

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 and 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.

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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-ons³ 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 Schwidessen 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 Bujic "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, ... (c)osmetic 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.⁶

2.1 The market and business model

The annual global video game market was valued in the region at \$115 billion in 2018⁷ and is predicted to be \$230 billion by 2022.⁸ In South Africa it is estimated to be worth about R8 billion in 2023.⁹ 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.¹⁰ It was projected that loot box revenue globally was about \$30 billion in 2018¹¹ and estimated to be \$50 billion in 2022.¹² About 60% of the best-selling video games include loot boxes.¹³ It is estimated that microtransactions make up between 34% and 56% of the profits of most prominent video game developers.¹⁴ If these

concept to the general public; parents of video game players, and even the players themselves, may have limited information on how loot boxes function and maladapted cognitive frameworks which serve to promote misunderstanding of probabilities" (Macey *et al* 2022 *J Behav Addict* 263).

⁶ Jiow and Lim 2021 *Journal of the Canadian Game Studies Association* 91.

⁷ McCaffrey 2019 *Business Horizons* 483.

⁸ Zendle and Cairns 2018 *Plos ONE* 9.

⁹ PWC 2022 <https://www.pwc.co.za/en/assets/pdf/entertainment-and-media-outlook-2022-26.pdf> with reference to the 2023 market estimate. Their estimate for the South African video games and esports market in 2026 is more than R10 billion. Bosch *Assessing Video Gaming Events* 1 estimated R5 billion in 2021.

¹⁰ Xiao 2021 *IELR* 32-33; Honer 2021 *IELR* 65.

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.

¹² Derrington, Starr and Kelley 2021 *JGI* 313-314.

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,¹⁵ including around 31% of children between 11 and 16 years of age.¹⁶ The data for South African gamers and minors that purchase loot boxes are not available but have been described as "significant".¹⁷ 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 17.¹⁸ What is accepted, though, is that the market is rapidly increasing with the growth in the popularity of smartphones.¹⁹

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.²⁰ 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.²¹ Loot boxes are a type of

4 noted that of the 82 bestselling games in the NSW jurisdiction in Australia, 62% had loot boxes.

¹⁵ Li, Mills and Nower 2019 *Addictive Behaviors* 27.

¹⁶ Digital, Cultural, Media and Sport Committee *Immersive and Addictive Technologies* 29; Zendle and Cairns 2019 *Plos ONE* 2; Von Meduna *et al* 2020 *Technology in Society* 8.

¹⁷ Lohse 2020 *IJSSE* 22.

¹⁸ Their research showed that children in South Africa between 7 and 9 years of age play games like *Candy Crush Sage*, *Need for Speed* and *Memory*, all with an age restriction of 16. Similarly, children between 10 and 15 years of age play games with an age restriction of 18 such as *Grand Theft Auto*, *God of War* and *Call of Duty* (FPB and UNISA *Impact Research Report* 30).

¹⁹ Castillo 2019 *Santa Clara L Rev* 166; Drummond and Sauer 2018 *Nat Hum Behav* 2; Zendle, Meyer and Ballou 2020 *Plos ONE* 11; Liu 2019 *Wash Int LJ* 797; Li 2022 *Advances in Economics, Business and Management Research* 1287. In South Africa the FPB *Research Report* para 1 found that, at the time, 40% of video games are purchased on mobile phones, either from the mobile operator or trusted international websites.

²⁰ Shen 2020 *UIC John Marshall Law Review* 1090; Lui, Thompson and Rich 2020 *York L Rev* 8; Neely 2019 *Games and Culture* 229; Azin 2020 *BC L Rev* 1577-1578; Perks 2020 *Games and Culture* 1010; Osathanunkul 2015 *IJMC* 41; Hong 2019 *W St U L Rev* 61; Cermak 2020 *MSU ILR* 278; Moshirnia 2018 *MJLST* 79-80; Mann 2020 *WJLTA* 202; Arvidsson *Ent LR* 112; Schwiddessen and Karius 2018 *IELR* 18; Nielsen and Grabarczyk 2019 *ToDIGRA* 178; Griffiths 2018 *GLR* 52; King and Delfabbro 2018 *Int J Ment Health Addict* 2; Tan 2019 *Galactica* 128; Adam, Roethke and Benlian 2022 *Electronic Markets* 981.

²¹ Zendle, Meyer and Ballou 2020 *Plos ONE* 2; Schwiddessen and Karius 2018 *IELR* 18; Lui, Thompson and Rich 2020 *York L Rev* 8; Osathanunkul 2015 *IJMC* 41; Cermak 2020 *MSU ILR* 278; Moshirnia 2018 *MJLST* 79-80; Azin 2020 *BC L Rev* 1578-1579; King and Delfabbro 2018 *Int J Ment Health Addict* 2. Microtransactions include but are not limited to the concept of "pay to win", where players pay to advance in the game and the purchase negates the skill element to progress in a game (Von Meduna *et al* 2020 *Technology in Society* 1, 3; Mistry 2018 *Rutgers U L*

microtransaction.²² 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 container²³ that holds randomised in-game items that a gamer can receive either by naturally progressing through the video game²⁴ or by purchasing it using real currency²⁵ for the opportunity to open the loot box – taking a chance on its unknown contents.²⁶ Not all video games have loot boxes²⁷ and not all

Rev 542; Steinmetz *et al* 2022 *J Gambl Stud* 785); in-app purchases with downloadable content, expansion packs and season passes to restricted content (Mistry 2018 *Rutgers U L Rev* 547, 549; Tan 2019 *Galactica* 133); "blind boxes" that can be purchased physically and "play to earn" blockchain-based games (Petrovskaya, Deterding and Zendle "Prevalence and Salience of Problematic Microtransactions" 1; Xiao 2022 *GLR* 1-14; Delic and Delfabbro 2022 *Int J Ment Health Addict* 1-14; Joseph 2021 *Journal of Consumer Culture* 68-83 and Newham, Scelles and Valenti 2022 *JRFM* 1-16) and battle passes, a "type of milestone microtransaction where gamers purchase access to a list of rewards that are provided as gamers invest playtime into games" (Joseph 2021 *Journal of Consumer Culture* 68 and Petrovskaya *et al* 2022 *Association for Computing Workshop* 3; Jiow and Lim 2021 *Journal of the Canadian Game Studies Association* 94).

²² Schwidessen and Karius 2018 *IELR* 18.

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; Schwidessen 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*).

²⁶ Lui, Thompson and Rich 2020 *York L Rev* 8; Neely 2019 *Games and Culture* 229; Azin 2020 *BC L Rev* 1578-1579; Hong 2019 *W St U L Rev* 61; Cermak 2020 *MSU ILR* 275; Mann 2020 *WJLTA* 202; Schwidessen and Karius 2018 *IELR* 18; Nielsen and Grabarczyk 2019 *ToDIGRA* 172; Griffiths 2018 *GLR* 52; Zendle and Cairns 2019 *Plos ONE* 2; McCaffrey 2019 *Business Horizons* 485; Mistry 2018 *Rutgers U L Rev* 545; Kansspelautoriteit *Onderzoek naar Loot Boxes* 2; Cerulli-Harms *et al Loot Boxes in Online Games* 14; Xiao 2022 *Int J Ment Health Addict* 438.

