Regulation of Video Gaming Loot Boxes: Lessons for South Africa from Abroad

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Abstract

To optimise income, video game developers incorporate microtransactions into their games. One such microtransaction is a loot box. This is a container that a gamer in certain instances can win or purchase to take a chance on the unknown contents in the hope of obtaining an item that may be useful in the progression of the game. In the case of tradable loot boxes, these items won can also be traded or sold for cash either during the game or on a third-party marketplace. Research has shown that loot boxes are potentially harmful to minors and that there is possibly a link between loot boxes and problem gambling. The labelling of the games seems inadequate as it does not always warn gamers and/or parents of the potentially harmful content. It has also been argued that these loot boxes are an example of the convergence between gambling and gaming in that gambling-like opportunities are becoming more prevalent in video games. Notwithstanding existing research, the industry has not been forthcoming in addressing these problems. There are some exceptions where the developers amended their games after the gaming community reacted negatively to the introduction of loot boxes or when forced to do so by regulations or other third-party service providers. The call for self-regulation by the industry to adopt a set of ethical guidelines to address these concerns has not yielded the desired results. As a result of the lacklustre actions of the industry, some jurisdictions have addressed these problems through regulation. The mechanisms used by these jurisdictions differ, ranging from the banning of loot boxes to a mere acknowledgement of the potential problems without taking any action. Even where (tradable) loot boxes fall within the legal definition of gambling in national legislation, enforcement has been inconsistent as some argue that using gambling regulatory frameworks to protect vulnerable groups is inappropriate. After discussing these debates and global developments, the article concludes with a discussion of the current South African legal situation vis-à-vis loot boxes with specific reference to the constitutional and international law imperatives, the Film and Publications Board classifications, the consumer protection legislation, and the gambling regulatory framework. It finally provides suggestions for legal changes that may be feasible considering the lessons learnt from abroad.

Keywords

Loot boxes; gambling; gaming; addiction; minors; consumer protection; age classification.

References

[References are not provided in the image, but would typically include citations for the sources referenced in the text, such as peer-reviewed articles, books, and other scholarly works.]
1 Introduction

Traditionally, video games promise an entertainment value that – apart from the purchase price – used to be cost-free no matter how often a player decided to play. Both digital platforms and the growing interconnectivity of video games provide publishers with additional ways of generating revenue that are oftentimes in contrast to free entertainment.\(^1\)

As a result of ever-changing technology and the growing financial need to meet the rising costs of developing new high-quality and exciting video games,\(^2\) game developers introduce additional income streams into existing games through add-ons\(^3\) and/or microtransactions such as loot boxes.\(^4\) The reaction to some of these microtransactions, specifically loot boxes, has been mixed and somewhat controversial. As is discussed hereunder, criticisms include condemnations of such exploitative practices without the developers giving clear information about what the games contain or labelling the games helpfully, pointing out the possible links to problem gambling that could harm minors.

As legal research on the topic in South Africa is scant,\(^5\) this article first discusses loot boxes broadly within the context of existing global research,

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\(^1\) Von Meduna et al 2020 *Technology in Society* 1. Also see King and Delfabbro 2018 *Int J Ment Health Addict* 1; Castillo 2019 *Santa Clara L Rev* 166; Jones 2020 *Chapman L Rev* 249; and Boric and Strauss 2022 *Journal of Data Intelligence* 203.

\(^2\) The games today, such as *Fortnite*, go beyond gaming and include architecture, artificial intelligence, manufacturing, public planning, and film and television production with extended reality applications and cross-media story and brand worlds (Jungherr and Schlarb 2022 *Social Media and Society* 10).

\(^3\) Schuddeessden and Karius 2018 *IELR* 18 describes add-ons as “freemium” games: a gamer can play the basic game for free but must pay for premium content. Add-ons can also be obtained by purchasing expansion packs separate from the original game to access new storylines, additional weapons, or characters in an existing game that the gamer already purchased. Examples of freemium games includes *Counterstrike: Global Offensive* and *Rocket League* (Macey and Bujić “Talk of the Town” 200). Add-ons are generally not controversial as the requirements of the law of sale are met: a sale agreement for a specific item at a specific price. With loot boxes, as is discussed subsequently, there is uncertainty as to the contents of the loot box.

\(^4\) Abarbanel 2018 *GLR* 231; Macey and Hamari 2019 *Media & Society* 22; Von Meduna et al 2020 *Technology in Society* 2; Zendle 2020 *PeerJ* 2; Mistry 2018 *Rutgers U L Rev* 539; Moshirnia 2018 *MJLST* 83; Cerulli-Harms et al *Loot boxes in Online Games* 7; Liu 2019 *Wash Int LJ* 764. Jones 2020 *Chapman L Rev* 250 notes that the first loot box was included in *ZT Online* in 2006 but the concept expanded significantly after 2016 with the game *Overwatch*.

\(^5\) Information is difficult to obtain globally. Macey states: "Although loot boxes are a highly visible presence in the gaming environment, they remain a relatively novel
stakeholder attitudes, and the regulatory and non-regulatory approaches followed in foreign jurisdictions as well as some solutions offered by industry experts and academics. Underlying the discussion are the lack of transparency, potential prejudice to players, and possible harm to vulnerable groups such as minors and problem gamblers. The article concludes with a discussion of the current South African legal framework with some suggestions for change.

2 The loot box controversy

Despite providing significant revenue to publishers, loot boxes are not necessarily an experience that gamers enjoy. Initially, cosmetic content allowed players to uniquely customize the aesthetics of players' avatars, while maintaining a fair play environment. However, publishers eventually experimented with loot boxes that alter the fairness of this environment.  

2.1 The market and business model

The annual global video game market was valued in the region at $115 billion in 2018 and is predicted to be $230 billion by 2022. In South Africa it is estimated to be worth about R8 billion in 2023. The exact size of the microtransactions in these video games, specifically the loot box market, both globally and in South Africa, is unknown, as game companies do not release data on the spending on loot boxes. It was projected that loot box revenue globally was about $30 billion in 2018 and estimated to be $50 billion in 2022. About 60% of the best-selling video games include loot boxes. It is estimated that microtransactions make up between 34% and 56% of the profits of most prominent video game developers. If these

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7  McCaffrey 2019 Business Horizons 483.
8  Zendle and Cairns 2018 Plos ONE 9.
11 Zendle and Cairns 2019 Plos ONE 1 estimates that the amount will rise to $50 billion in 2022. Also see Jones 2020 Chapman L Rev 247.
13 Rockloff et al 2021 J Behav Addict 35; Li 2022 Advances in Economics, Business and Management Research 1284.
14 Cerulli-Harms et al Loot Boxes in Online Games 7 estimates 34%, although Azin 2020 BC L Rev 1578 and Carvalho 2021 Decision Support Systems 1 note that the percentage could be as high as 56%. Boric and Strauss 2022 Journal of Data Intelligence 203 note that one of the most profitable video game publishers, Activision Blizzard, received more than half of its annual income (US$ 4 billion) from 3% of their players. Mistry 2018 Rutgers U L Rev 553 and Rockloff et al Loot Boxes
estimations are correct, this would mean that South Africans are spending billions of rands annually on microtransactions. Research shows that about 78% of all gamers in the UK have purchased loot boxes, including around 31% of children between 11 and 16 years of age. The data for South African gamers and minors that purchase loot boxes are not available but have been described as "significant". The Film and Publications Board and UNISA Impact Research Report in 2015 noted that playing video games is an important part of the entertainment of children from different socio-economic backgrounds in South Africa between the ages of 7 and 17. What is accepted, though, is that the market is rapidly increasing with the growth in the popularity of smartphones.

As mentioned above, to remain competitive the business models of game developers utilise additional strategies to generate continuous income streams from their games through microtransactions. These microtransactions inter alia enable players to purchase and sell, with real currency, either directly or via virtual game currency, additional or premium content, including virtual items. Loot boxes are a type of...
microtransaction. This article is limited to loot boxes. Although other microtransactions may raise similar concerns, they are excluded from this discussion.

2.2 What is a loot box?

What is a loot box? It takes the form of a virtual mystery container that holds randomised in-game items that a gamer can receive either by naturally progressing through the video game or by purchasing it using real currency for the opportunity to open the loot box – taking a chance on its unknown contents. Not all video games have loot boxes and not all

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23 Loot boxes are random reward mechanisms (RRMs) (Kao 2020 IEEE Transactions on Games 219), also called crates, packs or chests (Azin 2020 BC L Rev 1578-1579; Schwiddessen and Karius 2018 IELR 18; Nielsen and Grabarczyk 2019 ToDIGRA 172; Griffiths 2018 GLR 52); Zendle, Meyer and Ballou 2020 Plos ONE 3.
24 Zendle et al 2020 CHB 182 refers to Star Wars: Battlefront II where loot boxes can be earned through play only.
25 This can also include using in-game currency that can be cashed into real currency. Nielsen and Grabarczyk 2019 ToDIGRA 198 identifies four ways in which digital games relate to real currency through randomised rewards: one, those not for sale or purchase; two, those that can only be sold but not purchased; three, those that can only be purchased but not sold and lastly, those that can be sold and purchased functionally equivalent to gambling. As an example, Counter Strike: Global Offensive’s loot boxes could at that time be purchased with real currency (Zendle et al 2020 CHB 182-183). Some loot boxes in a game need a key to open them, but this key must be purchased with real currency (Zendle et al 2020 CHB 182-183 with reference to Star Trek Online).
27 Experts do not always agree about the definition of loot boxes, as is evidenced by the Xiao-Zendle disagreement (Xiao and Henderson 2022 Addiction 2 and Zendle 2021 Addiction 2556).
loot boxes are the same.\textsuperscript{28} Loot boxes are available in various popular games\textsuperscript{29} and vary in access and costs, transparency, content and value.\textsuperscript{30} In some games, progression is impossible without purchasing loot boxes.\textsuperscript{31}

The loot box contents may be cosmetic items\textsuperscript{32} with no in-game advantages over other players,\textsuperscript{33} or the box can contain items that provide in-game advantages.\textsuperscript{34} These advantages can take the form of more potent weapons, better versions of existing characters or even new characters.\textsuperscript{35} In some games, items are available exclusively in loot boxes and cannot be obtained merely by progressing through the game.\textsuperscript{36}

Loot boxes can include items that can be used only in the game itself and cannot be sold or traded with others for different items (non-tradable loot boxes), or they can be tradable with other game players in the game itself or on secondary markets created for this purpose (tradable loot boxes).\textsuperscript{37}

\textsuperscript{28}Drummond and Sauer 2018 \textit{Nat Hum Behav} 2 provide a detailed overview of the most played games with loot boxes. Also see Macey and Hamari 2019 \textit{New Media & Society} 23.

\textsuperscript{29}Rockloff et al 2021 \textit{J Behav Addict} 35; Li 2022 \textit{Advances in Economics, Business and Management Research} 1284. Zendle and Cairns 2019 \textit{Plos ONE} 1 refers to games such as Overwatch and Rocket League, each with about 40 million players and Counter-Strike Global Offensive with over 25 million players. Kao 2020 \textit{IEEE Transactions on Games} 219 refers to loot boxes in Hearthstone and League of Legends.

\textsuperscript{30}Cerulli-Harms et al Loot Boxes in Online Games 7-8.

\textsuperscript{31}Lischer et al 2022 IJERPH 5 refers to the game Diablo Immortal where it is impossible to proceed beyond a specific stage without buying loot boxes.

\textsuperscript{32}These cosmetic items are also called skins (Abarbanel 2018 GLR 231; Schwiddessen and Karius 2018 IELR 18). The rarest skin called Dragon Love was sold for $61,000 (Jones 2020 Chapman L Rev 269).

\textsuperscript{33}Even though players attach their own value to these items, they do not provide in-game advantages (Hong 2019 \textit{W St U L Rev} 74; Cermak 2020 MSU ILR 275). Cosmetic items are usually unproblematic because these items do not alter the way the game progresses, but only how the characters, characters’ clothing, or weapons look (Cermak 2020 MSU ILR 275; Moshirnia 2018 MJLST 90; Schwiddessen and Karius 2018 IELR 18-19; Nielsen and Grabarczyk 2019 ToDIGRA 195-196; Neely 2019 Games and Culture 230; Griffiths 2018 GLR 52).

\textsuperscript{34}Derrington, Starr and Kelley 2021 JGI 301 with reference to Fortnite’s Illama pinatas.

\textsuperscript{35}Azin 2020 BC L Rev 1579; Liu 2019 Wash Int LJ 771; Liu, Thompson and Rich 2020 York L Rev 8; Schwiddessen and Karius 2018 IELR 18-19; Nielsen and Grabarczyk 2019 ToDIGRA 172; Neely 2019 Games and Culture 229; Hong 2019 W St U L Rev 61; Kao 2020 IEEE Transactions on Games 219; Cermak 2020 MSU ILR 275. In some games, the contents can be “re-invested” in more loot boxes (Zendle, Meyer and Over 2019 RSOS 4). Shelstad Cost of Playing the Game 82 refers to loot boxes possibly containing additional characters for the game in Marvel Content of Champions.

\textsuperscript{36}Li, Mills and Nower 2019 Addictive Behaviors 28 with reference to the game Counter Strike: Global Offence and Zendle et al 2020 CHB 182-183 with reference to Rocket League.

\textsuperscript{37}Zendle et al 2020 CHB 182-183 note that some loot boxes, such as in Overwatch and Destiny 2, cash out the rewards to their players whilst others such as those in Counterstrike and Rocket League use external marketplaces. External markets
Items in loot boxes vary in rarity, and the rarer the item, the less likely that it will be gained in a loot box. Advertising of loot boxes is often engineered to highlight the benefits and rarity of the possible item in the loot box, encouraging the gamer to purchase more loot boxes. However, the rarity of items or the odds of winning the item (also called the drop rate) is subjectively predetermined by game developers. Although randomly distributed, these odds are generally not available to gamers.

2.3 The controversy: lack of information, targeting of minors and possibly gambling

The controversy over loot boxes first came from within the gaming community and not from outside interest groups. Although gamers have traditionally accepted add-ons to existing games, some regard loot boxes as unfair gameplay and "predatory monetisation" schemes. Apart from being regarded as annoying, it is argued that loot boxes destroy the game's balance, especially for competitive multiplayer games, in favour of

38 Rarity of items can also take the form of time-sensitive availability (Zendle, Meyer and Over 2019 RSOS 4).
40 Schwiddessen and Karius 2018 IELR 18. Griffiths 2018 GLR 52 puts it nicely: "All players hope that they can win 'rare' items and are often encouraged to spend more money to do so because the chances of winning such items are minimal." Research by Adam, Roethke and Benlian 2022 Electronic Markets 981 found that the "probabilities of winning rewards in loot box menus influence users' loot box selection".
43 Mistry 2018 Rutgers U L Rev 552. The backlash started on the Reddit website, a community forum for news and content evaluation inter alia of online video games (Jones 2020 Chapman L Rev 287).
45 Some gamers object to the randomness of the loot boxes and to the fact that they receive duplicate prizes of low value (Derrington, Starr and Kelley 2021 JGI 304).
those with money. Yet players still make use of loot boxes for a variety of reasons.

