

Running head: AN EVALUATION OF GAMES

An Evaluation of Games for Advocacy in Health and Human Rights

Soroya Julian McFarlane

Lien Tran

University of Miami

Abstract

A serious game is “a process initiated in a serious context or controlled environment, which serves a serious purpose and which is mainly supported by the use of games” (Le Compte, Watson & Elizondo, 2014). Serious games for health, also referred to as health games (Emmerich, 2014), can be utilized to promote disease prevention strategies, increase knowledge and awareness and change attitudes and behavior (Connolly et al., 2012), by targeting health care providers and specific populations (Luz et al., 2014). In sexual health, games offer the opportunity to provide participants with confidentiality (to reduce risk of stigma) and the capacity to tailor interventions to diverse audiences with varying needs based on their background (for example, by gender, age, sexual orientation, race, etcetera) (Desmet, Shegog, Van Ryckeghem, Crombez, & De Bourdeaudhuij, 2015).

Health communication research is particularly interested in establishing cause and effect relationships, or, how components of the game may affect participants mentally (thoughts), emotionally (attitudes) and impact behavior change (Emmerich, 2014). The game designer is typically focused on improving the user experience of the game, characteristics of players and their motivations to play, recognizing them as active contributors to the effect of the medium (Ivory, 2013). To make these determinations, evaluation, by way of conducting user tests and experiments, is critical, but not yet prioritized (Emmerich, 2014). This study primarily aims to address both research and design perspectives by contributing qualitative evidence of games as a viable communication platform for advocacy in health and human rights.

Using a qualitative design, 9 focus groups were conducted in March 2016 with over 50 South African advocacy leaders, representing more than 15 human rights organizations. Participants of the study either played *Cops and Rubbers* (treatment condition) or read the Open Society Foundation (OSF)'s *Criminalizing Condoms* report (control condition), which

both address the treatment of condoms as contraband. The *Cops and Rubbers* game is an interactive demonstration of unjust international policing practices that impact sex workers' lives negatively, leading to consequences such as but not limited to increased vulnerability to HIV infection. The game, created in 2012, is based on the research conducted for the OSF's 2012 report *Criminalizing Condoms: How Policing Practices Put Sex Workers and HIV Services at Risk*. The report draws from research conducted in six countries: Kenya, Namibia, Russia, South Africa, the United States and Zimbabwe. Both the report and game address the adverse effect the practice of using condoms as evidence of prostitution has on sex workers' health and human rights.

During this study's focus groups, participants discussed the benefits and barriers of the use of a game versus the report, with the latter considered as a standard method of advocacy. To facilitate data coding and analysis, transcribed focus group conversations were analyzed using Nvivo 11 qualitative software. A constant comparison analytical method was used to develop emergent themes. In addition, discourse analysis was also used to understand group dynamic and consensus or disagreement on topics addressed.

Preliminary results demonstrated support for the use of *Cops and Rubbers* as a creative tool of advocacy. There was general consensus from participants that the game, more so than the report, elicited empathy from the realism of scenarios in life including stigma and discrimination, socioeconomic status, gender norms, the importance of empowerment and hope, and contradictions in Government policy related to the practice of using possession of condoms as evidence. However, an important consideration which emerged from the analysis is to take into account the starting place of the player in terms of prior knowledge, attitudes and perspectives. Depending on familiarity with the topic, advocates thoughts or emotions were more so, or less so, impacted by the game. Recommendations to improve the game experience also emerged but was also influenced by the game's emotional impact on players

at the individual level. Overall, serious games for health have potential to be effective tools for advocacy for diverse causes and populations, especially at particular levels of prior knowledge or experience by players.

Keywords: social impact games, game assessment, games for advocacy, role-taking, public health, social justice

References

- Connolly, T. M., Boyle, E. A., MacArthur, E., Hainey, T., & Boyle, J. M. (2012). A systematic literature review of empirical evidence on computer games and serious games. *Computers & Education, 59*, 661–686.
- Desmet, A., Shegog, R., Van Ryckeghem, D., Crombez, G., & De Bourdeaudhuij, I. (2015). A Systematic Review and Meta-analysis of Interventions for Sexual Health Promotion Involving Serious Digital Games. *Games for Health Journal, 4*(2), 78-90.
- Emmerich, K., Masuch, M., & Schmidt, R. (2014). Digital Entertaining Health Applications: Researching the Fundamentals of a Cause-Effect Relationship. In *Proceedings of the 2014 Workshops on Advances in Computer Entertainment Conference* (p. 15). ACM.
- Ivory, J. (2013). Video games as a multifaceted medium: A review of quantitative social science research on video games and a typology of video game research approaches. *Review of Communication Research, 1*(1), 31-68.
- Le Compte, A., Watson, T., & Elizondo, D. (2014). Serious Games: A design methodology from concept to end-user. In *Proceedings of the Sixth International Conference on Virtual Worlds and Games for Serious Applications: VS-Games*. Retrieved from: <https://my.tech.dmu.ac.uk/~alecom01/public/papers/seriousGames.pdf>
- Luz, S., Masoodian, M., Cesario, M., Cesario, R. R., & Rogers, B. (2014). Designing a serious game for community-based disease prevention in the Amazon. In *Proceedings of the 11th Conference on Advances in Computer Entertainment Technology* (p. 41). ACM.