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.²⁸ Loot boxes are available in various popular games²⁹ and vary in access and costs, transparency, content and value.³⁰ In some games, progression is impossible without purchasing loot boxes.³¹

The loot box contents may be cosmetic items³² with no in-game advantages over other players,³³ or the box can contain items that provide in-game advantages.³⁴ These advantages can take the form of more potent weapons, better versions of existing characters or even new characters.³⁵ In some games, items are available exclusively in loot boxes and cannot be obtained merely by progressing through the game.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).³⁷

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

²⁹ Rockloff *et al* 2021 *J Behav Addict* 35; Li 2022 *Advances in Economics, Business and Management Research* 1284. Zendle and Cairns 2019 *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 *IEEE Transactions on Games* 219 refers to loot boxes in *Hearthstone* and *League of Legends*.

³⁰ Cerulli-Harms *et al* *Loot Boxes in Online Games* 7-8.

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.

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

³³ Even though players attach their own value to these items, they do not provide in-game advantages (Hong 2019 *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; Schwidessen and Karius 2018 *IELR* 18-19; Nielsen and Grabarczyk 2019 *ToDIGRA* 195-196; Neely 2019 *Games and Culture* 230; Griffiths 2018 *GLR* 52).

³⁴ Derrington, Starr and Kelley 2021 *JGI* 301 with reference to *Fortnite's* Illama pinatas.

³⁵ Azin 2020 *BC L Rev* 1579; Liu 2019 *Wash Int LJ* 771; Liu, Thompson and Rich 2020 *York L Rev* 8; Schwidessen 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*.

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*.

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,³⁸ and the rarer the item, the less likely that it will be gained in a loot box.³⁹ Advertising of loot boxes is often engineered to highlight the benefits and rarity of the possible item in the loot box,⁴⁰ encouraging the gamer to purchase more loot boxes.⁴¹ However, the rarity of items or the odds of winning the item (also called the drop rate) is subjectively pre-determined by game developers. Although randomly distributed, these odds are generally not available to gamers.⁴²

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.⁴³ Although gamers have traditionally accepted add-ons to existing games,⁴⁴ some regard loot boxes as unfair gameplay and "predatory monetisation" schemes.⁴⁵ Apart from being regarded as annoying,⁴⁶ it is argued that loot boxes destroy the game's balance, especially for competitive multiplayer games, in favour of

include OPSkins (Zendle and Cairns 2019 *Plos ONE* 2), Value's Steam Community Market (Jones 2020 *Chapman L Rev* 268) and FutGalaxy.com (Derrington, Starr and Kelley 2021 *JGI* 317). Also see King and Delfabbro 2018 *Int J Ment Health Addict* 6; Schwidessen and Karius 2018 *IELR* 19. Drummond *et al* 2020 *Nat Hum Behav* 987 note that the idea that virtual items have no value, is archaic and disregards the various markets that allow people to monetise these items.

³⁸ Rarity of items can also take the form of time-sensitive availability (Zendle, Meyer and Over 2019 *RSOS* 4).

³⁹ Lui, Thompson and Rich 2020 *York L Rev* 8; Neely 2019 *Games and Culture* 229; Azin 2020 *BC L Rev* 1578-1579; Hong 2019 *W St U L Rev* 61; Cermak 2020 *MSU ILR* 275; Moshirnia 2018 *MJLST* 80; Mann 2020 *WJLTA* 202; Schwidessen and Karius 2018 *IELR* 18; Nielsen and Grabarczyk 2019 *ToDIGRA* 172; Griffiths 2018 *GLR* 52. Li, Mills and Nower 2019 *Addictive Behaviors* 28 with reference to FIFA 18.

⁴⁰ Jones 2020 *Chapman L Rev* 269. Also see in general the study of Kelling and Tham 2020 *Journal of Interactive Advertising* of the interpretations of promotional messaging of loot boxes in FIFA 19.

⁴¹ Schwidessen and Karius 2018 *IELR* 19. 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".

⁴² Azin 2020 *BC L Rev* 1579; Hong 2019 *W St U L Rev* 75; Cermak 2020 *MSU ILR* 287; Castillo 2019 *Santa Clara L Rev* 175; Schwidessen and Karius 2018 *IELR* 18-19; Nielsen and Grabarczyk 2019 *ToDIGRA* 174.

⁴³ Castillo 2019 *Santa Clara L Rev* 175; Tan 2019 *Galactica* 134.

⁴⁴ 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 Brooks and Clark 2019 *Addictive Behaviors* 26; King and Delfabbro 2018 *Int J Ment Health Addict* 3; McCaffrey 2019 *Business Horizons* 485; Mistry 2018 *Rutgers U L Rev* 541.

⁴⁶ 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.⁴⁷ Yet players still make use of loot boxes for a variety of reasons.⁴⁸

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,⁴⁹ in a backlash against Electronic Arts (EA), the developers of *Star Wars Battlefront II*.⁵⁰ 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.⁵¹ 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.⁵²

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

⁴⁷ Macey and Bujic "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 *Plos 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 *Plos One* 21). Puiras *et al* 2022 *J Gambli 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 Gambli 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.

⁵⁰ Macey and Hamari 2019 *New Media & Society* 24; Schwidessen and Karius 2018 *IELR* 22-23; Belgium Gaming Commission 2018 <https://gamingcommission.be/sites/default/files/2021-08/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf> 2; Moshirnia 2018 *MJLST* 92-93; Cermak 2020 *MSU ILR* 276; Jones 2020 *Chapman L Rev* 287. In 2017, game developers Monolith Productions removed all microtransactions from the game *Middle-earth Shadow of War* after the negative response from gamers that it undermined the game itself (Tan 2019 *Galactica* 140).

⁵¹ Kao 2020 *IEEE Transactions on Games* 220; McCaffrey 2019 *Business Horizons* 484; Castillo 2019 *Santa Clara L Rev* 172 onwards.

⁵² Kao 2020 *IEEE Transactions on Games* 220; McCaffrey 2019 *Business Horizons* 484; Castillo 2019 *Santa Clara L Rev* 175.

are exploited⁵³ 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.⁵⁴ This creates a trust problem.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.⁵⁶

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

Concerning minors, developers have been criticised for unscrupulous marketing tactics about loot boxes in games that target minors.⁵⁹ Although not all video games target children specifically,⁶⁰ loot boxes are widely available in games labelled as suitable for minors,⁶¹ thus normalising the activity for children.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.⁶³

⁵³ McCaffrey 2019 *Business Horizons* 486.

⁵⁴ Mistry 2018 *Rutgers U L Rev* 557.