The best example of a community-driven player reaction against developers’ perceived exploitive revenue-generation options by introducing loot boxes took place via social media and online forums, in a backlash against Electronic Arts (EA), the developers of Star Wars Battlefront II. As a result of the fallout and subsequent removal of the loot boxes, EA suffered between $1.4 and $2 billion loss in stock value and long-term damage to its brand. More broadly, the EA saga resulted in the first call for the regulation of the industry and a campaign for loot boxes to be categorised and regulated as gambling.

There are a few concerns about loot boxes. The first concern is the lack of available information and inadequate or incorrect labelling about the loot boxes in the game. It has been argued that with some loot boxes, gamers

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47 Macey and Buić “Talk of the Town” 217. Some players admitted to frustration when the random reward mechanisms such as loot boxes interfere with gameplay, especially where the use of real-life currency is the trigger condition (Yin and Xiao “Reward for Luck” 14).

48 Boric and Strauss 2022 Journal of Data Intelligence 208 note that the motivations for paying for loot boxes include "socialization, to continue playing, to unlock content, or to advance in the game, and due to a special offer, a good price/value for money, and convenience". Close and Lloyd Lifting the Lid on Loot-Boxes 2 found that the main reason gamers purchase loot boxes is the fear of missing out. Cai, Cebollada and Cortiñas 2022 Pls One 21 argue that players purchase functional-based goods, probability-based goods, and ornamental-based goods for different motives and through the different behavioural processes. Functional-based goods are purchased for the flow experience, probability-based goods as a compromise for purchase restrictions, and ornamental goods for intrinsic motivations and exposure in the virtual world (Cai, Cebollada and Cortiñas 2022 Pls One 21). Puiras et al 2022 J Gamb Stud 1 further include "enjoyment, the chance to win, boredom, and charitable intentions" as reasons for purchasing loot boxes. He continues that the reasons gamers refrain from purchasing loot boxes include "negative consequences, gambling concerns, disinterest, finances, and accessibility" (Puiras et al 2022 J Gamb Stud 1). Li adds to the first list the seduction of curiosity about the unknown (Li 2022 Advances in Economics, Business and Management Research 1287). Also see in general Eliassen Loot Boxes.

49 McCaffrey 2019 Business Horizons 484.


are exploited\textsuperscript{53} by their distinct disadvantage due to the lack of information about the prizes they can win and the odds of winning these prizes, combined with a lack of sufficient remedies against developers for perceived unfair practices.\textsuperscript{54} This creates a trust problem.\textsuperscript{55} With unavailable loot box data, questions have been raised about the ethics of these game companies’ practices in that no independent empirical research can be conducted to determine the fairness or adverse effects of a particular game.\textsuperscript{56}

The second and third concerns surrounding loot boxes relate to the social implications of the purchasing of loot boxes by minors,\textsuperscript{57} and the possible enhancement of problem gambling behaviour by gamers purchasing loot boxes.\textsuperscript{58}

Concerning minors, developers have been criticised for unscrupulous marketing tactics about loot boxes in games that target minors.\textsuperscript{59} Although not all video games target children specifically,\textsuperscript{60} loot boxes are widely available in games labelled as suitable for minors,\textsuperscript{61} thus normalising the activity for children.\textsuperscript{62} There is a growing awareness amongst parents and other role-players of the possible economic and psychological detrimental effects of loot boxes on children.\textsuperscript{63}

\textsuperscript{53} McCaffrey 2019 Business Horizons 486.  
\textsuperscript{54} Mistry 2018 Rutgers U L Rev 557.  
\textsuperscript{55} Carvalho 2021 Decision Support Systems 1.  
\textsuperscript{56} Xiao 2021 IELR 32-33.  
\textsuperscript{57} Abarbanel 2018 GLR 233.  
\textsuperscript{58} Abarbanel 2018 GLR 233.  
\textsuperscript{59} McCaffrey 2019 Business Horizons 486. Liu argues that some developers intentionally induce psychological addiction practices into their games that target children specifically (Liu 2019 Wash Int LJ 773-774). Also see Hodge et al 2022 Plos ONE 12. Rockloff et al Loot Boxes 4 also refer to instances where minors were specifically targeted due to their known vulnerabilities.  
\textsuperscript{60} Cerulli-Harms et al Loot Boxes in Online Games 8.  
\textsuperscript{61} Zendle et al 2020 Addiction 1770; Macey and Hamari 2019 New Media & Society 31; Zendle, Meyer and Over 2019 RSOS 1; King and Delfabbro 2018 Int J Ment Health Addict 2; Rockloff et al Loot Boxes 4.  
\textsuperscript{62} Xiao 2022 Int J Ment Health Addict 446; Derevensky and Griffiths 2019 GLR 637; Derrington, Starr and Kelley 2021 JGI 306.  
\textsuperscript{63} Azin 2020 BC L Rev 1585-1587; Jones 2020 Chapman L Rev 251. Cerulli-Harms et al Loot Boxes in Online Games 29 argues that the “(k)nown developmental risk factors for children and adolescents also make them particularly vulnerable in the marketplace”. Younger children cannot assess the true cost of a product; do not understand risk; have impulse control problems and are susceptible to the development of “socially disordered behaviours in response to certain stimuli” (Cerulli-Harms et al Loot Boxes in Online Games 29). The concerns about minors having uncontrolled exposure to inappropriate material including gambling are well known and include desensitisation, and the inability to cope with the detrimental psychological consequences. These are not repeated herein. See inter alia FPB Convergence Survey Report 2.1.3.
Gambling is considered to be peripheral to gaming (playing games).\textsuperscript{64} Gaming is considered harmless and lawful but gambling is not and is regulated through legislation according to the public policy of each jurisdiction.\textsuperscript{65} Loot boxes in video games touch on another debate namely that some video games have moved from mere gaming into the realm of gambling.\textsuperscript{66} It is argued that some loot boxes are an example of this complex\textsuperscript{67} convergence of gaming and gambling over the past few years, with gambling mechanisms based purely on chance being incorporated into video games.\textsuperscript{68}

There are two elements to the discussion of loot boxes and gambling: the first is that they may lead to problem gambling and the second that they may be legally regarded as gambling in certain jurisdictions and should be regulated within the national legislation.\textsuperscript{69}

Regarding problem gambling, numerous studies, starting with Drummond and Sauer in 2018, have found that "loot boxes share important structural and psychological similarities with gambling".\textsuperscript{70} This configuration does not occur by accident.\textsuperscript{71}

The Australian Senate Committee \textit{Gaming Micro-Transactions} notes that loot boxes share four mechanisms with gambling.\textsuperscript{72} First, both include variable ratio reinforcement schedules, also called manipulative conditioning.\textsuperscript{73} Xiao describes it best:

\begin{footnotesize}
\begin{enumerate}
\item Von Meduna \textit{et al} 2020 \textit{Technology in Society} 2.
\item For the South African public policy, see 5.4.3.
\item Wardle and Zendle 2021 \textit{Cyberpsychology, Behaviour and Social Networking} 267.
\item Zendle 2020 \textit{PeerJ} 21.
\item Von Meduna \textit{et al} 2020 \textit{Technology in Society} 2; Zendle and Bowden-Jones 2019 \textit{Lancet} 724; Li, Mills and Nower 2019 \textit{Addictive Behaviors} 30; Gainsbury 2019 GLR 80; Derevensky and Griffiths 2019 GLR 634; Shi \textit{et al} 2021 \textit{Frontiers in Psychiatry} 1. Kolandai-Matchett and Abbott 2022 \textit{Int J Ment Health Addict} 2024 found convergence in "multiple overlapping contexts (gaming elements in gambling, games incorporating gambling elements, gambling on games, free simulated online gambling, and social media games and gambling) driven by technological advances and commercial interests".
\item Ony the first of these will be discussed in this section. The second issue is addressed under 4.
\item Drummond and Sauer 2018 \textit{Nat Hum Behav} 1; Zendle and Cairns 2018 \textit{Plos ONE} 2-3; Fleming 2020 \textit{U Toronto Faculty L Rev} 85-86; Cartwright and Hyde 2022 \textit{Legal Studies} 2.
\item Derrington regards this as the result of a deliberate predatory monetisation scheme (Derrington, Starr and Kelley 2021 \textit{JGI} 304).
\item Australian Senate Committee \textit{Gaming Micro-Transactions} 32-49.
\item Derrington, Starr and Kelley 2021 \textit{JGI} 305; Liu 2019 \textit{Wash Int LJ} 763. Developers capitalise on the behaviour responses of gamers to increase their profits (Azin 2020 \textit{BC L Rev} 1590). Van der Hof \textit{et al} 2022 \textit{Frontiers in Digital Health} 2 refers to "dark patterns" in game design where the gamer is manipulated to make certain choices and cannot make an informed decision. Also see Leahy 2022 \textit{Journal of Consumer Policy} 582.
\end{enumerate}
\end{footnotesize}
[The] desired behavior can be 'reinforced' in a subject through a gradual process of incrementally 'rewarding' behaviours which constitute correct steps towards the formation of that certain desired behaviour.74

The chance-based nature of loot boxes, holding out the possibility of the gamer's obtaining rare and valuable items, creates psychological triggers similar to gambling, even if the reward is not financial.75 Secondly, the game-play experience of gambling and loot boxes is similar. Most loot boxes have a strong gambling tone, look and feel,76 as they are presented in the form of traditional gambling games such as mechanisms resembling slot machine visuals, sounds and lights.77 It has been argued that this sensory feedback of the animations induces the psychological thrill of anticipation and winning,78 and instils a gambling mindset in gamers.79 In addition, research shows that reflecting near-misses specifically "lead to cognitive distortions whereby the player believes they are more likely to win in the future",80 abusing the irrational biases of gamblers to make irrational decisions to 'chase losses".81 Limited offers also create a sense of urgency to purchase.82 Thirdly, both loot boxes and gambling include mechanisms

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74 Xiao 2021 IELR 30.
75 Larche et al 2021b J Gambl Stud 160; Castillo 2019 Santa Clara L Rev 194; Xiao 2022 Int J Ment Health Addict 442.
76 Liu 2019 Wash Int LJ 771.
77 King and Delfabbro 2018 Int J Ment Health Addict 3; Mann 2020 WJLTA 202; Nielsen and Grabarczyk 2019 ToDIGRA 184; Schwiddessen and Karius 2018 IELR 18; Cartwright and Hyde 2022 Legal Studies 3; Evans 2022 Geo Wash L Rev 380. The audio-visual sensory effects when opening a loot box have a significant impact on how many loot boxes a player opens (Kao 2020 IEEE Transactions on Games 223). Also see Close and Lloyd 2021 Lifting the Lid on Loot-Boxes 13.
80 Zendle et al 2020 CHB 182-183 with reference to DOTA 2 and Counter Strike.
81 Adam, Roethke and Benlian 2022 Electronic Markets 984 "demonstrate that platform providers can profit from offering certain (vs. uncertain) rewards in loot box menus. Moreover, this effect increases when participants previously experienced a loss and decrease when they perceive to have more control over the result". Xiao 2021 IELR 30-31 argues that apart from the near-miss concept, additional irrational biases of gamblers are exploited through "entrapment", where a player continues to spend resources to justify previous unsuccessful attempts; and the "gambler's fallacy" that the more they play, the better the odds of winning become. Some players spend huge amounts of money to purchase loot boxes (Jones 2020 Chapman L Rev 255). Azin 2020 BC L Rev 1589. In June 2021 EA changed the loot box mechanics in their FIFA games by allowing players to preview the contents of a loot box for 24 hours before purchasing. Thereafter a new preview pack can be viewed. Lemmens notes that this scheme increases transparency and reduces the gambling element but creates artificial scarcity with players fearing that they will miss out on time-limited offers (Lemmens 2022 Telematics and Informatics Reports 7).
to encourage continued spending.\textsuperscript{83} The presence of in-game currency and the ability to turn the contents of loot boxes into cash strengthen the link between loot boxes and problem gambling.\textsuperscript{84} The (Belgium) Gaming Commission Research Report on Loot Boxes lists several ways gamers are lured into playing with real currency: the games create an emotional profit expectation and turn the opening of loot boxes into an online social activity.\textsuperscript{85} The games create the illusion of a game of skill and fuse fiction and reality by referencing celebrities or cult items.\textsuperscript{86} The games introduce a personal currency system and easy payment methods but combine these with an unfathomable data policy and many types of loot boxes that do not necessarily add value to the game.\textsuperscript{87} Fourthly, gambling and loot boxes are constantly available, encouraging continuous play with an "endless cycle" of new loot boxes being released.\textsuperscript{88}

Apart from players describing these features as addictive,\textsuperscript{89} independent research has found a link between loot boxes and problem gambling in both

\textsuperscript{83} Xiao 2021 IELR 30-31. Also see Nielsen and Grabarczyk 2019 ToDRIGA 183-185, that highlights the expectation of winning, near misses, losses disguised as wins, cognitive entrapment, the illusion of control and chasing as factors contributing to the culture of gambling.

\textsuperscript{84} Zendle \textit{et al} CHB 188. "However, contrary to predictions, the more money an individual made selling loot box items, the weaker their relationship between loot box spending and problem gambling" (Zendle \textit{et al} 2020 CHB 189). This is contrary to the argument by Brooks and Clark 2019 Addictive Behaviors 33 that actual trading is a crucial feature of gambling behaviours.


\textsuperscript{88} Australian Senate Committee Gaming Micro-Transactions 32-49; Azin 2020 BC L Rev 1579.

\textsuperscript{89} Mistry 2018 Rutgers U L Rev 546. This addiction to loot boxes seems to be in addition to the addiction to video games, which is specifically excluded from this article (Hong 2019 W St U L Rev 63; Spicer 2022 New Media & Society 1001). Yokomitsu \textit{et al} 2021 Current Addiction Reports 491 provides an overview of 20 of the 201 studies on the issue to date that met their pre-determined criteria, concluding that those who purchase loot boxes "exhibit Internet gaming-related and/or disordered gambling symptoms and behaviors". Gonzalez-Cabrera \textit{et al} 2022 CHB 6 showed a positive and significant relationship was established between the purchase of loot boxes and Internet Gaming Disorder and Online Gambling Disorder. Close \textit{et al} 2021 Addiction 2343 found that for adults "the demographic associations of video game loot box engagement (younger age, male sex, non-university educational attainment and unemployment) mirror those of other addictive and problematic behaviours, including disordered gambling, drug and alcohol misuse" in the UK. The link between loot boxes, internet gaming disorder and gambling disorder remains understudied and unclear (Raneri \textit{et al} 2022 Addictive Behavior Reports 1; Shen 2020 UIC John Marshall Law Review 1091; Derrington, Starr and Kelley 2021
adults and children. Although this link may have to do with the characteristics of loot boxes, it was unclear whether the availability of loot boxes is a gateway to problem gambling or whether the spending on loot boxes just appeals more to problem gamblers. Research by Wardle and

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90 JGI 306). The recognition of gaming disorder in 2019 in the WHO International Classification of Diseases 11th Revision will generate more research (Király, Potenza and Demetrovics 2022 Current Opinion in Behavioral Sciences 1).

