

Substance Abuse Prevention Education: “A snowball’s chance” at UVA

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An estimated 21.6 million persons in the United States aged 12 or older were classified with substance dependence or abuse in 2003.¹ While a large number of addicted individuals make alcohol their drug of choice, roughly 1 out of every 20 Americans are dependent upon drugs other than alcohol.² While historically substance abuse has been considered an individual and criminal problem, illicit drug use was identified as a medical condition as early as 1990 as one of the top ten actual causes of death by the Centers for Disease Control and Prevention.³ Since substance abuse stems from both individual and societal factors and it affects people on both a personal and communal level, public health interventions are important tools to effectively address substance abuse problems.

Substance abuse is considered a “complex disorder,” meaning the intricate interplay of multiple genetic and environmental factors contribute to vulnerability. Environmental, or social, factors include stress, adolescence, homelessness, gender, etc., while multiple alleles seem to be responsible for genetic predispositions to addiction. In the past drug problems have been associated with a failure of willpower, character flaws, negative social environments, and criminal behavior. With new understandings of the underlying biology of psychoactive drugs, however, substance abuse is finally being considered as a health problem and a chronic disease. The medical repercussions resulting from abusing psychoactive substances range from brain damage to increased HIV transmission, from injury to eating disorders, resulting in public health care costs of over \$4.1 billion.⁴ Since substance abuse is both an individual and societal disease, it exists as a primary public health problem; therefore, prevention campaigns should utilize the same theories and models used for other large-scale health crises.

One health promotion program at the University of Virginia is the Peer Health Educators’ *Buzzed* outreach, which makes information about drugs accessible to students and engages them in interactive learning activities based on previous behavior change theories. When the illicit drug outreach protocol was developed in 2000, all of the most popular public health theories were taken into account; however, the Social Norms Theory, which was recently developed based on substance abuse research in colleges, had yet to be incorporated into the *Buzzed* outreach. Therefore, *Buzzed* was predominately an individual-focused outreach. The Social Norms Theory is based on the idea that individuals respond to their environment and shape their behaviors based on what they think others are doing. Unfortunately the perception of prevalence of drug use is often much higher than actual use, which suggests that people may engage in riskier behaviors than they otherwise would chose to do. Social Norm strategies aim to point out the gap between perception and actuality by illustrating how the majority of a specific, pre-defined population chooses to act. Since the environment plays such a key role in the development of addiction, effective public health campaigns must address environmental factors, for instance social norms, which can contribute to risky drug use.

This project was designed to evaluate whether the Peer Health Educators' *Buzzed* outreach would be strengthened by the addition of a social norms activity. I developed and implemented a Snowball Survey to be given in addition to the original *Buzzed* activities. The Snowball Survey allows students to see whether their perceptions correctly match reality, both of the drug behaviors among their peers in the room and campus-wide. By comparing the audience Snowball Survey responses based on thought (or their perceptions) to their responses based on their actual practices (or reported use) of drugs, the activity powerfully exhibits the phenomenon on which social norms is based, the discontinuity between thought and practices, perception and reality.

Group 1, consisting of 67 UVA fraternity and sorority members, received the outreach without the social norms addition, while 84 UVA students in Group 2, consisting of in fraternity members and students in a health course, took part in the Snowball Survey. Data was gathered from the evaluation forms given at the end of the outreach. Specifically each student is asked to complete an evaluation sheet, responding with one answer for each item as a result of the *Buzzed* outreach: what did you learn, what do you intend to do, what did you like most, and what could have been improved. The overwhelming majority of positive responses and the insignificant differences between the two groups, indicate an equally effective program given to each group, despite activity changes. However, one important difference is the increase of responses in Group 2 indicating that they learned how often/much drugs were used (6.3% of Group 1 to 19.4% of Group 2). This increase is directly related to the inclusion of the social norms Snowball Survey, which aims to convey actual substance use patterns in the student community. Another difference between Group 1 and Group 2 was the intention of informing oneself of correct information and being aware of drug use in one's community (10.7% of Group 1 and 14.1% of Group 2). Also Only 7% of Group 1 felt inspired to share information with their friends, whereas almost 16% of Group 2 planned on extending the lesson to their peers. Educating one's self and others are both ways of eliminating false perceptions of drug use that lead to risky behaviors. Another interesting result is that 23% Group 2 listed the Snowball Survey as their favorite activity, making it the most common response. Simultaneously the enjoyment of interaction increased from 6.9% in Group 1 to 18.9% in Group 2, which is significant since student engagement is one teaching method that can increase knowledge.

The data gathered in this project demonstrates how adding a social norms activity to the PHE *Buzzed* outreach strengthened the program by providing a more comprehensive public health approach to decreasing substance abuse on college campuses. The Snowball Survey added more of a public health perspective to the program by offering information about the students' community, or environment, as opposed to simply focusing on the individual. Given the importance of peer approval and environmental factors to behavior change decisions and substance abuse vulnerability, this addition is crucial to a comprehensive public health campaign.

References:

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