

## **Loot Boxes in Video Games - Call for Evidence**

The [Gambling Health Alliance](#) (GHA) is a coalition of 50 organisations and individuals with a shared interest in reducing the damage caused to health and wellbeing from gambling. The secretariat is provided by the [Royal Society for Public Health](#) (RSPH). The objective of the Alliance is to support policy-making to address the social, economic and cultural factors that contribute to gambling harm and the inequalities in health caused by it. We do this by highlighting gambling-related harm, engaging with policy makers, and promoting evidence that can be translated into reducing gambling harms.

We welcome the Government's plans to make the UK the safest place to be online in the world, and believe that tackling problems linked to loot boxes in video games would make a major contribution. We are therefore very pleased to respond to this consultation, and alongside our response we will be launching a campaign, '#LidOnLoots', calling for loot boxes to be classed as a form of gambling. The campaign has been developed following discussion with our members who have agreed that loot boxes are a major problem and should be the focus of the GHA's work.

This response is primarily based upon data from the 2019 RSPH report [Skins in the Game](#); research was conducted from November 2018 to November 2019 through six in-depth focus groups with young people held in England, Scotland and Wales, followed by an online survey of 1,025 11-24 year olds (from here referred to as 'RSPH research'). Additionally, our response draws on a survey of 611 British gamers aged 13-24, conducted between October and November 2020 by the GHA (from here referred to as 'GHA research'). The survey was hosted by SurveyMonkey and promoted through social media.

### **Summary**

- The overwhelming majority of respondents (91%) agreed with the statement: 'buying a loot box is a form of gambling'.
- Three quarters (75%) feel that buying a loot box is bad for their health, citing feelings of addiction, regret and anger when purchasing loot boxes.
- Three quarters (76%) thought that loot boxes should be illegal for under 18s to buy.
- If a major market such as the UK takes decisive action this would have a major impact on games companies and position the UK as an international leader on this issue.

### **Recommendations**

- Loot boxes should be classed as a form of gambling and removed from games for under 18s.
- As part of the wider Online Harms agenda games developers should be encouraged to make loot boxes in games played by adults safer, by including features such as tracking in-game spending and clear odds of winning.
- Further research into 'cashing out' loot boxes is needed, and tighter regulation put in place to prevent this if necessary.

### **Loot box harms questions**

**1. Do loot boxes cause any harm to players and what evidence is there to support this? Issues to consider include:**

**a. What are the harms and how are they caused by loot boxes?**

### Findings from GHA research:

Three in four (75%) respondents agreed with the statement "buying a loot box is bad for my health or other young people's health", with only 9% disagreeing. The effects of loot boxes on young people's wellbeing included:

- Financial harm – respondents told us of spending potentially hundreds of pounds, if not more, over the course of a year on loot boxes. One said that loot boxes were *'at the age of 22, ruining [him] financially'*.
- One third (33%) said they didn't feel in control of how much money they spent on loot boxes
- 13% had got themselves into debt because of spending on loot boxes.
- Overspending on loot boxes also impacted their close relationships as well as their mental health. For example, one described the relational harm as well as the financial cost of an addiction to loot boxes: *"I was addicted to opening FIFA packs. I spent £100 in one night trying to get a "limited edition team of the year" card. It made me sick. I had an addiction to the FIFA 'packs' but was too embarrassed to admit it to myself or my friends and family."*
- Nearly two in five (37%) had got in trouble with their parents for spending money on loot boxes. This is likely related in part to how many young people acquired the money to spend on loot boxes:
  - More than one in ten (11%) respondents had either used their parent's credit or debit card, or borrowed money from friends or family; 15% had taken money from their parents without permission to buy a loot box; and one in ten (9%) had borrowed money they couldn't repay.<sup>1</sup>
  - Three respondents' families had to re-mortgage their homes to cover the costs and another told us of resorting to crime in order to pay off his debts.
  - One respondent, for example, told us that his 13-year-old brother had stolen £700 from him to spend on loot boxes: *"I find most loot box mechanisms to be purely gambling wrapped up in a bow. They provide nothing as reward or pay out other than virtual items, and in FIFA and Battlefield 2, they are downright almost forcing you to spend on these gambling mechanisms in order to properly experience the game. I hate them with a passion, as my younger brother of 13 has spent so much money on them and has gotten nothing tangible from it. It is gambling."*

Over four in five (82%) respondents thought buying loot boxes was, or could become, addictive, and a quarter (24%) said that they themselves were thus addicted. As one powerfully described his experience: *"One box leads to another and to another and to another... by that point you've spent so much money you don't even know what to do. This cycle happens multiple times and you end up spending thousands. It's gambling addiction and it's very hard to stop. There are no barriers to say that you're spending too much, if anything companies promote it more so you spend more... I hate them now."*

This supports the data from RSPH'S research, in which 79% of respondents said they thought it was either very likely (50%) or likely (29%) that a young person would find buying loot boxes to be addictive. Despite not being classified as gambling, far more respondents in that survey thought loot boxes would be addictive than betting with a bet-maker online (44% overall) or in person (33%).

When we asked respondents to describe other changes they had noticed because of spending money on loot boxes, many reported common signs of addiction:

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<sup>1</sup> This closely correlated with findings from RSPH's 2019 survey findings: of those who had bought loot boxes, 7% had used a parent's card, and 2% had borrowed money from friends or family.

- Nearly half (48%) said they tried to hide how much time or money they were spending on loot boxes.
- 15% said they struggled to focus on other things. *“I was always thinking when I would be able to open my next loot box”*, one respondent noted.
- Nearly one in four (23%) said they experienced mood swings more often than usual as a result of buying loot boxes.
- Almost half (44%) said they experienced feelings of frustration and anger more often than usual because of loot boxes. In their comments, respondents described how the disappointment of gambling on loot boxes could impact their wellbeing: *“The feeling of regret when (most of the time) you get nothing of value is incredibly soul crushing when you’re young. Yet it makes you want to go again so that you can get something good and it feels worth it at the time. It’s a vicious circle of wasting money and feeling bad about it but still going back for more”*.
- Nearly three in ten (31%) said they didn’t feel in control of how much time they spend on games.
- 14% said loot boxes caused them to spend less time with other people.
- 16% said loot boxes caused them to sleep less well.