See the research of Gonzalez-Cabrera et al 2022 CHB 6 (Spanish adolescents and young people); Tang et al 2022 Frontiers in Psychiatry 1 (male and female players of gacha games); Rockloff et al 2021 J Behav Addict 35 (adolescents and young adults in NSW, Australia); Wardle and Zendle 2021 Cyberpsychology, Behaviour and Social Networking 272 (children between 16 and 24 years); Irie et al 2022 Current Psychology (unplanned loot box purchases of Japanese adolescents between 15 and 18 years); Ide et al 2021 JMIR Serious Games (14-year-old Japanese gamers); Evren et al 2021 Psychiatry and Behavioral Sciences 25-31 (adults in Turkey); Macey and Hamari 2019 New Media & Society 35 (eSports between the ages of 14 and 50 plus); Zendle and Cairns 2018 Plos ONE 6 (large-scale online survey of adults); Zendle, Meyer and Over 2019 RSOS 6 (16 to 18-year-olds); Zendle 2019 PeerJ 3; Zendle and Cairns 2019 Plos ONE 9. Also see in general Garea et al 2021 Int Gambl Stud 460-479; Von Meduna et al 2020 Technology in Society 8 and Yokomitsu et al 2021 Current Addiction Reports 489; Li, Mills and Nower 2019 Addictive Behaviors 32, Brooks and Clark 2019 Addictive Behaviors 33; Rockloff et al Loot Boxes 7; Kiraly, Potenza and Demetrovics 2022 Current Opinion in Behavioral Sciences 2; Kansspelautoriteit Onderzoek naar Loot Boxes 9; Montiel et al 2022 Plos ONE 1-23. Etchells et al 2022 RSOS 12 showed a positive correlation between loot box spending and problem gambling, but not between such spending and mental well-being or psychological distress. This is in contrast to Drummond, Hall and Sauer 2022 Nature Scientific Reports 7, which found that purchasers of loot boxes are at approximately 1.87 times higher risk of severe psychological distress on a standardised clinical screening tool than people who do not purchase loot boxes". Forström et al 2022 Addictive Behaviors 6 show that the Swedish version of the Risky Loot Index is a valuable instrument to measure risky loot box consumption with regard to time and money spent, based on the Brooks and Clark 2019 Addictive Behaviors proposal. Also see in general Akçayır, Nicoll and Baxter 2022 J Gambl Stud. Ide et al 2021 JMIR Serious Games 4 found that there is no correlation in Japan between parental loot box purchasing and that of adolescents, and that adolescents that purchase loot boxes are significantly more likely to exhibit problem online gambling problems. Sidloski et al 2022 Addictive Behaviors 5 shows that Problem Gambling Severity Index (PGSI) scores "among non-gamblers were significantly elevated in loot box users vs non-loot box users, although absolute numbers were low overall".


91 Garrett et al 2022 Int Gambl Stud 9 concludes that "loot box mechanisms appear to appeal disproportionately to a specific demographic (ie. problem gamblers), regardless of income, although the short- and long-term financial and psychological consequences of spending remain unknown". Research by D’Amico et al 2022 Nature Scientific Reports 10 seems to dispel the "gateway" theory whilst Spicer et al 2022 Addictive Behaviors 6 found that almost 20% of the loot box purchasers they studied self-reported either "gateway effects" (loot boxes causally influencing subsequent gambling) or "reverse gateway effects" (gambling causally influencing subsequent loot box engagement). Rockloff et al 2021 J Behav Addict 35 seems in line with Spicer. See Zendle and Cairns 2018 Plos ONE 8; Zendle and Cairns 2019 Plos ONE 11; Zendle et al 2020 CHB 184; Zendle, Meyer and Over 2019 RSOS 4.
Zendle performed in 2021 demonstrated "that the purchase of loot boxes is associated with elevated rates of problem gambling amongst minors even after higher levels of gambling consumption are taken into account".93

As is the case in gambling, most of the revenue from loot boxes is obtained from a small percentage of gamers.94 Although the overall relationship between problem gambling and loot boxes was "observed to be small-to-medium size",95 problem gamblers spend less money when loot boxes are removed from video games.96 Shi notes that there is growing concern about the association between minors who gamble and the later development of gambling problems with the accompanying negative psychological, social, financial and substance abuse, particularly for males.97

These studies are, however, not universally accepted as conclusive98 and not without critique.99 Gainsbury criticises them on the basis that the researchers failed to control the gambling engagement of the participants, that they relied on convenient self-recruiting sampling and introduced
inadequate timeframes.\textsuperscript{100} In addition, DeCamp's research on minors shows that loot boxes share little in common with traditional forms of gambling and that minors are less likely to purchase loot boxes than adults.\textsuperscript{101} Moreover, the Zendle study shows that the more money a gamer made selling loot boxes, "the weaker their relationship between loot box spending and problem gambling".\textsuperscript{102}

Leaving aside the differences, the research highlights the commonalities between loot boxes and gambling. It does not determine whether loot boxes are or should legally be classified as gambling in a particular jurisdiction, however. This matter is discussed hereunder.

\subsection*{2.4 Conclusion}

Loot boxes are a relatively new but highly profitable element in video games. What is evident, however, is that there are real concerns about the transparency of some loot boxes, the harmful impact on minors as well as their possible link to gambling and addiction. Notwithstanding the controversies, the loot box market is growing.\textsuperscript{103}

The concerns have not gone unnoticed, and research is ongoing and necessary to clarify the many uncertainties.\textsuperscript{104} The gaming industry organisations and experts have responded to some of the concerns on an \textit{ad hoc} basis and these will be set out in the next section.

\section*{3 Gaming industry response}

\subsection*{3.1 Introduction}

Several academics and industry experts have called for industry self-regulation to address these concerns – either voluntarily by the industry or through community or governmental pressure.\textsuperscript{105}

\textsuperscript{100} Gainsbury 2019 \textit{GLR} 81. Opposing interpretations of the link between loot boxes and problem gambling can also be found in the New South Wales and Dutch Loot Boxes Reports. These reports note that there is no evidence that experiences with loot boxes are related to gambling involvement or gambling problems (Rockloff \textit{et al} \textit{Loot Boxes} 59. Kansspelautoriteit \textit{Onderzoek naar Loot Boxes} 4. Also see Gainsbury 2019 \textit{GLR} 81-82).

\textsuperscript{101} DeCamp 2021 \textit{J Gambil Stud} 198-199.

\textsuperscript{102} Zendle \textit{et al} 2020 \textit{CHB} 189.

\textsuperscript{103} McCaffrey 2022 \textit{Communications of the Association for Information Systems} 44; Close and Lloyd \textit{Lifting the Lid on Loot-Boxes} 28; Macey and Hamari 2019 \textit{New Media \& Society} 37; Zendle and Cairns 2018 \textit{Plos ONE} 8; Von Meduna \textit{et al} 2020 \textit{Technology in Society} 2; Yokomitsu \textit{et al} 2021 \textit{Current Addiction Reports} 491; Zendle \textit{et al} 2020 \textit{CHB} 189; Moshirnia 2018 \textit{MJLST} 112-113; Gainsbury 2019 \textit{GLR} 82; Cerulli-Harms \textit{et al} \textit{Loot Boxes in Online Games} 8 and Australian Senate Committee \textit{Gaming Micro-Transactions} 3; Gonzalez-Cabrera \textit{et al} 2022 \textit{CHB} 6.

\textsuperscript{104} This is also the case for South Africa (Lohse 2020 \textit{IJSSER} 24-25).

\textsuperscript{105} See the discussion that follows.
The industry must recognize that they are beholden to the public they serve and that the public’s best interest is their own best interest.\(^\text{106}\)

The argument is that developers, who financially benefit from loot boxes, have the power, responsibility and incentive to self-regulate and to make changes to their games to address these concerns and to prevent governmental interference or regulation.\(^\text{107}\) But the response from video game companies has been seen as inadequate.\(^\text{108}\) Mistry argues that self-regulation by professional industry associations remains the most appropriate solution to address these problems to avoid external interference and to allow the developers, producers, filmmakers, musicians and other artists to continue creating these games for gamers’ enjoyment.\(^\text{109}\)

Individually some developers and distributors have voluntarily or under duress removed loot boxes from their games\(^\text{110}\) or limited them to cosmetic items.\(^\text{111}\) Others have added better labelling to video games by publishing the prizes and the odds to make their games more transparent and fairer.\(^\text{112}\) For developers, it is ultimately a balance between current potential profit versus the promotion of long-term player engagement and a continued player base.\(^\text{113}\)

But as an industry there has been an unwillingness to unanimously admit to potential problems or harm, to be proactive, or to take comprehensive remedial action. The gaming industry’s argument has mostly been that it is a gamer’s free choice as to whether he wants to purchase a loot box within a game as part of an informed consent process.\(^\text{114}\) However, some changes in attitude have been forthcoming on an \textit{ad hoc} basis.\(^\text{115}\)

The Gambling Regulators European Forum (GREF), for example, released a joint statement by eighteen European regulators noting their concern about the blurring of lines between gaming and gambling and the need for

\begin{footnotes}
\item[106] Fleming 2020 \textit{U Toronto Faculty L Rev} 108.
\item[107] Abarbanel 2018 \textit{GLR} 233; Cermak 2020 \textit{MSU ILR} 316; Fleming 2020 \textit{U Toronto Faculty L Rev} 101-103.
\item[108] Cermak 2020 \textit{MSU ILR} 320; Close and Lloyd 2021 \textit{Lifting the Lid on Loot-Boxes} 3.
\item[110] Kersley 2021 https://www.wired.co.uk/article/loot-boxes-new-gambling 2 with reference to the developers of \textit{Fortnite} that removed their loot boxes in the light of imminent governmental review. Also see Tan 2019 \textit{Galactica} 140.
\item[111] This limitation is often aimed at avoiding their loot boxes being defined as gambling in a specific jurisdiction (Perks 2020 \textit{Games and Culture} 1017).
\item[112] McCaffrey 2019 \textit{Business Horizons} 490; Kao 2020 \textit{IEEE Transactions on Games} 220. Perks describes the reaction of developers as an example of the role and power of journalistic critiques that can shape gambling cultures and consumption (Perks 2020 \textit{Games and Culture} 1004). In South Africa, see the FPB \textit{Labelling Strategy} para 6.2.
\item[113] Macey and Bujić “Talk of the Town” 217.
\item[115] Xiao and Henderson 2021 \textit{Int J Ment Health Addict} 184-185.
\end{footnotes}
consumer protection, especially for minors.\textsuperscript{116} International Game Developers Association (IGDA) called for an industry commitment not to market loot boxes to minors, to disclose the odds and to launch an educational campaign to increase parental awareness of the games.\textsuperscript{117} However, their counterpart in Europe, European Games Developers Federation (EGDF) refused to make these commitments due to the variety of loot boxes and the legal uncertainties surrounding them.\textsuperscript{118}

The South Korean Game Industry Association admits that changes to loot boxes are needed considering the criticisms and encourages the developers in their association to be more transparent by revealing their loot boxes’ contents and odds.\textsuperscript{119}

There has been some reaction to the controversy from external strategic partners. Games of the storefront companies such as Apple and Google Play App Stores must disclose the contents and odds of loot boxes.\textsuperscript{120} PayPal has responded to the risk to minors by strengthening its processes to prevent minors from using its platform to gamble.\textsuperscript{121} Sony, Nintendo and Microsoft, major console makers for gaming, have announced new policies that would require games for their platforms to be transparent about the odds of obtaining virtual items from paid loot boxes.\textsuperscript{122}

Two further aspects deserve further discussion: the existing classification (also called the rating) of the games and the call for adopting an ethical set of guidelines by the industry and for the industry. Each is discussed hereunder.

\textsuperscript{116} Liu 2019 Wash Int LJ 787; GREF 2018 https://www.spillemyndigheden.dk/uploads/2018-11/Declaration%20of%20gambling%20regulators%20on%20their%20concerns%20related%20to%20the%20blurring%20of%20lines%20between%20gambling%20and%20gaming%20%282002%29.pdf.


\textsuperscript{118} Honer 2021 IELR 68. In 2021 they noted the concerns around loot boxes (EGDF 2020 https://www.egdf.eu/documentation/7-balanced-protection-of-vulnerable-players/consumer-protection/lootboxes/).

\textsuperscript{119} McCaffrey 2019 Business Horizons 489.

\textsuperscript{120} McCaffrey 2019 Business Horizons 489-490; Schwidessen and Karius 2018 IELR 17; Moshirnia 2018 MJLST 94-95; Cerulli-Harms et al Loot Boxes in Online Games 8. In September 2021 a court ruled that the decision is possible as Apple has sovereignty over its App Store (Jungherr and Schlarb 2022 Social Media and Society 9), Xiao, Henderson and Newall 2021 SSRN Electronic Journal found that there was only a 64% compliance rate in the disclosure of loot boxes in games on the Apple platform.

\textsuperscript{121} NGB Potential Impact of 4IR 41.

\textsuperscript{122} Carvahlo 2021 Decision Support Systems 3; Fleming 2020 U Toronto Faculty L Rev 106.
3.2 Classification of games

Although there is no one single organisation that represents the video game industry, a few self-regulating game classification industry associations exist. Their age classification systems are akin to film and publication classifications and traditionally focussed on age-restriction warnings due to violence and sexual content.\textsuperscript{123} Classification is an important guide for purchasers and an incorrect classification has led to at least one claim in for damages, in France.\textsuperscript{124}

Three of the biggest industry gaming organisations committed to industry self-regulation that are involved in the classification of games, the Entertainment Software Rating Board (ESRB),\textsuperscript{125} the Interactive Games and Entertainment Association (IGEA)\textsuperscript{126} and the Pan-European Game Information (PEGI)\textsuperscript{127} all initially opposed any suggestion that loot boxes may be potentially harmful or akin to gambling.\textsuperscript{128} Since 2020, however, ESRB and PEGI have included additional descriptors for games to inform purchasers, gamers and parents.\textsuperscript{129} These classifications include descriptions of simulated gambling, gambling and/or in-game purchases (including random items) where gamers can purchase digital goods or services with real-world currency.\textsuperscript{130} The ESRB has refused to rate games

\textsuperscript{123} The classification of these organisations is also crucial in South Africa as some reliance is placed on their classification, as is discussed hereunder.

\textsuperscript{124} Derrington, Starr and Kelley 2021 JGI 303 refers to this ongoing case against EA and their game FIFA Ultimate Team where the argument is that the classification should have included a gambling warning.


\textsuperscript{127} PEGI is a non-profit organisation aimed at the self-regulation and classification of games for 37 countries in the EU (McCaffrey 2019 Business Horizons 489; Cermak 2020 MSU ILR 285).

\textsuperscript{128} Moshirnia 2018 MULST 95-96; Griffiths 2018 GLR 53-54; Cermak 2020 MSU ILR 286; Zendle and Cairns 2018 Plos ONE 2; Zendle and Cairns 2019 Plos ONE 3; Castillo 2019 Santa Clara L Rev 176; Jones 2020 Chapman L Rev 260. IGEA originally likened loot boxes to harmless Kinder Joy Surprise chocolates (Zendle and Cairns 2019 Plos ONE 3) but has since adopted a policy on loot boxes.

