



Gaming the system

OCTOBER 2019



REVEALING REALITY

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Summary

The overwhelming majority of children (93 percent) in the UK play video games¹. Yet despite its popularity, the culture of ‘gaming’- its rules and its rituals, the varying profiles of players, the risks they face – tends to be spoken of by adults, whether they be policymakers or parents, as if it were an alien landscape.

While children can get great pleasure from playing games, either alone or with their friends, the widespread popularity of gaming and the evolution of gaming from offline to online has raised a number of concerns, such as children being able to talk to strangers or becoming the target of bullying. Many of these concerns tend to stem from more general concerns about child safety online rather than actual experiences of gaming. There are worries that over-exposure to video game content may have a damaging effect on the development and socialisation of young people, something compounded by concerns about the length of time children spend playing. A growing concern is around the potential for children to be negatively affected by violent imagery and other inappropriate content. The possible link between gaming and gambling, and the concurrent risk of addiction, is also a source of concern.

We spoke to children aged 10 to 16 to better understand what they love and what they dislike about gaming and how gaming could be improved for them.

A form of play: the positives to online gaming

Children say there are benefits to playing online. These can include socialising with their friends, learning new skills, and above all, having fun. In this way, online gaming extends normal play into the digital landscape, and children play by the same social rules that they apply offline. Most online social interactions are with people the children already know outside of online gameplay, such as school friends, and gaming provides a chance to build on these connections. Children choose to play games they know their friends are playing in order to cement their friendships and bond over common shared interests.

“If a lot of people like it at school, you think you’ll like it as well.”

Lawrence, 12 (Minecraft player)

In a world where children are less and less likely to be allowed out to play with friends outside of the home, for many children, online gaming and their social lives are closely intertwined. Children consider the shared experience of gaming to be just as important to their friendships, as other non-digital experiences. For some children, online gaming provides a social network through which they can also just talk to their friends, regardless of whether or not they were actually playing.

“I can chat to all my friends when they’re not actually with me... or if they just want to tell me stuff in private.”

Anna, 10 (Roblox player)

¹The Rip-Off Games: How the new business model of online gaming exploits children. ParentZone. 2019. Children were aged 10-16 <https://parentzone.org.uk/system/files/attachments/The%20Ripoff%20Games%20-Parent%20Zone%20report.pdf>

Social harms and the negative experiences of online gaming

However, children also say there are negative aspects to playing online, including feeling frustrated or being teased and bullied by both friends and strangers. Despite the fact that many of the same offline social rules apply to the online world, in some instances, children notice a difference in friends' behaviour when playing online games. This was fuelled in part by the privacy of headsets and a perceived lack of consequences for teasing or bullying online.

Children are scorned in games such as Fortnite if they are seen to wear the 'default skin' (the free avatar they receive at the start of the game). Children say they feel embarrassed if they cannot afford new 'skins', because then their friends see them as poor.

"If you're a default skin, people think you're trash."

Nina, 10 (Fortnite player)

Some children talk about the aggressive and unpleasant behaviour they experience from other players, for example having their work destroyed.

"I was annoyed when I spent six months building a football stadium and my brother's friend destroyed it."

James, 12 (Minecraft player)

Children also say that they encounter risks from strangers online – for instance, the risk of being scammed for their personal information. For example, on the popular online game Roblox, children report being offered access to 'Robux generators' by other players to improve their game, in return for personal information or passwords, was commonplace. There were a couple of instances in which children had met and formed friendships with online strangers. In these cases, children felt that they had been careful in these interactions but recognised that forming these sorts of connections with strangers online could be harmful.

"I did add this one person who was really nice to me, but he sounded about 17 or 18 and I don't want to meet a 17/18-year-old in a park."

Julian, 11 (Fornite player)

In most cases, children felt that they had strategies to avoid the worst impacts of negative experiences, including muting other players' microphones or blocking and reporting other players.

"That's not fair because it's a solo game and it's meant to be every person for themselves - so I reported them."

Julian, 11 (Fortnite player)

Time spent playing games

Younger children reported playing games for an average of two to three hours a day, whereas older children are playing for three or more hours. When asked, some children reported feeling addicted to gaming and do not feel in control of the amount of time they spend playing games.

"You don't realise how long you're actually playing for... sometimes it's 5 or 6 hours."

Nick, 16 (FIFA player)

The close link between online gaming and their social lives means that in some cases children feel compelled to play even when it detracts from other activities. Children can think of alternative things to do if they are not able to play online games, however, would also say that they would become frustrated if they could not play for a long period of time.

Monetisation is where online gaming starts to look less like ‘play’ and more like gambling

The amount of money children spend on games varies. In some cases, the amount of money children report spending on games has increased annually, with some spending over £300 in one year. Peer pressure from friends and online strangers, as well as influence from famous gaming YouTubers, are all factors that children say lead to them feeling pressured to spend money on in-game purchases.

Game design also encourages spending. In games such as FIFA, children can either improve by investing significant time to build up their squad or spend money in the hope of quickly advancing their position. The latter option - to spend money in the hope of progressing - is the most popular option across the sample. With new editions of FIFA being released every year, children feel as though there is an expectation and pressure to buy new players, spend money and build up their team as quickly as possible.

“It takes a long time to get somewhere so you just do that [open player packs].”

Tim, 16 (FIFA player)

In some cases, this spending was done in order to receive a collection of unknown rewards, so-called loot boxes. The most obvious example of this is FIFA player packs, which some children acknowledged as being similar to gambling.

“It’s like gambling- you could lose your money and not get anyone good, or get someone really good.”

Tim, 16 (FIFA player)

The lack of guaranteed reward from these purchases can leave some children feeling as though they have wasted their money. The potential to receive a good reward means that children also feel that they are not in control of their spending, and sometimes try to ‘chase losses’. In general, children do not have effective strategies to manage their online spend.

“I never get anything out of it [buying packs] but I still do it.”

Lee, 14 (FIFA player)

“You feel like it’s a waste of money... and then you open more.”

Nick, 16 (FIFA player)

If gaming is an online extension of children’s offline lives, then the rules should be the same

Given that gambling is not allowed in children’s offline lives, its presence in their online lives requires close attention. Adults who gamble often tend to have boundaries and control measures in place to mitigate against harm. Children are unlikely to be able to put these in place for themselves. If there are

concerns around exposure to gambling at an early age offline, then those same concerns should translate into the online world.

The Government's proposed duty of care addresses some of the harms revealed in our research, including cyberbullying and violent content. Underage use is also a problem, however the white paper refers to this specifically in relation to social media, not gaming. And our research reveals major harms on online gaming platforms, especially financial harms, which are currently not listed as within scope of the duty of care.

Policy recommendations

This report calls for urgent action to address these harms:

Limiting the role of money

There has been some action from industry to address harms associated with loot boxes. But these measures do not go far enough. One obstacle to progress in this space is the current legal definition of gambling. Gambling laws need updating to reflect the reality of children's experiences of spending money within games.

1. Financial harm should be specifically listed as within scope of forthcoming online harms legislation.
2. Developers and platforms should not enable children to progress within a game by spending money. Spending should be limited to items which are not linked to performance - e.g. aesthetic items such as new outfits.
3. All games which allow players to spend money should include features for players to track their historic spend.
4. Maximum daily spend limits should be introduced in all games which feature in-game spending and turned on by default for children.
5. Parents should speak to children about the ways in which games companies monetise their products, and discuss alternatives if parents and children would like to avoid these aspects of gaming, such as new subscription-based services which have recently come to the market.
6. The Government should take immediate action to amend the definition of gaming in section 6 of the Gambling Act 2005 to regulate loot boxes as gambling.
7. The Government must also undertake a wider review into the current definition of gambling in the Gambling Act, to ensure that it accurately reflects new forms of gambling, including those forms found in online games.

Helping children to manage their time

Although children rarely say that their only hobby is online gaming, they describe feeling that it is an inescapable part of their lives, given how popular it is with their peers, and they sometimes worry about becoming addicted to it. A successful game will make children want to keep playing, but this crosses a line when children feel out of control. Government, regulators, parents and industry all have a role in helping children to manage their time.

8. The final version of the age appropriate design code must include provisions on nudge

techniques and detrimental use of data. The Government must ensure that the code is laid before Parliament as a matter of urgency and the ICO should pay particular attention to games companies and distribution platforms when monitoring compliance.

9. Games companies and platforms should share aggregated anonymised data about players with independent researchers, including average length of time spent on particular games, to facilitate much needed research into the nature and effects of excessive use. This can be done in a way which is consistent with data protection legislation.
10. Parents should talk to children about the importance of balancing time online (including on games) with time spent offline, and being mindful of how they spend their time online. The Children's Commissioner's Digital 5 A Day can be used as a tool for facilitating these conversations.

Doing more to ensure content is appropriate

There is no single age rating system for games and some platforms do not require them at all. Perhaps most worryingly, parents do not seem to take age ratings for games as seriously as they do other age ratings (for example, for films). The age ratings system for online games need to be overhauled, and parents need to be informed about why it is important.

11. Games that are distributed online should be subject to a legally enforceable age-rating system, just as physical games are. There should be a requirement for an additional warning to be displayed for games which facilitate in-game spending.
12. The Government should consult on whether all age ratings of all games distributed online should be moderated pre-release, just as physical games are.
13. The Government and industry must do more to raise awareness of the importance of age ratings and parental controls so that parents make greater use of them.

