

27 July 2018

Senator Janet Rice
Chair, Environment and Communications Reference Committee
PO Box 6100
Parliament House
Canberra ACT 2600

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Dear Senator Rice,

## Gaming micro-transactions for chance-based items

The Association of Heads of Independent Schools of Australia (AHISA) welcomes the opportunity to contribute to the Senate's review of chance-based micro-transactions in digital games and their potential for harm. The focus of AHISA's interest is the impact of such transactions in digital games on the wellbeing of children and young people.

As well as evidence of the negative impact of extended game play or video gaming addiction on the mental health of young people<sup>1</sup>, there is a growing evidence base on the engagement of children and young people in Australia in gambling activity via digital games which highlights a range of concerns and risks associated with this exposure. Some of these findings are discussed in our submission.

Based on this research, AHISA suggests that the scale of exposure of Australian children to simulated gambling games and within-game gambling represented by loot boxes warrants government intervention. AHISA recommends that governments deem the purchase of chance-based loot boxes within digital games as a form of gambling and review legislation accordingly. At the very least, the purchase of chance-based loot boxes represents a form of gaming that familiarises children and young people with gambling and normalises gambling as an activity, and signals the need for a special focus on children and young people as a sub-set of Australia's gambling population.

We would welcome any inquiries you may have about this submission. These may be addressed to AHISA's Chief Executive Officer, Ms Beth Blackwood, telephone , email

Yours faithfully,

### Dr Mark Merry

AHISA National Chair Principal of Yarra Valley Grammar, Victoria



### **KEY POINTS & RECOMMENDATIONS**

The rapid evolution of the digital environment and online gaming, including online gambling, suggests that constant vigilance is required to ensure the risk of harm to children and young people is minimised and that information and education programs are fit for purpose.

It is AHISA's view that the sheer scale of the potential for children to be exposed to online gambling, either through simulated gambling games or in-game gambling features such as loot boxes warrants ongoing review of federal online gambling legislation and regulation with a specific focus on children and young people.

With particular regard to chance-based micro-transactions in digital games, it is AHISA's view that there is sufficient research evidence to indicate a substantial risk of harm and therefore a case for governments to consider strategies for protection and harm minimisation.

#### AHISA therefore recommends:

- That the Australian Government makes a determination that chance-based microtransactions in digital games are a form of online gambling. As a consequence of this determination, the Government should consider whether existing legislation needs strengthening, or whether further industry regulation is required, such that game producers and distributors are to advise whether digital games include options for ingame purchases or simulated gambling play such as loot boxes.
- That an advisory group to the federal Minister for Social Services be established to monitor developments relating to risk of harm to children and young people from online gambling, including from simulated games and in-game gambling, with a view to recommending national research projects, pinpointing new information of relevance to government-supported education programs and websites and suggesting amendments to existing legislation or other government regulatory measures such as industry use of product classifications and warnings when warranted.



### **ABOUT AHISA**

AHISA Ltd is a professional association for Heads of independent schools.

The primary object of AHISA is to optimise the opportunity for the education and welfare of Australia's young people through the maintenance of collegiality and high standards of professional practice and conduct amongst its members.

AHISA's 430 members lead schools that collectively account for over 430,000 students, representing 11.5 per cent of total Australian school enrolments and 20 per cent of Australia's total Year 12 enrolments. One in every five Australian Year 12 students gains part of their education at an AHISA member's school.

AHISA's members lead a collective workforce of over 40,000 teaching staff and some 25,000 support staff.

The socio-economic profile of AHISA members' schools is diverse. Over 20 per cent of our members lead schools serving low- to very low-SES communities.

AHISA believes that a high quality schooling system in Australia depends on:

- Parents having the freedom to exercise their rights and responsibilities in regard to the education of their children
- Students and their families having the freedom to choose among diverse schooling options
- Schools having the autonomy to exercise educational leadership as they respond to the emerging needs of their communities in a rapidly changing society.



### **GAMING vs GAMBLING**

### **Defining terms**

Overseas and Australian research provides some insight into both the increasing convergence of gaming and gambling due to digital technologies and when digital game-based play may be designated as gambling.