One of the dynamics that lay behind these reports of addiction was what respondents referred to as ‘pay to win’, whereby spending money on loot boxes provides an advantage over those seeking to progress through time, skill and effort alone. One response sums this up: *“It was an endless cycle of frustration, when people can pay to get the chance of better players to give an advantage, it’s very hard not to buy into. And with such low probability of actually receiving something worthwhile, it was incredibly annoying. Despite this there is such an addictive nature to opening FIFA packs to try and get the best players that it’s impossible to stop, especially as a teenager with little understanding of gambling and money. I had to stop buying and playing the game to stop wasting money”*.

Because of this dynamic, combined with the low odds of receiving the most valuable items, respondents described feeling compelled to keep purchasing loot boxes. For instance, in FIFA, Lionel Messi and Cristiano Ronaldo are considered the most valuable players, but the chances of finding them in a loot box are very slim – less than 1%. Attempting to acquire these players can rack up huge costs, as one respondent described: *“I have played FIFA Ultimate Team since FIFA 09 and I have never packed Messi or Ronaldo. Over 10 years, each year spending around £200 to £400, so overall £2000 to £4000 and never getting the best players.”* Many others had the same experience: *“On FIFA, I spend hundreds if not thousands on packs and never seem to get anyone of note.”* It should be noted that as of mid-November 2020 Electronic Arts introduced an in-game monitoring tool to allow players of FIFA-21 to track their spending.<sup>2</sup>

Nine out of ten respondents (91%) agreed with the statement: ‘buying a loot box is a form of gambling’. When invited to comment on why they thought loot boxes constituted gambling, many used the same logic: that exchanging money for the **chance** of winning something is the essence of gambling. In fact, several respondents considered loot boxes as worse than activities currently regulated as gambling: they believed that the odds were more in the favour of games publishers than those for regular bookmakers, and because the items do not necessarily have any real currency value, unless traded on a third-party site, meaning game publishers never have to ‘pay out’. For these respondents, it did not matter that loot box items did not necessarily have direct monetary value – which is why loot boxes are not currently regulated in the UK – because their value within

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<sup>2</sup> <https://www.videogameschronicle.com/news/fifa-21-now-lets-you-limit-how-much-you-play-and-spend-on-fifa-points/>

the game and to their performance in it was so substantial. In this way, respondents were following the line taken by the Belgian Gambling Commission that “the reward that can be obtained from a gambling activity does not necessarily have to be of monetary value: it is sufficient if it has value for the player, which can for example result from the scarcity of a virtual item”.<sup>3</sup>

Three in four (76%) respondents thought that buying a loot box when under the age of 18 would make someone more likely to gamble when they are legally allowed. Only 6% thought buying a loot box when under the age of 18 would make someone less likely to gamble as an adult.

Respondents noted that becoming accustomed to the thrill of opening a loot box, especially while the brain is in the process of developing, and being normalised to gambling behaviour were significant factors in this regard. *“Functionally it's designed to excite the same areas of the brain that gambling does. It's very satisfying in the moment but can lead to deep addictive behaviour which left unchecked can be damaging to people's lives”*, one commented. Others went into more detail about the features used to ‘excite’ the brain: *“I believe the visual and audible feedback commonly seen with loot boxes (bright colours, flashing lights, loud noises etc.) are intentionally mimicking methods seen in adult casinos, i.e. slot machines.”* Other research has noted that these kinds of reward mechanisms habituate children to a constant input of new and exciting stimuli and thereby contribute to hyperactivity and symptoms of inattention.<sup>4</sup>

Some respondents referred to loot boxes as a ‘gateway’ onto other forms of gambling either explicitly or with reference to their own personal experience. *“Buying loot boxes in games led to me placing bets I regretted instantly on sports such as football and Formula One.”* Attempting to recoup one’s losses from loot boxes could also lead to more direct forms of gambling: *“I had a gambling addiction when I was around 16 due to CS:GO [Counter-Strike: Global Offensive] cases [loot boxes] and had spent over £650 on them which then led me to going onto CS:GO gambling websites and spending more money and playing actual casino games but with the CS:GO skins such as roulette. This led me to spend another £350+.”*

We also heard of loot boxes feeding into bullying amongst young people: *“There was often discussion in lunch halls at school about how many packs people were going to buy when FIFA was out, and if you couldn’t afford them you felt left out.”* This supports the finding from the Children’s Commissioner’s report *Gaming the System* (2019), produced using research focus groups, where children described feeling embarrassed if they could not afford new ‘skins’, because they would be teased by friends, feel excluded or different, or receive verbal abuse for wearing the default skin.

In and of itself, bullying can cause significant harm. But in this instance, its effects may be doubly negative. For, Dr David Zendle observes, a strong “predictor of problem gambling is the social acceptance and availability” of it.<sup>5</sup> Therefore, the perception that gambling on loot boxes is not only normal but something that they need to do to fit in could have serious consequences for young people’s relationship with gambling in the future. In this context, it is also notable that in RSPH’s research, 46% of respondents said that buying loot boxes was ‘definitely a normal thing’ for

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<sup>3</sup> Cerulli-Harms, A. et al., Loot boxes in online games and their effect on consumers, in particular young consumers, Publication for the committee on the Internal Market and Consumer Protection (IMCO), Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020, p.36

<sup>4</sup> Lobel, A., Engels, R.C.M.E., Stone, L.L. et al. Video Gaming and Children’s Psychosocial Wellbeing: A Longitudinal Study. *J Youth Adolescence* 46, pp. 884–897 (2017). <https://doi.org/10.1007/s10964-017-0646-z>; Gentile, D. A., Swing, E. L., Lim, C. G., & Khoo, A. (2012). Video game playing, attention problems, and impulsiveness: Evidence of bidirectional causality. *Psychology of popular media culture*, 1(1), pp.62-70

<sup>5</sup> <https://publications.parliament.uk/pa/cm201719/cmselect/cmcomeds/1846/1846.pdf>

someone of their age to do and another 44% said it was a 'fairly normal thing' – a higher proportion than said the same of any other gambling or gambling-like activity.

As a result of this cumulative impact on their health and wellbeing, three in four (76%) thought loot boxes should be made illegal for under-18s to buy.