Teaching children to be digital citizens

Online games are places in which children come together and interact with friends (and sometimes people they do not know) as well as to play the games themselves. Just as in the offline world children need to be guided in what is acceptable behaviour and prepared for social challenges they may face, so too do they need to be guided in the online world too. More needs to be done to prepare children for what they might encounter in online games.

14. Online games should be a key focus of digital citizenship lessons in schools, rather than lessons focusing exclusively on social media. Teachers involved in the delivery of these lessons should be familiar with how key online games that are popular with children work.
15. Children should be prepared for the social aspects of the games they play, to increase their resilience and awareness of how their actions may affect others.

The gaming landscape

Gaming is now a substantive part of mainstream popular culture. The gaming industry is predicted to be worth \$180.1 billion by 2021, with an estimated 2.5 billion video gamers worldwide². Though gaming is also popular among adults, an estimated 93 percent of children in the UK aged 10 to 16 play video games³.

However, despite its dramatic increase in popularity, gaming and the culture behind it remains unfamiliar to many, including policymakers and parents. This section introduces the current gaming landscape and provides a brief overview of the potential harms children may encounter.

Gaming moving from offline to online

Video games are increasingly played online⁴. This is in part due to a wider digital and online shift, which has also changed the way video games (both offline and online) are purchased. Online gaming means that users can play multiplayer games with, and against, many different people worldwide. This is often seen to be more rewarding than offline play: playing with human opponents provides new rewards, more variety and more exciting challenges.

Due to the demand for online gaming, many games are now played entirely online - Fortnite is one popular example. Online gaming has blossomed into one of the most profitable entertainment industries in the world, making up the bulk of gaming industry revenue⁵.

Concerns around online gaming

A number of popular games children are playing - for instance, Call of Duty, Grand Theft Auto and Battlefield - are designed with adults in mind; this could be due to the fact that the average age of a gamer in the UK is 43⁶. This, coupled with the online nature of gaming, has given rise to a number of concerns about children and gaming. There are worries that over-exposure to video game content may have a damaging effect on the development and socialisation of young people, something compounded by concerns about the length of time children spend playing. One increasingly recognised concern is the potential for children to be negatively affected by violent imagery and other inappropriate content. The possible link between gaming and gambling, and the concurrent risk of addiction, is also a growing worry. This was recently discussed in a BBC news article describing a child who had developed a gambling addiction following an intense period of in-game spending⁷. The wider dangers of in-game monetisation were also discussed in a recently released Parent Zone report⁸.

³The Rip-Off Games: How the new business model of online gaming exploits children. ParentZone. 2019 <https://parentzone.org.uk/system/files/attachments/The%20Ripoff%20Games%20-%20Parent%20Zone%20report.pdf>

⁴ https://www.theesa.com/wp-content/uploads/2019/03/ESA_EssentialFacts_2018.pdf

⁵ <https://www.limelight.com/resources/white-paper/state-of-online-gaming-2019/#overview>

⁶

https://media.nesta.org.uk/documents/did_you_really_take_a_hit_understanding_how_video_games_playing_affects_individuals.pdf

⁷ <https://www.bbc.co.uk/news/stories-49941610>

⁸ The Rip-Off Games: How the new business model of online gaming exploits children. ParentZone. 2019 <https://parentzone.org.uk/system/files/attachments/The%20Ripoff%20Games%20-%20Parent%20Zone%20report.pdf>

The changing monetisation of gaming

This new online space has paved the way for a growing range of ways to spend money on gaming, beyond the initial moment when the game is purchased.

The most dominant of these are in-game purchases, also known as micro transactions. For many games, purchasing or obtaining the base-level game only unlocks a fraction of the gaming experience, with the option to spend more to improve gameplay. In some cases, these extras can also be earned without spending money, but this often takes considerable time. In-game purchases may enhance the look of a character (for example, clothing or cosmetics), give you an advantage in the game (for example, weapons or characters), or allow you to progress in the game by using real money or that which is earned in-game. These extra purchases are increasingly common across paid-for games and are vital to how 'free to play' (F2P) games make money⁹. These games allow players to access a large proportion of the game for free but make money through advertising or by including extra paid-for items.

One type of in-game purchase are loot boxes. This is where players can use in-game currency or real money to buy a loot box – a random selection of items or modifications that might be difficult or time consuming to earn otherwise. The contents of the 'box' are usually (but not always) unknown until a player opens it. These types of in-game purchases take various forms and are common across games of many genres and audiences, from Clash of Clans through to NBA, FIFA and Fortnite.



Fortnite: Loot box



Call of Duty: Reserve crate

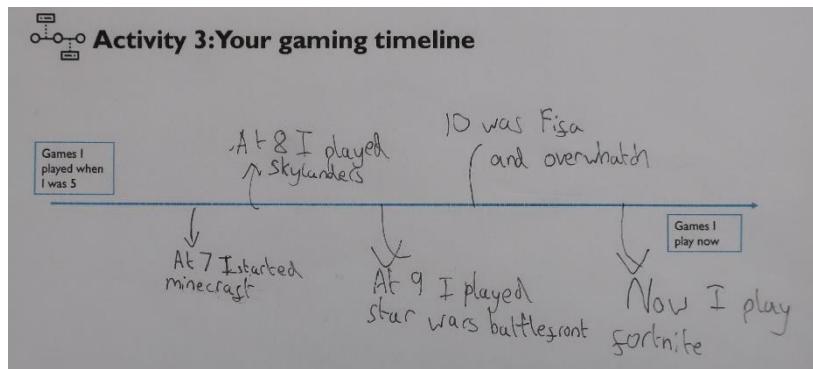
Some companies have faced backlash from players who feel that some games rely too heavily on in-game purchases, to the detriment of the gaming experience¹⁰. Concerns around exponential spending and the gambling-style loot boxes have also been raised. The gambling regulators in both Belgium and Netherlands have found that some loot boxes violate their gambling laws. Despite the backlash, these in-game purchases remain a source of huge revenue for games companies, and a source of fun for many players.

⁹ <https://www.ea.com/en-gb/games/library/freetoplay>

¹⁰ <https://www.theguardian.com/games/2017/nov/24/gambling-regulators-to-investigate-loot-boxes-in-video-games>

Children's experiences of gaming

In order to understand the potential benefits and risks of online gaming for children, this research set out to explore children's own experiences of the games they play. We conducted six focus groups, speaking to 29 children in total about their experiences of gaming. The children also filled out a five day behaviour diary of their gaming activities. The games we explored in detail were Fortnite, Minecraft, FIFA, Roblox and Call of Duty, with each group focusing on one of these games (more detail on these games can be found in the appendix).



Gaming timeline by Kieran, 11, Fortnite player

These games were chosen on account of their popularity and in order to cover various genres. They were also chosen to represent a range of common harms associated with online gaming, including violent imagery, explicit language/content, addiction and online bullying. In the case of some of these games, the research focused on certain online game modes as they had features that might cause specific harms. These were FIFA Ultimate Team, the Survival and Creative modes on Minecraft and Fortnite Battle Royale and Save The World.

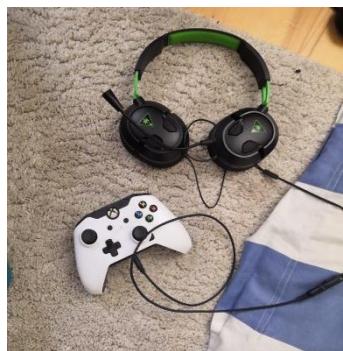
For all children in the sample, playing online games makes up a large part of their free time and in many ways can be viewed as an extension of 'play' within the digital landscape. It allows them to play with friends, learn new skills and ward off boredom. By exploring gaming experiences from a child-centred approach, we were able to report on children's self-articulated online gaming experiences and, at times, challenge common assumptions made on their behalf. This section explores the benefits and risks children reported when online gaming.

What are children playing and why?

Overall, the research found that younger children (aged 10 to 11) often spend two to three hours per day playing online games such as Fortnite, Roblox, Minecraft, Mario Kart and Skylanders, mainly after school and on the weekends. Older children (aged 15 to 16) spend around one to three hours per day playing games such as Rainbow Six Siege, FIFA, Call of Duty and Grand Theft Auto online, and often have to balance this with other time-pressured activities such as revising or doing their homework. Play time also varied from child-to-child depending on the devices they had access to and time restrictions, which were often determined by parents. While some children have their own mobile phones, tablets, computers and TV consoles in their rooms, others are restricted to one or two devices.



Gaming consoles: Nintendo Switch, Laptop, Smartphone, Wii U and video games



X-Box games console controller



PlayStation 4 games console controller

"I play Roblox on my iPad. I play Fortnite on my PS4. I play Roblox Royale High on my dad's phone."

Ciara, 10 (Roblox player)

Most frequently, children are playing towards an in-game objective, such as unlocking new game features, advancing to the next level or being the last person standing. Children also use gaming to kill time while they wait to do another activity, for instance, going to football training or having dinner. In these instances, play tends to be more of a passive means to end boredom rather than an opportunity to actively work towards an in-game objective.

For most children, gaming is a part of their social lives and they often choose the types of games they play based on their friends' recommendations. Playing the same games as friends provides children with shared topics to chat about at school, as well as the opportunity to spend more time with friends when at home. Children discuss new and upcoming games with their friends and share their excitement around a game's release.

