

Fresh Start: An Innovative Video Game to Educate First Year College Students about Mindful Drinking

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Keywords

Serious games, educational games, narrative, health intervention

EXTENDED ABSTRACT

Binge drinking is a major public health issue that affects college campuses. Research suggests that heavy drinking rates on college campuses may be a result of poor implementation and design of alcohol intervention programs (Van Damme et al., 2013). Students at a U.S. public state college felt that the existing online alcohol education program for first year students at the school was not engaging. On the contrary, gamebased learning has shown effectiveness in changing people's health behaviors, including improving sexual health attitudes and knowledge, promoting learning about pain management, and reducing consumption of unhealthy foods (Dobson & Ha, 2007; Ingadottir et al., 2017; Wang et al., 2017). However, there is a gap in the literature on game-based alcohol interventions.

An interdisciplinary team, composed of faculty and students from Communication Studies, Public Health, and Interactive Multimedia, have taken on the project of building an interactive video game with narrative immersion that educates first year college students about mindful drinking. Guided by Social Cognitive Theory, Self Determination Theory, and Elaboration Likelihood Model, the game, called "Fresh Start," aims to teach mindful drinking skills, raise awareness about unhealthy drinking habits, and demystify alcohol related misconceptions.

"Fresh Start" immerses players in realistic scenarios that first year college students might come across in their first year of college. Research (e.g., Hinyard & Kreuter 2007; Wang et al. 2017) indicates that narrative communication is more effective at producing positive changes in perceived social norms and behavioral intention than non-narrative communication. This format offers players more immersion and engagement, as well as more positive cognitive responses by eliminating the chance that players will feel like they are being lectured with videos and paragraphs of text.

Proceedings of DiGRA 2020

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The narrative of “Fresh Start” depicts the experience of a diverse group of first year friends, in which the player is a part of, at the authors’ college. Throughout the game, the player must navigate challenges associated with alcohol and college parties and make decisions in various scenes. The game also presents reinforcement health messages in response to the choices that the player makes, to foster feelings of competence and promote intrinsic motivation.

Research shows that providing agency over a character increases the user-character connection, which then increases engagement in a character-consistent act (Carpentier et al., 2015). Other researchers (Day & Zhu, 2017) demonstrate that improving a player’s perceived agency will satisfy the player’s desire without requiring changes to the degree of agency that the game affords. Throughout “Fresh Start,” players have the ability to exert control by making choices, allowing them to manipulate the content and form of the game, thus view direct and immediate consequences of their choices.

Research also shows that entertainment-education programming can be an effective way to deliver prosocial and health messages (Moyer-Guse, 2008). This game utilizes “mini-games” dispersed throughout the narrative for players to learn and test important skills, such as pouring a standard drink of different types of alcohol and finding effective ways of persuading a peer to stop drinking based on the peer’s intoxication level. These features are expected to lead to greater player enjoyment, break up the narrative text, and address learning objectives in ways that are less likely to yield reactance (Moyer-Guse, 2008).

The game has been in development for over a year. It has been continuously worked on and updated based on playtesting and feedback within the college student and campus community. To ensure that the game is culturally sensitive, inclusive and representative of the college student body as a whole, the team also playtested the game and conducted several focus groups among students and administrators from diverse groups and organizations. Overall, there has been positive feedback about the game: “Fresh Start” is engaging, enjoyable, relatable, authentic, inclusive, and seems to be effective in promoting mindful drinking behavior. Partnered with multiple entities on campus, “Fresh Start” has the potential to be adopted as the college’s mandatory alcohol education program.

In the near future, the team plans to conduct a series of experiments surrounding “Fresh Start.” The first study will be a pre-post test aiming to see the game’s overall effectiveness at education and behavior change around mindful drinking. A follow-up, more complex study will target at the role of agency in learning outcomes. Lastly, the team will carry out a randomized controlled trial comparing “Fresh Start” with other online alcohol training programs.

As a conclusion, “Fresh Start” is a narrative-based interactive video game that allows first year college students to play through different scenarios, each of which represents something players might come across in their first year of college life. By providing higher levels of interactivity and agency, “Fresh Start” innovatively addresses the need to educate first year college students about mindful drinking in an engaging way, and affirms serious games as a viable and effective way of health intervention.

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