In its report on simulated gambling games, the Australian Gambling Research Centre<sup>2</sup> defines simulated gambling games as those which 'imitate many of the core characteristics of gambling—such as the look, sound and actions—but do not provide an opportunity to bet, win or lose real money'. Such games might include casino-style games such as poker, roulette and blackjack, imitations of electronic gaming machines (EGMs) or 'pokies' or 'slot machines' and lotteries. The Centre's research paper notes that many of these games are more popular with adolescents than adults, and that adolescents are more likely than adults to play them on a laptop, smartphone or tablet – that is, portable rather than desktop technology.

While such games may not be constituted as online gambling, as no money is paid by the user or money or rewards accrued, the Australian Gambling Research Centre's report notes that the boundaries between simulated and commercial gambling are becoming increasingly blurred and that this convergence is giving rise to concern that it is increasing young people's exposure to and risk of engaging in commercial gambling. 'Loot boxes' available for purchase in nongambling role-play and social video games are an example of this convergence.

Recent Australian research<sup>3</sup> on the mechanisms of loot boxes notes six characteristics common to most gambling activities:

- The exchange of money or valuable goods
- An unknown future event determines the exchange
- Chance at least partly determines the outcome
- Non-participation can avoid incurring losses
- Winners gain at the sole expense of losers
- Winnings can be 'cashed out', that is, converted in some way into real-world money.

The researchers note that while not all video games with loot boxes contain a 'cashing out' function, this may be possible via third-party websites. (Such websites have been referred to as 'parasites'.<sup>4</sup>)

The research analysed 22 video games containing loot boxes and which were rated as appropriate for audiences 17 years old or younger. Five games were found to have cashing out availability, with four of the five meeting the other gambling characteristics outlined above. All were rated as suitable for players 13 years old or younger. The researchers note that some legal definitions of gambling require that the ability to cash out winnings for money be present and that, according to this definition, loot boxes in the five games with cashing out availability 'constituted a form of gambling'. They further note:



This is a narrow definition of gambling because it fails to recognise the value created for players from the combination of scarcity of, and competitive advantage provided by, ingame items in the gaming environment.

The research also identified that the variable ratio reinforcement schedule used to create the element of chance in what the loot box delivers to the player is the same as that underpinning many forms of gambling, and notes:

Variable ratio reinforcement results in people quickly acquiring behaviours and repeating these behaviours frequently in the hopes of receiving a reward.

That is, to promote continued engagement by players, loot boxes may exploit the same human psychology as gambling games. Such tactics, amplified by the use of artificial intelligence and data mining to accrue knowledge of players' game-related preferences, have led to some withingame micro-transactions being described as 'predatory'.<sup>5</sup>

A position paper on virtual currencies, eSports and social casino gaming issued by the UK Gambling Commission in 2017<sup>6</sup> states:

Where in-game items or currencies which can be won, traded or sold can be converted into cash or exchanged for items of value, under (UK) gambling legislation they are considered money or money's worth.

The Commission appears to consider third party 'parasite' websites that allow the cashing out of loot box items as a form of gambling and concludes:

Where facilities for gambling with tradable in-game items are offered to British consumers a licence is required.

The Commission further states that 'the ability to exchange in-game items for cash or trade on secondary markets also risks drawing elements within games themselves into gambling definitions':

... One commonly used method for players to acquire in-game items is through the purchase of keys from the games publisher to unlock 'crates', 'cases' or 'bundles' which contain an unknown quantity and value of in-game items as a prize. The payment of a stake (key) for the opportunity to win a prize (in-game items) determined (or presented as determined) at random bears a close resemblance, for instance, to the playing of a gaming machine. Where there are readily accessible opportunities to cash in or exchange those awarded in-game items for money or money's worth those elements of the game are likely to be considered licensable gambling activities.

Additional consumer protection in the form of gambling regulation, is required in circumstances where players are being incentivised to participate in gambling style activities through the provision of prizes of money or money's worth. Where prizes are successfully restricted for use solely within the game, such in-game features would not be licensable gambling, notwithstanding the elements of expenditure and chance.

In spite of these conclusions and the Commission's finding that some 25,000 British children aged 11 to 16 years of age are 'problem gamblers' and a further 36,000 at risk of developing a problem<sup>7</sup>, Britain has not yet changed its gambling laws.