⁵⁵ Carvalho 2021 *Decision Support Systems* 1.

⁵⁶ Xiao 2021 *IELR* 32-33.

⁵⁷ Abarbanel 2018 *GLR* 233.

⁵⁸ Abarbanel 2018 *GLR* 233.

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.

⁶⁰ Cerulli-Harms *et al* *Loot Boxes in Online Games* 8.

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.

⁶² Xiao 2022 *Int J Ment Health Addict* 446; Derevensky and Griffiths 2019 *GLR* 637; Derrington, Starr and Kelley 2021 *JGI* 306.

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).⁶⁴ Gaming is considered harmless and lawful but gambling is not and is regulated through legislation according to the public policy of each jurisdiction.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.⁶⁶ It is argued that some loot boxes are an example of this complex⁶⁷ convergence of gaming and gambling over the past few years, with gambling mechanisms based purely on chance being incorporated into video games.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.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".⁷⁰ This configuration does not occur by accident.⁷¹

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

⁶⁴ Von Meduna *et al* 2020 *Technology in Society* 2.

⁶⁵ For the South African public policy, see 5.4.3.

⁶⁶ Wardle and Zendle 2021 *Cyberpsychology, Behaviour and Social Networking* 267.

⁶⁷ Zendle 2020 *PeerJ* 21.

⁶⁸ Von Meduna *et al* 2020 *Technology in Society* 2; Zendle and Bowden-Jones 2019 *Lancet* 724; Li, Mills and Nower 2019 *Addictive Behaviors* 30; Gainsbury 2019 *GLR* 80; Derevensky and Griffiths 2019 *GLR* 634; Shi *et al* 2021 *Frontiers in Psychiatry* 1. Kolandai-Matchett and Abbott 2022 *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".

⁶⁹ Only the first of these will be discussed in this section. The second issue is addressed under 4.

⁷⁰ Drummond and Sauer 2018 *Nat Hum Behav* 1; Zendle and Cairns 2018 *Plos ONE* 2-3; Fleming 2020 *U Toronto Faculty L Rev* 85-86; Cartwright and Hyde 2022 *Legal Studies* 2.

⁷¹ Derrington regards this as the result of a deliberate predatory monetisation scheme (Derrington, Starr and Kelley 2021 *JGI* 304).

⁷² Australian Senate Committee *Gaming Micro-Transactions* 32-49.

⁷³ Derrington, Starr and Kelley 2021 *JGI* 305; Liu 2019 *Wash Int LJ* 763. Developers capitalise on the behaviour responses of gamers to increase their profits (Azin 2020 *BC L Rev* 1590). Van der Hof *et al* 2022 *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 *Journal of Consumer Policy* 582.

[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

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; Schwidessen 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.

⁷⁸ Derrington, Starr and Kelley 2021 *JGI* 304; Liu 2019 *Wash Int LJ* 786; Australian Senate Committee *Gaming Micro-Transactions* 32; Brooks and Clark 2019 *Addictive Behaviors* 26; Mistry 2018 *Rutgers U L Rev* 546.

⁷⁹ Nielsen and Grabarczyk 2019 *ToDIGRA* 183, 185; Lui, Thompson and Rich 2020 *York L Rev* 8; Neely 2019 *Games and Culture* 229; Azin 2020 *BC L Rev* 1579.

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 gamers 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).

⁸² 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.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.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.⁸⁵ The games create the illusion of a game of skill and fuse fiction and reality by referencing celebrities or cult items.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.⁸⁷ Fourthly, gambling and loot boxes are constantly available, encouraging continuous play with an "endless cycle" of new loot boxes being released.⁸⁸

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

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.

⁸⁴ Zendle *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 *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.

⁸⁵ Belgium Gaming Commission 2018 <https://gamingcommission.be/sites/default/files/2021-08/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf> 6-8. Gamers share videos online of them opening loot boxes (Zendle 2020 *PeerJ* 4; McCaffrey 2019 *Business Horizons* 485).

⁸⁶ Belgium Gaming Commission 2018 <https://gamingcommission.be/sites/default/files/2021-08/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf> 6-8.

⁸⁷ Belgium Gaming Commission 2018 <https://gamingcommission.be/sites/default/files/2021-08/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf> 6-8.

⁸⁸ Australian Senate Committee *Gaming Micro-Transactions* 32-49; Azin 2020 *BC L Rev* 1579.

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 *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 *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 *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 *et al* 2022 *Addictive Behavior Reports* 1; Shen 2020 *UIC John Marshall Law Review* 1091; Derrington, Starr and Kelley 2021

adults and children.⁹⁰ Although this link may have to do with the characteristics of loot boxes,⁹¹ 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.⁹² Research by Wardle and

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).

⁹⁰ 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". Forsström *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 Akçayir, 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 Zendle and Cairns 2019 *Plos ONE* 11; Zendle 2020 *PeerJ* 1 and Zendle 2019 *PeerJ* 1.

⁹² 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

Research by Hunt found that problem gamblers do indeed spend more money on loot boxes than non-problem gamblers (Hunt 2022 *Int Gambli Stud* 16).

⁹³ Wardle and Zendle 2021 *Cyberpsychology, Behaviour and Social Networking* 272. Larche *et al* argue that this is also the case with loot box earners (as opposed to purchasers) (Larche *et al* 2022 *J Gambli Stud* 17).

⁹⁴ Zendle, Petrovskaya and Wardle 2020 <https://psyarxiv.com/5k2sy> 1, which leads to the potential for economic harm. Their research shows that the majority of revenue is from the top 10% of the gamers with 1% of gamers responsible for 26% of all revenue. Carey, Delfabbro and King 2022 *Int J Ment Health Addict* 2906 found that "loot box expenditure was low (M = \$25 in 3 months, for the 10.8% of respondents who played loot boxes) but significantly positively associated with the degree of gaming-related financial harm".

⁹⁵ Zendle and Cairns 2019 *Plos ONE* 9.

⁹⁶ Zendle 2019 *PeerJ* 10; Derevensky and Griffiths 2019 *GLR* 636.

⁹⁷ Shi *et al* 2021 *Frontiers in Psychiatry* 2-3. This was confirmed by the Kisch study in Sweden in 2022 (Kisch and Håkansson 2022 *JMIR Serious Games* 1). Ayala-Rojas found empirical evidence for an increase in dual gaming and gambling disorders (Ayala-Rojas *et al* 2021 *Journal of Psychiatric Research* 148).

⁹⁸ Some argue for further research and regular reconsideration (Gibson *et al* 2022 *CHB* 14; Sidloski *et al Addictive Behaviors* 5 and Rockloff *et al Loot Boxes* 60-61). Gentles *et al* 2022 *Pacific Health Dialog* 601 studied Samoan gamers 16-30 and could not find any association between buying a loot box and gambling. Xiao, Fraser and Newall 2022 *J Gambli Stud* 20 argue for more research in China. Hing *et al* 2022 *J Behav Addict* 403 noted that "while causal relationships between loot box purchasing and problem gambling remain unclear, the results indicate that loot boxes disproportionately attract adolescents experiencing gambling problems, adding to the financial stress already caused by gambling".