### **b. Whether young people are impacted differently to adults, and if so, how?**

There is evidence that young people are more likely to spend more on loot boxes than adults and the positive correlation between the spending on loot boxes and problem gambling severity has been shown to be twice as strong among adolescents as among adults.<sup>6</sup>

#### Findings from RSPH research:

RSPH found that respondents aged 11 to 14 years old were significantly more likely to purchase a loot box (which respondents also identified as the most likely gambling or gambling-like activity to be addictive) than those aged 18 and above. This is in stark contrast to their lower participation in other forms of gambling and gambling-like activity, like betting with a bookmaker or buying a scratch card. Over a quarter (27%) of young people aged between 11-14 had bought a loot box in the week before completing the survey, compared to 16% of those aged 18 and above. Younger respondents also had more permissive views around loot boxes than older participants: they were less likely to think loot boxes should be classified as gambling. This divide suggests that younger participants, who began playing video games when loot boxes were already a feature, have been normalised to this activity. Younger people may also not have engaged as much with campaigns or information about potential harmful gaming and gambling.

In contrast, older participants in the RSPH research could remember a time when their gaming experience did not feature loot boxes and so their attitude to them differed, and was far more negative. In focus groups, there was often a strong sense of frustration from respondents in the older age groups that the benefits to their wellbeing they had previously got from playing games had been quietly polluted by mechanisms they associated with gambling. This often involved comparisons made to games they played earlier in their childhood, which did not feature loot boxes or skins. Across all focus groups with 17 to 24 year olds, young people commented that they felt that modern games were designed in a way that made enjoying or completing them difficult without buying loot boxes. In addition, there was often a sense of concern towards younger players of games, who they felt could be less well-equipped to manage the risks associated with loot boxes. This was attributed to them having less experience of participation in gambling and therefore fewer protective strategies to avoid harm. It was also felt that younger gamers had less experience of older games that did not feature items such as loot boxes and skins and were therefore less critical of them and likely to consider them as a normal aspect of gaming, which the RSPH survey results substantiated. Finally, there may be less awareness of gambling within gaming as gambling has only been on the Health Education curriculum since September 2020, making the case for the need for education to include gambling-like gaming.

### **c. Whether any harms identified also apply to offline equivalents of chance mechanisms, such as buying packs of trading cards.**

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<sup>6</sup> Zendle, D., Meyer, R., & Over, H. (2019). Adolescents and loot boxes: links with problem gambling and motivations for purchase. *Royal Society Open Science*, 6(6), 190049.

### Findings from GHA research:

We asked survey respondents whether they thought either loot boxes or physical trading cards were, or could become, addictive:

- Over half (53%) said loot boxes, but not trading cards, were or could become addictive.
- Only 6% said trading cards, but not loot boxes, were or could become addictive.
- Three in ten respondents (29%) thought both could be addictive.

We asked respondents which item they felt more peer pressure to buy: over half (53%) chose loot boxes compared to 6% who chose trading cards.

We thus identified evidence that the risks of purchasing loot boxes, and the dynamics around them, are significantly more harmful than those which surround physical trading cards. One respondent independently drew a distinction between the two formats: *"[Loot boxes are] not dissimilar from buying a packet of Match Attax, Pokemon Cards or Pagani Stickers, but in online games it is way more predatory and is causing problems in young people that those old school card/sticker packs never did."*

Another observed a significant difference between Magic The Gathering, a game with physical trading cards, and Magic The Gathering Arena, a digital version, partly on the grounds that digital cards remained the propriety of the platform hosting the game: *"Magic used to be great. Sure, it was always kind of gambling but there was a much less false and predatory, shiny exterior on the gambling and you got real physical cards that didn't have a chance of getting deleted from existence one day."*

This distinction – between physical cards and those which exist digitally, and therefore continue to depend on the platform and the functionality of the game for their value – is especially relevant to loot boxes in sports games. Each year, these games are updated and gamers are unable to 'carry over' the teams they have acquired through loot boxes into the new edition, compelling them to spend more money on loot boxes. One gamer put it thus: *"My roommate spent £800 in one month on FIFA packs in FIFA 20. Now there's FIFA 21 and that £800 is worth NOTHING now. That's just one month's worth... they are dangerous"*.

There is also a matter of the difference in cost. To complete the set of skins in League of Legends, it has been estimated that one would need to spend \$17,000 US<sup>7</sup> – few sticker albums would cost an equivalent amount to fill.

#### **d. Whether any harms identified may also apply to other types of in-game purchases.**

Other in-game purchases include subscriptions, premier access and battle passes. Their characteristics of being purchased less frequently may make them potentially less harmful and addictive than loot boxes, but this needs to be fully researched. Nevertheless, other types of in-game purchases and their association with harms should be monitored, particularly in relation to loot box purchasing habits.

A study of 112 players of *Heroes of the Storm* found that when loot boxes were removed from the game, problem gamblers spent significantly less money in-game. The more severe an individual's

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<sup>7</sup> <https://www.eteknix.com/loot-box-league-of-legends/>

problem gambling, the more their spending was reduced when loot boxes were removed from a game.<sup>8</sup>

#### Findings from GHA research:

Over half of survey respondents agreed that other in-app or in-game purchases are or could become addictive (20% strongly agree, 34% agree). One third (33%) agreed that they have felt peer pressure to make other in-app purchases (11% strongly agree, 22% agree). One respondent described that their spending on loot boxes went hand-in-hand with an inability to control their spending on other in-game purchases:

*"I have struggled with general spending in games since I was a young teenager, and it has carried over to loot boxes now that I'm older just to get that thrill." And the way another, who reported spending £300 in loot boxes in a week, described his spending on in-app purchases which enabled progression in the game seems to strongly indicate an addiction: "Even people like me who are AWARE it's a gross manipulative scam still fall for it. I alternate between thinking in-app purchases are bad and spending (way too much) money on them anyway. Yeah, it's bad and gross and shouldn't happen. But like the alternative is wasting days grinding and I value my time more than I value my (non-rent, non-food) money because what else is it for but making my life slightly less agonising?"*

#### In-game purchases market questions

**2. How many and what kind of video games contain loot boxes? Information that would be useful to receive includes:**

**a. How often paid and free loot boxes appear in popular and bestselling games.**

A 2019 study<sup>9</sup> by led by Dr David Zendle at the University of York found that the presence of loot boxes is continuing to grow on desktop games, played on consoles. In the group of high-selling games included in this study, the presence of loot boxes had increased from about 4% to 71% over the past nine years. A 2019 report by Parent Zone<sup>10</sup> found that nine in ten (91%) young people reported that there were loot boxes available in the games that they play.