\textsuperscript{129} Castillo 2019 Santa Clara L Rev 197-198; Derrington, Starr and Kelley 2021 JGI 316.

\textsuperscript{130} PEGI 18 (Gambling) and PEGI 3 "In-game purchases (includes Random Items)" (PEGI date unknown https://pegi.info/what-do-the-labels-mean). Also see Lischer \textit{et al} 2022. JERPH 6. Vance 2019 https://www.esrb.org/blog/what-parents-need-to-know-about-loot-boxes-and-other-in-game-purchases/. Also see McCaffrey 2019 Business Horizons 489. IGEA 2021 https://igea.net/wp-
with tradable loot boxes as "Adults Only". IGEA adopted a policy to promote a safe and responsible industry through education to protect minor gamers. Although these are positive developments, these classifications are ineffective as consumers do not understand the warnings and as classifications are inconsistently applied.

The International Age Rating Coalition (IARC) aims to address the inconsistencies and streamline the classification process through a single procedure. The IARC is a collaboration of authorities and organisations already tasked with the classification of games and allows developers to obtain classifications for multiple territories and storefronts.

The classification of games by itself is not adequate to address the concerns highlighted here. Research has shown that the labelling of games with an age restriction does not necessarily deter minors from playing games and may sometimes have the opposite effect. In addition, parents are also not always aware of the contents of the games or the meaning of the classifications. Shi argues that an age restriction should be combined with additional strategies to be successful, such as the education of parents.

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131 Castillo 2019 Santa Clara L Rev 198. When large retailers do not stock specific games, this entices developers to change their games (Castillo 2019 Santa Clara L Rev 198).
132 IGEA date unknown https://igea.net/useful-links/parental-controls.
133 Garrett et al 2023 CHB 13.
134 Garrett et al 2023 CHB 13. The FPB Conversion Survey Report 4.1 noted that 75% of South African parents have not played the video games their children play and are unaware of the contents. Xiao and Newall 2022 JGI 1 argue that the reward structures of most loot boxes are "too complex for consumers to be meaningfully protected by probability disclosures alone".
135 Countries forming part of the initiative include Australia, Brazil, Korea, the EU and Germany. Classification organisations include PEGI, ESRB, the German Unterhaltung Selbkontrolle (USK) and the Korean Game Rating and Administration Committee (GRAC). Storefronts participating are Google Play, Microsoft, Nintendo eShop, PlayStation Store and Amazon Luna (IARC 2023 https://www.globalratings.com/about.aspx).
136 Garrett et al 2023 CHB 13. Also see FPB and UNISA Impact Research Report 30; FPB Conversion Survey Report 5.2. For an example of parental education, see the IGEA information and assistance with parental controls and classification (IGEA date unknown https://igea.net/useful-links/parental-controls).
The problem with these organisations is that they have no teeth to enforce any classification and with an impossible workload, they often rely on self-reporting by gaming developers.

3.3 Ethical guidelines

Apart from the classification of games, it has been proposed that the voluntary adoption of ethical and socially responsible industry guidelines aligned with regulatory frameworks would be ideal to address the concerns about loot boxes. There is consensus that the guidelines should address competing interests and correct the identified problems without interference from legislators and courts. The details thereof are mired in uncertainty and controversy, however, inter alia because game designers view ethical monetisation differently.

The following guidelines have been suggested:

Some suggest that loot boxes should be limited to non-competitive advantages by disabling pay-outs and that loot boxes should be obtained only through regular play, with all external trading markets for loot box items banned.

Others call for more nuanced industry guidelines, including the explicit and uniform labelling of games to address the lack of transparency and protection of minors by adding an appropriate age classification on games. Warnings on the games should include general consumer

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139 Honer 2021 IELR 72.
141 Xiao 2021 IELR 36. These possible guidelines can take the form of an ethical game design toolbox (Xiao 2021 IELR 41); King and Delfabbro 2018 Int J Ment Health Addict provides a blueprint of possible solutions.
142 Mistry 2018 Rutgers U L Rev 576; King and Delfabbro 2018 Int J Ment Health Addict 4; Gainsbury 2019 GLR 82. Xiao and Henderson 2021 Int J Ment Health Addict 178 are critical of King and Deltabbro’s suggestions, but a full discussion of this aspect falls outside the scope of this article.
143 Mistry 2018 Rutgers U L Rev 577; Xiao and Henderson 2021 Int J Ment Health Addict 188.
144 Karlsen 2022 Games and Culture 652.
146 King and Delfabbro 2018 Int J Ment Health Addict 5-6.
147 King and Delfabbro 2018 Int J Ment Health Addict 7.
148 Xiao 2021 IELR 36.
149 Moshirnia 2018 MJLST 108; Mistry 2018 Rutgers U L Rev 574.
information\textsuperscript{150} and educational data\textsuperscript{151} aimed at extending financial and parental controls to protect minors.\textsuperscript{152} Specifically, the warnings should advise customers, parents and classification agencies about the content\textsuperscript{153} and the age classification.\textsuperscript{154} Age verification would be essential for the effectiveness of these suggestions.\textsuperscript{155} In addition, it is proposed that the guidelines include advertising restrictions and transparency through upfront disclosures of the prizes and odds of winning the award so that the gamers’ expectations are reasonable.\textsuperscript{156}

Additional suggestions to consider in these guidelines include mechanisms to address excessive spending on loot boxes through education and in-game warnings.\textsuperscript{157} Gamers should be allowed to voluntarily limit their spending on loot boxes\textsuperscript{158} or to self-exclude from the game.\textsuperscript{159} In addition, “cool down” periods such as embedded disruptions and additional steps to the purchasing process could be included.\textsuperscript{160} Consumer information should automatically be added in the form of periodic statements on in-game spending, combined with tips on healthy gaming behaviour and a checklist for problematic gaming use.\textsuperscript{161} The display of the actual currency values and not just the virtual values is seen as essential to awareness of how

\textsuperscript{150} Moshirnia 2018 MJLST 109. Carvalho’s solution is to use blockchain technology by coding loot boxes as smart contracts and running them on a public blockchain that allows a player to verify the randomisation mechanism to make it transparent and tamper-proof (Carvalho 2021 Decision Support Systems 2, 11). Delfabbro, Delic and King 2022 J Behav Addict 724, however, also with the use of blockchain technology, argues for increased transparency and consumer awareness of the risks of these models. Also see Delic and Delfabbro 2022 Int J Ment Health Addict 1-14.

\textsuperscript{151} Moshirnia 2018 MJLST 110.

\textsuperscript{152} Liu 2019 Wash Int LJ 798.


\textsuperscript{154} Zendle and Cairns 2019 Plos ONE 11; Zendle, Meyer and Over 2019 RSOS 17; King and Delfabbro 2018 IJMHA 8; Drummond and Sauer 2018 NHB 3.

\textsuperscript{155} Liu 2019 WILJ 797.

\textsuperscript{156} Hong 2019 WSLR 80; Misty 574; McCaffrey 2019 BH 486; Belgium Gaming Commission Research Report on Loot boxes 18; Moshirnia 2018 MJLST 107; King and Delfabbro 2018 Int J Ment Health Addict 8; Liu 2019 Wash Int LJ 798.

\textsuperscript{157} Fleming 2020 U Toronto Faculty L Rev 107.

\textsuperscript{158} Zendle, Meyer and Over 2019 RSOS 17; King and Delfabbro 2018 Int J Ment Health Addict 4-5.

\textsuperscript{159} King and Delfabbro 2018 Int J Ment Health Addict 9. Xiao and Henderson 2021 Int J Ment Health Addict 182 argues that these measures are unlikely to be adopted by gamers.

\textsuperscript{160} King and Delfabbro 2018 Int J Ment Health Addict 5; Xiao 2021 IELR 39. This would “reduce the automaticity or ‘mindlessness’ of purchasing behaviour” (King and Delfabbro 2018 Int J Ment Health Addict 5).

\textsuperscript{161} King and Delfabbro 2018 Int J Ment Health Addict 9-10.
much is being spent.\textsuperscript{162} What is suggested is the establishment of frameworks similar to responsible gambling initiatives.\textsuperscript{163} Online support could be helpful,\textsuperscript{164} as would reducing limited-time offers, repeat awards and the audio-visual design of opening a loot box.\textsuperscript{165} A more drastic guideline to be considered is a refund entitlement under certain circumstances.\textsuperscript{166}

Xiao and Henderson argue that these proposed guidelines are unlikely to be adopted by the developers or the industry for various reasons, including vested financial interest and possible human rights violations.\textsuperscript{167} It is anticipated that there could also be player aversion to the suggested guidelines as paternalistic, especially regarding play interruptions.\textsuperscript{168}

For the guidelines to create consumer confidence, enforcement is necessary.\textsuperscript{169} Voluntary self-regulation will never have the teeth to enforce adherence as such regulation could potentially be ignored by those whose actions are targeted for change.\textsuperscript{170} Enforceability of these self-regulating guidelines would be problematic and impractical.\textsuperscript{171} In addition, the guidelines would not address the problem of the potential abuse of random award mechanisms.\textsuperscript{172} What is needed is ethical game design,\textsuperscript{173} but the dilemma is how to achieve this.

### 3.3 Conclusion

Although there are positive movements within the industry to deal with the concerns pertaining to loot boxes, some pressure seems required to enhance their commitment to self-regulation.\textsuperscript{174} But unless this happens, the call for regulation will likely remain and even increase with numerous calls for a more holistic approach.\textsuperscript{175} This call is made notwithstanding the

\begin{footnotesize}
\begin{enumerate}
\item King and Delfabbro 2018 \textit{Int J Ment Health Addict} 5. Uddin argues that adolescents lose a sense of how much they spend when they use virtual currencies for loot boxes (Uddin 2021 \textit{Family Court Review} 875).
\item Macey and Bujić “Talk of the Town” 217.
\item King and Delfabbro 2018 \textit{Int J Ment Health Addict} 4.
\item King and Delfabbro 2018 \textit{Int J Ment Health Addict} 7.
\item King and Delfabbro 2018 \textit{Int J Ment Health Addict} 9.
\item Xiao and Henderson 2021 \textit{Int J Ment Health Addict} 182. They argue that the setting of age and financial limits may be discriminatory and have human rights infringement consequences (Xiao and Henderson 2021 \textit{Int J Ment Health Addict} 186). Also see Xiao 2021 \textit{IELR} 38-39.
\item Xiao and Henderson 2021 \textit{Int J Ment Health Addict} 180.
\item Xiao 2021 \textit{IELR} 37.
\item Xiao 2021 \textit{IELR} 37.
\item Xiao and Henderson 2021 \textit{Int J Ment Health Addict} 189.
\item Xiao and Henderson 2021 \textit{Int J Ment Health Addict} 186.
\item Xiao and Newall suggest a more ethical game design by \textit{inter alia} capping the number of loot boxes per game and rewards per box and by equalising the winning probabilities across the rewards (Xiao and Newall 2022 \textit{JGI} 8).
\item Australian Senate Committee \textit{Gaming Micro-Transactions} 65, 68.
\item McCaffrey 2019 \textit{Business Horizons} 491-492.
\end{enumerate}
\end{footnotesize}
speed at which the gaming world develops, with policymakers always on the back foot in understanding the developments and consequences. In the next section an overview is given of existing regulatory actions taken around the world.

4 Regulatory interferences in foreign jurisdictions

A successful regulatory policy will control risk while encouraging positive social behaviour, with regular re-evaluation to ensure policies remain relevant in the face of changing environments and technologies. Considering that convergence is supported by rapid advances in technology and is taking place largely on the Internet (accessible 24 h), harms for consumers could manifest quickly and spread broadly across societies before their existence and severity are established.

4.1 Introduction

Most commentators agree that some form of regulation is defensible. Minors and other vulnerable gamers should be protected when the games are harmful and addictive. This is necessary as current self-regulation initiatives by the industry to deal with such concerns are inadequate.

There are government-sponsored age-related classification systems for video games. As far as we could establish, it is only in Australia, Spain and Indonesia where gambling-related content and in-game purchases are specifically included in the government classification systems. This is

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177 Abarbanel 2018 GLR 231.
179 Xiao 2021 IELR 34; Zendle, Meyer and Over 2019 RSOS 17.
180 Abarbanel 2018 GLR 234.
181 Gainsbury 2019 GLR 82. The argument that regulation is unnecessary and that it is the parent’s responsibility to protect minors from engaging with harmful content is no longer accepted (Uddin 2021 Family Court Review 879).
182 Close and Lloyd Lifting the Lid on Loot-Boxes 4.
184 In August 2022 in Australia, for example, the Classification Board classified the games of Hard Rock World Tour, Shark Parimatch Attack, Domino Club – Casino, Aviator PinUp and jetx by givvy (to name a few) as Mature (M) (Simulated Gambling), not for children under the age of 15, as it includes a theme that requires a mature outlook (Australian Classification date unknown https://www.classification.gov.au/classification-ratings/latest-classification-decisions?f%5B0%5D=latest-decision-category%3AC). Gonzalez-Cabrera et al 2022 CHB 6 argues for a change in the Spanish classification system to add an age limit of 18 to a game with a gambling classification.
where the industry classification initiatives are useful as many countries accept the industry classification systems discussed above.\(^\text{185}\)

Leaving aside developments in the USA, it is expedient to note that although a few countries are currently investigating loot boxes,\(^\text{186}\) some jurisdictions have acted on loot boxes, although the solutions adopted differ. There is currently no uniform approach globally as to how loot boxes should be regulated.

An outright regulatory ban on all loot boxes is theoretically possible, but most commentators see this as too paternalistic an option,\(^\text{187}\) leaning towards over-regulation\(^\text{188}\) and being unjustified.\(^\text{189}\) There have been calls against an overreaction to possible addictive game designs as they will interfere with the standard gaming flow design that is neither unethical nor abusive.\(^\text{190}\) In addition, it is argued that a ban on all loot boxes may have unintended consequences and restrict the freedom of adults to make informed choices.\(^\text{191}\) There are also doubts about the possible success of enforcing such a ban.\(^\text{192}\)

The regulatory actions in foreign jurisdictions can be summarised as follows:\(^\text{193}\)

### 4.2 Overview of jurisdictions

There are two main groups of regulation, one focussing on consumer protection and the other on the national gambling regulatory framework. First the consumer protection initiatives.

Although loot boxes remain legal in Japan, South Korea, China and Germany, some limitations on loot boxes have been enforced.

\(^{185}\) See the discussion under 3.2. This is also done in South Africa. See the discussion under 5.4.1.

\(^{186}\) The Brazilian Justice Authorities have launched an inquiry into the possible banning of loot boxes at the behest of the Brazilian National Association of Child and Adolescent Defence Centres. The outcome is not yet available (Frascarelli 2021 https://archive.esportsobserver.com/brazilian-justice-loot-boxes/).

\(^{187}\) Xiao June 2022 OsF Preprints; Xiao and Henderson 2021 *Int J Ment Health Addict* 186.

\(^{188}\) Moshirnia 2018 *MJLST* 111; Xiao 2021 *IELR* 35.

\(^{189}\) Xiao 2021 *IELR* 33. Okereke is an exception here to and argues for a ban on loot boxes (Okereke 2022 *T Marshall L Rev* 74).