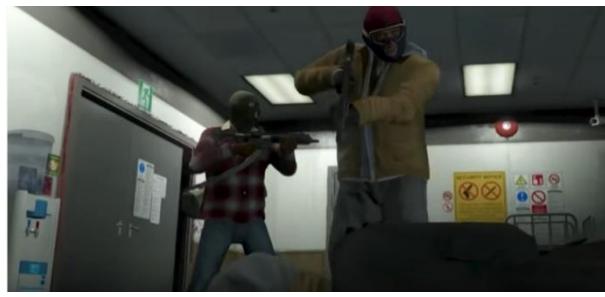
"If a lot of people like it at school, you think you'll like it as well."

Lawrence, 12 (Minecraft player)

Some children mention that advertisements have an impact on what games they play. For example, seeing a new game being played or endorsed by their favourite YouTuber encourages them to play it. At times, parental permissions also impact the games children can and cannot play, with most restrictions centring around the theme of inappropriate content. For example, some older children noted that their parents did not allow them to play Grand Theft Auto, an 18+ rated game, when they were around 11 years old due to the sexual imagery, explicit language and violent behaviour it displayed.



Grand Theft Auto: Game play



Grand Theft Auto: Game play

"I needed permission to play GTA [Grand Theft Auto]. It's got a lot of sexual stuff in it, so that's probably why we all weren't allowed to play it."

Aman, 15 (Call of Duty player)

Exploring online gaming and play

Many of the key elements associated with conventional non-digital play are mirrored in online videogame play. These can be categorised into distinct themes - social, skills, mood, decisions around appropriate behaviour, and regulating play time - that each have associated harms and benefits, as discussed below.



Minecraft focus group: best game moments



Minecraft focus group: worst game moments

Online gaming can be social

Social interaction provides many of the most significant benefits of online gaming for children. Most online social interactions are with people the children already know, and when harmful interactions with strangers do occur, children often have strategies to reduce or ignore them.

New ways to play

One of the primary benefits of playing with others online is that it opens up new opportunities and types of gameplay, such as multiplayer game modes and team strategy. Across the sample, children say that their experience of playing video games is improved by the online presence of other people.

"It depends if all my friends are playing. I don't want to play a game by myself."

Dan, 16 (Call of Duty player)

These new avenues of gameplay are broadly split between being competitive and working cooperatively. In the FIFA groups, playing competitive games with a group of friends (often while wagering players against each other) is an essential element of the children's gaming experience. Conversely, group play

on Minecraft offers opportunities to be more cooperative and the children enjoy working together to “help friends make a home or build houses”. Most of the children in the Fortnite focus group prefer playing Battle Royale as part of a ‘squad’ or ‘duo’, as it makes gameplay easier and more fun.

“I only play on my own when I’m really bored.”

Beth, 10 (Fortnite player)

Playing with my mates

Across the sample, children enjoy the chance to continue socialising with their friends when not together in person, and “playing with my mates” recurs as one of the highlights of playing their respective games. In many cases, gaming helps to build friendships by providing a shared interest through which children can interact and bond. Most children play online games as part of a group of friends they know offline. Within these groups, gaming is a key topic of conversation. For example, the Roblox group mentioned that certain in-game moments become a topic of conversation at lunchtime at school.

Children use various methods to decide when and what to play with their friends. This sometimes included making specific plans during the school day, but more often involved logging into the game, assuming a friend would be online.

“I’ll just see who’s on the chat when I log on.”

Anna, 10 (Roblox player)

The quality of in-game social interactions was enhanced by the use of supporting technology. One of the FIFA groups reported that groups of up to 10 friends would use the Xbox app on their phone to have conversations while playing. Jacob, 14, said: “It’s like a party”. All children, bar those children in the Roblox group, also have headsets, allowing them to talk freely with their friends.

“All you have to do is talk through that [headset], say if I use Facetime it wastes my battery.”

Beth, 10 (Fortnite player)

One of the children in the Roblox group implied that, for her, Roblox is as much a social network as a game, and she would sometimes log on simply to talk with friends.

“I can chat to all my friends when they’re not actually with me... or if they just want to tell me stuff in private.”

Anna, 10 (Roblox player)

Although all children speak about how gaming offers a medium to socialise with existing friends, the type of interactions and the topic of conversation depends on their level of engagement. During more passive moments, when waiting for a game to load or when in a “less stressful” game mode, players are more likely to have general conversation about non-game topics, thereby reinforcing offline connections. For example, the Minecraft group reported that doing more menial in-game tasks was a common trigger for general discussion over their headsets.

“When we mine in different directions, we just talk to each other.”

Lawrence, 12 (Minecraft player)

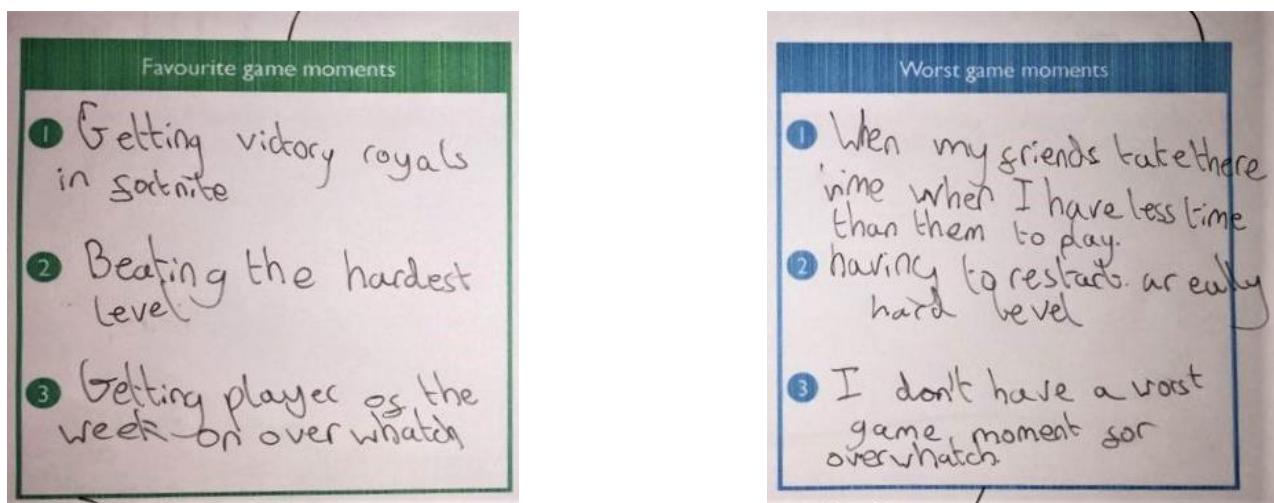
However, during more active game moments - for example, when competing or cooperating to complete an objective - discussion would centre on the game itself. In the Call of Duty group, playing competitively meant there was little space for more general conversational chat. Children report that they sometimes deliberately play more passively and talk about more general topics, commonly centring around what happened at school or other newsworthy information.

"When we're chatting over the headset, we just talk about stuff that happened at school."

Aman, 15 (Call of Duty player)

One topic of conversation that arose when discussing the benefits and risks of online gaming was the ability to compete against friends. Children in the FIFA groups mentioned that they would wage bets against friends, often online currency, on who had the best team or would win a match on FIFA. One child mentioned that he and his friends bet real money on these wagers and friends would have to "pay up" at school the next day. Online gaming appeared to provide another medium through which children could engage in personal rivalries against friends.

Brandon, from the Leeds FIFA group, referred to one of his best moments as "beating Nick every game", and his worst as "getting beat once or twice by Tim". The importance of these rivalries to the children's friendships was illustrated by how much value they place on "[getting] bragging rights". Similarly, children across the groups took great pleasure in winding each other up, and in the groups there were multiple references to enjoying the fact that one of your friends had seen a funny moment that had happened to you in-game.



**Favourite and worst game moments by Jacob,
14, FIFA player**

Children perceive some of the most frequent harms of social play to come from interactions with their existing friends. Most harmful interactions among friends tend to centre around 'teasing' or arguments within groups, rather than being singled out or bullied. These interactions are often fairly light-touch - children reported being teased when they are playing badly or laughed at by the group when they were heard over the headset talking with their parents.

Some children noticed a difference in their friends' behaviours online and offline, mentioning that friends may say something online while gaming that they would not say to them in real life. For instance, one child mentioned that friends had waited until playing online after school to tease him about

something that had happened at school. Headsets, and the ability to chat with friends while gaming online, allow children to say things they might not wish to say face to face, but with this came the increased likelihood of teasing and bullying.

In the Fortnite group, children reported that friends (as well as strangers) tease each other over which in-game purchases they could afford. Because players need real money in order to buy V-Bucks, this teasing creates a sense of who is ‘rich’ or not at school, and players without many additional items are made to feel excluded or different. Beth, 10, reported being made fun of for only having one skin as a result of her family’s financial situation.

“Sometimes if you are wearing the default skin you can get bullied. My mum has just got a card, so I don’t really have many.”

Beth, 10 (Fortnite player)

Playing with strangers

Harms associated with the social elements of online gaming, such as ‘stranger danger’ and online bullying, are often discussed as one of the biggest concerns facing children. However, these harms did not dominate the interactions that children in our sample reported – most interactions with other players are game-centric. Across the groups, children reported being aware of the dangers of talking to strangers online, with many saying they had strategies to avoid harm or to avoid talking to strangers altogether. However, for most children, talking to strangers is not something they express an interest in doing.

