improved their understanding of a standard drink in relation to different types of alcoholic beverages, and their understanding of drinking norms on college campuses. At the same time this seems to be one of the problems that participants had with the course. Even if some students expressed that they found valuable information throughout the course, many felt that the course lacked an overall message. As expressed in the last quote presented above, students would have liked the course to have a clear message about personal responsibility with information and guidelines supporting this message.

The second general conclusion based on the analysis is that students prefer information and presentations of this information in ways that they can relate to and identify with. Often participants expressed frustrations about the actors in the "class project" videos and the content of the "scenario" videos that it impacted their attention to the messages in the videos. Furthermore, students felt that the best presentations involved some kind of interaction with the course as expressed in the quotes about the BAC calculator that most participants really liked and used after they had finished the course.

The third general conclusion relates to the surveys. Most students expressed frustrations with the surveys because of the length and the redundancy. These frustrations apparently led them to give insincere and inaccurate answers to the questions, thus impacting data quality and compromising the purpose of the surveys. The last general conclusion based on this analysis is about the overall impact of the course. The participating students generally did not expect the course to impact their behavior relating to alcohol. Even if some of the information stayed with them, they did not expect any behavior or attitudinal changes.

Findings of this qualitative study may help to explain the findings of RCTs summarized in the introduction (e.g., Paschall et al., 2011a,b; Ringwalt et al., 2011). The apparent short-term effects of the course on alcohol use and related problems in the fall semester are due in part to correcting student misperceptions about drinking norms on college campuses. Yet the course did not appear to have any effect on other psychosocial factors targeted by the course, including positive and negative alcohol expectancies, personal approval of alcohol use, and use of protective behavioral strategies (Ringwalt et al., 2011). The decaying effects of AlcoholEdu for College in the spring semester may be attributable to limited student engagement in the course and general dissatisfaction with course content, in addition to the short duration of the course itself. We should also note, however, that most universities participating in the 30-campus RCT did not actually mandate AlcoholEdu for College course, which could have led to underestimation of course effects in both the fall and subsequent spring semester.

Limitations and Directions for Future Research

There are two important limitations to this study; 1) the size of the sample, and 2) the difficulties of recruitment (participation rate). We were able to obtain interviews with nine groups as planned. However, the number of participants was lower than anticipated. Instead of 63 participating freshmen, as expected, we ended up with 56, and the gender distribution ended up as 18 male and 38 female students. Ideally we would have wanted closer to equal gender distribution. Furthermore, participation rates were very low. We contacted 200 freshmen on each of the three participating campus to secure the 56 participants, a participation rate below 10%. There may be a number of reasons for these numbers but since we did not have access to any information about the non-responders, we can only speculate about the actual reasons for students not wanting to participate. However, it is highly unlikely that there would be a selection bias in either a positive or negative direction relating to AlcoholEdu. You could assume that students with a more positive attitude to AlcoholEdu would be more likely to participate in interviews about the program but our findings do not suggest such a bias. On the other hand, if you assume that students with a negative attitude to AlcoholEdu would be more interested in participating, you would expect very negative findings in this study; this does not seem to be the case either.

Despite these limitations, we are quite confident in our findings. The interviews showed the same pattern of answers across groups and universities with no new themes or issues present in only one group or at one university.

This study expands our understanding of student's attitudes toward AlcoholEdu and similar programs. Whereas quantitative studies may provide statistically significant findings on

behavioral and attitudinal impact of such programs, the qualitative approach gives us much more in-depth information about the reasons for this impact. It is important for our understanding of how such programs may impact the target group to conduct both quantitative and qualitative studies when evaluating them. By adding a qualitative component, we will be able to much better tailor such programs to the target group and thereby increase the potential of higher impact.

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Table 1

Participants in focus group interviews

Campus	Respondents (to invitation)	Actual Interviewees	Male	Female
Campus 1	25	19	6	13
Campus 2	20	17	6	11
Campus 3	25	20	6	14