

PROJECT DESCRIPTION

Playing video games, including violent shooter games, may boost children's learning, health and social skills, according to a review of research in *American Psychologist*.

The study comes out as debate continues among psychologists and other health professionals regarding the effects of violent media on youth. An APA task force is conducting a comprehensive review of research on violence in video games and interactive media and will release its findings later this year.

"Important research has already been conducted for decades on the negative effects of gaming, including addiction, depression and aggression, and we are certainly not suggesting that this should be ignored," says Isabela Granic, PhD, of Radboud University Nijmegen in The Netherlands, lead author of the article. "However, to understand the impact of video games on children's and adolescents' development, a more balanced perspective is needed."

While one widely held view maintains that playing video games is intellectually lazy, such play actually may strengthen a range of cognitive skills such as spatial navigation, reasoning, memory and perception, according to several studies reviewed in the article. This is particularly true for shooter video games, which are often violent, the authors found. A 2013 meta-analysis found that playing shooter video games improved a player's capacity to think about objects in three dimensions just as well as academic courses designed to enhance these same skills, according to the study.

"This has critical implications for education and career development, as previous research has established the power of spatial skills for achievement in science, technology, engineering and mathematics," Granic says.

This enhanced thinking was not found when playing other types of video games, such as puzzles or role-playing games.

Playing video games may also help children develop problem-solving skills, the authors said. The more adolescents reported playing strategic video games, such as role-playing games, the more they improved in problem solving and school grades the following year, according to a long-term study published in 2013. Children's creativity was also enhanced by playing any kind of video game, including violent games, but not when the children used other forms of technology, such as a computer or cell phone, other research revealed.

Simple games that are easy to access and can be played quickly, such as "Angry Birds," can improve players' moods, promote relaxation and ward off anxiety, the study said. "If playing video games simply makes people happier, this seems to be a fundamental emotional benefit to consider," said Granic. The authors also highlighted the possibility that video games are effective tools for learning resilience in the face of failure. By learning to cope with ongoing failures in games, the authors suggest that children build emotional resilience they can rely upon in their everyday lives.

Another stereotype the research challenges is the socially isolated gamer. More than 70 percent of gamers play with a friend, and millions of people worldwide participate in massive virtual worlds through video games such as "Farmville" and "World of Warcraft," the article noted. Multiplayer games become virtual social communities, where decisions need to be made quickly about whom to trust or reject and how to lead a group, the authors said. People who play video games, even if they are violent, that encourage cooperation are more likely to be helpful to others while gaming than those who play the same games competitively, a 2011 study found.

CONTENT:

This dataset contains a list of video games with sales greater than 100,000 copies. It was generated by a scrape of vgchartz.com.

Fields include

- Rank - Ranking of overall sales
- Name - The games name
- Platform - Platform of the games release (i.e. PC,PS4, etc.)
- Year - Year of the game's release
- Genre - Genre of the game
- Publisher - Publisher of the game
- NA_Sales - Sales in North America (in millions)
- EU_Sales - Sales in Europe (in millions)
- JP_Sales - Sales in Japan (in millions)
- Other_Sales - Sales in the rest of the world (in millions)
- Global_Sales - Total worldwide sales.

The script to scrape the data is available at <https://github.com/GregorUT/vgchartzScrape>.

It is based on BeautifulSoup using Python.

There are 16,598 records. 2 records were dropped due to incomplete information.

As an analyst, keeping the above things in mind, answer the following:

PROBLEM STATEMENT

- Which place did “Call of Duty: Ghosts” gain the maximum sales?
- What genre of games is the most popular?
- Out of the entire data given to you, how many percent games does Electronic Arts publish?
- Which game reported the highest sales in Japan ever?
- Which games in North America report a sale of over 5 million USD?
- Which game reported the highest sale globally and in what year?
- How much sale did “Grand Theft Auto: San Andreas” report in the rest of the world?