When children do talk to unknown players, they say that most of these interactions are centred on elements of gameplay or the game itself as opposed to disclosing any personal information.

“I never properly have a conversation. I normally just say stuff about the game or that I’m really enjoying this.”

Kaiden, 10 (Roblox player)

The Minecraft group reported that conversations with strangers tend to focus on the game generally and how good they are or “how many wins you’ve got” (Alex, 12). Similarly, on FIFA some children reported discovering shared interests with other players, but this was rare. Even on games where social chat is essential to gameplay, conversation tends to remain within the bounds of the game. In Adopt Me!, one of the most popular Roblox games, players can create and join virtual families. Anna, 10, talks to other players to try and persuade them to join her virtual family, but rarely about anything else.

Some common social harms associated with online gaming did arise in conversations with the children. This included feeling bullied by others, being subject to aggressive behaviour and being at risk of online ‘scams’. ‘Scammers’ were known to be anti-social players that tricked players into giving them personal information.

On Fortnite, some players reported receiving abuse for being unable or unwilling to pay for certain in-game purchases, particularly skins.

“If you’re a default skin, people think you’re trash.”

Nina, 10 (Fortnite player)

Those in the Roblox group reported being provoked by other players “just for the fun of it” (Ciara, 10), while a number of the children feel apprehensive about building their own games in case “dislikers and commenters” leave negative comments. Similarly, James in the Minecraft group remembered an occasion where an unknown player had blown up a house he had created in the game.

Verbal and written abuse is also a common part of gameplay across various games, from friends and other unknown players. On FIFA, in-game conversation is “usually just [the opponent] shouting at you” (Nigel, 15), including threats to fight or explicit language. Receiving a “few messages” from an opponent after winning at the last minute or by a narrow margin was also a common experience. These sentiments are echoed on Fortnite, where other players can sometimes be “aggressive” and “get really angry when they die” (Kieran, 11).

There were some examples of children being asked to share personal information in games. On Roblox, the children reported that being offered access to ‘Robux generators’ by other players to improve their game, in return for personal information or passwords, was commonplace. This was echoed by the Minecraft group. In these instances, children reported that they are aware of the risks of giving out personal information, and as a result have not done so.

Despite encountering a range of risks during online social play, almost all the children say they have strategies to avoid or mitigate the worst harms associated with these moments. Learned through experience, discussion with friends, or seeing issues raised by others in their game community, these include identifying situations to avoid, taking action to remove harm by reporting other players, or ignoring certain behaviours. Interestingly, school lessons were not mentioned by the children as one of the ways they had learnt to mitigate harms online.

Across the groups, being aware of the dangers of online play is seen as an intrinsic part of gaming.

“You can only make things dangerous for yourself.”

Kaiden, 10 (Roblox player)

There were a couple of instances in which children had met and formed friendships with online strangers. In the Fortnite group, Julian had spoken to a stranger over his headset, added them as friend in the game and recently met them in an offline context. He regarded the experience as a positive one and had gotten his parents’ permission before meeting the boy. Similarly, Nina bonded with another player over a shared skin and now considers them a friend. In these cases, the children felt they had been careful but recognised that forming these sorts of connections with strangers online could be harmful.

“I did add this one person who was really nice to me, but he sounded about 17 or 18 and I don’t want to meet a 17/18-year-old in a park.”

Julian, 11 (Fornite player)

In some cases, children act to avoid harmful situations. When other players are saying “mean things” about her on the in-game Roblox chat, Ciara, 10, will “just mute them, so I can’t see what they’re saying about me”.

Other children identified developing situations and avoided them. Josh, 10, is aware that other players might be trying to get personal information from him, so knows that “if they ask for anything just say no”. The Roblox group reported they can identify “scammers” through certain clues – they tend to chat using “computer writing” or disappear once games begin - and they can therefore avoid them easily. Overall, the success of these strategies allows interactions with strangers to be “okay”.

Across the groups, children see a certain level of abusive language or aggression as inevitable, and therefore say it is to be ignored and not taken personally. The FIFA group were able to ignore players who shouted or used abusive language, finding such moments “funny”. Similarly, on Call of Duty, some children see other players becoming angry as part of the fun of online play.

“When people rage it’s just funny hearing them.”

Aman, 15 (Call of Duty Player)

Playing by the rules

Children are also aware of, and keen to ensure, in-game rules are upheld while online gaming. They have clear visions of what they feel to be ‘good’ and ‘bad’ gaming behaviour.

For example, Julian (11) from the Fortnite focus group attributes using hacks, or teaming up with other players whilst in solo mode, to exhibiting bad gaming behaviour. Most of the children in the Fortnite group have reported another player they thought was not playing fairly.

Moments like this provide opportunities for children to explore what they understand good and bad play behaviour to be and often influences how they behave in games. In some cases, it also provides a learning moment for children on how to navigate experiences with ‘bad players’, with solutions often resulting in children blocking or reporting other players.

“That’s not fair because it’s a solo game and it’s meant to be every person for themselves- so I reported them.”

Julian, 11 (Fortnite player)

Many children are navigating the online gaming space similarly to how they would the real world. Frustrating moments, such as bad behaviour by other players, appear to provide ways for children to explore ideas of right and wrong.

Some children say that although they might be tempted to do so, they won’t ruin someone else’s creation because “it wouldn’t be nice” (Minecraft focus group), indicating a level of emotional maturity that could be beneficial outside of online gaming. Henry, 12, noted how he has learnt “resilience” through playing Minecraft, given that he has experienced his creations being destroyed by others in the game.

“If you lose something, then you work hard to get it back.”

Henry, 12 (Minecraft player)

Online gaming can develop skills

One of the other primary benefits of online games is that it gives children the opportunity to learn and develop soft skills, specifically strategic thinking, teamwork and creativity.

Strategic thinking

Most games we explored required an element of strategic thinking. For example, when discussing FIFA children spoke about selecting players that worked well together and trading worse players on the transfer market for more experienced ones. The game required children to think ahead and plan the tactics they might use in a certain match, putting a player's speed against another player's skill. Similarly, in the Fortnite group, children spoke about the strategies they might use to win a game, whether that be working as part of a team or using a stealthier tactic when playing solo to stay alive for longer.

Teamwork

In the focus groups, children talked about how playing in a team or a clan taught them how to work as part of a team and cooperate with other players. For instance, in school, children will talk about different combinations of strategies they could use to win a game in Call of Duty or Fortnite. This means that when they log on to play a game in the evening, each player knows what their individual goal is - for example, defending the base or killing opponents - in order to give their team the best chance of winning. This allows children to not only develop strategic thinking skills but also develop the methods by which they communicate with their friends and work effectively as a team.

"One of the key things is communication...you talk to team mates, so you know whether to fight someone or run."

Kieran, 11 (Fortnite player)

Creativity

Some online games give children the opportunity to develop their creative thinking at different stages of the game. Children who regularly play Minecraft and Roblox say that playing these games helps them think "more creatively" (Lawrence, 12), with some even commenting on how these creative skills may help them in the future with, for instance, designing buildings.

"I'd like to build a house. Maybe I could become an architect or something."

Lawrence, 12 (Minecraft player)

Given that there are no time pressures or significant targets to achieve in creative mode, children spend hours building stadiums and houses in Minecraft and modifying their avatar's appearance in Roblox. The limited time pressures mean that these games provide a space for children to feel a sense of achievement when they finish creating something, especially if it brings kudos amongst other players.



Fashion famous game in Roblox

For example, Ciara (10) enjoys dressing up and competing with other players on a virtual runway in the game Fashion Famous on Roblox. Here she is able to receive top rankings among other players for her fashion designs, which makes her feel good about herself and boosts her confidence.

However, children also reported feeling as though their time has been wasted when time spent building something is ruined or destroyed by other players.

"I was annoyed when I spent six months building a football stadium and my brother's friend destroyed it."

James, 12 (Minecraft player)

Online gaming can influence mood

Gaming has an impact on children's moods, either elevating, bringing down or otherwise altering their emotional state both in the moment of play and afterwards. Different emotions not only inform whether children choose to game or not, it also informs how children choose the game they want to play.

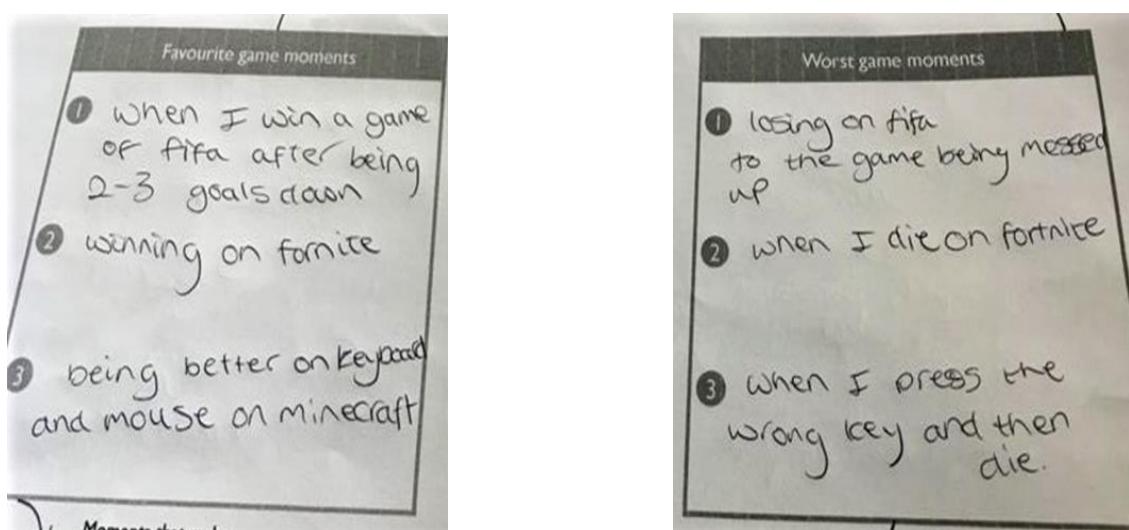
In some cases, children actively select games they think will change how they are feeling, and in others they will choose a game according to the mood they are already in. For example, some children mentioned playing open world games, such as Minecraft and Roblox, to relax or unwind. These have limited time pressure or in-game objectives to complete, and therefore are less mentally strenuous.