⁹⁹ Gainsbury 2019 *GLR* 81; King and Delfabbro 2018 *Int J Ment Health Addict* 3. Zendle and Cairns 2019 *Plos ONE* 9 noted that the relationship between problem gambling and microtransactions other than loot boxes is "trivially small". McCaffrey 2022 *Communications of the Association for Information Systems* 41 argues that the conclusions in the literature are unsatisfactory and premature.

inadequate timeframes.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.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".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.

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.¹⁰³

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

3 Gaming industry response

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.¹⁰⁵

¹⁰⁰ Gainsbury 2019 *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 *et al* *Loot Boxes* 59. Kansspelautoriteit *Onderzoek naar Loot Boxes* 4. Also see Gainsbury 2019 *GLR* 81-82).

¹⁰¹ DeCamp 2021 *J Gambi Stud* 198-199.

¹⁰² Zendle *et al* 2020 *CHB* 189.

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

¹⁰⁴ This is also the case for South Africa (Lohse 2020 *IJSSER* 24-25).

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.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.¹⁰⁷ But the response from video game companies has been seen as inadequate.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.¹⁰⁹

Individually some developers and distributors have voluntarily or under duress removed loot boxes from their games¹¹⁰ or limited them to cosmetic items.¹¹¹ Others have added better labelling to video games by publishing the prizes and the odds to make their games more transparent and fairer.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.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.¹¹⁴ However, some changes in attitude have been forthcoming on an *ad hoc* basis.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

¹⁰⁶ Fleming 2020 *U Toronto Faculty L Rev* 108.

¹⁰⁷ Abarbanel 2018 *GLR* 233; Cermak 2020 *MSU ILR* 316; Fleming 2020 *U Toronto Faculty L Rev* 101-103.

¹⁰⁸ Cermak 2020 *MSU ILR* 320; Close and Lloyd 2021 *Lifting the Lid on Loot-Boxes* 3.

¹⁰⁹ Mistry 2018 *Rutgers U L Rev* 568.

¹¹⁰ Kersley 2021 <https://www.wired.co.uk/article/loot-boxes-new-gambling> 2 with reference to the developers of *Fortnite* that removed their loot boxes in the light of imminent governmental review. Also see Tan 2019 *Galactica* 140.

¹¹¹ This limitation is often aimed at avoiding their loot boxes being defined as gambling in a specific jurisdiction (Perks 2020 *Games and Culture* 1017).

¹¹² McCaffrey 2019 *Business Horizons* 490; Kao 2020 *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 *Games and Culture* 1004). In South Africa, see the FPB *Labelling Strategy* para 6.2.

¹¹³ Macey and Bujic "Talk of the Town" 217.

¹¹⁴ Jones 2020 *Chapman L Rev* 254.

¹¹⁵ Xiao and Henderson 2021 *Int J Ment Health Addict* 184-185.

consumer protection, especially for minors.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.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.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.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.¹²⁰ PayPal has responded to the risk to minors by strengthening its processes to prevent minors from using its platform to gamble.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.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.

¹¹⁶ Liu 2019 *Wash Int LJ* 787; GREF 2018 <https://www.spillemyndigheden.dk/uploads/2018-11/Declaration%20of%20gam-bling%20regulators%20on%20their%20concerns%20related%20to%20the%20blurring%20of%20lines%20between%20gambling%20and%20gaming%20%28002%29.pdf>.

¹¹⁷ Honer 2021 *IELR* 67. Also see IGDA 2019 <https://igda.org/news-archive/igda-presents-to-ftc-about-loot-boxes-and-esa-adopts-igda-recommendations/>.

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/>).

¹¹⁹ McCaffrey 2019 *Business Horizons* 489.

¹²⁰ McCaffrey 2019 *Business Horizons* 489-490; Schwiddessen 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.

¹²¹ NGB *Potential Impact of 4IR* 41.

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.¹²³ Classification is an important guide for purchasers and an incorrect classification has led to at least one claim in for damages, in France.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),¹²⁵ the Interactive Games and Entertainment Association (IGEA)¹²⁶ and the Pan-European Game Information (PEGI)¹²⁷ all initially opposed any suggestion that loot boxes may be potentially harmful or akin to gambling.¹²⁸ Since 2020, however, ESRB and PEGI have included additional descriptors for games to inform purchasers, gamers and parents.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.¹³⁰ The ESRB has refused to rate games

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

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.

¹²⁵ McCaffrey 2019 *Business Horizons* 489; Jones 2020 *Chapman L Rev* 246. ESRB is a US and Canadian video game industry organisation (Jones 2020 *Chapman L Rev* 251).

¹²⁶ IGEA represents the video games industry in Australia and New Zealand (IGEA 2019 <https://igea.net/2019/03/igea-statement-on-the-australian-governments-response-to-the-senate-environment-and-communications-references-committee-report-on-gaming-microtransactions-for-chance-based-items-loot-boxes/> and New Zealand Government Classification Office 2023 <https://www.classificationoffice.govt.nz/classification-info/classification-labels/>); Zendle and Cairns 2019 *Plos ONE* 3.

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).

¹²⁸ Moshirnia 2018 *MJLST* 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.

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

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 *et al* 2022 *IJERPH* 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".¹³¹ IGEA adopted a policy to promote a safe and responsible industry through education to protect minor gamers.¹³² Although these are positive developments, these classifications are ineffective as consumers do not understand the warnings¹³³ and as classifications are inconsistently applied.¹³⁴

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.¹³⁵

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.¹³⁶ In addition, parents are also not always aware of the contents of the games or the meaning of the classifications.¹³⁷ Shi argues that an age restriction should be combined with additional strategies to be successful, such as the education of parents.¹³⁸

content/uploads/2021/06/IGEA-Policy-Briefs-Promoting-a-safe-and-responsible-industry-1.5.pdf.

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 Jones 2020 *Chapman L Rev* 280.

¹³⁵ Countries forming part of the initiative include Australia, Brazil, Korea, the EU and Germany. Classification organisations include PEGI, ESRB, the German Unterhaltung Selbstkontrolle (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 Shi *et al* 2021 *Frontiers in Psychiatry* 1.

¹³⁷ 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".