#### Findings from GHA research

We asked survey respondents how often **free** loot boxes feature in the games they regularly played, and less than one in ten (8%) said that the loot boxes in the games they played were 'always' available for free. By contrast, three in ten (30%), said loot boxes which did not need to be purchased 'rarely' or 'never' appeared in the games they played. Only 13% said they never paid for loot boxes, compared to 19% who said they 'always' did and another 22% who said they 'often' did.

It should be noted that just because a game offers a loot box which can technically be acquired for free, that does not mean that players do not end up purchasing it with virtual or real currency. Often, the tasks required to acquire a free loot box are too arduous, and put players at a competitive disadvantage. For example, in Overwatch, to acquire five loot boxes would take 4.3 hours of playing matches, with an average match lasting seven minutes, and there is only a one in 21 chance of any of those loot boxes containing the skin of a player's favourite hero. To acquire 22 loot boxes would

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<sup>8</sup> Zendle D. 2019. Problem gamblers spend less money when loot boxes are removed from a game: a before and after study of Heroes of the Storm. PeerJ 7:e7700 <http://doi.org/10.7717/peerj.7700>

<sup>9</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6824327/>

<sup>10</sup> <https://parentzone.org.uk/the-rip-off-games>

take over 20 hours of seven minute matches (more time would be needed to look for the match and the ceremonies involved after each). The attraction of paying for those loot boxes instead is compelling.<sup>11</sup> Indeed, nearly three in five (58%) respondents said it was 'difficult' or 'very difficult' to get items in loot boxes through means other than paying, compared to one in five (21%) who said it was easy or very easy.

As many survey respondents were reflecting on their experience of loot boxes and pay to win mechanics across multiple games, it is not possible from our survey to identify the average cost of loot boxes or the frequency with which they appear by game. However, we can make some rough deductions. For example, among those who said free loot boxes 'never' or 'rarely' appeared in the games they play, the most commonly played games were Grand Theft Auto V and FIFA.

**b. Whether loot boxes are more likely to be found on certain platforms and devices/within specific genres of game/within games using certain payment models (free to play, subscription etc) and if so, which platforms or device/genres/payment models?**

Findings from RSPH research:

RSPH research found that one in five (21%) of the young people who responded to the survey had bought a loot box in the previous seven days. When this group of respondents were asked which games they had purchased the loot boxes on, the most common responses were the Grand Theft Auto (42%) and FIFA (17%) series of games.

In total, the young people who responded to the RSPH survey were able to list 35 different mobile and video games in which they had bought loot boxes in the previous seven days. The young people RSPH spoke to also felt that loot boxes were disproportionately present on games brought to the market by specific games developers, summed up by one respondent saying that loot boxes could be found on "*literally any EA game*".

The analysis of these responses also identified clear trends in the genre of games that young people said featured loot boxes, with loot boxes distributed relatively evenly across the first-person shooter, battle royale and role-playing game genres.

Approximately one in six (17%) of those games were first-person shooter games, with the most frequently given responses being Counter Strike Global Offensive, Tom Clancy's Rainbow Siege and Overwatch. The same proportion (17%) were battle royale games, with the most frequently given responses being Fortnite, PlayerUnknown Battlegrounds and League of Legends. Finally, one in five (19%) of the games listed were role-playing games, including Fallout.

Findings from GHA research:

The follow up GHA research asked which games respondents played that contained loot boxes and the most popular responses were as follows:

- FIFA (53%)
- Grand Theft Auto V (48%)
- Overwatch (42%)

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<sup>11</sup> Paul Tassi, October 2016, The Math Behind Why Overwatch's Loot Boxes Are Exhausting To Unlock, Forbes. Available at: <https://www.forbes.com/sites/insertcoin/2016/06/10/the-math-behind-why-overwatches-loot-boxes-are-exhausting-to-unlock/>



- Counter-Strike: Global Offensive (35%)
- Apex Legends (32%)
- Star Wars Battlefront II (26%)
- Red Dead Redemption 2 (25%)

Other games which contained loot boxes played by respondents included: Tom Clancy's The Division 2 (10%), Crash Team Racing Nitro-Fueled (6%), Fire Emblem Heroes (5%), Pro Evolution Soccer (5%), Madden (5%), Modern Warfare, Splitgate, Heartstone, League of Legends, Team Fortress 2, Rainbow Six: Siege, Smite, Dota 2, Call of Duty, Halo, Clash of Clans, Farm Heroes, and Battlefield.

We also asked on which games their experience was negatively or positively impacted by loot boxes. Our findings are shown in the table below:

Game	Said loot boxes negatively impacted game	Said loot boxes positively impacted game
FIFA	79%	10%
Farm Heroes	68%	2%
Pro Evolution Soccer	67%	8%
Crash Team Racing Nitro-Fueled	66%	10%
Madden	65%	9%
Tom Clancy's The Division 2	63%	12%
Grand Theft Auto V	56%	14%
Fire Emblem Heroes	53%	20%
Red Dead Redemption 2	50%	12%
Counter-Strike: Global Offensive	45%	21%
Apex Legends	41%	22%
Overwatch	35%	33%

Respondents repeatedly drew a distinction between loot boxes which one had to pay to buy and which were essential to gameplay on one hand, and those which could be acquired through other means and/or contained purely cosmetic items on the other. Games which featured the first kind of loot boxes received the most negative views. These included: FIFA, Madden, Red Dead Redemption 2, Grand Theft Auto, and Star Wars: Battlefront 2 (before its loot boxes were removed). Respondents were more likely to say loot boxes had an overall neutral or even positive effect on games with the second kind of loot boxes, including Overwatch and Apex Legends. Respondents also took into account the value for money of loot boxes: if the odds of them getting a prized item were considered too low then they were counted as a waste of money. Sports games were also criticised because they were updated annually but players could not carry their teams (acquired through loot boxes) over into the new edition and so had to start over and spend more money.