In games such as Call of Duty or Fortnite, children say that you have to be in the "mood to play it" (Connor, 15, Call of Duty). The amount of concentration required, coupled with the time pressure and in-game objectives to complete, often means that these games are not thought of as games to play when you want to relieve stress.

"It's very intense, my heart starts beating fast...my heart will be pounding."

Kieran, 11 (Fortnite player)

Across the groups, there were instances in which gaming negatively impacted children's moods. For example, in moments when play does not go according to plan, games are likely to negatively impact a player's mood. Many of the "worst moments" children mentioned having while playing were to do with being killed on a particular game or losing to one of their friends. Feelings of frustration were often reported as one of the reasons why games became unenjoyable.



*Favourite and worst moments by Brandon,
16, FIFA player*

Similarly, feeling as though you have been unable to reach a personal in-game objective - for instance, getting to another level, beating a high score, or being the last one standing while playing - not only makes the game unenjoyable but also made some children feel as though time has been wasted.

"We were both mining in different directions. I wasn't finding anything. I got a bit frustrated, not angry."

Otis, 12 (Minecraft player)

Despite their frustrations, overall the children we spoke to find gaming to be a positive and enjoyable experience, offering them a chance to play with friends and learn new skills.

"It can't not be fun. If you are playing a game and not having fun, why are you playing?"

James, 11 (Minecraft player)

Given that the majority of gameplay is enjoyable, many children use gaming to elevate their mood. Across groups, children noted how playing online games has the ability to cheer them up if they are feeling sad, stop them from feeling bored as well as act as a form of stress relief after a busy day.

"If I'm sad, I'll normally play things that make me happy."

Kaiden, 10 (Roblox player)

Online gaming can be hard to control

Most children in our sample were not worried about the amount of time they spent gaming. For many it is their favourite thing to do on account of the benefits it gives them and how it acts as an extension of their social life. Across the groups, children rarely reported feeling as if there was a trade-off between playing online games or spending their free time doing something else. They still play outside with their friends, go to football training or visit their grandparents at the weekend.

"I wouldn't go too crazy-maybe I'd play for a few hours."

Lawrence, 15 (Minecraft player)

Though most were comfortable with the amount of time they spent gaming, some children feel bound to playing online games due to the close link between gaming and their social life.

"I could go out with my friends but then I realise they're the friends I'm playing with...I've got to persuade them [to stop playing the game]."

Lee, 14 (FIFA player)

Some children find it hard to convince friends to go outside and play with them because most of their friends prefer to play online games indoors. As a result, gaming is an inescapable part of children's social life and an activity of play, given that a large part of their social interaction rely upon playing online games with their friends.

"If you did go outside, there'd be no one to hang out with."

Brandon, 15 (FIFA player)

In rare cases, a few children mentioned feeling that gaming is addictive and is the only thing they can do with their free time - for example, avid gamer Otis, 12, reported feeling "addicted to all the games [he] plays". In these instances, children reported feeling a loss of control over how they spend their free time, given that they feel compelled to play for multiple hours a day, sometimes to the detriment of other activities.

In many cases, and particularly for younger children, regulating play time is down to parental intervention. This varied across groups but was most noticeable in younger children who play Roblox. Rose is only allowed to play on Wednesdays, Fridays and weekends, whereas Anna, 10, can play whenever she wants and will often play for two to three hours per day.

Some of the older children mentioned the need to revise for GCSEs as a reason they might need to spend less time on the game. However, none of them have actively tried to cut down the time they spend on games.

"There are other things you could be doing...like revising."

Chris, 14 (FIFA player)

Some of the addictive qualities are exacerbated by the game itself, which requires players to spend a lot of time and/or money in the game in order not to be left behind. For instance, in FIFA, with the release of new players and the ability to upskill existing players using the daily squad-building challenges, there is a sense that those playing the game need to play consistently in order to have a good chance of winning.

"You don't realise how long you're actually playing for... sometimes its 5 or 6 hours."

Nick, 16 (FIFA player)

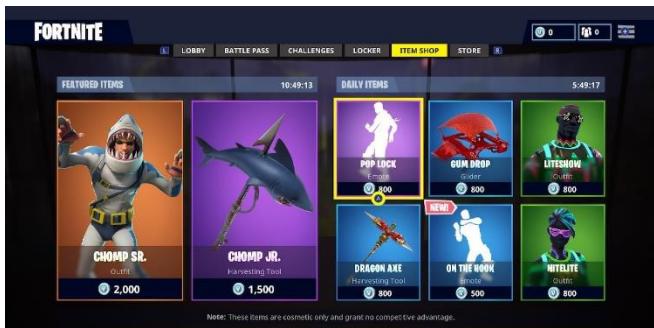
In the FIFA groups, none of the boys minded the idea of not being able to play FIFA for a week, saying they would just play outside or meet up with friends. However, most say that they would be quite frustrated if they couldn't play the game for a month, given that it would affect their game progress and chances of getting good players before their friends.

Gaming and gambling

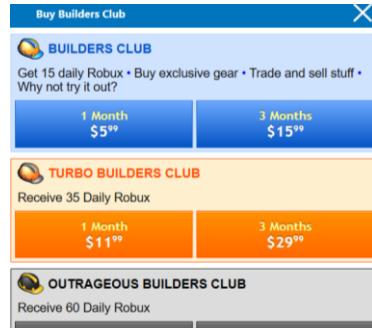
When money is involved, online gaming starts to look less like play. The reasons as to why children spend money within games vary but largely relate to enjoyment, wider social pressures and in-game mechanics that normalise spending. These pressures, coupled with the widespread use of in-game features that produce a random selection of items, encouraged children to over-spend and lose track of how much they were spending.

How did children use money in games?

On top of buying multiple games, almost all the children in the sample spend money on a range of in-game purchases. What children spend money on depends on the games they play and on the child themselves. Children playing Fortnite and Roblox primarily spend money on aesthetic improvements to their character or avatar which does not directly improve gameplay.



Fortnite: Skins



Roblox: Builders Club

"My dad says it's pointless because you are just wearing a skin [on Fortnite] ... but I like buying it because my friends like it."

Alex, 12 (Minecraft player)

Those on FIFA buy certain items, such as player packs, to enable faster improvement and the attainment of higher objectives. Those on Minecraft and Call of Duty spend little money, despite ample opportunities to do so, because they feel it does not add to their experience, although some do make in-game purchases in other games.

The amount of money spent also varies across games and within groups. Some children in the FIFA groups spend up to £300 a year on player packs, and one Fortnite player had spent £250 on skins. Conversely, in the Roblox group, the children spend a few pounds every few months.

For most children, money used on in-game purchases comes from their parents, though in a few cases it is earned through part time jobs and apprenticeships. Older children tend to have control over how they spend their money, given that they often have a personal debit card, while younger children tend to ask their parents for permission to make one-off purchases.

Loot boxes

Some of the most significant spending across the groups is on in-game purchases, often called 'loot boxes', where the player receives a randomised selection of items. This was particularly true for the FIFA groups, where the vast majority of children's expenditure is on player packs.

In the FIFA groups, children were aware that the odds of receiving good players is low and some children explicitly related the purchase of player packs to gambling. Nonetheless, they are still happy to spend hundreds of pounds on packs.

"It's like gambling- you could lose your money and not get anyone good, or get someone really good."

Tim, 16 (FIFA player)

For many of the children, buying player packs is an integral part of their Ultimate Team experience, and is something they do regularly, often buying multiple packs back-to-back.

These types of in-game purchases are not restricted just to moments of play. Nick, 16, enjoys that having the FIFA app on his phone allows him to open a pack every Thursday on the way to school. If he receives a good player, he spends the rest of the day thinking about how to build a team around them.

Though this type of in-game purchases does exist in other games - for example Reserve Crates in Call of Duty - children in this group did not purchase them.

Why are children spending money in games?

In many cases, children enjoy the excitement generated when their purchases are revealed. However, some children described feeling pressured to spend money by the way the game was set up, or by elements of social play. For these children spending money has become a normalised part of gaming.

Having fun

Many of the children spending money on in-game purchases do not regret it, seeing it as a fun and sometimes necessary part of the game experience. For example, Nigel, 15, felt that the £250 he has spent on Fortnite skins has been a worthwhile investment because he has used each one on multiple occasions. Children in the Roblox group meanwhile receive money from their parents as an occasional treat and use it to buy the most exciting rideable animals. Similarly, opening player packs on FIFA is seen to add variation if children are “getting bored of playing”.