¹³⁸ Shi *et al* 2021 *Frontiers in Psychiatry* 1. 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 classification¹³⁹ and with an impossible workload, they often rely on self-reporting by gaming developers.¹⁴⁰

3.3 Ethical guidelines

Apart from the classification of games, it has been proposed that the voluntary adoption of ethical and socially responsible industry guidelines¹⁴¹ aligned with regulatory frameworks would be ideal to address the concerns about loot boxes.¹⁴² There is consensus that the guidelines should address competing interests and correct the identified problems without interference from legislators and courts.¹⁴³ The details thereof are mired in uncertainty and controversy, however, *inter alia* because game designers view ethical monetisation differently.¹⁴⁴

The following guidelines have been suggested:

Some suggest that loot boxes should be limited to non-competitive advantages by disabling pay-outs¹⁴⁵ and that loot boxes should be obtained only through regular play,¹⁴⁶ with all external trading markets for loot box items banned.¹⁴⁷

Others call for more nuanced industry guidelines, including the explicit and uniform¹⁴⁸ labelling of games to address the lack of transparency and protection of minors by adding an appropriate age classification on games.¹⁴⁹ Warnings on the games should include general consumer

¹³⁹ Honer 2021 *IELR* 72.

¹⁴⁰ Xiao and Henderson 2021 *Int J Ment Health Addict* 188; Jones 2020 *Chapman L Rev* 285.

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.

¹⁴⁵ Liu 2019 *Wash Int LJ* 797; Xiao 2021 *IELR* 40-41.

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.

information¹⁵⁰ and educational data¹⁵¹ aimed at extending financial and parental controls to protect minors.¹⁵² Specifically, the warnings should advise customers, parents and classification agencies about the content¹⁵³ and the age classification.¹⁵⁴ Age verification would be essential for the effectiveness of these suggestions.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.¹⁵⁶

Additional suggestions to consider in these guidelines include mechanisms to address excessive spending on loot boxes through education and in-game warnings.¹⁵⁷ Gamers should be allowed to voluntarily limit their spending on loot boxes¹⁵⁸ or to self-exclude from the game.¹⁵⁹ In addition, "cool down" periods such as embedded disruptions and additional steps to the purchasing process could be included.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.¹⁶¹ The display of the actual currency values and not just the virtual values is seen as essential to awareness of how

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.

¹⁵¹ Moshirnia 2018 *MJLST* 110.

¹⁵² Liu 2019 *Wash Int LJ* 798.

¹⁵³ Zendle and Cairns 2019 *Plos ONE* 11; McCaffrey 2019 *Business Horizons* 487; King and Delfabbro 2018 *Int J Ment Health Addict* 8; Belgium Gaming Commission 2018 <https://gamingcommission.be/sites/default/files/2021-08/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf> 18.

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.

¹⁵⁵ Liu 2019 *WILJ* 797.

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.

¹⁵⁷ Fleming 2020 *U Toronto Faculty L Rev* 107.

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

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.

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).

¹⁶¹ King and Delfabbro 2018 *Int J Ment Health Addict* 9-10.

much is being spent.¹⁶² What is suggested is the establishment of frameworks similar to responsible gambling initiatives.¹⁶³ Online support could be helpful,¹⁶⁴ as would reducing limited-time offers, repeat awards and the audio-visual design of opening a loot box.¹⁶⁵ A more drastic guideline to be considered is a refund entitlement under certain circumstances.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.¹⁶⁷ It is anticipated that there could also be player aversion to the suggested guidelines as paternalistic, especially regarding play interruptions.¹⁶⁸

For the guidelines to create consumer confidence, enforcement is necessary.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.¹⁷⁰ Enforceability of these self-regulating guidelines would be problematic and impractical.¹⁷¹ In addition, the guidelines would not address the problem of the potential abuse of random award mechanisms.¹⁷² What is needed is ethical game design,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.¹⁷⁴ But unless this happens, the call for regulation will likely remain and even increase with numerous calls for a more holistic approach.¹⁷⁵ This call is made notwithstanding the

¹⁶² King and Delfabbro 2018 *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 *Family Court Review* 875).

¹⁶³ Macey and Bujic "Talk of the Town" 217.

¹⁶⁴ King and Delfabbro 2018 *Int J Ment Health Addict* 4.

¹⁶⁵ King and Delfabbro 2018 *Int J Ment Health Addict* 7.

¹⁶⁶ King and Delfabbro 2018 *Int J Ment Health Addict* 9.

¹⁶⁷ Xiao and Henderson 2021 *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 *Int J Ment Health Addict* 186). Also see Xiao 2021 *IELR* 38-39.

¹⁶⁸ Xiao and Henderson 2021 *Int J Ment Health Addict* 180.

¹⁶⁹ Xiao 2021 *IELR* 37.

¹⁷⁰ Xiao 2021 *IELR* 37.

¹⁷¹ Xiao and Henderson 2021 *Int J Ment Health Addict* 189.

¹⁷² Xiao and Henderson 2021 *Int J Ment Health Addict* 186.

¹⁷³ Xiao and Newall suggest a more ethical game design by *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 *JGI* 8).

¹⁷⁴ Australian Senate Committee *Gaming Micro-Transactions* 65, 68.

¹⁷⁵ McCaffrey 2019 *Business Horizons* 491-492.

speed at which the gaming world develops, with policymakers always on the back foot in understanding the developments and consequences.¹⁷⁶ 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.¹⁷⁷ 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.¹⁷⁸

4.1 Introduction

Most commentators agree that some form of regulation is defensible.¹⁷⁹ Minors and other vulnerable gamers should be protected¹⁸⁰ when the games are harmful and addictive.¹⁸¹ This is necessary as current self-regulation initiatives by the industry to deal with such concerns are inadequate.¹⁸²

There are government-sponsored age-related classification systems for video games.¹⁸³ 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.¹⁸⁴ This is

¹⁷⁶ Kersley 2021 <https://www.wired.co.uk/article/loot-boxes-new-gambling> 4.

¹⁷⁷ Abarbanel 2018 *GLR* 231.

¹⁷⁸ Kolandai-Matchett and Abbott 2022 *Int J Ment Health Addict* 2024. Also see Leahy 2022 *Journal of Consumer Policy* 569.

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.

¹⁸³ New Zealand Government Classification Office 2023 <https://www.classificationoffice.govt.nz/classification-info/classification-labels/> issue the classifications and BBFC 2019 <https://www.bbfc.co.uk/about-classification/classification-guidelines>.

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.¹⁸⁵

Leaving aside developments in the USA, it is expedient to note that although a few countries are currently investigating loot boxes,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,¹⁸⁷ leaning towards over-regulation¹⁸⁸ and being unjustified.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.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.¹⁹¹ There are also doubts about the possible success of enforcing such a ban.¹⁹²

The regulatory actions in foreign jurisdictions can be summarised as follows: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/> 1).

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 hereto 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 Schwidessen and Karius 2018 *IELR*.

In Japan¹⁹⁴ the *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.¹⁹⁵

In South Korea the 2011 *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.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+.¹⁹⁷ In 2018 the South Korean Fair Trade Commission fined three game developers almost ₩ 1 million for misleading players about loot boxes.¹⁹⁸

In China, where dedicated game servers facilitate enforcement,¹⁹⁹ loot boxes may not be purchased with cash and the transfer of virtual currency for real currency is prohibited.²⁰⁰ In addition, all loot boxes must be transparent and display all rewards and the odds of winning.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.²⁰² Limits have also been imposed on the hours minors can spend playing games and the monthly amounts that may be spent.²⁰³ This approach has been described as a sensible

¹⁹⁴ Hong 2019 *W St U L Rev* 69; Cermak 2020 *MSU ILR* 299; Fleming 2020 *U Toronto Faculty L Rev* 87.