FIFA was continually singled out as the game where the gaming experience was most negatively impacted by loot boxes. 79% of respondents who played FIFA said loot boxes had a 'very negative' or 'negative' effect on their experience of that game, compared to 10% who said it had a positive effect. Respondents were united in their explanation: it was impossible to play successfully without spending money on loot boxes (containing football players to build your team), as the game followed "a pay-to-win" dynamic. At the same time, the odds of getting one of the best players were considered incredibly low (>1%), so FIFA players could end up sinking large amounts of money

without getting the results they wanted. One respondent's comment was representative: *"The chance of packing a good player is extremely low but it makes the player want to buy more and more just for the chance to get one, like in gambling. It also makes EA not have to put effort into other game modes as they know Ultimate Team is their biggest seller and as long as they make money there then the other game modes (e.g. pro clubs, career mode) are not worth their time."* Those who played FIFA were the most likely to spend over £100 to complete the game.

We found that survey respondents played games containing loot boxes on various devices, including PC (36%), Xbox (28%), PlayStation (25%), and smartphones (10%). Nintendo was the sole exception of a device on which games with loot boxes were not commonly played.

### **3. How are loot boxes used in games? Information that would be useful to receive includes:**

**a. How loot boxes are deployed in games e.g. through time specific offers, part of games involving the performance of repetitive tasks known as "grind", a combination of paid and free loot boxes, whether items provided are cosmetic or substantial items to enhance gameplay.**

#### Findings from RSPH research:

When asked how they had accessed loot boxes, two thirds (66%) said they had done so by purchasing the loot box using real-life money, often through the intermediary of a virtual, in-game currency. The remaining third had accessed loot boxes through points or currency accumulated through gameplay, with no investment of real-life money involved.

Across the RSPH research, young people reported that although loot boxes could often be accessed for free through gameplay, they were often highly sceptical as to the prospects of free loot boxes containing items of value or worth, compared to paid-for loot boxes. This is summarised well by an 18 year old who took part in a focus group:

*"That's the line from the games developers isn't it? They say that you can win the big loot boxes through normal gameplay, but the grind to that is impossible. If it really was easy to get loot boxes that way, they'd make no money. They know full well what they are doing".*

The majority of the young people involved in the research identified that fun (78%) was the critical factor in their decision to purchase a loot box.

Nevertheless, a significant proportion of young people said that they did so in an effort to obtain a substantial item that would help them to be good at the game they were playing (13%) or to help them to reach a certain level so that they could continue to play the game (12%). One in ten (10%) said that they bought loot boxes in an effort to gain cosmetic or substantial items, which would stop them feeling like they had a worse team or player than their friends.

This is summarised by a quote from one young person, stating that buying a loot is *"part of the game... without it you will have terrible football players or boring weapon skins"*.

#### Findings from GHA research:

We asked respondents what methods they typically used to access loot boxes: for free with no action required, by watching an advert, by waiting a set amount of time, by doing a repetitive task (the grind), or by paying with real or virtual currency. Doing a repetitive task or purchasing the loot box were the two most popular responses:

- One fifth (19%) said they ‘always’ paid for loot boxes, and another 22% said they ‘often’ acquired loot boxes this way while 18% said they ‘always’ performed a repetitive task to get a loot box, and 40% ‘often’ did so. Only 13% said they never paid for loot boxes.
- Just 2% were ‘always’ able to acquire loot boxes by watching an advert and 3% were ‘always’ able to simply wait a set amount of time to receive a loot box.
- 13% said they could ‘always’ get a loot box for free without any action required from them, but for over a third (35%), that was only ‘occasionally’ or ‘rarely’ an option for them.

Although across the broad spectrum of games, there is some variety in how loot boxes are acquired, this depends heavily on the title, and the two favoured techniques by games publishers are to require payment or ‘the grind’. A respondent summarised why this is: *“I would love to see loot boxes and all other micro-transactions gone from video games completely. They ruin games. Companies will purposely make their games “grindy” to entice you to buy loot boxes or micro-transactions to essentially skip the grind. There’s less sense of reward from playing games these days because of this.”*

Young people again told us that high-value loot boxes were very difficult to obtain through “grind”. Over half (58%) of respondents told us that it was either ‘difficult’ or ‘very difficult’ to do this, compared to just a fifth (21%) of young people who told us that it was either easy or very easy. For example, in Overwatch, to acquire five loot boxes would take 4.3 hours of playing matches, with an average match lasting seven minutes, and there is only a one in 21 chance of any of those loot boxes containing the skin of a player’s favourite hero. To acquire 22 loot boxes would take over 20 hours of seven minute matches (more time would be needed to look for the match and the ceremonies involved after each). The attraction of paying for those loot boxes instead is compelling.<sup>12</sup>

One quarter (25%) of respondents told us they bought loot boxes to obtain substantial, functional items to improve their chances of progressing in the game, implying that even if it were technically possible to complete a game without buying loot boxes, trying to acquire them through gameplay would put players at a competitive disadvantage (this is referred to as ‘pay-to-win’.) One third (33%) of respondents said they bought loot boxes to obtain cosmetic items to improve their character’s appearance.

While many respondents felt more positive towards games where the loot boxes only contained cosmetic items, it does not necessarily follow that the decision to buy such boxes is entirely free. In the Children’s Commissioner’s report Gaming the System (2019), produced using research focus groups, children described feeling embarrassed if they could not afford new ‘skins’ (cosmetic items), because they would be teased by friends, feel excluded or different, or receive verbal abuse for wearing the default skin. Some respondents to our survey also described feelings of addiction to collecting ‘skins’ even though they weren’t necessary to gameplay because of their cultural value and potential future significance to the game:

*“Why did I waste so much time trying to unlock aesthetics for heroes I almost never played as? Why did I waste so much time unlocking aesthetics I knew for a fact I’d never want to activate? D.Va’s police skin from Heroes of the Storm is a prime example. I remember exactly why I wanted*

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<sup>12</sup> Paul Tassi, October 2016, The Math Behind Why Overwatch's Loot Boxes Are Exhausting To Unlock, Forbes. Available at: <https://www.forbes.com/sites/insertcoin/2016/06/10/the-math-behind-why-overwatches-loot-boxes-are-exhausting-to-unlock/>

*it: I would never be able to get it again. What if the skin became significant later on? What if my access to that skin would, years down the line, give my account some kind of prestige? [...] Artificial scarcity is horrible. This idea that if I don't get it now, I'll never get it, so I "have to" get it now just in case it's something I want later on, even though I know I don't want it now, is very stressful."*

*"Other players put a sort of status on having certain cosmetics that you can earn from loot boxes, so if you don't have a character or weapon that looks a certain way then you are 'beneath' them in this fictional status".*

*"My friends, at the time all around 13-16, were constantly opening packs [containing cosmetic skins], and pressuring me to do the same so they weren't playing with someone "basic"."*

Moreover, skins in Counter Strike: Global Offensive can easily be sold, with some retailing for hundreds and even thousands of pounds.<sup>13</sup> The potential to earn money from loot boxes was why some respondents noted CS: GO skins as particularly 'addictive' even though they weren't necessary for game progression.