The gambling-style mechanics behind opening FIFA packs also provide moments of great “suspense” and “excitement”, especially when opened with friends. Even though they are aware that the odds of receiving good players is low, this is seen only to add to the fun.

As might be expected in the case of gambling-style mechanics, how long the pleasure derived from opening player packs lasts is dependent on the pack itself.

“[The excitement] depends on what you’ve got... If you don’t get anyone good it makes you angry because you’ve wasted money.”

Nigel, 15 (FIFA player)

Keeping up

For many of the children in our sample, being able to spend in-game allows them to make decisions on how to use their money. However, some children, particularly those in the FIFA groups, feel that the way the game is set up encourages them to spend large amounts of money.

On FIFA Ultimate Team, children described two opposing ways to progress and become successful within the game. One option, termed ‘grinding’ in the gaming industry, is to slowly improve your team by earning FIFA coins through winning matches against other players. The other is to spend money on player packs in the hope that you receive a good player and therefore skip out much of the grinding process.

“It takes a long time to get somewhere so you just do that [open player packs].”

Tim, 16 (FIFA player)

The children in the FIFA group felt that, on reflection, the game encourages them to invest money rather than slowly ‘grind’ their way to success. One potential impetus is a lack of time to slowly build a team (something that was estimated to take “a good few months”) compared to other players.

“Sometimes you don’t have the time – if you go to school you don’t have as much time to save [coins].”

Brandon, 15 (FIFA player)

There was a recurring sentiment that if you don’t pay for packs you might “fall behind” players who are able to do so and be unable to win against them. Children felt this was compounded by the fact that each iteration of FIFA is only popular for around six months, and when it is replaced by the next version players are unable to transfer their ultimate team across. This results in a narrow window to build a competitive team, encouraging players to buy packs and build up their team as quickly as possible.

Children also said that Ultimate Team has smaller-scale encouragements to spend money on packs, such as one-off or time-limited promotions. These promotions are seen by the children when they are not playing the game, such as when they are on websites and social media.

“You get told on websites or social media when they’re on there [limited-time packs] I’ll buy them then.”

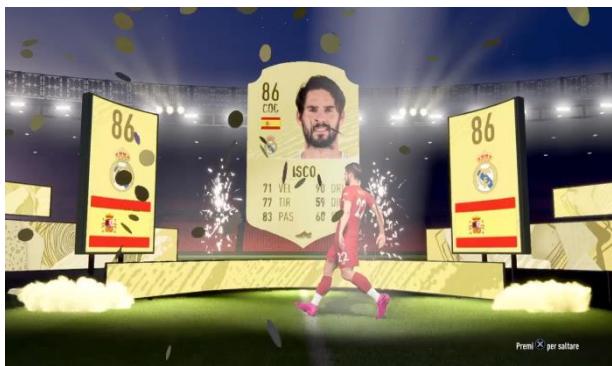
Brandon, 15 (FIFA player)

Conversely, in other games where in-game purchases are largely aesthetic, spending money does not have as much of an impact on in-game success. In these cases, children say they do not feel as much pressure to spend. For example, Henry, 12, in the Minecraft group does not spend money because “it’s not really necessary in the game to have fun”. Whether or not children feel the game encourages them to spend also depends on the child. Despite similar mechanics to FIFA, whereby buying additional gear might improve in-game performance, those in the Call of Duty group felt that in-game purchases tend to be a waste of money, often because they are able to upgrade weapons by playing the game.

Peer pressure

Other factors also encourage children to spend money in-game, such as peer pressure from other players, both offline friends and online strangers.

Some children in the FIFA groups reported that they will often open player packs in groups, either in person or while talking “on the party” (on the Xbox app with friends). Opening player packs with friends is seen to be more exciting, as you can compare what you receive with others. This peer pressure can encourage children to open more packs than they might otherwise, especially given that the chance element of this mechanic means that any opening could be a good one.



FIFA: Player packs



FIFA: Player packs

"If they're all round yours or you're on the party, you'll just end up opening FIFA packs, opening FIFA packs."

Gavin, 15 (FIFA player)

The ways in which children are treated by others in the game also informs whether they feel encouraged to spend money on in-game purchases. In the Fortnite group, children felt that they should spend money on skins to prevent being seen in the free default skin. The default skin is seen not only as making someone “uncool”, but is a marker of being a ‘poor kid’, and is therefore something to be avoided. One child, who has spent £120 on Fortnite, was aware of both of these factors.

"You don't want to be the one left with no skins... I bought 40 to 50 skins and a battle pass."

Jasper, 15 (Call of Duty player, talking about Fortnite)

There was some suggestion that engaging with other content, such as pack openings shared by popular YouTubers, also encourages online spending. For example, some children mentioned watching popular YouTubers such as Castro, who “have enough money to buy all the packs”, opening FIFA player packs.

The impact of spending

Both in-game mechanics and the influence of other players contrive to normalise spending considerable amounts of money for some children. One of the FIFA groups described how their average yearly spend has risen year-on-year since they first started playing Ultimate Team, illustrating how central money has become to their gaming experience. Gavin, 15, described how, when he had first started playing Ultimate Team aged 11, he had spent around £10 each year. This rose to £100 by the time he was 14. By the age of 16, when he was playing FIFA 19, he spent £300 in the year. The normalisation of in-game purchases, particularly when these purchases occur through loot boxes, has significant consequences for children.

Many children in the FIFA groups say that the lack of a guarantee of receiving a good player when opening FIFA packs means there is the potential to waste significant money. Lee, who has spent at least £150 on packs this year, described how gambling-style mechanics can make children feel like they are wasting money.

"I never get anything out of it [buying packs] but I still do it."

Lee, 14 (FIFA player)

However, although these mechanics are a source of great frustration, the fact that the next pack opening could result in a good player means that children continue to open packs even when they are losing.

“You feel like it’s a waste of money... and then you open more.”

Nick, 16 (FIFA player)

This idea, akin to chasing losses, means that children tend to buy multiple packs at once without planning to, and without keeping track of how much they are spending. Nick, 16, reported that he buys between 12 to 15 packs at any one time, costing him a total of around £20.

In general, the nature of in-game purchases - a series of one-off spends - means that children struggle to keep track of how much they are spending, especially given that FIFA does not offer a tool to track their spending history. This means that many of the children in the FIFA groups had not reflected on the amount of money they are spending on game purchases. Gavin, 15, reflected that spending “£10 a day at the time seems like a good idea”, but he had failed to consider the impact of longer-term spending.

“It’s just annoying when you’ve wasted £20 and you don’t get good players.”

Jacob, 14 (FIFA player)

The amount of money children are spending on in-game purchases is also, in some cases, something that is a source of regret, with a number of players suggesting they would in hindsight rather have spent money on other things.

“Sometimes I think I could have used the money for other stuff – saved it up and things.”

Brandon, 15 (FIFA player)

Conclusions

Gaming is a digital extension of play

- > Children play online games because of their many enjoyable elements. Gaming allows them to spend free time with their friends and develop relationships as they compete, cooperate or just socialise. It also helps them to build strategic, teamwork and creative skills.
- > However, much like elements of their non-digital lives, there are drawbacks to playing online games. The digital nature of online gaming can also change and amplify some of these drawbacks.

Monetisation of gaming brings children closer to gambling

- > The fact that children can now spend money in games - and indeed are often pressured to do so - marks a significant divergence from their normal offline behaviour.
- > In some cases, this spending (in some cases of hundreds of pounds) was done without any knowledge of what the rewards would be. Other than the fact that these rewards come in the form of in-game benefits rather than real-world currency, this behaviour is much like gambling.
- > The amount of money spent, and the lack of a guaranteed reward meant children often feel like their money is wasted. In some cases, they lose control of their spending and attempt to 'chase losses' by spending more.

If gaming is just an online extension of children's offline lives, then the rules should be the same

- > Many of the risks that come with online gaming echo those found in children's non-digital lives and should therefore be treated in the same way. Giving children the freedom to explore and take risks within the online world - as long as they are protected from severe negative experiences - allows them to develop and learn how to make decisions.
- > The money component of online gaming is where new approaches to children's safety and wellbeing need to be implemented. There is no real equivalent in the offline world, and it should therefore be the focus of any thinking now being done around the direction that gaming is moving in.

Policy recommendations

With the introduction of a ground-breaking duty of care for online services on the horizon, alongside with new regulatory measures from the ICO specifically addressing the needs of children, now is an invaluable opportunity to get online gaming right for its youngest players.

Our research reveals that some of the harms in scope of the Government's proposed duty of care occur in the context of online games, including cyberbullying and violent content. Underage use is also a problem, however the white paper refers to this specifically in relation to social media, not gaming. And our research reveals major harms on online gaming platforms, especially financial harms, which are currently not listed as within scope of the duty of care. Some of these issues are being addressed by the ICO's forthcoming age appropriate design code. It is vital that new legislation and regulation builds on what is already in track and is designed with online gaming in mind. As this report shows, online games are just as important to children as social media, if not more so.

It is important to note that some of the recommendations directed to industry would require developers and platforms to provide a certain level of protection for child players. This could be achieved by affording the same high level of protection to all players, or by requiring games companies and platforms to develop and use robust forms of age verification and to take a special approach to child players. The ICO is currently exploring what age verification requirements will be placed on online platforms as part of the age appropriate design code.