\(^{190}\) Xiao and Henderson 2021 *Int J Ment Health Addict* 186.

\(^{191}\) Abarbanel 2018 *GLR* 234.

\(^{192}\) See the discussion hereunder about the Belgium attempt to ban loot boxes.

\(^{193}\) Derrington, Starr and Kelley 2021 *JGI* 311-312. Although now slightly outdated, McCaffrey provided a table on policies in some jurisdictions (McCaffrey 2019 *Business Horizons* 487). See the risk assessment of various jurisdictions in Schwiddessen and Karius 2018 *IELR*. 
In Japan\textsuperscript{194} the \textit{Act Against Unjustifiable Premiums or Unexpected Benefits and Misleading Representations} resulted in the banning of "Kompu gacha" games, which contained multi-layered loot boxes, as being exploitative.\textsuperscript{195}

In South Korea the 2011 \textit{Youth Protection Revision Act} requires loot boxes to be transparent, requires the developers to disclose the prizes and odds of loot boxes and requires companies to limit players under sixteen from playing between midnight and 6 a.m.\textsuperscript{196} The South Korean Games Rating Board controls the loot boxes by preventing games from being approved for release in the country or giving them a classification of 18+.\textsuperscript{197} In 2018 the South Korean Fair Trade Commission fined three game developers almost ¥1 million for misleading players about loot boxes.\textsuperscript{198}

In China, where dedicated game servers facilitate enforcement,\textsuperscript{199} loot boxes may not be purchased with cash and the transfer of virtual currency for real currency is prohibited.\textsuperscript{200} In addition, all loot boxes must be transparent and display all rewards and the odds of winning.\textsuperscript{201} Furthermore, the purchasing of loot boxes includes a more complicated two-step payment confirmation system with spending limits to make the purchasing process more complicated.\textsuperscript{202} Limits have also been imposed on the hours minors can spend playing games and the monthly amounts that may be spent.\textsuperscript{203} This approach has been described as a sensible

\textsuperscript{194} Hong 2019 \textit{W St U L Rev} 69; Cermak 2020 \textit{MSU ILR} 299; Fleming 2020 \textit{U Toronto Faculty L Rev} 87.


\textsuperscript{196} This Act is commonly known as the \textit{Gaming Shutdown Law}; Hong 2019 \textit{W St U L Rev} 70; Shen 2020 \textit{UIC John Marshall Law Review} 1099.

\textsuperscript{197} One of the concerns was the "potential line-blurring ethics of online gambling" (Liu 2019 \textit{Wash Int LJ} 782-783). Loot boxes were not mentioned, although they were among the concerns raised (Liu 2019 \textit{Wash Int LJ} 783).


\textsuperscript{199} Xiao 2022 \textit{J Behav Addict} 249.

\textsuperscript{200} Cermak 2020 \textit{MSU ILR} 299; Shen 2020 \textit{UIC John Marshall Law Review} 1098; McCaffrey 2019 \textit{Business Horizons} 487. Hong 2019 \textit{W St U L Rev} 71 notes that this is being side-stepped by certain developers through the use of in-game currency which comes with free loot boxes.


\textsuperscript{202} This is aimed at mitigating possible addictive behaviour (Liu 2019 \textit{Wash Int LJ} 783-784).

\textsuperscript{203} Minors are banned from playing online games between 10 pm and 8 am; are limited to 90 minutes per day during the week and three hours per day on weekends. There is also a ¥57 spending limit per month (Shen 2020 \textit{UIC John Marshall Law Review} 1098).
compromise between commercial interests and the protection of participants.\textsuperscript{204}

Germany’s actions focus on minors purchasing and trading in loot boxes. The Commission for the Protection of Minors in the Media evaluated loot boxes and their impact on children.\textsuperscript{205} Since 2021 a new youth law is being considered to protect minors from purchasing video games with loot boxes by adding an 18+ classification.\textsuperscript{206}

Most other Western countries focus on the ambiguous gambling legal status of loot boxes and whose regulatory responsibility it should be where it offends national legal gambling principles.\textsuperscript{207} Oversimplified, the three essential gambling elements in most national jurisdictions are one, a stake (a consideration given); two, where chance determines, three, a payout or prize.\textsuperscript{208} There is no uniform interpretation of these elements amongst jurisdictions, there are no unified outcomes within regulatory frameworks and there are no consistent enforcement mechanisms.\textsuperscript{209}

On the one hand, in New Zealand,\textsuperscript{210} Ireland\textsuperscript{211} and France\textsuperscript{212} loot boxes are not considered gambling and thus not controlled by their gambling regulatory frameworks. The rationale in these countries is similar: one, there is always a prize to be won in a loot box; and two, the items do not have real-world value,\textsuperscript{213} although the last aspect is unconvincing.\textsuperscript{214}

On the other hand, in Belgium the purchasing of all loot boxes is regarded as gambling in terms of its legislation.\textsuperscript{215} The Belgium Gaming Commission

\textsuperscript{204} Xiao 2022 J Behav Addict 249; Derrington, Starr and Kelley 2021 JGI 315.
\textsuperscript{205} Schwiddessen and Karius 2018 IELR 42.
\textsuperscript{207} NGB Potential Impact of 4IR 42.
\textsuperscript{208} Mann 2020 IWLTA 202; Xiao 2021 IELR 34; Derrington, Starr and Kelley 2021 JGI 308. This is also the case in South Africa (Casino Enterprises (Pty) Ltd v Gauteng Gambling Board 2011 6 SA 614 (SCA) para 29).
\textsuperscript{209} Xiao 2021 IELR 35.
\textsuperscript{210} Abarbanel 2018 GLR 232; Moshirnia 2018 MJLST 105; Australian Senate Committee Gaming Micro-Transactions 14.
\textsuperscript{211} Columb, Griffiths and O’Gara 2022 Ir J Psychol Med 3; Evans 2022 Geo Wash L Rev 381.
\textsuperscript{212} Zendle and Cairns 2019 Plos ONE 2; Honer 2021 IELR 67.
\textsuperscript{213} Liu 2019 Wash Int LJ 779.
\textsuperscript{214} Drummond et al 2020 Nat Hum Behav 987; Jones 2020 Chapman L Rev 267. Evans 2022 Geo Wash L Rev 70 argues that the solution is “valuing a virtual good based on the perceived benefit it can bring in the virtual world - irrespective of any real-world value”. If this is done, he continues, loot boxes should be “regulated similarly to the gambling industry they mimic”.
Research Report on Loot Boxes has recommended a ban on minors purchasing these games or using the payment platforms for those games until specific permits have been developed to safely accommodate loot boxes. The Gambling Commission has demanded the removal of all loot boxes from games sold in Belgium and most developers have complied, "albeit reluctantly." The choice given by the authorities to the developers was simple: remove the loot boxes, withdraw the game or face criminal prosecution. Xiao disagrees that the ban is successful and states that in mid-2022, 82% of the highest-grossing iPhone games in Belgium continue to sell loot boxes for real-world money and instead of improving consumer protection, it shifted gamers for higher-risk illegal providers.

In several countries a difference is made between tradable and non-tradable loot boxes with only tradable loot boxes meeting the legal definition of gambling of the applicable national gambling legislation. This was the case in Denmark, originally in the Netherlands, Sweden, Canada, Poland, the UK and Australia. Only in two of these jurisdictions, however, did this lead to any enforcement action.

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219 Liu 2019 Wash Int LJ 786; Hong 2019 W St U L Rev 75.
220 Xiao July 2022 OSF Preprints 120-122.
221 Australian Senate Committee Gaming Micro-Transactions 9; Abarbanel 2018 GLR 232; Moshirnia 2018 MJLST 105. The Danish Gambling Authority 2017 https://www.spillemyndigheden.dk/en/news/statement-about-loot-boxes-loot-crates 1 stated that not all loot boxes are gambling in terms of the legislation – only where they are tradable for real currency.
222 Kansspelautoriteit Onderzoek naar Loot Boxes 2: 14. The report noted that four of the ten loot boxes examined were in contravention of the Wet op de Kansspellen. Also see Zendle and Cairns 2018 Plos ONE 2; McCaffrey 2019 Business Horizons 488; Australian Senate Committee Gaming Micro-Transactions 11-12.
224 Schwiddessen and Karius 2018 IELR 41-42.
225 Moshirnia 2018 MJLST 106; Hong 2019 W St U L Rev 73. In the UK only tradable loot boxes at an external after-sale market are legally regarded as gambling. Standard loot boxes are not, as their content is usable only in the game, and the argument is that it cannot be gambling as there is no "prize" (Schwiddessen and Karius 2018 IELR 25; Cermak 2020 MSU ILR 293; Mistry 2018 Rutgers U L Rev 563; Abarbanel 2018 GLR 232). This does not take into account secondary markets
In Denmark the Danish Gambling Authority has since 2018 obtained court orders to force telecommunications companies to block illegal gambling sites, including some video-gaming sites with tradable loot boxes targeting minors and which operate without the licence required in terms of the Danish gambling statute.\(^{226}\)

In the Netherlands, tradable loot boxes were regarded as gambling in terms of the gambling legislation,\(^{227}\) and the Dutch Gaming Authority required games to remove addiction-sensitive elements.\(^{228}\) The Authority has the power to impose a fine of up to € 830 000 or 10% of the company’s worldwide turnover for any breaches, and should this not be sufficient it can resort to criminal proceedings.\(^{229}\) Some developers have updated their games according to these requirements, but others have refused and challenged the decision.\(^{230}\) On 9 March 2022 the final appeal by EA against the financial penalty imposed by the Gambling Authority was successful:

The Administrative Jurisdiction Division of the Council of State found that loot boxes in the Ultimate Team Mode of the FIFA video games (FUT) published by Electronic Arts (EA) did not contravene Dutch gambling law, contrary to the Netherlands Gambling Authority’s (Kansspelautoriteit) previous 2018 interpretation of the law and overruling a previous 2020 judgment that affirmed the Kansspelautoriteit’s previous interpretation.\(^{231}\)

In short, the judge found that a loot box is not gambling as it does not meet the statutory requirement of an independent "game of chance": loot boxes should be seen in the context of the overarching video game and cannot exist separately from the game.\(^{232}\) This is a unique interpretation of loot boxes. Xiao and Declerck criticise the approach as over-reliant on how the majority of players engage with the game without taking into account the

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\(^{227}\) Section 1 of the Wet op de Kansspelen requires a licence for persons providing gambling games to the public (Shen 2020 UIC John Marshall Law Review 1097 with reference to “addiction-sensitive” games such as Hearthstone).


\(^{229}\) Australian Senate Committee Gaming Micro-Transactions 12.

\(^{230}\) Hong 2019 W St U L Rev 73.

\(^{231}\) Xiao and Declerck 2022 OSF Preprints 2.

differences between purchased and earned loot boxes. The judgment also does not answer the question as to whether:

the de facto real-world economic value of loot box content gained through the use of the ‘black market’ satisfies the ‘prize’ (or equivalent) criterion of gambling law, despite the company explicitly prohibiting players from selling loot box content in exchange for real-world money (i.e., participating in black market trading) and thereby granting them real-world economic value.

In the other jurisdictions where tradable loot boxes meet the gambling statutory requirements, no action has been taken to implement the provisions of the applicable gambling legislation. The gambling regulators in these countries do not regard it as part of their mandate to oversee loot boxes. They are either unable to or uninterested in dealing with the issue, notwithstanding the possible harm to minors and addiction fears. It seems as if the solutions to these concerns in these jurisdictions should be sought elsewhere. In the UK the official solution suggested focusses on classifying these games in such a way as to limit them to those above the gambling age and to use in educational programmes, although there are calls for pre-emptive regulation as a precautionary measure to limit harm. In Australia the official outcome was that regulation should be considered only after further research. The experts show a preference for consumer protection regulations to protect the vulnerable rather than using the

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233 Xiao and Declerck 2022 OSF Preprints 16.
234 Xiao and Declerck 2022 OSF Preprints 15.
236 Liu 2019 Wash Int LJ 779; UKGC Young People and Gambling 91; Australian Senate Committee Gaming Micro-Transactions 12-13. Abarbanel 2018 GLR 232 argues that this "It's not my job" reaction is a frustrating customer service response. Also see Australian Senate Committee Gaming Micro-Transactions 37-38; UKGC Virtual Currencies 30; and Digital, Cultural, Media and Sport Committee Immersive and Addictive Technologies 163. Also see in general the following two reports for a detailed discussion of the United Kingdom: Digital, Cultural, Media and Sport Committee Loot Boxes and Digital Gaming and Digital, Cultural, Media and Sport Committee Loot Boxes in Video Games.
237 Digital, Cultural, Media and Sport Committee Immersive and Addictive Technologies 29; Zendle and Cairns 2019 Plos ONE 2; Australian Senate Committee Gaming Micro-Transactions 14; Larche et al 2021b J Gamb Stud 161. The success of the youth educational aspects of these programmes in the UK has been questioned by Van Schalkwyk in 2022 (Van Schalkwyk, Hawkins and Petticrew 2022 Population Health 1-20); Larche et al 2021b J Gamb Stud 160.
238 Close and Lloyd 2021 Lifting the Lid on Loot-Boxes 4; Xiao 2021 IELR 33; Digital, Cultural, Media and Sport Committee Immersive and Addictive Technologies para 79.
gambling framework. EU Guidelines also suggest a consumer law approach rather than a gambling approach. Cartwright and Hyde argue that loot boxes can be viewed either as unfair labour practices or misleading practices, alternatively as deceptive or aggressive and immersion game design.

Although a consumer protection approach may appear more accessible, Leahy argues against it. He notes that the focus should be on player protection and not on consumer protection and that the approach does not take into account the structural differences between gambling regulation and consumer laws: gambling regulation is about control, the imposing of regulations to protect players and regulatory supervision, all at the cost of the operator. Consumer law is less invasive, more informational and aimed at informing the consumer so that consent is informed.

4.3 Conclusion

In conclusion, there is little uniformity in the jurisdictional responses to loot boxes, with divergent degrees of enforcement and protection. There are two main approaches to address the concerns: a consumer protection approach or a gambling framework approach.

What makes the route of existing gambling legislation enticing is that the national gambling regulatory frameworks have a proven history of promoting responsible gambling and harm-minimisation with established preventative measures. Game developers would loathe their games to be classified as gambling and have to submit to costly regulatory processes worldwide.

From a broader perspective, it remains important for the loot box concerns to be addressed, irrespective of the legal avenue chosen.

5 Calls for a holistic approach

Self-regulation, the classification of games and possible ethical guidelines cannot be the final solutions to the loot box concerns, especially in an industry where pockets still fail to acknowledge these concerns, some believe in bad faith, and the response has been described as

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240 Nettleton, Abi-Hanna and Pasternacki 2020 *The Bulletin* 3. As this has not yet been tested in court, it is unclear if the outcome would be positive.
241 Leahy 2022 *Journal of Consumer Policy* 571.
242 Cartwright and Hyde 2022 *Legal Studies* 3-4.
244 Xiao 2021 *IELR* 34-35.
245 Derevensky and Griffiths 2019 *GLR* 639.
246 Abarbanel 2018 *GLR* 233; Xiao 2021 *IELR* 35.
247 Abarbanel 2018 *GLR* 232; Azin 2020 *BC L Rev* 1580; Cerulli-Harms *et al Loot Boxes in Online Games* 9; Xiao 2021 *IELR* 36.
lacklustre. It is argued that game companies have until now propagated distrust through their lack of action and it is expected that the industry will keep manoeuvring to avoid compliance unless pressured by stakeholders, governments and other strategic partners. Any change would have to include long-term benefits for the industry as well.