¹⁹⁵ Act 134 of 1962; Castillo 2019 *Santa Clara L Rev* 195; McCaffrey 2019 *Business Horizons* 487; Moshirnia 2018 *MJLST* 103; Liu 2019 *Wash Int LJ* 781; Derrington, Starr and Kelley 2021 *JGI* 314; Woods 2022 *New Media & Society* 1.

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

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

¹⁹⁸ Shen 2020 *UIC John Marshall Law Review* 1100; Leahy 2022 *Journal of Consumer Policy* 568; Derrington, Starr and Kelley 2021 *JGI* 314.

¹⁹⁹ Xiao 2022 *J Behav Addict* 249.

²⁰⁰ Cermak 2020 *MSU ILR* 299; Shen 2020 *UIC John Marshall Law Review* 1098; McCaffrey 2019 *Business Horizons* 487. Hong 2019 *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.

²⁰¹ Liu 2019 *Wash Int LJ* 784; McCaffrey 2019 *Business Horizons* 487; Mistry 2018 *Rutgers U L Rev* 564; Castillo 2019 *Santa Clara L Rev* 196; Moshirnia 2018 *MJLST* 103; Australian Senate Committee *Gaming Micro-Transactions* 14; Shen 2020 *UIC John Marshall Law Review* 1099.

²⁰² This is aimed at mitigating possible addictive behaviour (Liu 2019 *Wash Int LJ* 783-784).

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 *UIC John Marshall Law Review* 1098).

compromise between commercial interests and the protection of participants.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.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.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.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.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.²⁰⁹

On the one hand, in New Zealand,²¹⁰ Ireland²¹¹ and France²¹² 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,²¹³ although the last aspect is unconvincing.²¹⁴

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

²⁰⁴ Xiao 2022 *J Behav Addict* 249; Derrington, Starr and Kelley 2021 *JGI* 315.

²⁰⁵ Schwidessen and Karius 2018 *IELR* 42.

²⁰⁶ McNulty 2021 <https://screenrant.com/loot-boxes-banned-games-minors-germany/> 4-5.

²⁰⁷ NGB *Potential Impact of 4IR* 42.

²⁰⁸ Mann 2020 *WJLTA* 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).

²⁰⁹ Xiao 2021 *IELR* 35.

²¹⁰ Abarbanel 2018 *GLR* 232; Moshirnia 2018 *MJLST* 105; Australian Senate Committee *Gaming Micro-Transactions* 14.

²¹¹ Columb, Griffiths and O'Gara 2022 *Ir J Psychol Med* 3; Evans 2022 *Geo Wash L Rev* 381.

²¹² Zendle and Cairns 2019 *Plos ONE* 2; Honer 2021 *IELR* 67.

²¹³ Liu 2019 *Wash Int LJ* 779.

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".

²¹⁵ Belgium Gaming Commission 2018 <https://gamingcommission.be/sites/default/files/2021-08/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf> 3-4, 15-17; Honer 2021 *IELR* 68; Zendle and Cairns 2018 *Plos ONE* 1-2; Abarbanel 2018 *GLR* 232;

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.²¹⁶ The Gambling Commission has demanded the removal of all loot boxes from games sold in Belgium and most developers have complied, "albeit reluctantly".²¹⁷ The choice given by the authorities to the developers was simple: remove the loot boxes, withdraw the game or face criminal prosecution.²¹⁸ 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 towards higher-risk illegal providers.²¹⁹

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,²²⁰ originally in the Netherlands,²²¹ Sweden,²²² Canada,²²³ Poland,²²⁴ the UK²²⁵ and Australia. Only in two of these jurisdictions, however, did this lead to any enforcement action.

Moshirnia 2018 *MJLST* 104; Liu 2019 *Wash Int LJ* 785; Cermak 2020 *MSU ILR* 283-291.

²¹⁶ Belgium Gaming Commission 2018 <https://gamingcommission.be/sites/default/files/2021-08/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf> 17-18; Hong 2019 *W St U L Rev* 81; Drummond and Sauer 2018 *Nat Hum Behav* 3.

²¹⁷ McCaffrey 2019 *Business Horizons* 488; Liu 2019 *Wash Int LJ* 786, 789; Hong 2019 *W St U L Rev* 74-75. The developer of *Pro Evolution Soccer*, Konami, for example, discontinued sales in Belgium as a direct result of the Belgium Gaming Commission *Research Report on Loot Boxes* (Garou 2019 <https://www.resetera.com/threads/konami-removes-myclub-coin-microtransactions-from-pro-evolution-soccer-2019-in-belgium.99210/>), as did Blizzard Entertainment by not publishing *Diablo Immortal* in Belgium (Xiao July 2022 *OSF Preprints* 120).

²¹⁸ Liu 2019 *Wash Int LJ* 786; Hong 2019 *W St U L Rev* 75.

²¹⁹ Xiao July 2022 *OSF Preprints* 120-122.

²²⁰ 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.

²²¹ 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 Kansspelen*. Also see Zendle and Cairns 2018 *Plos ONE* 2; McCaffrey 2019 *Business Horizons* 488; Australian Senate Committee *Gaming Micro-Transactions* 11-12.

²²² Schwidessen and Karius 2018 *IELR* 39-40.

²²³ Schwidessen and Karius 2018 *IELR* 41-42.

²²⁴ Schwidessen and Karius 2018 *IELR* 38-39.

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" (Schwidessen 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

for trading the loot box items (Zendle and Cairns 2019 *Plos ONE* 2). Schwidessen and Karius 2018 *IELR* 25-27 disagree that there is legal certainty about tradable loot boxes for real currency, as the UK Commission statements, according to them, are subject to numerous interpretations.

²²⁶ Danish Gambling Authority 2019 <https://www.spillemyndigheden.dk/en/news/danish-gambling-authority-has-25-illegal-gambling-websites-blocked#:~:text=On%20March%2025%2C%202019%2C%20City,block%2025%20illegal%20gambling%20websites> 1 and Danish Gambling Authority 2021

<https://www.spillemyndigheden.dk/en/skin-betting-and-loot-boxes-video-gaming-or-gambling#skin-betting-and-loot-boxes-video-gaming-or-gambling?>- 3 with reference to a 2018 Frederiksberg court and 25 March 2019 Copenhagen city court decisions.

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*).

²²⁸ Liu 2019 *Wash Int LJ* 786; Hong 2019 *W St U L Rev* 73; Shen 2020 *UIC John Marshall Law Review* 1096.

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.

