

Response to DCMS call for evidence on loot boxes, ending 22/11/20

Parent Zone provides insights and projects to help families make the most of the digital future for children. We have been working on the links between gaming and gambling for several years.

In the past couple of years, we have conducted two independent research projects, qualitative and quantitative (with IPSOS Mori), into the links between gambling and online games. The first focused on skin gambling, *Skin Gambling: Teenage Britain's Secret Habit*, 2018¹. The second, *The Rip-Off Games*², looked at loot boxes.

In addition, we recently partnered with GambleAware to develop [Gaming or Gambling](#), two short films plus accompanying materials to help families learn about the gambling-like risks that eight-to-eleven-year-olds may face when playing online games - and give simple, practical advice to help ensure gaming remains fun and safer.

Our conclusion is that on the basis of the following factors:

- the gambling-like behaviours that loot boxes inculcate;
- the techniques borrowed from the gambling industry to keep children opening loot boxes;
- the links to gambling on skin gambling websites;
- and a growing body of evidence of links between loot box opening and problem gambling,

the precautionary principle dictates that the Government should classify loot boxes as gambling, and regulate them accordingly.

Gambling-like behaviours

The business model of online gaming has changed. When video games were first invented, they were bought on disk, complete. Now they are downloaded from the internet, opening the way for continual upgrades and updates, and providing a gateway to perpetual spending opportunities.

¹ [Skin gambling: teenage Britain's secret habit](#), Parent Zone, 2018

² [The Rip-Off Games: How the new business model of online gaming exploits children](#), Parent Zone, 2019

Businesses need to generate profits and we are not, of course, opposed to the monetisation of online games. The problem arises with the way this is currently being done, by exploiting children.

We believe that loot boxes are close enough to gambling to be classified as such for the following reasons:

- the outcome is determined by a future event, unknown at the time of paying
- the result is determined by chance
- the reward involves reallocation of wealth without work of productive value on either side
- losses can be avoided simply by not taking part.

The counter-argument that the winnings are held inside the game and not tradeable for real-world currency does not always hold, as our report on Skin Gambling showed.

This, however, is not the fundamental point. Through mechanisms that look like gambling and encourage gambler-type behaviour, a generation of children is being taught to gamble.

Parent Zone's research

In our loot box research in *The Rip-Off Games*, we found that 76% of children aged 10-16 who play online games (ie most children, since 93% of all children play online games) think that 'online video games try to make you spend as much money as possible during the game' and that more than half - 59% - would prefer to buy the individual items rather than open loot boxes.

'People get addicted to buying loot boxes and then they keep buying and buying, and when they've finished it's like 40 times the amount they'd have originally paid for a game.' boy, 12, Parent Zone qualitative research³.

'In some games there's like a loot box culture where everybody buys loot boxes and once you buy one, someone's bought more loot boxes than you and has got more stuff and comes along and wipes out everything you bought from the initial loot box, so you end up feeling really depressed because you spent a load of money then lost it all. So then you're drawn into buying more and more to stop that happening again, and it gets into a vicious cycle.' boy, 12, Parent Zone qualitative research⁴.

'You think - the way your mind works - if you don't get it then you'll get it next time, you think you'll just give it one more shot, and that's how they get you.' boy 12, Parent Zone qualitative research⁵.

³ [The Rip-Off Games: How the new business model of online gaming exploits children](#), Parent Zone, 2019, p. 15

⁴ [The Rip-Off Games: How the new business model of online gaming exploits children](#), Parent Zone, 2019, p. 15

⁵ [The Rip-Off Games: How the new business model of online gaming exploits children](#), Parent Zone, 2019, p. 15

Gambling-type techniques to promote engagement with loot boxes

Techniques developed and widely used by the gambling industry are deployed to encourage the opening of loot boxes.

Variable-ratio reinforcement, a technique used to keep people playing slot machines, is fundamental. Rewards of different value or scarcity are delivered variably, triggering a state of physiological arousal associated with the perpetuation of gambling behaviour⁶.

Other psychological incentives derived from gambling include:

- loss-aversion - gamers are more likely to spend money if they are only one or two steps away from winning.
- reward-removal - gamers are given a reward then threatened with its being taken away
- 'fun-pain' - where a painful situation (running out of moves, facing loss) is rescued by a pop-up offering a way out.

Children need special protection

Adults can be persuaded by coercive monetisation techniques, of course - and often are, both on and offline. But the adolescent brain may be particularly susceptible. In adolescents, the prefrontal cortex, responsible among other things for impulse control, doesn't mature until the age of 25. At the same time, the rapidly developing limbic system places a premium on appetite and pleasure-seeking.

Biological factors are strongly reinforced by the psychosocial needs of adolescents, which make a nonsense of games publishers' protests that items in loot boxes are 'only cosmetic'⁷. Children want to fit in. They want to see signs of their status in a game. Or, as one nine-year-old in our observation said of the default skin:

*'It's the no-skin. Nobody wants that. Not many people would play with you because they'd think you're bad. If I played with that, everyone would do the loser dance.'*⁸

⁶ [Rare Loot Box Rewards Trigger Larger Arousal and Reward Responses, and Greater Urge to Open More Loot Boxes](#), 2019

⁷ [The Science of Adolescent Risk-Taking](#), Institute of Medicine of the National Academies, 2011

⁸ [The Rip-Off Games: How the new business model of online gaming exploits children](#), Parent Zone, 2019, p. 14

Links to skin gambling

Our work on skin gambling found that where skins can be cashed in, gamers are able to use skins as virtual currency to bet via a complex ecosystem of loosely connected sites.