Limiting the role of money

There has been some action from industry to address harms associated with loot boxes. For example, Google, Sony, Microsoft and Nintendo have all recently committed on their respective platforms to disclose the odds of receiving types of in-game items from loot boxes in future titles, while Apple have required this since 2017. But these measures do not go far enough. It is unavoidable that there are powerful economic interests to keep players opening loot boxes. The current loot box market is estimated to be worth £20 billion worldwide, including £700 million in the UK.¹¹

Moreover, the evidence that games lead to increased risk of gambling remains contested, although a recent large study linked adolescents' problem gambling with excessive spending loot boxes.¹²

Another obstacle to progress in this space is the current legal definition of gambling. Under the Gambling Act 2005, gambling means playing a game of chance for a prize, with a prize being defined as money or money's worth. It is argued that since the contents of loot boxes cannot officially be exchanged for cash, they do not count as "money's worth" and therefore they do not fall under the current definition of gambling. However, this argument ignores the fact that items won through loot boxes *can* be cashed out on illegal third party trading sites.¹³ Furthermore, the argument fails to recognise the value placed by children on winning certain items, even when those items cannot be cashed out for money - simply winning the game, is enough to persuade some children to spend enormous sums. Gambling laws need updating to reflect the reality of children's experiences of spending money within games. The gambling regulators in both Belgium and Netherlands have found that some loot boxes violate their gambling laws.

¹¹ <https://www.juniperresearch.com/document-library/white-papers/in-game-gambling-the-next-cash-cow>

¹² D. Zendle, R. Meyer, and H. Over, "Adolescents and loot boxes: Links with problem gambling and motivations for purchase."

¹³ <https://www.gamblingcommission.gov.uk/PDF/Virtual-currencies-eSports-and-social-casino-gaming.pdf> "In particular we are calling on games publishers and network operators to recognise the legal, moral and commercial imperatives of tackling any exploitation of their player community by predatory third parties."

Some tools are available to control children's spending on online games. For example, earlier this year EA introduced new default spend limits on all teen accounts. But lack of effective age verification means children might not have the correct account for their age, and some children simply use their parent's account.

1. Financial harm should be specifically listed as within scope of forthcoming online harms legislation.
2. Developers and platforms should not enable children to progress within a game by spending money. Spending should be limited to items which are not linked to performance - e.g. aesthetic items such as new outfits.
3. All games which allow players to spend money should include features for players to track their historic spend.
4. Maximum daily spend limits should be introduced in all games which feature in-game spending and turned on by default for children.
5. Parents should speak to children about the ways in which games companies monetise their products, and discuss alternatives if parents and children would like to avoid these aspects of gaming, such as new subscription-based services which have recently come to the market.
6. The Government should take immediate action to amend the definition of gaming in section 6 of the Gambling Act 2005 to regulate loot boxes as gambling.
7. The Government must also undertake a wider review into the current definition of gambling in the Gambling Act, to ensure that it accurately reflects new forms of gambling, including those forms found in online games.

Helping children to manage their time

Much of the debate about time spent on gaming has focused on the World Health Organisation's decision in 2018 to classify gaming disorder as a clinical condition. While it is important that players (including children) whose lives are so deeply affected by online gaming receive appropriate support, and the recent announcement of the country's first specialist clinic for gaming addiction is welcome, there are many children outside of this extreme who struggle to strike the right balance between time spent online and time spent offline, and they need help, too.

Screen time across digital platforms of all kinds remains a key area of concern for parents and policymakers, prompting a review from the Chief Medical Officer (CMO) earlier this year.¹⁴ The review found given a lack of conclusive evidence about a possible causal link between screen time and mental health problems, it is "wise to take a precautionary approach".

The need for greater evidence around the impact of online gaming, particularly when used for extensive periods, was underlined in a recent report from the DCMS committee on immersive and addictive design.¹⁵ Research is being hampered by a lack of data being made available to researchers by games companies, who often say that on the one hand they are being asked to minimise the data they collect, while on the other hand being asked to collect more, e.g. to inform research and to verify users' age.

¹⁴https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/777026/UK_CMO_commentary_on_screentime_and_social_media_map_of_reviews.pdf

¹⁵<https://publications.parliament.uk/pa/cm201719/cmselect/cmcumeds/1846/1846.pdf>

8. The final version of the age appropriate design code must include provisions on nudge techniques and detrimental use of data. The Government must ensure that the code is laid before Parliament as a matter of urgency and the ICO should pay particular attention to games companies and distribution platforms when monitoring compliance.
9. Games companies and platforms should share aggregated anonymised data about players with independent researchers, including average length of time spent on particular games, to facilitate much needed research into the nature and effects of excessive use. This can be done in a way which is consistent with data protection legislation.
10. Parents should talk to children about the importance of balancing time online (including on games) with time spent offline, and being mindful of how they spend their time online. The Children's Commissioner's Digital 5 A Day can be used as a tool for facilitating these conversations.

Doing more to ensure content is appropriate

Age ratings are a key way for children and parents to distinguish which games with content are suitable for their age. All video games released in physical form in the UK come with age ratings using the PEGI (Pan European Game Information) system. Titles with PEGI ratings of 12, 16 or 18 years are legally enforceable, meaning that retailers can be prosecuted if they sell the games to someone under-age.

In contrast to physical games, there is no requirement for games distributed online to be age-rated. Some major platforms voluntarily require games developers to have their games rated using PEGI criteria through the IARC system,¹⁶ including Google and the major consoles¹⁷. Apple have developed their own age rating systems and criteria. However, some platforms do not require age ratings at all, e.g. Steam.

Furthermore, even when games distributed online do have age ratings, there is variety in how these are checked. The age ratings of games rated using the IARC system are not independently verified *prior* to release. It is the developers themselves who rate the games on the basis of a questionnaire, and their answers might only be checked *after* release. While only a small minority have their age rating changed, this still means that players, including children, might be exposed to games which have been age rated misleadingly. Earlier this year, a Wired investigation found a number of games rated age 3 including blood, gore, stabbing and shooting.¹⁸ In contrast, Apple state that all apps (including games) hosted on the Apple store are moderated prior to release.

In order for age ratings to be an effective way of limiting children's exposure to inappropriate content, they need to be actually used. Research has found that four fifths of parents say that they do not follow age restrictions on video games, compared to just a quarter in relation to films.¹⁹ There are also parental controls available on many platforms but lack of familiarity with games and these tools means many parents do not make use of these.

11. Games that are distributed online should be subject to a legally enforceable age-rating system, just as physical games are. There should be a requirement for an additional warning to be

¹⁶ International Age Rating Coalition. A global age rating and age classification system for digitally deliverable games and apps. <https://www.globalratings.com/>

¹⁷ For online only games Nintendo and Microsoft use IARC, but if a game also has a physical release it will be rated for both offline and online distribution through PEGI directly. Sony only go through PEGI directly but are working towards joining IARC. Google only uses IARC.

¹⁸ <https://www.wired.co.uk/article/android-google-children-games>

¹⁹ <https://www.childcare.co.uk/blog/video-games>

displayed for games which facilitate in-game spending.

12. The Government should consult on whether all age ratings of all games distributed online should be moderated pre-release, just as physical games are.
13. The Government and industry must do more to raise awareness of the importance of age ratings and parental controls so that parents make greater use of them.

Teaching children to be digital citizens

Children have been taught about the online world for many years now, but this is often through the narrow prism of online safety. Children also need to be equipped with digital resilience if they are to lead successful lives online. Our *Life in Likes* research revealed that children are often poorly prepared to deal with the social aspects of time spent online, such as being influenced by the appearances of celebrities and influencers or dealing with online conflicts with their peers.²⁰ This becomes a particular challenge when children make the move from primary to secondary school.

The need to broaden out digital education beyond the issue of safety has been recognised in recent Government guidance, including guidance on teaching online safety in school²¹ and new statutory guidance on Relationships (and Sex) Education,²² which will be mandatory from September 2020.

Despite these signs of progress, questions remain about how effectively schools will be able to teach this material in the context of a packed curriculum. There is a further issue about how familiar teaching staff are with the specifics of online gaming, rather than social media and the online world in general. Children say that they wish that parents and teachers knew more about the games they play so they could provide better advice on how to respond to some of the challenges they face.²³

14. Online games should be a key focus of digital citizenship lessons in schools, rather than lessons focusing exclusively on social media. Teachers involved in the delivery of these lessons should be familiar with how key online games that are popular with children work.
15. Children should be prepared for the social aspects of the games they play, to increase their resilience and awareness of how their actions may affect others.

²⁰ <https://www.childrenscommissioner.gov.uk/wp-content/uploads/2018/01/Childrens-Commissioner-for-England-Life-in-Likes-3.pdf>

²¹ <https://www.gov.uk/government/publications/teaching-online-safety-in-schools>

²² <https://www.gov.uk/government/publications/relationships-education-relationships-and-sex-education-rse-and-health-education>

²³ <https://www.childrenscommissioner.gov.uk/2019/08/27/childrens-experiences-of-online-harm-and-what-they-want-to-do-about-it/>

Appendix

Our research

The aim of this research was to better understand the risks and benefits children experience while playing online games. This was to be done using children's voices.