The EA saga has shown that the nature of the internet makes it possible for stakeholders to pressure change successfully. There are numerous suggestions. McCaffrey argues that self-regulation would be successful only if gamers and regulators were to enter into an informal alliance to force game developers to address the loot box concerns. In addition, gamers and other stakeholders, such as parents, could assist in holding developers accountable by supporting games adhering to ethical practices.

Moreover, governments could use gentle financial coercion to motivate developers to be accountable and adopt specific guidelines through investments, grants or tax relief for the gaming industry or to encourage new game design.

As previously mentioned, major strategic online partners have effectively motivated developers to change potentially harmful practices. Closer alignment with companies such as PayPal, Google, Facebook, Apple and game console developers could be utilised to effect changes to protect minors and the vulnerable.

Experts reiterate that communication between the stakeholders is essential if these options are to be successful. McCaffrey argues that developers should dedicate resources to navigating the legal issues and the complex relationship between customer and regulatory complaints by directly involving customer communities, trade organisations and other strategic partners. Macey and Bujić formulate it as follows:

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250 Close and Lloyd 2021 *Lifting the Lid on Loot-Boxes* 4; Xiao 2021 *IELR* 42.

251 Abarbanel 2018 *GLR* 233.

252 Xiao 2021 *IELR* 42.

253 Honer 2021 *IELR* 72; Castillo 2019 *Santa Clara L Rev* 200; Perks 2020 *Games and Culture* 1019; Xiao and Henderson 2021 *Int J Ment Health Addict* 189. The Konami Pro Evolution Soccer amendments in Belgium are another example.

254 McCaffrey 2019 *Business Horizons* 491. He bases this suggestion on the fact that both gamers and regulators dislike loot boxes.

255 Abarbanel 2018 *GLR* 233.

256 Xiao and Henderson 2021 *Int J Ment Health Addict* 189; Lischer et al 2022 *IJERPH* 8.

257 Li 2022 *Advances in Economics, Business and Management Research* 1287. This is already done by France and the UK (Honer 2021 *IELR* 77).


259 NGB *Potential Impact of 4IR* 42, 44.

Finally, the approach adopted by both regulators and legislators requires more effective communication regarding the rationale behind their adopted strategy in order that regulators can demonstrate that they are not anti-game or anti-gamer. As a consequence, decisions are more likely to be understood and accepted by the gaming community, rather than being perceived as diktats from an uninformed and uninterested authority. Active and targeted communication strategies on the part of authorities are likely.  

Some experts argue for a more holistic approach that includes pressure from stakeholders in addition to the available criminal and civil sanctions: shaming tactics against recalcitrant game developers; possible retrograde reclassification; specific guidance as to the best principles to include in ethical game design; and education.

Any universal and targeted measures to reduce harmful gambling would have to address several domains: price and taxation, availability and accessibility, marketing and advertising, promotion and sponsorship; environment and technology; information and education; and treatment and support.

Prospective policy should include provisions for clear definitions of loot boxes, game labelling and age ratings, full disclosure of odds presented in an easy-to-understand way, spending limits and prices in real currency, and finally, obligations of gatekeepers (i.e. developers, distributors, content providers) for the trade they enable and profit from.

Xiao argues inter alia for disclosure requirements to be specific and detailed, and that "prospective regulation should recognise certain sub-mechanics of loot boxes, such as pity-timers, which gradually change the player’s probabilities of obtaining rarer rewards and carefully consider how to regulate them: should they be required to be disclosed in a specific way or should they be banned outright?"  

The best solution going forward with loot box regulation may be for the law to set a minimum standard that does not overregulate, and for self-regulation to complement the legal regime by thriving to achieve an even higher standard of consumer protection.

It is against this background that the South African legal situation is contemplated.
6 South Africa

6.1 Introduction

As mentioned above, the video game market in South Africa is significant, and the loot box controversy and concerns are directly relevant. This includes the lack of transparency and information about the games, the targeting and participation of minors, and gambling-related concerns. Although there are existing statutes that are or should be applicable, there are broader constitutional, international and public policies that should also be considered – especially with regard to minors. These imperatives are highlighted before discussing the legislation.

6.2 Minors: constitutional, international and policy imperatives

Although research on loot boxes in South Africa is limited, we know that video games are an important part of the entertainment of children from different socio-economic backgrounds in the country between the ages of 7 and 17. With video games, there is evidence of the manipulation of minors for commercial purposes such as data collection, targeted advertising and gambling opportunities. Minors deserve more protection than adults because of their capacities are not yet fully developed. They are less able to assess the risks and consequences of their actions and less able to protect their data.

The protection of minors against harm is a constitutional imperative: "A child's best interests are of paramount importance in any matter concerning the child." The protection of children is thus also highlighted in various pieces of legislation, including the statute dealing with the age classification of games, consumer protection, and the gambling statutes, as discussed hereunder.

Protecting the rights of children is also an international law obligation. In terms of section 39(1)(b) and (c) of the Constitution, when interpreting the Bill of Rights the court, tribunal or forum must consider international law and may consider foreign law. South Africa has ratified the Convention on the

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267 It is worth repeating that FPB and UNISA Impact Research Report 30 found that children in South Africa play games that have been classified for ages they have not reached yet. See fn 18.
268 Sargeant "Rights-Based Approach to Online Economic Exploitation" 19.
269 Van der Hof et al 2022 Frontiers in Digital Health 4.
270 The Constitution is the supreme law of the country and binds all levels of government, organs of state and individuals (s 8(1)-(2) of the Constitution of the Republic of South Africa, 1996 (the Constitution)).
271 Section 28(2) of the Constitution.
272 Section 233 further imposes an obligation on courts, to "prefer any reasonable interpretation of the legislation that is consistent with international law over an alternative interpretation that is inconsistent with international law". International law
Rights of the Child (CRC), and one of the four goals of the CRC is to prevent harm to children. The CRC also contains the principle of the best interests of the child. Other relevant children's rights contained in the CRC are the right to play, the right to health, the right to be protected against economic exploitation and the right to data protection. The aim is not to discuss each of these rights but to focus on South Africa's obligation as a state party regarding children in a digital environment. It should be noted, however, that a child's right to leisure and play includes this caveat:

Leisure time spent in the digital environment may expose children to risks of harm, for example, through opaque or misleading advertising or highly persuasive or gambling-like design features. By introducing or using data protection, privacy-by-design and safety-by-design approaches and other regulatory measures, State parties should ensure that businesses do not target children using those or other techniques designed to prioritize commercial interests over those of the child.

The Committee on the Rights of the Child that monitors the CRC issued General Comment No 25 on Children's Rights in Relation to the Digital Environment. This General Comment explains to a State party how to implement and comply with its obligations under the CRC vis-à-vis minors in the digital environment. The guidance is comprehensive and includes:

one, the involvement of national and local bodies to oversee and coordinate the fulfilment of these rights;

two, taking appropriate measures to protect children from content risks, including consultations and amending includes binding and non-binding law (Schäfer Child Law 84; S v Makwanyane 1995 3 SA 391 (CC) para [35]).

South Africa signed the documents in 1993, but the Convention was ratified and assented to in 1995.

Van der Hof et al 2022 Frontiers in Digital Health 3.

Article 3.1 of the Convention on the Rights of the Child (1989) (the CRC), although the principle is seen as the "primary consideration" in all matters dealing with the child. Also see art 12 of the General Comment 25 on Children's Rights in Relation to the Digital Environment UN Doc CRC/C/GC/25 (2021) (the General Comment).

Van der Hof et al 2022 Frontiers in Digital Health 3. See respectively arts 31, 28, 32 and 16 of the CRC.

Article 110 of the General Comment. State measures should not curtail a child's access to the digital environment as a whole, however, or interfere with the child's leisure opportunities or rights (art 111).

Article 43(2) of the CRC.

Article 7 of the General Comment. Also see Schäfer Child Law 79. The South African courts give substantial weight to these General Comments (Schäfer Child Law 81).

Article 13 as read with art 27 of the General Comment. There is an obligation on these bodies of independent monitoring regarding their fulfilment of these duties (art 31 of the General Comment).

Article 14 of the General Comment specifically mentions the risk of exposure to gambling.

Article 34 of the General Comment requires the involvement of civil society in the development and implementation of these rights. The General Comment promotes international and regional cooperation as well as the exchange of expertise and good
national legislation to bring it in line with the CRC;\(^{283}\) three, conducting research\(^\text{284}\) and providing information and education to all stakeholders;\(^\text{285}\) four, respecting and having due regard to the views and evolving capacities of the child when developing legislation, policies and programmes and when designing and applying appropriate safeguards;\(^\text{286}\) five, enforcing these measures and providing children with access to justice, effective remedies and appropriate reparations\(^\text{287}\) and ensuring compliance by the business sector also through developing industry codes to the highest standards of ethics, privacy and safety;\(^\text{288}\) and lastly, ensuring that providers apply "concise and intelligible labelling, for example on the age-appropriateness or trustworthiness of the content".\(^\text{289}\) This General Comment has been

\(^{283}\) Article 23 of the General Comment. Article 30 of the General Comment. This should include collecting data and mandating impact assessments to inform policies to address these issues (arts 23-24 of the General Comment). To regulate against known harms, State parties must proactively consider emerging research and evidence in the public health sector to prevent \textit{inter alia} services that may damage children's mental health, and to prevent unhealthy engagement in digital games designs that undermine a child's development and rights (art 96 of the General Comment).

\(^{284}\) This includes the duty to disseminate information and conduct awareness campaigns and educational programmes for children, parents, professionals, the business sector and policymakers (art 32 of the General Comment). Also see the art 49 obligations to provide children with child-sensitive and age-appropriate information about complaint mechanisms, services and remedies should their rights be violated in the digital environment. Art 55 has the same obligation vis-à-vis content labelling. There is a duty to provide training and advice \textit{inter alia} to parents, caregivers and educators on the appropriate use of digital devices to prevent harm to children (art 15 of the General Comment.) This creation of awareness in parents should include respect for a child's autonomy, capacities and privacy (art 21).

\(^{285}\) Articles 17 and 19 of the General Comment. Article 43-49 of the General Comment. Implement measures to protect children from risks by ensuring investigation of crimes and the provision of remedies and support for child victims including child-friendly information (art 25 of the General Comment). In addition, this includes providing specialised training for law enforcement for cross-border crimes (art 47 of the General Comment). State parties must also ensure that the appropriate enforcement measures are in place and must support children and parents' access thereto. "They should legislate to ensure that children are protected from harmful goods, … such as gambling. Robust age verification systems should be used to prevent children from acquiring access to products and services that are illegal for them to own or use" (art 114 of the General Comment).

\(^{286}\) Article 39 of the General Comment. There is a duty to protect children against the infringement by the business sector (arts 35-36 of the General Comment. This includes that State parties must require the business sector to undertake child right's due diligence and impact assessments and disclose them to the public (art 38). The protection of privacy is also addressed in arts 67-78 of the General Comments, particularly where businesses rely financially on the processing of personal data as set out in art 40 and the aim in art 42 is to prevent the profiling and targeting of children for commercial purposes.

\(^{287}\) Article 55 of the General Comment.
published very recently and no action has been visible in the country as yet to implement its guidelines.

Several statutes reiterate a child’s right to protection, including the Films and Publications Act 65 of 1996, the Consumer Protection Act 68 of 2008 and the ten gambling statutes discussed hereunder as a possible vehicle to include in the CRC requirements. The issue of children’s rights in video games and specifically the concerns pertaining to loot boxes have not been given specific attention in South Africa, however. One of the questions to be answered is whether some of the existing frameworks and legislative provisions could or should be used or amended to deal with the specific loot box concerns.

Before considering the legislation it may be appropriate to make a brief comment on the gaming industry’s response in South Africa to date.

6.3 Self-regulation and the gaming industry response

There is no single organisation that represents the South African gaming fraternity. There are two existing organisations: Interactive Entertainment South Africa (IESA), which has commented on possible policy changes to the Films and Publication Amendment Act of 2015, and the organisation Games Industry Africa, which is only an information source for the industry. Their impact on implementing changes in the industry seems to be minimal. South Africa does benefit from international industry initiatives, however, specifically where games are amended to be more ethical for whatever reason such as pressure from foreign jurisdictions and storefront policy changes; and classifications by foreign rating organisations that are adopted here.

6.4 Legislation

The existing legislation already directly or indirectly applicable to video games and potentially loot boxes is the following: the Films and Publications Act 65 of 1996, the Consumer Protection Act 68 of 2008 and the eleven gambling statutes. Each of these will be discussed hereunder.

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290 IESA for example commented on the Films and Publications Amendment Bill [B 37-2015] (IESA date unknown https://pmg.org.za/files/160830iesa.pptx). The Games Industry Africa (GIA) of Vic Bassey is merely a source of information about the African games industry but does not provide any regulatory or evaluation support (GIA date unknown https://gamesindustryafrica.com/about/).
6.4.1 Films and Publications Act 65 of 1996

In terms of the Films and Publications Act, the Films and Publications Council of the Film and Publication Board, an independent body, is tasked with issuing classification guidelines for the age classification inter alia of video games in addition to films and other publications. It provides for an evaluation regulatory process for the classification of games for a fee, aimed at consumer advice towards informed consent and the protection of minors from harmful content. One of the core strategic functions of the FPB is outreach and public education.

The Act as read with the Classification Guidelines for the Classification of Films, Games and Certain Publications of 2022 includes the following possible classifications of games with restricted distribution content: prohibited content ("refused classification") or classifiable elements for an XX-classification, X18-classification, or age restricted-classification.

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291 As read with the following regulations: Films and Publications Regulations (Games), 1999 (GN R348 in GG 19848 of 15 March 1999); Application for Appeal to the Board in terms of Chapter 5 of the Act (GN 83 in GG 36123 of 8 February 2013); Amended Films and Publications Tariffs Regulations, 2020 (GN 1174 in GG 43872 of 6 November 2020); Classification Guidelines for the Classification of Films, Games and Certain Publications (GN 2218 in GG 46649 of 1 July 2022) (the 2022 Classification Guidelines); Films and Publications Regulations, 2022 (GN R2432 in GG 46839 of 2 September 2022) (the 2022 Regulations) and Notice Issued in terms of Sections 24C and 27A of the Act (GN 2682 in GG 47373 of 28 October 2022).


293 Section 3(2) of the Films and Publications Act. These guidelines are issued under the guidance of the Minister (s 4A(1)(a) of the Films and Publications Act).

294 Section 18 as read with the definition of "game" in s 1 of the Films and Publications Act.

295 A full discussion of the process to be followed falls outside the scope of this study. See in general the 2022 Regulations. It should be noted that there are prescribed fees (Amended Films and Publications Tariffs Regulations, 2020 (GN 1174 in GG 43872 of 6 November 2020)).

