

Using Audience Response Technology in Brief Live Interactive Normative Group (BLING) Sessions to Reduce High-Risk Drinking in First-Year College Students

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THE VIRGINIA COMMONWEALTH UNIVERSITY (VCU) WELLNESS Resource Center was awarded a model program grant from the U.S. Department of Education to reduce high-risk drinking on campus. Among other components, the comprehensive alcohol program included a campus-wide social norms campaign and the use of audience response technology (clickers) to enhance alcohol prevention education on campus. Clickers are hand-held wireless devices that transmit personal responses. The personal responses can then be immediately displayed as graphs during educational sessions. This article describes a retrospective program evaluation study assessing the impact of large group clicker educational sessions on alcohol use during students' first semester.

Research shows college students overestimate how much and how often their peers drink alcohol (Perkins, 2005). Social norms theory posits that correcting these misperceptions can result in decreased alcohol use. Small group social norming is used to make normative messages more credible and pertinent to increase the shift toward healthier perceptions (Far & Miller, 2003). In 2008, Joseph LaBrie demonstrated that live interactive group-specific normative feedback reduced both misperceptions and drinking in college students.

Intervention

LaBrie coined the term "BLING" for brief live interactive normative group interventions (2009). To increase healthy perceptions and decrease alcohol use, the VCU Wellness Resource Center implemented a BLING intervention with first-year students the week before classes began in 2008. Ten one-hour presentations of "Love n' Liquor: What's Normal — What's Not" were presented over a four-day period before classes began. Participation was voluntary but strongly encouraged by the department of Residential Life and Housing. A total of 1,842 students participated, which was 49% percent of our incoming first-year class. Between 100-200 students attended each session in which all participants were provided a hand-held clicker. The presentation consisted of interactive education about sexuality and alcohol. About 15 min-

utes dealt with misperception of norms related to smoking cigarettes, drinking alcohol, and number of sex partners. Students were asked if they felt safe using the clickers and if they would tell the truth about a series of three perception and three behavior questions. Students who did not feel safe using the clickers were encouraged not to respond. Almost all of the participants provided responses to both the perception and behavior questions.

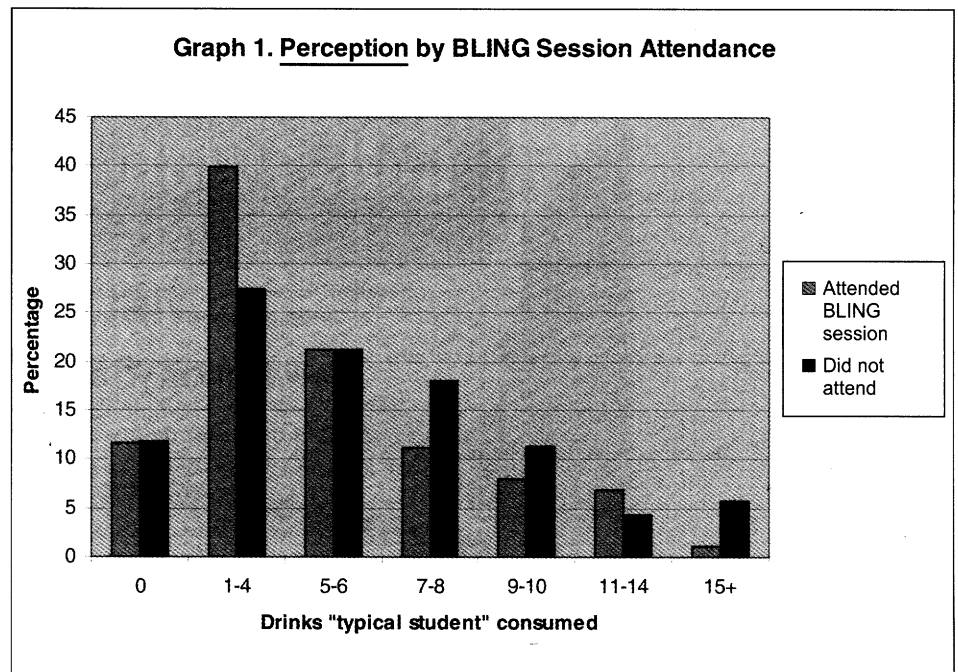
To address alcohol, students were asked how many days per month they believe the

typical student drank alcohol and then were asked how many days per month they drank. Bar graphs linking perception and behavior were immediately revealed to the audience. In every session participants overestimated unhealthy behavior and were surprised by the actual behavior of the group, which closely mirrored campus-wide normative behavior.