**b. The way loot boxes work alongside other in-game purchases in video games e.g. can items normally be purchased directly, can they be gained for free?**

**4. How do loot boxes contribute to the market for in-game purchases? Information that would be useful to receive includes:**

**a. The percentage of in-game purchase revenue from UK customers that comes from loot boxes in the UK.**

**b. The percentage of revenue from UK customers that comes from all in-game purchases.**

**c. The value of loot boxes to different business models e.g. free to play.**

**d. The average spend and frequency of loot box purchase per customer in the UK.**

Findings from GHA research:

We asked young people how much money they estimate they spend on loot boxes during the course of completing a game, on top of the purchase price of the game itself. Almost 1 in 4 (22%) told us they spent over £100 on loot boxes, in addition to the original purchase price of the game, to complete it. 10% spent between £51 and £100 on loot boxes in a single game; and 15% spent between £21 and £50. One third (32%) spent under £20, and only one in five (21%) said they typically could complete a game without spending any money on loot boxes. It should be noted that 31% of survey respondents said they struggled to keep track of their spending on loot boxes meaning respondents may be underestimating their average spend.

When asked how often they spend real-life money on loot boxes, 11% told us they did so on a daily or weekly basis, and 27% did so every month. Only 13% said they never bought loot boxes. Of those participants who did spend real-life money on loot boxes, when asked how much they tended to spend on loot boxes per week, the most frequent response was somewhere between £1 and £5 (22%), which would amount to between £52 and £260 a year. One in ten (10%) spent between £5

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<sup>13</sup> <https://gamerone.gg/the-top-ten-most-expensive-csgo-skins>

and £10 a week, and a similar proportion (9%) spent £11- 20 a week. 4% told us they spent upwards of £50 a week on loot boxes. Over the course of a year, that would add up to a total spend of at least £2,600 for this minority group.

**e. The average price of loot boxes available in the UK and the average price of the most popular loot boxes in the UK including:**

**i. Loot boxes with the highest number of total purchases**

**ii. Loot boxes purchased by the highest number of individual players**

Findings from GHA research:

When asked to give an approximate value for the cost of a loot box in games they play, there was a range of responses given, from £1 to over £60. The modal response from young people was £1-3, with around a third (34%) giving this response. Over a quarter (27%) estimated the average cost at between £4-6, 15% at £7-10, and 11% at £11-20.

It is important to note that around one in ten (9%) said that the value of a loot box was not possible to calculate. One possible explanation for this is that the use of virtual currency in games acting as an intermediary between real-life money and the cost of a loot box.

**5. How do loot boxes work in conjunction with the wider in-game purchases market? Information that would be useful to receive includes:**

**a. Whether people buying loot boxes in the UK spend more than the average for players who purchase any type of in-game purchase in the UK.**

Findings from GHA research:

We asked about spending on other in-app purchases. Respondents estimated that in the last six months they had spent the following on other in-app purchases besides loot boxes; one in five (21%) had spent £21-50; over one in ten (14%) had spent over £101; another one in ten (13%) had spent £6-10. Only 12% had not spent any money on in-app purchases over the past six months. The most common weekly spending on loot boxes (£1-5) is equal to a six monthly spend of between £26 and £130; this comparison suggests that more money is spent on loot boxes than other in-game purchases.

**b. The percentage of players in the UK buying a loot box who will also make another type of in-game purchase in the same session.**

Findings from GHA research:

We asked respondents what other types of in-app purchases they make besides loot boxes: 65% have bought a battle pass, 57% have bought a subscription, 51% have paid for non-randomised content such as skins or weapons, and 44% have paid for premium content. A minority also purchased additional Downloadable Content (DLC).

**6. To what extent are items received in loot boxes tradable? Information that would be useful to receive includes:**

**a. How often items from loot boxes are tradable for other in-game items, including those which might have been purchased with real money?**

Skins are downloadable graphic or audio-based items that change the appearance of a character within a game. They can be obtained from loot boxes. Skin betting involves the 'skins' obtained whilst gaming to be used as a virtual online currency, in order to gamble on the outcome of a real-life or virtual event. Individuals are able to effectively use the skins in their possession as poker chips, in order to gamble in an attempt to obtain more valuable skins, which may have been paid for with real money.<sup>14</sup>

#### Findings from RSPH research:

Around one in ten RSPH survey respondents had taken part in skin betting related to a video game, for example trying to win a skin for a character. 12% had done this in the past week, 13% in the past month, and 7% did this at least once a week on a regular basis. Skin betting was higher in the younger age group; 14% of 11-14 year olds had been involved in skin-betting in the previous week, compared with 13% of 15-17 year olds.

In comparison with other gambling activities, skin betting is slightly more prevalent amongst children and young people. The 2019 Gambling and Young People report by the Gambling Commission found that participation in any National Lottery game by 11-15 year olds over the past 7 days prior to responding to the survey was 3% for 11-15 year olds, and 9% for 16 year olds.<sup>15</sup> Additionally, 11% of 11-16 year olds in Great Britain reported spending their own money on one or more gambling activities in the seven days prior to participating in the survey. The most common activities were placing a private bet for money (mentioned by 5%) and playing on fruit or slot machines (4%).

#### Findings from GHA research:

When asked how often items won in loot boxes are traded for other in-game items, 6% said they 'always' do this; 26% 'often' do this, 21% 'occasionally' do this; 21% 'rarely' do this; and 26% 'never' do this.