296 Section 2 of the Films and Publications Act.


298 Section 18(3)(a) of the Films and Publications Act where the game "(i) contains child pornography, propaganda for war or incites imminent violence; or (ii) advocates hatred based on identifiable group characteristic and that constitutes incitement to cause harm" subject to limited exceptions. See regs 5.1(10) and 5.10 of the 2022 Classification Guidelines.

299 Section 18(3)(b) of the Films and Publications Act where the game contains certain types of explicit sexual conduct or violence. Also see regs 5.1(11) and 5.11 of the 2022 Classification Guidelines.

300 Section 18(c) of the Films and Publications Act where the game contains certain types of explicit sexual conduct. Also see regs 5.1(12) and 5.12 of the 2022 Classification Guidelines.

301 Section 18(d) of the Films and Publications Act where the game contains content "disturbing or harmful to, or age-inappropriate for children", an appropriate age restriction can be imposed. In terms of reg 2.2 of the 2022 Classification Guidelines.
The guiding principles for consideration when classifying games include the context, impact and release format of the game’s content. Regulation 5.1(3) notes:

the degree of interactivity of the game (such as first-person as opposed to third-person gameplay), the use of incentives and rewards, technical features and competitive intensity, has to be considered in determining the intensity of impact.

The Board does not classify the games. It can either adopt the self-classification by an accredited commercial online distributor in terms of the prescribed guidelines, or it can use the classifications of a foreign or international classification authority or body. Such classification will be deemed to be that of the Board and non-compliance with a classification, if done knowingly, is a criminal offence. Other remedies for any breach include a civil action such as an interdict or a claim for damages.

Although it may appear at first glance that the loot box issue may be dealt with in terms of this statute, the Classification Guidelines is limited to what is contained in the regulations, which do not include classifications for gambling, simulated gambling or in-game purchases in video game. For illustration purposes, the game Babylon’s Fall, which includes tradable loot boxes, received a classification in January 2022 by the Board of 16, with the classifiable elements include competitive intensity (CI) with reference to violence, criminal techniques (CT), substance abuse (D), imitative acts and techniques (IAT), horror (H), language (L), nudity (N), prejudice (P), sexual conduct (S), sexual violence (SV) and violence (V). The possible classifications include: No age restriction (PG), Low (7-9PG), Mild (10-12PG), Moderate (13), Strong (16) or Very strong (18).

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302 Regulation 5.1(1) of the 2022 Classification Guidelines. Advice should be added where a game contains photo or pattern sensitivity, motion sickness and reacting to low frequency sound (PPS). For context, the expectations of the public in general and the target market of the content in particular, the manner in which the issue is presented, and the apparent intention of the game creator, as it is reflected in its effect, should be considered (reg 5.1(2)). Reg 5.1(3) specifically notes that the "degree of interactivity of the game (such as first-person as opposed to third-person gameplay), the use of incentives and rewards, technical features and competitive intensity, has to be considered in determining the intensity of impact".

303 Section 18C(1)-(2)(f) of the Films and Publications Act. The rationale is cost-effectiveness (FPB Labelling Strategy 7.1).

304 This would be possible on application by the distributor (s 18D(1) of the Films and Publications Act.) The FPB Research Report highlighted the need for regulatory mechanisms to close the gap between international and South African classification systems (FPB Research Report para 5.5). There are also additional obligations set for internet access and service providers (s 24C).

305 Sections 3, 6A and 24A(2) and 24A(2)(a) of the Films and Publications Act as read with Print Media South Africa v Minister of Home Affairs 2012 6 SA 443 (CC) para [90]. The Act is enforced by the Enforcement Committee and Compliance Officers (s 15A).


warnings for D (substance abuse), L (language), V (violence), PPS (Photo Pattern Sensitivity) and Cl (Competitive Intensity). The question may rightly be asked if this statute provides sufficient protection of minors against the loot box concerns. The answer is negative. This FPB Convergence Survey Report confirms the possible harm to minors and that it has insufficient information on games to be able to make an informed decision about their contents. One, there are no categories for gambling/simulated gambling or for issuing a warning about in-game purchases. Two, as the FPB relies on external classifications, its acknowledgement that there is a need to enhance the monitoring procedures in tracking the labels is concerning. Three, most children have limited awareness of the age restrictions and classification guidelines for games by the FPB with less than 20% of parents actively complying with the FPB regulations.

It is submitted that this statute should be amended to include the classifications for gambling, simulated gambling and in-game purchases as a first step towards informing minors, the parents and other stakeholders about possible harmful content when purchasing and playing the game. This is submitted notwithstanding the evidence and arguments that classification by itself is not sufficient to protect minors and that minors themselves may not welcome age classifications. As outreach and public education are core strategic functions of the FPB, this function could be extended to include education about the concerns with loot boxes. As an aside, these amendments could be useful to facilitate the investigation of and enforcement against non-compliant developers and distributors as well as service providers.

308 In Australia, classifications of in-game purchases and simulated gaming were added. See Australian Classification date unknown https://www.classification.gov.au/search/title?search=Babylon%27s+fall&sort_by=search_api_relevance.
309 FPB Convergence Survey Report para 1.
310 FPB Labelling Strategy 7.1.
311 FPB and UNISA Impact Research Report 34, 64. Interestingly, it noted that the content of games is perceived to have minimal effect on children as the games are animated and not real.
312 FPB Convergence Survey Report para 5.2. This is in line with international research that "labelling an activity as 'age-restricted' may not deter youth from gambling; in some instances, it may generate increased appeal for gambling" (Shi et al Frontiers in Psychiatry 1).
313 Minors, including those in South Africa, do not welcome age restrictions on games (Lohse 2020 IJSES 20). See the discussion under 3.2.
314 See the Notice Issued in Terms of Sections 24C and 27A (GN 2682 in GG 47373 of 28 October 2022). This notice is currently focussed on child pornography, propaganda for war, incitement of imminent violence or hate crimes (reg 5(1)).
6.4.2 Consumer protection legislation

As in other jurisdictions, there have been suggestions that consumer protection legislation could be useful to address the concerns about loot boxes.\textsuperscript{315}

There is no holistic and comprehensive protection for consumers transacting electronically in South Africa.\textsuperscript{316} The protection is fragmented and includes the \textit{Consumer Protection Act} 68 of 2008 (CPA), the \textit{Electronic Communications and Transactions Act} 25 of 2002 (ECTA) and industry-specific self-regulatory codes such as the Advertising Regulatory Board (ARB).\textsuperscript{317} This section will focus on the CPA and specifically excludes the ECTA and the ARB.\textsuperscript{318}

There are certain fundamental consumer rights relevant to the concerns about loot boxes, particularly the right to disclosure and information,\textsuperscript{319} the right to fair and responsible marketing,\textsuperscript{320} the right to fair and honest dealing – the right against unconscionable conduct, false, misleading or deceptive representations,\textsuperscript{321} and the right to privacy.\textsuperscript{322} The purpose of the Act is \textit{inter alia} to protect consumers, including minors or other vulnerable consumers, from unconscionable, unfair, unreasonable, unjust and improper trade practices of goods and services.\textsuperscript{323}

The Long Title of the CPA determines that the aim of the legislation is \textit{inter alia} to establish national norms and standards for consumer protection, to prohibit certain unfair practices and to improve the information given to consumers:

\begin{quote}
To promote a fair, accessible and sustainable marketplace for consumer products and services and for that purpose to establish national norms and standards relating to consumer protection, to provide for improved standards of consumer information, to prohibit certain unfair marketing and business practices, to promote responsible consumer behaviour, to promote a
\end{quote}

\textsuperscript{315} Dos Santos 2019 https://www.itweb.co.za/content/Pero37ZgzdEMQb6m 4.
\textsuperscript{316} Van Eeden and Barnard \textit{Consumer Protection Law} 554.
\textsuperscript{317} Van Eeden and Barnard \textit{Consumer Protection Law} 554.
\textsuperscript{318} The \textit{Electronic Communications and Transactions Act} 25 of 2002 (ECTA) is excluded from this discussion as the s 42(3)-exception clause seems to imply that if electronic consumer transactions are subject to another measure (such as the \textit{Consumer Protection Act} 68 of 2008 (the CPA)), the ECTA will not apply (Van Eeden and Barnard \textit{Consumer Protection Law} 557). The Advertising Regulatory Board (ARB) is excluded as the rulings bind members only and none of the gaming companies is a member of the ARB (Van Wyk vs Lottoland South Africa (Pty) Ltd ARB Ruling 2236 of 1 November 2022).
\textsuperscript{319} Section 22 of the CPA.
\textsuperscript{320} Section 29 of the CPA.
\textsuperscript{321} Sections 40-41 of the CPA.
\textsuperscript{322} Section 11 of the CPA.
\textsuperscript{323} Section 3(1)(b)(iii) as read with s 3(1)(d) of the CPA. S 9(1) of the CPA recognises that there may be grounds for the differential treatment of customers based on age.
consistent legislative and enforcement framework relating to consumer transactions and agreements, to establish the National Consumer Commission...

The Act is aimed at improving consumer awareness and information to encourage responsible and informed consumer choices, including proper product labelling and trade descriptions. The consumer's right to information about goods includes that the information should be framed in plain, understandable language and should not be misleading.

The CPA provisions are enforced by the Consumer Protection Commission, the powers of which range from investigating complaints to enforcing compliance notices. The purpose of a compliance notice is to ensure that the non-compliant party is informed about its non-compliance and be given an opportunity to correct it. The Commission is obliged to consult with any regulatory licensing body prior to issuing the notice. Non-compliance with the notice is an offence and may lead to an administrative fine levied by the National Consumer Tribunal or referral to the National Prosecuting Authority for criminal prosecution.

For our current purposes, it should be noted that video games fall within the scope of the CPA. It is submitted that, in principle, the consumer information provisions can be utilised to force developers and distributors through a compliance notice procedure and possible criminal prosecution to engage in the proper labelling and disclosure of information about loot boxes. This may go some way towards preventing potential harm to children. The process is consumer driven, however, and would rely on complaints received by consumers and actions taken by the Commission.

6.4.3 Gambling legislation

As gaming and gambling continue to converge, there will be a greater importance placed on the need to understand the optimal approaches – including player education, interventions, industry action, and modifications to the activities themselves – to respond effectively to the needs and behaviours of this large and diverse player base.

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324 Section 24 of the CPA. This includes the right to information in plain language (s 22).
325 Section 22 of the CPA.
326 Section 24(2) of the CPA.
327 Section 99(b)-(d) as read with ss 71-73 of the CPA.
329 Section 100(2) of the CPA.
330 Section 99(g)-(i) as read with s 100(2) of the CPA.
331 The definition of "goods" under (c) includes "any ... game ...., software, code or other intangible product written or encoded on any medium".
332 King and Delfabbro 2018 Int J Ment Health Addict 11.
There is uncertainty about the legal status of loot boxes in South Africa, specifically whether they meet the definition of gambling as contained in gambling statutes as influenced by public policy.

In South Africa, public policy and the gambling legislative framework are based on the limited legalisation of gambling opportunities combined with strict regulation through a licensing system. There are eleven gambling statutes and eleven gambling regulatory boards, two at the national level and the remainder at the provincial level. The legislation is divided into the regulation of lotteries and sports pools by the Lotteries Act and the regulation of other forms of gambling by the National Gambling Act in conjunction with the nine provincial gambling statutes. In addition, certain norms and standards have been adopted in the legislation, including the need to mitigate the over-stimulation of the latent demand for gambling, the need for the protection of minors and protection against the negative socio-economic impacts of gambling and gambling addiction.

333 The framework is a result of two gambling commission reports published in the early 1990s, both recommending the limited legalisation combined with the strict regulation of gambling (Howard, Strauss and Mahanyele Commission of Inquiry into Lotteries Report 22, still under the Apartheid regime that was almost immediately shelved for political reasons, and the Lotteries and Gambling Board Main Report on Gambling 7).

334 Section 104(1)(b)(i) as read with Schedule 4 Part A of the Constitution. Lotteries and sports pools are a national competence only, but in regard to gaming, wagering and casinos, national and provincial governments have concurrent legislative powers. The statutes and boards are the Lotteries Act 57 of 1997 (the Lotteries Act) (National Lotteries Commission governed by the National Lottery Board); National Gambling Act 7 of 2004 (the National Gambling Act), replacing the National Gambling Act 33 of 1996 (National Gambling Board); Eastern Cape Gambling and Betting Act 5 of 1997 (Eastern Cape Gambling Board); Free State Gambling, Liquor and Tourism Act 6 of 2010 (Free State Gambling, Liquor and Tourism Authority); Gauteng Gambling Act 4 of 1995 (Gauteng Gambling Board); KwaZulu-Natal Gambling Act 10 of 1996 (KwaZulu-Natal Gambling and Betting Board); s 1 of the Limpopo Gambling Act 3 of 2013 (Limpopo Gambling Act); Mpumalanga Economic Regulator Act 2 of 2017 (Mpumalanga Economic Regulator); North West Gambling Act 2 of 2001 (North West Gambling Board); Northern Cape Gambling Act 3 of 2008 (Northern Cape Gambling Board); and the Western Cape Gambling and Racing Act 4 of 1996 (Western Cape Gambling and Betting Board).

335 Lotteries and Gambling Board Main Report on Gambling 8, 65; Preamble of the National Gambling Act.

336 Lotteries and Gambling Board Main Report on Gambling 9, 64; s 12 of the National Gambling Act; and reg 2 of the Control of the National Lottery Regulations (GN R1514 in GG 19503 of 20 November 1998).

337 Lotteries and Gambling Board Main Report on Gambling 65; ss 13-14 of the National Gambling Act.
Dos Santos mentions that a loot box may theoretically be a lottery, depending on how the relationship between the game and the loot box is viewed.\(^{338}\) Lotteries are defined to:

- include any game, scheme, arrangement, system, plan, promotional competition or device for distributing prizes by lot or chance and any game, scheme, arrangement, system, plan, competition or device, which the Minister may by notice in the Gazette declare to be a lottery.\(^{339}\)

Although loot boxes may *prima facie* appear to fall within the broad definition of a lottery, it is submitted that the nature of a loot box is different from that of a lottery. A lottery has a finite number of prizes, the winners to be determined by lot. With loot boxes, purchasing a loot box is independent of gamers buying similar ones.\(^{340}\) In addition, the Lotteries Act is limited to the regulation of specific types of lotteries, which is not applicable to the loot box scenario.\(^{341}\) The legislation provides for a detailed licensing process as well as enforcement mechanisms.\(^{342}\)

It is submitted that loot boxes are more akin to gambling as regulated by the *National Gambling Act* and the provincial gambling statutes. The crux of the system is that any unlicensed gambling activity is unlawful and prohibited.\(^{343}\) It is the same for land-based gambling operations as well as online gambling games.\(^{344}\) The 2008 *National Gambling Amendment Act* aimed at further regulating interactive gambling has not been promulgated.\(^{345}\)

\(^{338}\) Dos Santos 2019 [https://www.itweb.co.za/content/Pero37ZgzdEMOb6m](https://www.itweb.co.za/content/Pero37ZgzdEMOb6m) 2. He notes that on the one hand, some argue that a loot box cannot be a lottery as the game and the loot box are indivisible and that the aim is not to create a lottery but to play the game for entertainment. On the other hand, others argue that the loot box is separate from the video game and as such the loot boxes can be removed.

