



# What are the Effects of Video Games on Children's Brain Development?

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## **Research Question:**

What are the effects of video games on children's brain development challenges the stigma that video games are inherently harmful to children. Video games are often viewed as detrimental; this view overlooks its potential benefits. When used in moderation, video games can serve as a powerful tool for supporting children's cognitive and social developments.

## **Introduction:**

The goal of my study was to discover how children's development is affected by video games. To do this, I have gathered many sources that discuss the benefits of video games, but I have also gathered some that have a differing opinion to give an even overview. I interviewed students from New Prospect Elementary School, grades 3-5, to gather firsthand how they use video games and its effects. In fact, all the students were able to give examples of times that they were able to solve a problem using skills from different games.

## **Background:**

Video games have a negative stigma about how they are detrimental to children's development. This is because of overuse and lack of control in children. Video games, when used moderately, can be helpful for children's development as research has shown that when video games are used properly it can lead to enhanced problem-solving abilities, improved hand-eye coordination, and can foster teamwork and communication through multiplayer games.

## **Methodology:**

I researched from an objective perspective to remain unbiased and conducted interviews with elementary school students to gather more relevant data. I used qualitative methods, like open-ended interviews, to collect data that best captured the students' genuine experiences and perspectives.

## **Results:**

Interviews with 3rd to 5th grade students at New Prospect Elementary showed that most played video games for 1-3 hours each day. Students shared examples of how games like Minecraft and Roblox helped them improve problem-solving, teamwork, and hand-eye coordination. They mentioned that some skills they practiced in games carried over into real-life situations, especially in classroom activities and group work.



## **Conclusion:**

My research has found that children are able to benefit from video games much more than thought. Prior research has shown that children who play 2-3 hours a day struggle with their daily lives. Through interviews and gathering various articles, I have found that children in fact benefit and develop faster than their peers. This is only possible if their usage is regulated and done in a proper manner. Future research could lead to exact developments as to how video games could be constructed in an optimal way for children's development.

## **Sources:**

Clinic, C. (2024, December 2). Are Video Games Good for You? Cleveland Clinic; Cleveland Clinic.  
<https://health.clevelandclinic.org/are-video-games-good-for-you>

J, J. (2023, August 10). The Impact of Video Games on Your Child's Brain and Behavior | Healthy Gamer.  
Www.healthygamer.gg. <https://www.healthygamer.gg/blog/the-impact-of-video-games-on-your-childs-brain-and-behavior>

National Institutes of Health. (2022, October 24). Video Gaming May Be Associated with Better Cognitive Performance in Children. National Institutes of Health (NIH); National Institutes of Health. <https://www.nih.gov/news-events/news-releases/video-gaming-may-be-associated-better-cognitive-performance-children>

Parong, J., & C. Shawn Green. (2023). How Video Games Change The Brain. Frontiers for Young Minds, 11.  
<https://doi.org/10.3389/frym.2023.1177758>

Paturel, A. (2014, June). How Do Video Games Affect Brain Development in Children and Teens? Wwww.brainandlife.org.  
<https://www.brainandlife.org/articles/how-do-video-games-affect-the-developing-brains-of-children>