#### **b. How often items from loot boxes are bought or sold for real money, including which games and platforms this may be easier and more prevalent on?**

Selling items from loot boxes for real money is possible on websites such as Steam.<sup>16</sup> In the Store individuals with a Steam account can sell items from loot boxes in exchange for Steam credit. The credit can be 'cashed out' by purchasing games on Steam and selling them on third party websites.<sup>17</sup>

#### Findings from GHA research:

When asked how often items won in loot boxes were sold for real money, the majority (64%) of respondents said they 'never' did this. However, 8% did this 'often' and 10% did this 'occasionally'.

In their comments, several respondents described doing this as the only way they could recoup some of the money they had spent on loot boxes.

#### **c. What actions have been taken by industry to prevent the trading of items outside of games and how successful have these been?**

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<sup>14</sup> [https://parentzone.org.uk/system/files/attachments/Skin\\_Gambling\\_Report\\_June\\_2018.pdf](https://parentzone.org.uk/system/files/attachments/Skin_Gambling_Report_June_2018.pdf)

<sup>15</sup> <https://www.gamblingcommission.gov.uk/PDF/Young-People-Gambling-Report-2019.pdf>

<sup>16</sup> <https://store.steampowered.com/>

<sup>17</sup> <https://careergamers.com/how-can-i-earn-money-playing-games-on-steam/#:~:text=You%20can%20sell%20cosmetic%20items,Steam%20credit%20to%20your%20account.>

## Current protections questions

**7. Please provide any evidence relating to the use and impact of restrictions/protections introduced directly into video games or on video games platforms and devices. Information that would be useful to receive includes:**

**a. Where video games companies have introduced restrictions/protections in relation to loot boxes, why were these introduced, what measures were used and what impact have they had on sales and the behaviour of players?**

### Findings from GHA research:

When we asked young people about whether loot boxes had negatively impacted their gaming experience, many drew distinctions between how loot boxes work in different games and the value they seem to represent. They also approvingly noted instances where games had reworked their loot box mechanics in response to negative reviews. This applied to:

- Star Wars Battlefront 2, which was released in November 2017 and caused significant outrage amongst players even before the launch. In addition to the £50 retail price, sections of the game and characters in it were behind a paywall and to progress through the game, players had to spend more on loot boxes. To play as Darth Vader, for example, cost a further £15. After serious backlash against EA, whose share price fell 10% that month as a result, paid-for loot boxes were removed from the game in March 2018. The loot boxes which remained in the game could only be acquired through gameplay, and they contained cosmetic items, rather than those which were necessary for game progression. In the GHA survey, respondents described how negatively the initial loot box system had affected their experience of Star Wars Battlefront 2, but were satisfied by the change in March 2018.
- Middle-earth: Shadow of War, also launched in November 2017, had its loot boxes and all other micro transactions removed in July 2018 after they were widely criticised for not only their expense but the negative effect which players believed they had on the gameplay.

Respondents also noted features in certain games which limited the harms of their loot boxes, including:

- Prevention from receiving duplicate items (e.g. Apex Legends and Overwatch)
- Disclosure of odds (e.g. Counter-Strike: Global Offensive, DOTA 2, and Apex Legends)
- Putting a daily cap on loot box purchases (e.g. League of Legends)
- Having loot boxes only contain cosmetic items, rather than ones essential to progress in the game (e.g. Counter-Strike: Global Offensive and Overwatch)

However, it should be noted that such features did not mean that these games received universal approval and many respondents still felt their experience of them was negatively affected by the existence of loot boxes. Although respondents wanted to see improvements like these introduced to safeguard *all* players, the overwhelming majority (76%) wanted to see loot boxes regulated as gambling and banned from games for under-18s. Others went further and wanted a total ban on paid-for loot boxes.

Respondents were also aware that some techniques used by games publishers and developers to sanitise the use of loot boxes did not actually protect players. For instance, one commented: *"FIFA has introduced percentages [of the likelihood of getting a player] but this is very generalised on purpose. When the odds are split by below 82 or above, there's a massive range there. An 82 could be worth very little, whereas a 90 would be loads but there is no indication of how likely the highest*

*rated cards are to get. Similarly, with promotional sets, EA frequently adds a lower rated card to something like a TOTW [Team of the Week] but odds are shown as any TOTW card rather than specific ones."*

Another felt that even if games developers made it technically possible to complete a game without buying loot boxes, they could use more subtle techniques to strongly inclined players to spend money: *"I would love to see loot boxes and all other micro-transactions gone from video games completely. They ruin games. Companies will purposely make their games "grindy" to entice you to buy loot boxes or micro-transactions to essentially skip the grind. There's less sense of reward from playing games these days because of this."*

Over one third (34%) of survey respondents reported that games 'rarely' make it clear from the start that they contain paid-for loot boxes and a further 16% said the games they play 'never' present this information. Only one in ten said the games they play 'always' say from the start that they contain paid-for loot boxes.

Nearly two thirds (62%) said it is 'difficult' (33%) or 'very difficult' (29%) to find out the chance of getting an item they want from a loot box and to understand that information. Only 7% said it was 'very easy' to do so. The majority of respondents said they 'rarely' (34%) or 'never' (33%) know what the prize in a loot box is before buying. This suggests not enough restrictions or protections have been introduced to make loot boxes less akin to gambling or to protect consumers from over-spending in the hopes of getting an item they want.

Accordingly, when we asked 'what changes, if any, would you like to see to how loot boxes work in games?' a large number of respondents suggested that odds of all outcomes when opening a loot box should be clearly disclosed outside and within the game, showing again that this is not universal or even widespread practice.

Players also recommended that the harms of loot boxes be limited by:

- Making loot boxes should be made illegal for under-18s to buy (supported by three quarters).
- Others added that this should be accompanied by robust age verification systems, and for games with loot boxes to not be targeted at children in their packaging, advertising, and promotional materials (including by influencers on social media).
- For loot boxes to be regulated in the same way as all other gambling activities and for games with loot boxes to be clearly stated as gambling products in promotional materials, with warnings of the harms of gambling clearly presented.
- Clearly labelled odds on every outcome.
- Increasing the odds of getting valuable items.
- A ban on paid-for loot boxes.
- Trackable spending in games.
- For the cost of loot boxes to not be given in virtual currency so it is easier to keep track of one's spending.
- Loot boxes to contain items which are cosmetic only, rather than giving a competitive advantage.
- Limits on daily spend.
- For parents to be able to all block in-app purchases.