\(^{339}\) Section 1 of the *Lotteries Act*.

\(^{340}\) A further discussion hereof is excluded from this article.

\(^{341}\) The lotteries allowed in terms of the *Lotteries Act* are the National Lottery, lotteries incidental to exempt entertainment, private lotteries, societal lotteries and promotional competitions (Parts I-II of the *Lotteries Act*).

\(^{342}\) The gambling statutes have been designed to include the closure of unlicensed gambling operators with harsh penalties for offenders.

\(^{343}\) Section 8 of the *National Gambling Act*, *Casino Enterprises (Pty) Ltd v Gauteng Gambling Board* 2011 6 SA 614 (SCA) para [40].

\(^{344}\) Section 11 of the *National Gambling Act*. Some betting sites have been licensed by provincial gambling authorities to operate online. An "interactive game" means: "a gambling game played or available to be played through the mechanism of an electronic agent accessed over the Internet other than a game that can be accessed for play only in licensed premises, and only if the licensee of any such premises is authorised to make such a game available for play" (s 1 of the *National Gambling Act*. Also see NGB *Potential Impact of 4IR* 32). "Internet" is defined in s 1 of the ECTA, which defines this concept as the "interconnected system of networks that connects computers around the world" through the use of a specified technology labelled as "TCP/IP".

\(^{345}\) Preamble of the *National Gambling Amendment Act* 10 of 2008.
A “gambling game” is defined to mean

any activity played upon payment of any consideration, with a chance that the person playing the game might receive a pay-out; and the skill of the player, the element of chance, or both might determine the result.

The essential elements for an activity to be regarded as a gambling game are one, the payment of consideration given; two, an element of chance that, three, determines the pay-out or prize.\(^{346}\)

The element of "consideration" is defined to include:

money, merchandise, property, a cheque, a token, a ticket, electronic credit, credit, debit, or an electronic chip, or similar object; or any other thing, undertaking, promise, agreement, or assurance.\(^{347}\)

In the context of loot boxes, a "consideration" would thus include a gamer using real currency to buy the loot box directly or via the video game’s virtual currency.\(^{348}\)

Loot boxes contain an element of "chance" in that the gamer receives an item which is determined randomly and disclosed only upon opening the loot box.\(^{349}\) It is submitted that loot boxes comply with this element of the definition of a "gambling game".

Can the receipt of the item in a loot box be regarded as a "payout" in terms of the legislation? A "pay-out" is defined to mean:

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\(^{346}\) Section 5(1)(a) of the National Gambling Act; s 18E of the Eastern Cape Gambling and Betting Act 5 of 1997; s 1 of the Free State Gambling, Liquor and Tourism Act 6 of 2010; s 1 of the Gauteng Gambling Act 4 of 1995; s 1 of the KwaZulu-Natal Gambling Act 10 of 1996; s 1 of the Limpopo Gambling Act 3 of 2013; s 21 of the Mpumalanga Economic Regulator Act 2 of 2017; s 1 of the North West Gambling Act 2 of 2001; s 87 of the Northern Cape Gambling Act 3 of 2008; and s 1(5) of the Western Cape Gambling and Racing Act 4 of 1996. This is similar to the position in other jurisdictions. See inter alia the discussions of Mann 2020 WJLTA 202; Xiao 2021 IELR 34-35; Abarbanel 2018 GLR 232; Cermak 2020 MSU ILR 291-295; Nielsen and Grabarczyk 2019 ToDIGRA 192; Schwiddessen and Karius 2018 IELR 23.

\(^{347}\) Section 1 of the National Gambling Act.

\(^{348}\) Sections 1 and 5(1)(a) of the National Gambling Act. This is the same in the other jurisdictions discussed above. See inter alia Belgium Gaming Commission 2018 https://gamingcommission.be/sites/default/files/2021-08/onderzoeksrapport-lootboxen-Engels-publicatie.pdf 9-10.

\(^{349}\) The argument in foreign jurisdictions that gaining loot boxes arises from the exercise of skill is not applicable in South Africa as the definition includes both chance and skill. This is also the case in most jurisdictions mentioned above, except for Belgium. The Belgium Gaming Commission 2018 https://gamingcommission.be/sites/default/files/2021-08/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf 9-10 notes that the mere fact that there is a chance to win or lose is enough for it to be regarded as gambling in terms of the national legislation. Also see Xiao 2021 IELR 35; Cermak 2020 MSU ILR 285 and Abarbanel 2018 GLR 232.
any money, merchandise, property, a cheque, credit, electronic credit, a debit,
a token, a ticket, or anything else of value that is won because of a player or
operator's skill, chance, or both; regardless of how the payout is made.\textsuperscript{350}

It is submitted that as a tradable loot box item may be cashed out in real
currency either within the game or via a third party, it complies with this
element of a "gambling game". The wording "regardless of how the payout
is made" was added to the definition as a result of land-based illegal
operators amending their gambling machines not to make a payout, but
giving the gamer an opportunity to play a further game. These opportunities
could then be traded for cash at a third-party vendor.\textsuperscript{351} Where there is no
payout of the loot box item either directly or indirectly, even though it may
be valuable to the gamer in the game, the loot box would not meet the
definition requirements and buying it would thus not be gambling.\textsuperscript{352}

To conclude, a tradable loot box meets the three requirements to be
classified as a "gambling game" and also an "interactive game".\textsuperscript{353} As such,
tradable loot boxes are unlawful unless licensed in terms of the
legislation.\textsuperscript{354}

Accepting this conclusion, the question is whether loot boxes can and
should be regulated under the gambling framework. The National Gambling
Board has already noted the risks loot boxes pose to minors.\textsuperscript{355} For a
gambling activity to be legal, however, a licence is required from a provincial
gambling board. This is currently an impossibility as the legislation does not
provide for such a licence.\textsuperscript{356} Substantial legislative amendments would be
necessary for tradable loot boxes to be licensed and legalised. The upside
hereof would be that minors would be prohibited from purchasing tradable

\textsuperscript{350} Section 6(1) of the \textit{National Gambling Act}.

\textsuperscript{351} Most systems removed the hopper from the gambling machine so that patrons could
not be paid money directly, but gave the patron an "opportunity to play a further
game" (see \textit{inter alia} AK Entertainment CC v Minister of Justice 1994 SA 736 (E); 1995 1 SA 783 (EC); AK Entertainment CC v Minister of Justice and Minister of Law
and Order 1994 1 SACR 362 (E); A straton Investments CC v Premier of KwaZulu-
Natal (NPD) (unreported) case number 2795/00 of 2 October 2000; and \textit{S v Ramos
2005 2 SACR 459 (C)}).

\textsuperscript{352} This is the same in other jurisdictions. See \textit{inter alia} Belgium Gaming Commission
2018 \url{https://gamingcommission.be/sites/default/files/2021-08/onderzoeksrapport-
loot-boxen-Engels-publicatie.pdf} 10; Azin 2020 \textit{BC L Rev} 1605; Hong 2019 \textit{W St U
L Rev} 74; Cermak 2020 \textit{MSU ILR} 289; Lui, Thompson and Rich 2020 \textit{York L Rev

\textsuperscript{353} See footnote 344 above.

\textsuperscript{354} Sections 1; 5(1)(a) and 11 of the \textit{National Gambling Act}; NGB \textit{Potential Impact of
4IR} 32. This is the same in most of the jurisdictions mentioned above, including the
UK (Xiao 2021 \textit{IELR} 34; Schwiddessen and Karius 2018 \textit{IELR} 23) and Denmark
(Nielsen and Grabarczyk 2019 ToDIGRA 192).

\textsuperscript{355} NGB \textit{Potential Impact of 4IR} 41.

\textsuperscript{356} The only licences provincial gambling boards have the power to award are licences
for casinos, bingo, route and site operators, totalisator and bookmaker licences as
well as horse racing-related licences.
loot boxes, self-exclusion would become a possibility for problem gamblers, and the gambling addiction support mechanisms and free counselling of the South African Responsible Gambling Foundation (SARGF) would become available. The downside would be that using the gambling framework would require legislative changes, a costly and cumbersome procedure for game developers, and additional pressure would be exerted on regulators, who would have to be upskilled to deal with this new activity.

It is worth noting that South African players have been blocked from participating in fictional casino gambling in certain online games such as Grand Theft Auto V: Online. It could not be confirmed whether the lockout in South Africa was proactively performed by the game developer, or whether it was performed as a result of actions taken by one of the South African regulatory boards.

**6.5 Conclusion**

South Africa has existing legislation that could potentially deal with some of the concerns about loot box and could partially meet the constitutional and international law imperatives vis-à-vis minors.

The Films and Publications Act could be amended to include classifications for gambling, simulated gambling and in-game purchases, to inform minors and parents of the contents of games. In addition, the existing information and education programmes could be extended to these issues. This would address one of the many CRC obligations, namely to ensure concise and intelligible labelling with age-appropriate indications of the content.

In its current form customers, parents and other stakeholders may lodge complaints with the CPA to investigate, and the CPA could then issue compliance notices with the usual consequences for non-compliance. This individual approach would not deal with the concerns effectively, however.

The gambling legislation is applicable to tradable loot boxes and in theory the various gambling boards should be able to act against the game developers and distributors. Whether the regulatory boards regard it as part of their duties and whether there is the will to do so is debatable.

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357 Section 12 of the National Gambling Act.
358 Section 14 of the National Gambling Act.
359 For an overview of their treatment services, see SARGF date unknown https://responsiblegambling.org.za/treatment-programme/. They are geared to adopt the newest research in treatment options such as the 2022 research by Andréa et al. 2022 Upsala J Med Sci 6.
These options are insufficient to protect consumers and especially minors against the potential harms of loot boxes, however. The obligations placed on South Africa by the General Comment of the CRC still need to be addressed: which national and local bodies will oversee and coordinate the fulfilment of these rights? What appropriate measures will be taken to protect children from content risks? Who will initiate and drive the consultations and amend the national legislation to bring it in line with the CRC? Which organisation will conduct the research and provide the information and education to all stakeholders? Who will consult with minors when developing legislation, policies and programmes and when designing and applying appropriate safeguards? Who will enforce these measures and provide children with access to justice, effective remedies and appropriate reparations and ensure compliance by the business sector? Who will develop the ethical codes for the industry?

7 Conclusion

It is not a surprise that video game publishers seek to safeguard their lucrative financial practices. Nor is it a surprise that these practices are causing great harm to our young people … What is a surprise, however, is our inaction in the face of this harm.361

The availability of and participation in video games in South Africa is a reality.362 This extends to video games with loot boxes. This article set out the concept of a loot box, the type of loot boxes in existence, as well as the problems and concerns pertaining to them. The focus has been on three main concerns, namely the lack of information provided about the loot boxes by the developers, the possible harmfulness thereof to minors, and the relation of loot boxes to gambling, their propensity to cause addiction, and the possibility that they infringe on existing gambling statutes.363

The article has given an overview of the non-regulatory and regulatory responses to these concerns by the industry. It further noted the approaches in foreign jurisdictions and suggestions by industry experts. In short, there is no universal and global approach to address the concerns about loot box. There has been a slight shift within the industry towards awareness,364 resulting in some changes being made (some voluntarily and some in response to pressure) and the issuing of a call for self-regulation through the adoption of ethical guidelines.365 The industry is also active in the age classification of the games accepted in many jurisdictions,366 but these

361 Uddin 2021 Family Court Review 878.
362 See the discussion under 2.1.
363 See the discussion under 2.2 and 2.3.
364 See the discussion under 3.1.
365 See the discussion under 3.3.
366 See the discussion under 3.2.
changes and calls are voluntary, and enforcement is impossible. Self-regulation is unlikely to happen on a universal and uniform scale.

As the industry is not forthcoming in dealing with these concerns effectively, there is agreement amongst experts that some state regulation is warranted. The difficulty is that the responses to date have not been uniform.\textsuperscript{367}

Some jurisdictions focus on the labelling and classification of the games and others on the financial transactions, whilst yet others have adopted specific legislation to deal with a few of the concerns. In Western countries the debate around loot boxes surrounds the question whether it is a form of gambling. Most of these jurisdictions distinguish between non-tradable and tradable loot boxes. It is accepted that non-tradable loot boxes do not constitute gambling, but jurisdictions have different outcomes for tradable loot boxes. Most agree, however, that more research is required before action can be taken. Even where loot boxes, particularly tradable loot boxes, fall within the definition of gambling, enforcement is inconsistent except in a few instances. In addition, there is no agreement on whether the use of consumer protection remedies would not be more appropriate in this context than the use of gambling legislation.

This brings us to the legal position of loot boxes in South Africa and how the concerns about loot boxes should be addressed. It is submitted that a holistic approach should be adopted that includes all the stakeholders. Although there is little evidence of the South African industry's involvement in possible self-regulation or classifications of games, the country does benefit from the global industry regarding self-regulation and classification initiatives as well as initiatives from global storefront and other companies.

What more can be done? Amending the Films and Publications Regulations to ensure the proper labelling of games and the education of stakeholders in line with international trends would be akin to plucking low-hanging fruit. Obviously the existing gambling provisions could be enforced, including the blocking of relevant websites. Government could proactively consider levying an additional tax to fund any information and educational programmes required and/or tax breaks for companies developing ethical games.

The CRC obligations to protect minors would require a more comprehensive and detailed approach, however. It is submitted that the South African Law Reform Commission would be the appropriate body to research all of the concerns pertaining to loot boxes and to make suggestions for the way forward, including industry guidelines and legislative changes. This would

\textsuperscript{367} See the discussion under 4.1.
also address the communication concerns, as their processes include comprehensive consultation with stakeholders. Whatever the suggestions they might make, they should ensure the protection of minors, which will not be an easy task.

The Abarbanel warning summarises the complexity of the situation:

Research, legislation and regulation often cannot keep up with the speed of technological change ... The emphasis for all parties, be they government, industry, or consumer, should be on the need for self-education and due diligence in understanding the complexity and nuance of games and gambling.368

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List of Abbreviations

ARB Advertising Regulatory Board
BBFC British Board of Film Classification
BC L Rev Boston College Law Review
CBSN Cyberpsychology, Behaviour and Social Networking
CHB Computers in Human Behavior
Chapman L Rev Chapman Law Review
CPA Consumer Protection Act 68 of 2008
CRC Convention on the Rights of the Child
EA Electronic Arts
ECTA Electronic Communications and Transactions Act 25 of 2002
EGDF European Games Developers Federation
Ent LR Entertainment Law Review
ENUK Esports News UK
ESRB Entertainment Software Rating Board
FPB Film and Publication Board
GIA Games Industry Africa
GLR Gaming Law Review
Geo Wash L Rev George Washington Law Review
GREF Gambling Regulators European Forum
IARC International Age Rating Coalition
IESA Interactive Entertainment South Africa
IELR Interactive Entertainment Law Review
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