Other nations and states have or are considering legislative responses. Belgium<sup>8</sup> and the Netherlands<sup>9</sup> have determined that the inclusion of loot boxes contravenes their national gambling legislation, and some state legislatures in the USA have introduced bills either banning loot boxes in games or prohibiting games containing loot boxes for users under 21 years of age.10

In 2016, China introduced regulations requiring game developers to make public the draw probably on all virtual items and services that can be acquired in loot boxes. Applying from May 2017, the regulations apply only to Chinese versions of games and, as one commentator notes, 'it's entirely possible a developer could boost the drop rate in China, and release the numbers under the new rules, while offering far lower odds in the rest of the world'. 11



### **RISK OF HARM**

## The effects of gaming and in-game gambling

Online gaming (and in-game gambling) by definition involves the use of digital devices, including desktop computers, tablets, consoles and smartphones. There is still lively academic contention over the impacts of using such devices and the games available for these platforms on the health and wellbeing of children and young people, including the impact of violence in digital games<sup>12</sup> and the effects of games and dopamine release on neural development.<sup>13</sup>

What is clear is that research studies often set out to explore a range of concerns, voiced by both specialists and parents, which describe the **risk of harm** to children and young people from exposure to a range of media, including digital games. For example:

- In its fact sheet, Effects of media violence on children<sup>14</sup>, the Australian Council on Children and the Media (ACCM) notes that while the detrimental impact of media violence on young people is disputed, 'there are now over 200 original research studies and many more research reviews which combine to give a reliable picture of the <u>likely impact</u> of violent media on children'. ACCM notes that 'a diet of media violence can <u>increase the risks</u> that children will: be more likely to choose to use violence to solve conflict; be desensitised to use of violence by others (more callous); develop a mean and scary view of the world'.
- Research on parental attitudes to the influence of computer games on children's development<sup>15</sup> records both the benefits and disadvantages parents describe as resulting from their children's computer gaming. The research abstract notes that 'parents recognise that games can have <u>powerful effects</u> on children'.
- Affirming concern arising from parental observations are findings presented in the *Digital Australia 2018* report<sup>16</sup>, which notes that three-quarters of parents responding to the Digital Australia survey reported having rules to regulate their children's game playing while some 84 per cent of parents reported that they talked to their children about online safety.

Such research conclusions indicate that, at the very least, there is an awareness that digital tools are having an impact on children, that these effects – whether positive or negative – are powerful and that children's immersion in a digital environment poses risks to health and wellbeing, even if these risks represent an escalation of risks that may otherwise be present in the lives of children.<sup>17</sup>

In considering the impact of chance-related micro-transactions in video and online games, it is therefore important to take into account that the media in which these transactions are undertaken are not necessarily risk-neutral environments.

As with research on violence in video games and the use of digital devices more generally, research specifically relating to digital games and gambling raises the issue of impact and risk, particularly in relation to exposure, 'initiation', 'consumer socialisation' or 'immersion'. For example:



- In its report on simulated gambling games, the Australian Gambling Research Centre<sup>18</sup> notes that 'the availability of simulated gambling on smartphones and tablets has generated concern, as the constant availability of gambling-related activities facilitates a deep integration of gambling or gambling-like activities into everyday life'.
- A report on gambling harm minimisation prepared for the NSW Government cites research findings that 'childhood involvement, parental role modelling and peer-group interactions at a young age formalise attitudes and beliefs regarding gambling and consequently the foundation for problem gambling in adulthood'. The report concludes that 'Exposure to gambling at formative stages of development is a risk factor for the normalisation of gambling as a recreational activity.'19

Research also indicates that the scale of the risk of harm to children and young people in regard to online gambling is significant, given the extent of children's exposure to simulated gambling games and to in-game gambling scenarios. For example, Australian research on children's attitudes to gambling<sup>20</sup> noted evidence that 'approximately two thirds to three guarters of children will have participated in some form of gambling in their pre-teen and teenage years'. The survey of British children aged 11 to 16 years of age, undertaken for the UK Gambling Commission's 2017 report. Young people and gambling 2017<sup>21</sup>, found that 15 per cent of boys and seven per cent of girls had gambled with their own money in the week prior to the survey.

