Male and Female Differences Regarding Buffers to STEM Fields

STEM (Science, Technology, Engineering, and Mathematics) fields are dominated by males, with societal norms discouraging many women from pursuing a career in STEM. Women in the STEM fields benefit from buffers that mediate the negative effects of discrimination. In our pilot study, we found that playing video games with a romantic partner served as a buffer for female gamers, facilitating their continued play. Understanding male attitudes towards female gamers helps to identify additional buffers and potential ramifications.

Our current project empirically explored the male opinion of female gamers and its effect on women's decision to enter into the STEM fields. We hypothesized that male participants would rate women as less accomplished players, refer to them as weak, and expect women to lack competitiveness. These negative expectations have the potential to influence women's decisions to pursue STEM careers, specifically game design and programming.

Data were collected using an online survey taken by 204 undergraduate males, 300 Caucasian women and 300 minority women. We assessed the participants' reactions to discrimination and harassment, likelihood to enter a STEM field, and opinions of female gamers.

We found that male gamers displayed discriminatory, sexist beliefs towards female gamers which contribute to similar perceptions about the prevalence of harassment in online gaming. Our results explore the link between these beliefs and the likelihood of female gamers pursuing STEM careers. Our study raises awareness of the lack of female presence in STEM fields and explains this deficiency by discerning the male perspective while examining potential buffers.

Keywords: Video games, gamers, STEM, discrimination, prejudice, programming, buffers, barriers, sexism