²³² Uitspraak 202005769/1/A3 (2022) Afdeling Bestuursrechtspraak Raad van State [Judgment of the Administrative Jurisdiction Division of the Council of State in the Netherlands] (9 March 2022) para 8.5-9.

differences between purchased and earned loot boxes.²³³ 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.²³⁴

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.²³⁵ 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.²³⁶ 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,²³⁷ although there are calls for pre-emptive regulation as a precautionary measure to limit harm.²³⁸ In Australia the official outcome was that regulation should be considered only after further research.²³⁹ The experts show a preference for consumer protection regulations to protect the vulnerable rather than using the

²³³ Xiao and Declerck 2022 *OSF Preprints* 16.

²³⁴ Xiao and Declerck 2022 *OSF Preprints* 15.

²³⁵ Xiao and Henderson 2021 *Int J Ment Health Addict* 188; McCaffrey 2019 *Business Horizons* 487-488.

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 Gambli 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 Gambli 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.

²³⁹ Hong 2019 *W St U L Rev* 76-77; Castillo 2019 *Santa Clara L Rev* 177; Australian Senate Committee *Gaming Micro-Transactions* 73; Liu 2019 *Wash Int LJ* 787. The Australian Government accepted this recommendation (Australian Government 2019

https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Gamingmicro-transactions/Government_Response 3).

gambling framework.²⁴⁰ EU Guidelines also suggest a consumer law approach rather than a gambling approach.²⁴¹ 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.²⁴²

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.²⁴³

4.3 Conclusion

In conclusion, there is little uniformity in the jurisdictional responses to loot boxes, with divergent degrees of enforcement and protection.²⁴⁴ 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.²⁴⁵ Game developers would loathe their games to be classified as gambling and have to submit to costly regulatory processes worldwide.²⁴⁶

From a broader perspective, it remains important for the loot box concerns to be addressed, irrespective of the legal avenue chosen.²⁴⁷

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,²⁴⁸ and the response has been described as

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.

²⁴³ Leahy 2022 *Journal of Consumer Policy* 571-572; Hing *et al* 2022 *J Behav Addict* 403.

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.

²⁴⁸ Jones 2020 *Chapman L Rev* 248.

lacklustre.²⁴⁹ It is argued that game companies have until now propagated distrust through their lack of action²⁵⁰ and it is expected that the industry will keep manoeuvring to avoid compliance unless pressured by stakeholders, governments and other strategic partners.²⁵¹ Any change would have to include long-term benefits for the industry as well.²⁵²

The EA saga has shown that the nature of the internet makes it possible for stakeholders to pressure change successfully.²⁵³ 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.²⁵⁴ In addition, gamers and other stakeholders, such as parents, could assist in holding developers accountable by supporting games adhering to ethical practices.²⁵⁵

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 industry²⁵⁶ or to encourage new game design.²⁵⁷

As previously mentioned, major strategic online partners have effectively motivated developers to change potentially harmful practices.²⁵⁸ 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.²⁵⁹

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.²⁶⁰ Macey and Bujić formulate it as follows:

²⁴⁹ Mistry 2018 *Rutgers U L Rev* 563; Jones 2020 *Chapman L Rev* 287.

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).

²⁵⁸ McCaffrey 2019 *Business Horizons* 493.

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

²⁶⁰ McCaffrey 2019 *Business Horizons* 492–493.

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.²⁶¹

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.²⁶²

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.²⁶³

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.²⁶⁴

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?"²⁶⁵

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.²⁶⁶

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

²⁶¹ Macey and Bujic "Talk of the Town" 217.

²⁶² Honer 2021 *IELR* 76. Derrington, Starr and Kelley 2021 *JGI* 316-318 argues for a global classification framework.

²⁶³ Regan *et al* 2022 *Lancet Public Health* 707. Xiao and Henderson suggest a public health approach funded by the industry (Xiao and Henderson 2021 *Int J Ment Health Addict* 173). Also see Xiao *et al* 2022 *Current Addiction Reports* 173-174.

²⁶⁴ Close and Lloyd 2021 *Lifting the Lid on Loot-Boxes* 4.

²⁶⁵ Xiao 2022 *I&CTL* 380.

²⁶⁶ Xiao 2021 *IELR* 43.

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 17.²⁶⁷ With video games, there is evidence of the manipulation of minors for commercial purposes such as data collection, targeted advertising and gambling opportunities.²⁶⁸ Minors deserve more protection than adults because 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.²⁶⁹

The protection of minors against harm is a constitutional²⁷⁰ imperative: "A child's best interests are of paramount importance in any matter concerning the child."²⁷¹ 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.²⁷² South Africa has ratified the *Convention on the*

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),²⁷³ and one of the four goals of the CRC is to prevent harm to children.²⁷⁴ The CRC also contains the principle of the best interests of the child.²⁷⁵ 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.²⁷⁶ 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.²⁷⁷

The Committee on the Rights of the Child that monitors the CRC²⁷⁸ 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.²⁷⁹ The guidance is comprehensive and includes: one, the involvement of national and local bodies to oversee and coordinate the fulfilment of these rights;²⁸⁰ two, taking appropriate measures to protect children from content risks,²⁸¹ including consultations²⁸² and amending

includes binding and non-binding law (Schäfer *Child Law* 84; *S v Makwanyane* 1995 3 SA 391 (CC) para [35]).

²⁷³ South Africa signed the documents in 1993, but the Convention was ratified and assented to in 1995.

²⁷⁴ Van der Hof *et al* 2022 *Frontiers in Digital Health* 3.

²⁷⁵ 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).

²⁷⁶ Van der Hof *et al* 2022 *Frontiers in Digital Health* 3. See respectively arts 31, 28, 32 and 16 of the CRC.

²⁷⁷ 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).

²⁷⁸ Article 43(2) of the CRC.

²⁷⁹ 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).

²⁸⁰ 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).

²⁸¹ Article 14 of the General Comment specifically mentions the risk of exposure to gambling.

²⁸² 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 research²⁸⁴ and providing information and education to all stakeholders;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;²⁸⁶ five, enforcing these measures and providing children with access to justice, effective remedies and appropriate reparations²⁸⁷ and ensuring compliance by the business sector also through developing industry codes to the highest standards of ethics, privacy and safety;²⁸⁸ and lastly, ensuring that providers apply "concise and intelligible labelling, for example on the age-appropriateness or trustworthiness of the content".²⁸⁹ This General Comment has been

practices to promote the protection of these rights (arts 123-124 of the General Comment).

²⁸³ Article 23 of the General Comment.

²⁸⁴ 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 *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).

²⁸⁵ 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 *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).

²⁸⁶ Articles 17 and 19 of the General Comment.

²⁸⁷ 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).

²⁸⁸ 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.

²⁸⁹ 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 2015,²⁹⁰ 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.

