

The Catchiest of Them All: The Title I Decided On

Project Objective or Aim: (75-150 words)

The aim for this research proposal to see if we can reliably draw a correlation between those amongst us who participate in semi-regular mental exercises, specifically video games, and more specifically competitive video games, and performance in other aspects of life, most importantly taking a specific look at what areas we find the largest differences.

Project Background and Significance: (350-400 words)

This research project explores the potential of video games as tools for cognitive and skill-based development, with significant implications for professions requiring precision, quick decision-making, and exceptional hand-eye coordination. Previous studies have shown that individuals who play video games perform better in tasks demanding accuracy and speed compared to non-gamers. Surgical students who played video games for over three hours per week, for example, demonstrated superior results in motor skills and problem-solving. Notably, competitive gamers in the top 10% of their respective games achieved the highest levels of performance, indicating a direct relationship between gaming experience and enhanced capabilities.

The significance of this research lies in its potential to identify video games as an innovative method for skill enhancement and cognitive training. In fields like surgery, aviation, and engineering, where precision and rapid decision-making are critical, video games may serve as supplemental training tools. Beyond professional applications, this research could contribute to understanding how video games support mental acuity and cognitive longevity, offering broader societal benefits, such as strategies to combat cognitive decline in aging populations.

This study will be guided by an examination of existing research on gaming and its impact on cognitive and motor skill development. The investigation will focus on how the interactive and immersive nature of video games provides consistent mental stimulation, fostering improvements in problem-solving, multitasking, and adaptability. By evaluating the performance of individuals with varying levels of gaming experience, the research aims to highlight practical ways video gaming can be integrated into training methodologies for skill-intensive fields.

Ultimately, this research seeks to challenge conventional perceptions of video games as mere entertainment and position them as valuable tools for professional development and lifelong cognitive health. By demonstrating their potential benefits, this study could inspire a reevaluation of gaming in educational and professional contexts, driving innovation in training techniques for the modern workforce.

Research Methods 300-400 words

Expected Outcome (300-400 words)

Literature Review

Preliminary Work and Experience (150-200 words)

IRB/IACUC statement (<50 words)

Budget. How much money will it take to fund your research? Your budget can be no more than \$1,500.00