The fact that these suggestions were each made by a significant number of respondents shows that the level of protections have not gone nearly as far as consumers would like.



**b. Where video games companies have not introduced restrictions/protections in relation to loot boxes, why were they deemed unnecessary?**

Findings from GHA research:

Many respondents rebutted some of the justifications often used by the gaming industry in defence of loot boxes. For example, while game publishers sometimes refute the claim that loot boxes are gambling on the grounds that they always contain something, even if not the item the player wanted, one respondent noted that ‘filler’ virtual items which have no value in the game are, for all intents and purposes, the same as an empty box: *“Loot boxes are padded with ‘filler items’ to trick players into believing they are ‘always getting something in return’, when in reality these filler items (voice lines, banners, etc.) are ultimately worthless to most players”*. This respondent also noted, like many others, the techniques used to lure players into spending money on loot boxes: *“I believe the visual and audible feedback commonly seen with loot boxes (bright colours, flashing lights, loud noises etc.) are intentionally mimicking methods seen in adult casinos, i.e. slot machines.”*

**8. Please provide any evidence relating to the use and impact of video games information labels such as the Pan European Game Information rating system (PEGI) in-game purchases and paid random item labels (see Box 3 below). Information that would be useful to receive includes:**

**a. Impacts on behaviour when purchasing games / in game content.**

Findings from GHA research:

The majority (83%) of survey respondents reported playing games when they were below the PEGI recommended age rating. Over a third (34%) of respondents had first spent money on a loot box when they were 13 years old or younger. Nearly half first spent money on a loot box when aged 14-17 (45%), and almost half (44%) had got someone else to purchase loot boxes for them, although this was not necessarily an older adult. The results suggest that age guidance around buying loot boxes alone may not be an effective response to preventing harm. Indeed, the PEGI rating system may need to be updated to take account of loot boxes, as the current PEGI rating for FIFA 21 and Madden is 3, meaning these games are deemed suitable for players of all ages. Games with gambling content are rated as PEGI 12, 16 or 18,<sup>18</sup> but if loot boxes are classed as a form of gambling, games such as FIFA 21 should be rated PEGI 18, with stricter age verification checks put in place to enforce this rating.

**9. Please provide any evidence relating to the use, impact and understanding of consumer rights legislation. Information that would be useful to receive includes:**

**a. How do company policies align with existing consumer rights legislation and what options are available to players if they are not satisfied with their purchase of a loot box?**

**b. What rights do players have when purchasing loot boxes and how is this information made available?**

**c. Are you aware of any action having been taken in relation to loot boxes on consumer rights grounds in the UK and/or internationally, and if so, what were the reasons for and outcome of this action?**

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<sup>18</sup> <https://pegi.info/what-do-the-labels-mean>

**10. Please provide any evidence of the effectiveness of mandatory and voluntary measures relating to the use and purchase of loot boxes in other jurisdictions.**

Other countries within Europe have brought certain types of loot boxes under their gambling legislation.<sup>19</sup> The Belgian Gaming Commission concluded in 2018 that the reward that can be obtained from a gambling activity does not necessarily have to be of monetary value – it is sufficient for it to have value for the player without being transferred into real-world money. They have thus ruled that all ‘embedded’ loot boxes, meaning those purchased with real-world money, constitute gambling, rendering loot boxes in games such as Overwatch, FIFA 18 and Counter-Strike: Global Offensive illegal in Belgium. This change was largely supported by gamers in Belgium.<sup>20</sup> In the Netherlands, the legal justification has been slightly different: to meet the national definition of gambling, the loot box must have a market value – which it gains when it is traded. It is irrelevant, however, whether the game publishers prohibit such trades, as they currently do. Accordingly, the Netherlands has also rendered all ‘embedded’ loot boxes to be illegal, albeit on different grounds.

Both authorities requested video game publishers to remove loot boxes from their games offered in Belgium and the Netherlands, with the risk of receiving a fine of up to 830,000 Euro and criminal prosecution if they were not compliant. In October 2020, the Court of The Hague authorised the Netherlands Gambling Authority (KSA) to enforce a fine of up to 10 million Euro (€500,000 per week that it fails to make the required change) first imposed in 2019 for not removing loot boxes from FIFA 19, 20 and 21.<sup>21</sup>

In February 2017, the Isle of Man's Gambling Supervision Commission brought loot boxes under its gambling regulations on the grounds that loot boxes involve an element of chance and virtual items count as a prize in “money’s worth”, even when not convertible into cash. As a result, companies offering loot boxes on Isle of Man infrastructure (which could mean registering players or hosting the game there, for example) are required to have a gambling licence.

Despite other countries having stricter regulations, around loot boxes, there are potential loopholes – gamers may be able to circumvent restrictions on loot boxes in their jurisdiction by using a Virtual Private Network (VPN) to change their location. Over a quarter (26%) of our survey respondents reported using a VPN when online. This suggests that a significant proportion of young gamers could utilise this loophole if tighter restrictions were put in place, and more may resort to this method if necessary. We suggest DCMS engages with games console developers to restrict use of VPNs to circumvent domestic legislation. Such an approach would fit into the government’s existing internet safety regime.

*For more information on this response please contact Louisa Mason, Alliance Lead: [gha@rsph.org.uk](mailto:gha@rsph.org.uk).*

*These recommendations reflect priority areas for action agreed by GHA members. Individual members may submit their own recommendations with their organisational priorities. A full list of GHA members can be found [here](#).*

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<sup>19</sup> Cerulli-Harms, A. et al., Loot boxes in online games and their effect on consumers, in particular young consumers, Publication for the committee on the Internal Market and Consumer Protection (IMCO), Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020,

<sup>20</sup> <https://www.bbc.co.uk/news/newsbeat-49674333>

<sup>21</sup> Welsey Yin-Poole, 30 October 2020, EA to appeal Dutch FIFA loot boxes ruling following €10m fine, Euro Gamer. Available at: [/www.eurogamer.net/articles/2020-10-29-ea-to-appeal-5m-dutch-fifa-loot-boxes-fine#:~:text=EA%20has%20said%20it%20will,in%202019%2C%20and%20published%20today](https://www.eurogamer.net/articles/2020-10-29-ea-to-appeal-5m-dutch-fifa-loot-boxes-fine#:~:text=EA%20has%20said%20it%20will,in%202019%2C%20and%20published%20today).