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 Bassegy 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*²⁹¹

In terms of the *Films and Publications Act*, the Films and Publications Council²⁹² of the Film and Publication Board,²⁹³ 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.²⁹⁴ It provides for an evaluation regulatory process for the classification of games for a fee,²⁹⁵ aimed at consumer advice towards informed consent and the protection of minors from harmful content.²⁹⁶ One of the core strategic functions of the FPB is outreach and public education.²⁹⁷

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")²⁹⁸ or classifiable elements for an XX-classification,²⁹⁹ X18-classification,³⁰⁰ or age restricted-classification.³⁰¹

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).

²⁹² Sections 3-4A of the *Films and Publications Act 65 of 1996* (the *Films and Publications Act*).

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*.

²⁹⁷ FPB date unknown <https://www.fpb.org.za/what-we-do/outreach-public-education-2/>.

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.³⁰² 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,³⁰³ or it can use the classifications of a foreign or international classification authority or body.³⁰⁴ Such classification will be deemed to be that of the Board and non-compliance with a classification, if done knowingly, is a criminal offence.³⁰⁵ Other remedies for any breach include a civil action such as an interdict or a claim for damages.³⁰⁶

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,³⁰⁷ 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).

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).

³⁰⁶ FPB *Labelling Strategy* 9.1-9.2.

³⁰⁷ See their website at FPB 2022 <https://www.fpb.org.za/classification-decisions/>.

warnings for D (substance abuse), L (language), V (violence), PPS (Photo Pattern Sensitivity) and CI (Competitive Intensity).³⁰⁸

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.³⁰⁹ 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.³¹⁰ Three, most children have limited awareness of the age restrictions and classification guidelines for games by the FPB³¹¹ with less than 20% of parents actively complying with the FPB regulations.³¹²

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.³¹³ 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.³¹⁴

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.³¹⁵

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

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

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

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

³¹⁵ Dos Santos 2019 <https://www.itweb.co.za/content/Per037ZgzdEMQb6m> 4.

³¹⁶ Van Eeden and Barnard *Consumer Protection Law* 554.

³¹⁷ Van Eeden and Barnard *Consumer Protection Law* 554.

³¹⁸ The *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 *Consumer Protection Act* 68 of 2008 (the CPA)), the ECTA will not apply (Van Eeden and Barnard *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).

³¹⁹ Section 22 of the CPA.

³²⁰ Section 29 of the CPA.

³²¹ Sections 40-41 of the CPA.

³²² Section 11 of the CPA.

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.³²⁴ The consumer's right to information about goods includes that the information should be framed in plain, understandable language³²⁵ and should not be misleading.³²⁶

The CPA provisions are enforced by the Consumer Protection Commission, the powers of which range from investigating complaints to enforcing compliance notices.³²⁷ 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.³²⁸ The Commission is obliged to consult with any regulatory licensing body prior to issuing the notice.³²⁹ 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.³³⁰

For our current purposes, it should be noted that video games fall within the scope of the CPA.³³¹ 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.³³²

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.

³²⁸ *Murray v National Consumer Commission* NCT/4570/2012/101(1)(P) [2012] ZANCT 17 (30 July 2012).

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.³³³ There are eleven gambling statutes and eleven gambling regulatory boards, two at the national level and the remainder at the provincial level.³³⁴ 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,³³⁵ the need for the protection of minors³³⁶ and protection against the negative socio-economic impacts of gambling and gambling addiction.³³⁷

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 Lotteries 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/Pero37ZgzdEMQb6m> 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 "payout" is defined to mean:

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-loot-boxen-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.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.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.³⁵²

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

³⁵⁰ Section 6(1) of the *National Gambling Act*.

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 *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); *Astraton Investments CC v Premier of KwaZulu-Natal* (NPD) (unreported) case number 2795/00 of 2 October 2000; and *S v Ramos* 2005 2 SACR 459 (C)).

³⁵² This is the same in other jurisdictions. See *inter alia* Belgium Gaming Commission 2018 <https://gamingcommission.be/sites/default/files/2021-08/onderzoekrapport-loot-boxen-Engels-publicatie.pdf> 10; Azin 2020 *BC L Rev* 1605; Hong 2019 *W St U L Rev* 74; Cermak 2020 *MSU ILR* 289; Lui, Thompson and Rich 2020 *York L Rev* 14-15; Schwidessen and Karius 2018 *IELR* 26.

³⁵³ See footnote 344 above.

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

³⁵⁵ *NGB Potential Impact of 4IR* 41.

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,³⁵⁷ self-exclusion would become a possibility for problem gamblers,³⁵⁸ and the gambling addiction support mechanisms and free counselling of the South African Responsible Gambling Foundation (SARGF) would become available.³⁵⁹ 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 payers have been blocked from participating in fictional casino gambling in certain online games such as *Grand Theft Auto V: Online*.³⁶⁰ 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.

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.

³⁶⁰ Powers 2021 <https://www.vgr.com/south-african-gamers-still-cant-access-the-gta-online-diamond-casino/>; and ENUK 2019 <https://esports-news.co.uk/2019/08/26/countries-that-have-banned-the-new-gta-casino-and-why/>.

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.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

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
GRAF	Gambling Regulators European Forum
IARC	International Age Rating Coalition
IESA	Interactive Entertainment South Africa
IELR	Interactive Entertainment Law Review

IGDA	International Game Developers Association
IGEA	Interactive Games and Entertainment Association
I&CTL	Information and Communications Technology Law
Int GambI Stud	International Gambling Studies
IJMC	International Journal of Management Cases
Int J Ment Health Addict	International Journal of Mental Health and Addiction
Ir J Psychol Med	Irish Journal of Psychological Medicine
IJERPH	International Journal of Environmental Research and Public Health
IJSES	International Journal of Social and Economic Sciences
IJSSER	International Journal of Social Science and Economic Review
J Behav Addict	Journal of Behavioral Addictions
JGI	Journal of Gambling Issues
J GambI Stud	Journal of Gambling Studies
JISIT	Journal of Information Systems and Information Technology
JRFM	Journal of Risk and Financial Management
MJLST	Minnesota Journal of Law, Science and Technology
MSU ILR	Michigan State International Law Review
Nat Hum Behav	Nature Human Behaviour
NGB	National Gambling Board
NSW	New South Wales
PEGI	Pan European Game Information
PWC	PricewaterhouseCoopers
RSOS	Royal Society Open Science
Rutgers U L Rev	Rutgers University Law Review
SARGF	South African Responsible Gambling Foundation
Santa Clara L Rev	Santa Clara Law Review
T Marshall L Rev	Thurgood Marshall Law Review
ToDIGRA	Transactions of the Digital Games Research Association
Wash Int LJ	Washington International Law Journal
WJLTA	Washington Journal of Law, Technology and Arts
W St U L Rev	Western State University Law Review
UK	United Kingdom

UNISA

Upsala J Med Sci

U Toronto Faculty L Rev

York L Rev

University of South Africa

Upsala Journal of Medical Sciences

University of Toronto Faculty of Law Review

York Law Review