

The impact of gaming on children and young people

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Abstract

The following research briefing examines the impact of gaming on children and young people's social skills and isolation, and the game *Fortnite* in particular. Video games can have positive impacts on young people such as focus, memory, and learning skills. On the other hand, video games may have negative impacts on players, such as increasing loneliness and anxiety issues. *Fortnite* is a game that is played globally. It encourages team playing, collaboration and other learning skills. However, the game can be a distraction for school students which has led to banning it from schools. In general, video games can be used as an educational tool, depending on how this is done and what types of games are used. Further research is needed on the impacts of *Fortnite* on young people and its potential as an educational tool.

Keywords

Video games, children and young people, social skills, social isolation, *Fortnite*

Key points

- Games can have positive or negative impacts on young people.
- Games can be used as an educational tool.
- *Fortnite* encourages team playing, collaboration and other learning skills.
- *Fortnite* could also be a distraction to students.
- Further research is needed on the impacts of *Fortnite* on young people.

Background

Digital and video games are highly popular across the globe. There are more than two billion people worldwide using video gaming and it has become an important component of young peoples' lives regardless of socio-economic background (Newzoo 2017). People Know How's Befriending project has revealed the popularity of video games,

in particular *Fortnite*, amongst many pupils in the schools in which they provide support, raising questions around its influence, both positive and negative, in young peoples' day-to-day lives.

Video games have been shown to have both positive and negative impacts on young people. They can improve

memory, focus and be used as an educational tool. They also encourage young people to acquire learning and communication skills (Gallagher 2014; Bokolas and Panagouli 2019). For example, digital games have been useful in the education of history and culture (Darvasi 2017). The strategy game series *Rome: Total War* that takes place during the time of Ancient Rome has been used to teach adolescents how historians think and gather information. The student-participants in the study responded well, using the game as a learning tool in place of traditional methods of memorising dates, events and interpretations (McCall 2011). As Filsecker and Hicke (2014) note, “commercial digital games players are developing problem-solving and literacy skills and these good commercial digital games are good learning principles that provide opportunities for players to participate actively and interactively during the game”. Another study by Ameerbakhsh et al. (2019) reports that University students found the use of serious games in marine ecology enjoyable and that expert demonstration is more effective than learning on their own.

Digital and video games can also have some negative outcomes when used heavily. Players that spend an excessive amount of time playing video games have been shown to have lower educational and career attainment as well as poorer social skills (Mihara and Higuchi 2017). Some of the addictive behaviours that gaming may create might be linked to existing issues such as anxiety, a low number of friends, decreased well-being, and higher instances of reported loneliness (see von der Heiden et al. 2019). It has been noted that problematic behaviours as

a result of video gaming are more likely to be found amongst male than female and younger gamers (cited in von der Heiden et al. 2019). It is also important to understand why people play games. For example, some of the reasons given for excessively playing games include using it as a distraction from problems, a coping mechanism, for social interactions with others online, as well as as a form of competition (von der Heiden et al. 2019).

Fortnite

Fortnite is a video game series launched at the end of 2017 by Epic Games. There are three games in the series - *Fortnite: Save the World*, *Fortnite: Battle Royale*, and *Fortnite Creative*. All three games are of high demand but *Fortnite: Battle Royale* has become one of the most popular games (Sloan 2018). As of 2019, about 250 million people are playing the game worldwide (Iqbal 2019). Depending on the analysis, either 45.75% or 62.7% of these players are between the age of 18 and 24. Majority of the players are male (72.4 or 83.7% depending on study). The median weekly time spent playing the game ranges between 6 to 10 hours (Iqbal 2019). About 15% of the players spend excessive time on the game which has led them to skip school (Iqbal 2019).

In *Fortnite: Battle Royale* gamers are dropped onto an island from a flying bus via parachute. Up to 100 players can be dropped into the landscape. Initially the players have only a pickaxe which they use to construct shelters, collect material and weapons. All players play individually or in teams to be the last man standing (Marlatt 2019). The game is free to download on different devices including Mac, PlayStation 4, Xbox, and mobile

devices. There are a number of blogs, channels, and unofficial pages that offer community support for the game (Marlatt 2019).

The popularity of *Fortnite* may arise from the cartoonish approach to the aesthetics of violence as compared to other shooting games such as *Call of Duty* and *Grand Theft Auto* (Marlatt 2019). *Fortnite* uses funny, quirky characters and situations (Marlatt 2019). The game is also easily accessible, which allows for broader use (Parkin 2018). Paumgarten (2018) notes that “there’s something new emerging around *Fortnite*, a kind of mass social gathering, open to a much wider array of people than the games that came before”. As the game has attracted many adolescents, educational institutions have had increased concerns over its impacts and other games in general (Maag 2018; Marlatt 2019).

Positive benefits of the game

One of the benefits of *Fortnite* includes the creation of a collaborative community. The synchronous multi-player format allows the participation of multiple players rather than them merely operating as individuals (Marlatt 2019). Playing the game allows meaning-making and problem-solving in a “global neighbourhood” (Marlatt 2019). According to Marlatt (2019), it has the potential to be an educational tool when it comes to literacy learning. A literacy community as defined by Rousculp and Maring (1992) is “dynamic classroom environments that are rich in social relationships, in partnerships, and in collaborations involving talking, reading, thinking, and writing” (p. 384).

Fortnite gamers communicate through specialized vocabulary which is highly important for participation (Marlatt 2019). This is similar to academic success in literacy learning where understanding of what is read is needed for writing, speaking, mastery of the subject and applications of these in field-based scenarios (see Marlatt 2019). One possibility for using the game as an educational tool is to allow for discussions about the game in the classrooms, rather than allowing the game to be played in class on mobile phones (Schwartz 2018).

Negative impacts

Although there are educational benefits of the game and there are some modes of the game that are non-violent. *Fortnite* is a shooting game which discourages educational leaders to use it as an educational tool (Marlatt 2019). Furthermore, although “people can be cooperative within these spaces and communities, but they can also compete fiercely for status” (Gee & Hayes, 2012). Other issues related to playing the game include distractions from responsibilities. For example, at school, the game is played during breaks, often distracting the students from schoolwork (Hernandez 2018). Low energy and poor concentrations have also been noted in some schools (Hernandez 2018). A number of schools in Australia have warned parents against some of these negative impacts of the game on the pupils (Zhou 2018). The parents have raised issues such as change in behaviour including online bullying and inappropriate language (Zhou 2018).

The effects of a game depend on the individual. In some cases it can become

addictive. Addiction is defined as “any compulsive activity or involvement which decreases a person’s ability to deal with other aspects of his life to a point where the activity or involvement comprises the dominant source of emotional reinforcement and identity for the person” (Peele 1985). The addiction could become a “gaming disorder” for some individuals. According to the World Health Organization 11th Revision of the International Classification of Diseases (ICD-11) gaming disorder is “characterized by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences”. Thus, family and friends can try to notice any change of behaviour over a 12-month period.

Conclusions & recommendations

Video gaming can have positive or negative impacts on players. Regarding young people it can be viewed positively as educational tool or negatively as a form of addiction. Similarly, the game *Fortnite* specifically could either have positive or negative impacts. Some of the benefits of *Fortnite* include the creation of a community that is cooperative in most cases. *Fortnite* also has the potential for improving literacy skills. The excessive use of the game and the presence of violence makes it less desirable to be used as an educational tool.

Much research has been conducted around the topic of gaming however there is currently a lack of research on the impacts of *Fortnite* in particular. Although there are potential positive and negative impacts of the game on young people, further data may be necessary in order to understand what these impacts are.

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