Audience-Induced Stress Impacts Performance and Mental Health at Super Smash Brothers' Ultimate eSport Events

Bergmann, Jack (School: Ossining High School)

Over 1.8 billion people play video games worldwide, with an estimated 201.2 million active members of the eSports community. The eSports domain has continued shifting into the mainstream and the public. Therefore, generating larger audiences who may exert pressure on the eSports player. This study investigated if audience-induced stress mitigates players' performance. Additionally, we examined if player experience and confidence counter stress and improve performance. eSports players (n = 165) were recruited from nine different Super Smash Bros Ultimate Tournaments across the USA. All players completed five different questionnaires including demographics, general health, mental well-being, personality type, and stress. Tournament performance data was pulled down from Start.gg and PGstats. The results found a moderate positive correlation between audience-induced stress and reduced player performance ($r = 0.379$, $p < .01$). Additional findings include positive correlations between player performance and confidence, as well as player performance and experience ($r = .42$ $p < .05$; $r = .37$ $p < .001$). This study found a moderate positive correlation between gameplay related stress and General Health Questionnaire values ($r = .339$ $p < .05$). Together, this suggests that player stress may be affected by the shift of the eSports scene from a virtual environment to an in-person environment. These findings improve our understanding and reveal crucial information on how different aspects of eSports affect player stress and performance.

Awards Won: