

CALIFORNIA STATE SCIENCE FAIR 2017 PROJECT SUMMARY

Name(s)

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Project Number

J0418

Project Title

Excessive Use of Electronic Video Games: Do Children Excessively Use Non-Internet Games More than Internet Games?

Abstract

Objectives/Goals

I completed my project to determine whether people are excessively using electronic video games. My hypothesis was "If I survey members of different age groups (11 years old and younger, 12-18 years old, 19 years old and older) about their electronic video gaming habits, then members of the youngest age group will excessively use non-internet games more than internet games because internet games are more complex, they involve social interactions and younger children have less freedom to use the internet when compared to older children and adults."

Methods/Materials

To test my hypothesis, I made a questionnaire based off of DSM-5's criteria for Internet Gaming Disorder which may become an official diagnosis in the future. A total of 426 people in the community completed my questionnaire. I recruited participants at movie theaters, Del Amo Mall, arcades, and schools including St. John Fisher and The University of California, Berkeley between January 14, 2017 and January 29, 2017.

Results

In the youngest age group I discovered that 12.7% of children excessively use internet games and 23.9% excessively use non-internet games. I found 6.2% of adolescents 12 to 18 years of age excessively use internet games while 6.9% excessively use non-internet games. In the oldest group I discovered 14.3% of adults excessively use internet games and 8.5% excessively use non-internet games. Overall, I found 11.0% of all the subjects excessively use internet games and 13.1% of all the subjects excessively use non-internet games. Furthermore, I discovered 15.5% of the members of the youngest age group, 3.5% of the members of the middle age group, and 0% of the oldest age group met the criteria for excessive use of non-internet games but did not meet the criteria for excessive use of internet games.

Conclusions/Discussion

My results proved my hypothesis that the members of the youngest age group would excessively use non-internet games more than internet games. My results supported the idea that DSM-5's diagnosis of "Internet Gaming Disorder" should be "Gaming Disorder". My results added more clarity to the diagnosis which will help to ensure people in the future are accurately diagnosed so they can obtain appropriate treatment. Previous studies have shown people who have symptoms consistent with Internet Gaming Disorder experience a higher rate of depression, anxiety and aggression.

Summary Statement

The goal of my project is to determine whether people excessively use electronic video games.

Help Received

I made the questionnaire and analyzed the data by myself. My family members helped me recruit subjects and organize the data.