Betting takes place on games of chance and on Esports. It is possible to return to reputable sites and retrieve winnings in real-world currency.

Skin-gambling sites, while unaffiliated to the gaming sites and platforms where skins are acquired, connect to them through APIs. Unlike other gambling sites, these pop-ups don't enforce rigorous age verification. Children find it easy to enter these virtual casinos: 10% of 10-16-year-olds had gambled with skins, according to our research in 2018. As long as these skin gambling sites remain so elusive and hard to regulate, the argument most often made against classifying loot boxes as gambling - that you can't cash out your winnings - doesn't hold.

We would argue, however, that it doesn't matter to a child whether they can extract real money from their loot box rewards. The promised items have value to them and others in their community - a 12 year old in one of our focus groups told us that 'you don't have to buy skins, but everyone will judge you if you don't'⁹. Through their efforts to obtain the contents, children are being taught to gamble.

Evidence linking loot boxes and problem gambling

Loot boxes have not been around for long enough for anyone to be able to make a causal link between 'induction' with loot boxes and later problem gambling.

Many researchers have however been able to find correlations. Zendle and Cairns found a stronger relationship between problem gambling and heavy loot-box-purchasing than between problem gambling and alcohol abuse, drug use or depression.¹⁰

In a follow-up study, Zendle, Cairns et al identified seven ways in which loot boxes differ from each other and found that some of these (being able to cash out, showing near-misses, and letting players use in-game currency to open loot boxes) slightly strengthened the links between loot boxes and problem gambling. Their main conclusion, however, was that 'regardless of the presence or absence of specific features of loot boxes, if they are being sold to players for real-world money, then their purchase is linked to problem gambling'¹¹.

⁹ [The Rip-Off Games: How the new business model of online gaming exploits children](#), Parent Zone, 2019, p. 14

¹⁰ [Video game loot boxes are linked to problem gambling: Results of a large-scale survey](#), Zendle and Cairns, 2018

¹¹ [Paying for loot boxes is linked to problem gambling, regardless of specific features like cash-out and pay-to-win](#), Zendle, Cairns, Barnett and McCall, 2020

Brooks and Cairns, in another study, concluded: 'Our findings are consistent with voiced concerns that loot boxes overlap with gambling, and support the need for regulators to consider gambling-like mechanisms within video games.'¹²

Drummond and Sauer concluded that even in games in which it is not possible to redeem winnings, loot boxes 'tap into basic psychological principles associated with gambling behaviour (for example, variable ratio reinforcement schedules)'¹³.

Existing protections don't safeguard children

The PEGI system is failing as far as loot boxes are concerned. Research from 2020¹⁴ found that:

- 58% of the top 100 grossing games on the Google Play store featured loot boxes and, of these, 93% were rated as suitable for children aged 12.
- 59% of the top games on the Apple App store features loot boxes and, of these, 95% were rated as suitable for children aged 12.
- 36% of the 50 most popular games on the Steam digital marketplace featured loot boxes and, of these, 39% were rated as suitable for children aged 12.

PEGI's descriptor: '*includes paid random items*' doesn't convey to parents that the game will expose children to gambling mechanisms such as variable ratio reinforcement.

Parents want and need to be involved in what their children are doing online. Well-informed parents can do a great deal to help children navigate online successfully - but they need support. They shouldn't be expected to bear the brunt of the responsibility in the face of inadequate regulation.

Recommendation

Loot boxes look like gambling. They encourage gambling-like behaviour. They use techniques derived from gambling to keep players playing. And a series of academic studies has linked them to problem gambling.

Our own research has shown that children feel compelled to keep opening loot boxes even when they sense that it's probably not in their best interests. The children in our focus groups were ambivalent about loot boxes.

'It makes you feel excited at the beginning when you've only just got it but then you open it up and it comes on screen, then you're kind of really nervous, and you say to yourself you're not

¹² [Associations between loot box use, problematic gaming and gambling, and gambling-related cognitions](#), Brooks and Cairns, 2019

¹³ [Video game loot boxes are psychologically akin to gambling](#), Drummond and Sauer, 2018

¹⁴ [The prevalence of loot boxes in mobile and desktop games](#), Zendle, Meyer, Cairns, Waters and Ballou, 2020

going to get anything good. You always end up disappointed. You never have a happy feeling after you've opened one.' girl, 12, Parent Zone qualitative research¹⁵.

There was a fair amount of anecdotal evidence in our research to suggest that children saw the most vulnerable (less popular, younger, children with specific learning difficulties) as being the most likely to spend money on loot boxes.

It may not (yet) be possible to make a causal link between loot boxes and problem gambling, but in the light of the evidence that does exist, and the fact that loot boxes are targeted at children, we should invoke the precautionary principle.

Loot boxes can lead to overspending in the short term and may well be associated with gambling addiction in the long term.

It would be in the best interests of children to bring loot boxes under gambling regulation.

¹⁵ [The Rip-Off Games: How the new business model of online gaming exploits children](#), Parent Zone, 2019, p. 15