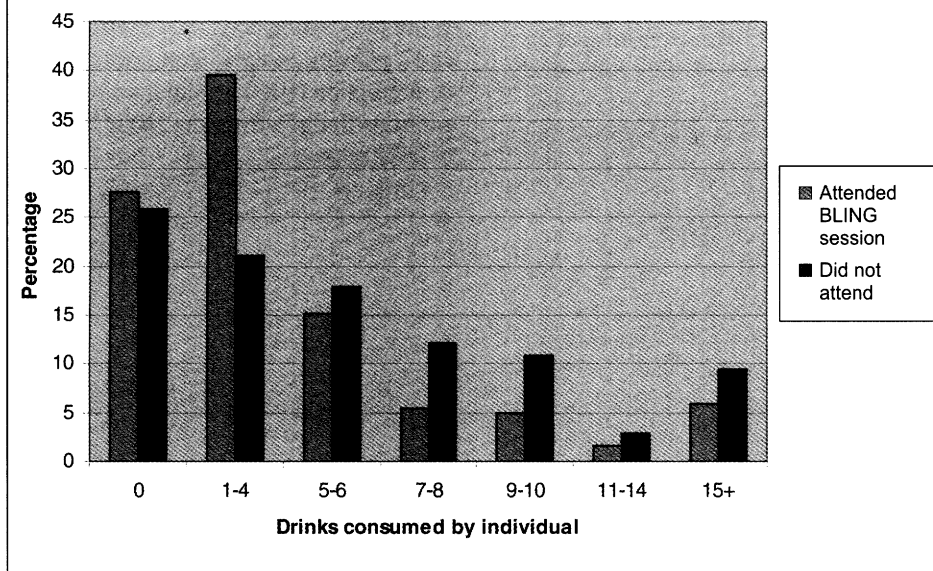
During the course of the semester a campus-wide social norms marketing campaign was conducted that reinforced true health norms. Posters displayed statistics from the 2007 ACHA-National College Health Assessment (ACHA-NCHA) conducted at VCU. The main theme of the campaign was "VCU students are healthier than you think."

Results

Eleven weeks after classes began, health educators provided educational sessions to first year orientation classes on stress management and alcohol. Once again, clickers were used to increase active learning. Prior to educational content, clicker questions



Graph 2. Behavior by BLING Session Attendance



were used to evaluate the impact of the Love n' Liquor sessions and to assess current perception and alcohol use in participants. Of the 513 students participating in six educational sessions, 412 students completed the post-test evaluation questions and were included in the study.

Clicker data indicated 47% attended a Love n' Liquor presentation and 45% were male. Perception of alcohol use was assessed by the question "how many alcoholic drinks in an evening do you think the typical VCU student has when they go out?" ACHA-NCHA data collected at VCU indicated that most VCU students drink 0-4 drinks in a sitting. Therefore the correct perception of alcohol use at VCU is that in one evening the typical VCU student has 0-4 drinks when they go out. Comparing Love n' Liquor attendees and non-attendees, we found that the attendees had healthier perceptions than non-attendees at post-test. Graph 1 shows that attendees more accurately perceive alcohol use on campus than non-attendees at almost all levels of alcohol use.

Chi-square analysis demonstrated a statistically significant difference between attendees and non-attendees ($\chi^2 = 16.2$, $df = 6$, $p = .013$).

Alcohol behavior was assessed by the question "the last time you went out, how many drinks did you have?" Comparing attendees

and non-attendees, we found that attendees had consumed a lower number of drinks than non-attendees at post-test. Graph 2 shows that compared to non-attendees, more attendees drank 1-4 drinks and fewer attendees drank 7-10 drinks the last time they went out. Chi-square analysis showed a statistically significant difference between attendees and non-attendees on drinks consumed ($\chi^2 = 23.3$, $df = 6$, $p = 0.001$).

Chi-square analysis indicates that the gender difference between attendees and non-attendees was not statistically significant.

These findings suggest that brief live interactive normative group (BLING) in large group educational settings can have a positive impact on both perception and alcohol use and that this benefit lasts eleven weeks into the first semester.

Conclusion

This study grew out of a program evaluation to assess the impact of our Love n' Liquor sessions. Due to the increase in healthy perception and decrease in number of drinks consumed by first-year students, we are currently attempting to replicate these findings. A formal prospective study is being conducted to determine if variables such as age, ethnicity, behavior prior to coming to school and residence location affect the results of the intervention. In conclusion, we found that clickers not only

allow for more interaction in educational programs; they also provide excellent ways to conduct quality program evaluations. And most importantly, these preliminary findings indicate that BLING sessions using clickers can positively impact the perceptions and behavior of students over time. For more information about our media or the clicker PowerPoint presentation please see www.yourstrategy.org or www.thewell.vcu.edu. ■

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