To explore this, project centred around the following research objectives:

- > Understand the types of games children play and how they play them (including platforms, devices, time spent, online versus offline)
- > Explore what children perceive the benefits of playing games to be (including building cognitive skills, building co-ordination skills, fun and enjoyment, building relationships with others)
- > Identify the risks they perceive and experience when playing games and their attitudes to these (including gambling behaviour, addiction, talking to strangers, in-game purchasing, bullying and problematic content / adverts)

Our method

Twenty-nine children between the ages of 10 and 16 took part in this research, which was carried out in September 2019. These children were chosen to represent a range of different gaming behaviours, across a range of games.

The children in the sample were selected primarily according to the games they played, and then to ensure they represented a range of demographic characteristics. This strategy was chosen as the diversity that exists in the world of online gaming means children's experiences of gaming varies hugely. Sampling according to game avoided some of the potential drawbacks associated with this diversity, including the possibility of stilted or ineffective conversations due to a lack of shared experience.

The research decided to focus on **Roblox, Minecraft, Fortnite, FIFA and Call of Duty: Black Ops 4**. These games were chosen not only to cover a range of genres, including strategy, action and open-world, but also a range of common harms associated with online gaming, including violent imagery, explicit language/content, addiction and online bullying. In the case of some of these games, the research focused on certain online game modes, given they had features that would cause specific harms. These were FIFA Ultimate Team, the Survival and Creative modes on Minecraft and Fortnite Battle Royale, and Save The World.

Each game was explored through a group of five children, other than FIFA, which had two groups of five. The groups were comprised of friendship triads or pairs, to encourage children to feel comfortable sharing their opinions about gaming, particularly negative moments.

The research comprised **two core stages**:

- > Gaming behaviour diaries
- > Focus groups

All participants were asked to complete a five-day gaming diary, where they detailed what, where, with whom and how often they played games, as well as their gaming history. This was intended to capture their actual gaming behaviours, beyond what they reported in the focus groups. Without this behavioural context, attitudes and opinions collected later in the project do not hold the same value. For example, a child reporting feeling frustrated on regular occasions while gaming is more meaningful when it is known they play online for 4-5 hours each day.

This phase was followed by six focus groups, where children were encouraged to share their reflections on various aspects of gaming: gaming in general, specific aspects of their most-played game, and on some of the benefits and drawbacks of gaming. Children were prompted by a range of stimuli, including materials from their behaviour diaries.

These methods were chosen to ensure our findings were centred on the **voices of children**, and their lived experiences of gaming.

Games explored in this research

Minecraft – Creative and Survival mode

Minecraft is one of the all-time bestselling video games. The game belongs to the ‘sandbox’ genre - players inhabit a world of blocks and are encouraged to explore and create. The most popular modes of play are **survival**, in which a player starts from scratch with the aim of exploring, collecting resources, battling enemies, building more elaborate structures and avoiding dying; and **creative**, in which resources are readily available and players cannot die, and where the focus is on creating things in an environment free of the challenges associated with survival mode.



Minecraft Creative mode



Minecraft Creative mode

FIFA – Ultimate Team Mode

FIFA is a football video game franchise that has been around since 1993, and is popular because of the use of real leagues, clubs and player names. A new version of FIFA is released every year – FIFA 20 is the most recent reversion. FIFA has a number of game modes, including: Career Mode, Pro Clubs, The Journey and **Ultimate Team**. In most modes, the aim is to take control of a football team and play against a computer or human opponent. In Ultimate Team, players start with a low-ranking team and aim to build an ‘ultimate’ squad. Players earn rewards to improve their squad, primarily by **earning** in-game currency that they can use to buy better players. They must play and win matches in order to go up the ranks. Alternatively, they can buy player packs using coins or FIFA points, which can also be purchased with real money - around 10-15% of player packs are acquired in this capacity.



FIFA Ultimate Team mode



FIFA Ultimate Team mode

Fortnite – Battle Royale and Save the World

Fortnite was released in 2017 and has three very different modes: **Save the World**, Fortnite Creative and **Battle Royale**, of which the last is the most popular. Battle Royale is an online-only ‘free to play’ third person shooter game in which the goal is to be the last fighter standing out of 100 human-controlled players. Everyone in the game begins in the same position, by parachuting in with a standard weapon. Once the game begins players can search for weapons, pick up new materials and build fort-like structures in order to protect themselves and beat opponents.



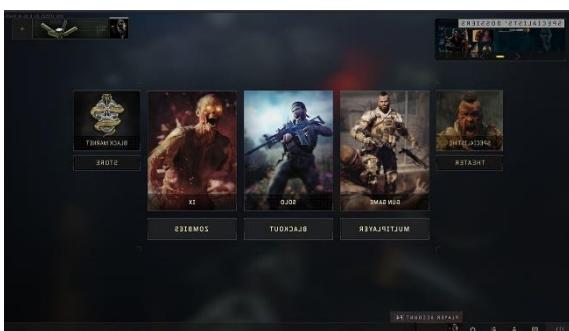
Fortnite home screen



Fortnite game play

Call of Duty: Black Ops 4

The Call of Duty (COD) franchise began in 2003. COD is a first-person shooter game in which the main goal is to kill as many opponents as possible. Early Call of Duty games were set in World War II, but the franchise has since produced games set in the Cold War era, modern times and the near future. When the COD first became popular, the single-player offline campaign modes were the centrepiece of each game, but as the demand for online multiplayer has increased over the years, so the focus of COD games has changed to accommodate this, with the multiplayer elements often the core focus for players.



Call of Duty home screen



Call of Duty game play

Roblox

Roblox was released in 2005 and is a free to play game with an estimated 100 million active users. Roblox is a multiplayer online game that allows users to either create their own games and develop their own rules or play on other user-generated games. Games on Roblox cover a range of genres, from role play and simulation to action and horror. Some of the most popular Roblox games include: Work at Pizza Place, Theme Park Tycoon 2, Adopt Me! and Natural Disaster Survival.



Roblox Adopt Me! game



Roblox Pizza Plaza game

Children in our sample

Focus group	Pseudonym	Age	Other games they play
Minecraft Group (London)	Otis	12	Overwatch, Rocket League, Fortnite
	Lawrence	12	Overwatch, Rocket League
	James	11	Fortnite
	Henry	12	Fortnite
	Alex	12	Fortnite
Call of Duty Group (London)	Aman	15	Minecraft, Grand Theft Auto
	Connor	15	Halo 3 Ending, Uncharted, Minecraft, Skyrim
	Jasper	15	Fortnite, FIFA
	Joe	16	Fortnite Overwatch
	Dan	16	NBA 2K, Grand Theft Auto, FIFA
FIFA Group 1 (Birmingham)	Wyatt	14	Minecraft
	Jacob	14	Fortnite, Minecraft
	Chris	14	Grand Theft Auto, Minecraft
	Lee	12	Fortnite
	Nathan	14	Fortnite
Fortnite Group (Birmingham)	Beth	10	N/A
	Amy	10	N/A
	Nina	10	Grand Theft Auto, NBA 2K
	Kieran	11	Lego: Police Undercover
	Julian	11	Spiderman, Overwatch
FIFA Group 2 (Leeds)	Nick	16	Rainbow Six Siege, Call of Duty
	Tim	16	Minecraft, Rainbow Six Siege
	Brandon	16	Minecraft
	Nigel	15	Fortnite, Minecraft, Call of Duty
	Gavin	15	Call of Duty
Roblox Group (Leeds)	Ciara	10	Fortnite, Minecraft
	Kaiden	10	Mario Kart, Dragonball Z
	Rose	10	Minecraft, Mario Kart
	Anna	10	Minecraft, Fortnite

Popular Game Genres

Genre	Description	Popular games
Action	<p>Players navigate levels or achieve objectives by battling enemies and overcoming obstacles.</p> <p>"Battle Royale" is a mode within action games that has become particularly popular in recent years where players battle other human opponents to be the last person standing</p>	Fortnite, Grand Theft Auto V, Red Dead Redemption 2
Action-adventure	Mixture between an action and an adventure game incorporating physical coordination and puzzle solving	Legend of Zelda, Call of Duty, Grand Theft Auto
Massively Multiplayer Online (MMO)	An online only game where players play the game individually, team up with, or compete against other human players in a game world inhabited by a mixture of human players and computer-controlled characters	World of Warcraft, RIFT, Final Fantasy XIV
Puzzle	Players use problem solving skills to solve puzzles, from strategic, tactical, logical and trivia	Portal, Shadow of the Tomb Raider, Resident Evil, Candy Crush
Real time strategy (RTS)	Players may build up resources to defend their base and attack opponents or use skilful thinking to achieve victory	Age of Empires III, Starcraft, Clash of Clans
Role-playing game (RPG)	Players assume the role of a character in a fictional setting	World of Warcraft, Elder Scrolls
Sandbox	Players can roam and change the virtual world at will	Minecraft, Roblox
Simulation	Similar to simulators used by professionals such as pilots, simulation games allow players to take control of realistic vehicles, humans and animals	The Sims, Automation, Euro Truck Simulator 2, Goat Simulator
Shooter / First person shooter (FPS) / Third person shooter (TPS)	Players engage in combat with enemies using weapons, spatial awareness and speed. Gameplay consists mainly of shooting.	Counterstrike, Battlefield, Overwatch, Call of Duty (COD)
Sports	Emulates the practise of sports	FIFA, Rocket League, NBA



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