Effects of Online Gaming on Mental Health

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1. Introduction

The popularity for online competetive gaming is increasing exponentially. Billions of people worldwide get together to play online games and some of theme have even made a career out of playing games called 'pro-players'.

The rise of gaming industry has opened up new career options such as professional players, viddeo-game streamers, game casters and many more. It has given birth to a fascinating online social community and gaming culture. But there are some major problems that the gaming community is facing, one of them is the issue of toxic behaviour. Players competing with eachother in online games often use profane and toxic language in the heat-of-the-moment or as strategy or simply to vent their frustration. Communication channels might be abused to harass and verbally assault other players, which negates the very purpose of entertainment in games by creating a toxic player-community.

As a gaming enthusiast myself, I wish to analyze the toxic behaviour in online gaming and how it affects mental health of players.

2. Problem Statement

My primary objective of this project is to understand the effects of gaming on mental heath of gamers by answering the following research questions:

- Does online gaming affects the daily work-life of a person?
- Are the effects on mental health more prominent for one particular gender?
- Are younger people more prone to mental health issues?

3. Data Description

This dataset consists of data collected as a part of a survey among gamers worldwide. The questionnaire asked questions that psychologists generally ask people who are prone to anxiety, social phobia, and less to no life satisfaction. The questionnaire consists of several set of questions as asked as a part of psychological study. The original data was collated by **Marian Sauter** and **Dejan Draschkow**. It is publicly available and can be downloaded from OSFHome.

Column Definitions: The data consists of 55 columns that correspond to every question asked in the survey questionnaire. Most of the columns correspond to different scoring criteria used in psychology like GAD (General Anxiety Disorder), SWL (Satisfaction with Life) an and SPIN (Social Phobia Inventory) scores. There are a few generic questions about where the people are born and why do they lay online games etc. The survey questions can be found in the same location where the data is present.

• GAD_T: Total General Anxiety Disorder score; 0-5 no anxiety, 5-10 mild, 10-15 moderate and >15 severe

- **SPIN_T:** Social Phobia Indicator; <20 none, 21-30 mild, 31-40 moderate, 41-50 severe, >50 very severe
- **SWL_T:** Satisfaction with Life score; measure of well being excluding health and employment life domains
- Hours: Total number of hours devoted to gaming in a week

4. Methodology

I will be performing exploratory data analysis on the available data to analyse and answer the above mentioned research questions.

5. Findings

Though majority of the gamers we have considered in this data do not exhibit severe mental health conditions, there are still clear signs of people getting affected. Some key findings from the analyses are as follows:

- Females under 25 years of age are most affected by online gaming as they exhibit relatively higher Anxiety Disorder and Social Phobia
- Majority of the gamers don't feel that gaming severely affects their work or daily lives
- Most proportion of Female gamers find it somewhat difficult to manage work-life because of gaming
- Playing for 50-90 hours per week might cause mild Social Phobia and Anxiety Disorders

This proves that online gaming does affect mental health, and even though the effects are mild they need to be addressed in-order to maintain a healthy gaming community. I also feel that in-game toxicity is a prime contributor to mental health problems in gamers and I would like to explore this feature for **future work**.