These statistics are alarming given claims that 'around 20 per cent of adults and adolescents who play simulated gambling games move to online commercial gambling<sup>22</sup>, and that 'about a third of adult problem gamblers who seek treatment started gambling when they were 11-17 years old'. 23 Research has also estimated that up to five per cent of young Australians will develop gambling problems before they are 25 years of age.<sup>24</sup>

Also worth noting is that some 80 per cent of those surveyed for the UK Gambling Commission's study had seen advertisements for gambling on television and 68 per cent had seen gambling advertising on social media and other websites.

The number of Australian children who may be exposed to some form of in-game play resembling or simulating gambling is likely to be high given the popularity of video games. The Digital Australia 2018 report, already cited, indicates that some 90 per cent of Australian children between the ages of five and 14 years play video games (including online games). Over a third of children aged one to four years play video games. Time spent playing averages at just over an hour a day for girls aged five to 14 and nearly two hours a day for boys in the same age bracket.



#### **RECOMMENDATIONS**

## Minimising risk of harm

AHISA commends Australian governments and federal and state parliamentarians for their ongoing interest in legislative and other means to protect Australians from gambling harms, targeting both gambling providers and consumers, including children and young people.

Response to the risk of harm of young people from gambling includes government-funded information and education resources on online gambling for young people, parents and schools, including:

- The Office of the eSafety Commissioner provides information for young people<sup>25</sup> and parents<sup>26</sup>
- The Australian Competition and Consumer Commission (ACCC) provides information on how to restrict in-app purchases<sup>27</sup>
- The Attorney General's Department of South Australia funds the ACCM's Children and Gambling Watch List, a part of the Know Before You Load project<sup>28</sup>
- The South Australian Government's *No Game* website<sup>29</sup> offers information to parents about online simulated gambling games.

AHISA assists in the promotion of such resources to schools with regular alerts to its members, who in turn promote them to their parent communities. However, there is evidence that more education targeting parents is required. For example, while the Office of the eSafety Commissioner offers important information on how to use parental controls to limit children's access to games considered inappropriate<sup>30</sup>, the *Digital Australia 2018* report already cited shows less than half of parents apply them. The report also reveals that only just over one half of parents (55 per cent) report that they are completely or mostly familiar with parental controls. Similarly, while about half of parents (53 per cent) are completely or mostly familiar with app store ratings and classification ratings, and are influenced by them when purchasing games for their children, there is still considerable confusion over the classifications 'M', 'MA15+' and R18+'.

Schools would also appreciate access to more information to help educate young people about how their behaviour is being manipulated by in-game gambling activity such as loot boxes and to counter their perception that skill plays a part in chance-based games.<sup>31</sup>

The rapid evolution of the digital environment suggests that constant vigilance is required to ensure the risk of harm to children and young people is minimised and that information and education programs are fit for purpose. It is AHISA's view that the sheer scale of the potential for children to be exposed to online gambling, either through simulated gambling games or in-game gambling features, and therefore to the risk of normalisation of gambling activity, warrants ongoing review of federal online gambling legislation with a specific focus on children and young people. To this end, AHISA recommends:



That an advisory group to the federal Minister for Social Services be established to monitor developments relating to risk of harm to children and young people from online gambling, including from simulated games and in-game gambling, with a view to recommending national research projects, pinpointing new information of relevance to government-supported education programs and websites and suggesting amendments to existing legislation or other government regulatory measures such as industry use of product classifications and warnings when warranted.

With particular regard to chance-based micro-transactions in digital games, it is AHISA's view that while as yet there is not a large body of evidence on the impact of such transactions on young people's attitudes to gambling, there is sufficient evidence from available research on the impacts of media and video gaming more broadly to indicate a substantial risk of harm and therefore a case for governments to consider strategies for protection and harm minimisation. AHISA therefore recommends:

That the Australian Government makes a determination that chance-based micro-transactions in digital games are a form of online gambling. As a consequence of this determination, the Government should consider whether existing legislation needs strengthening, or whether further industry regulation is required, such that game producers and distributors are to advise whether digital games include options for ingame purchases or simulated gambling play such as loot boxes.

A number of recommendations to government have already been outlined in various research papers on gambling and young people, including:

- Strengthening and standardising classification of simulated gambling games and use of advisory warnings to provide more protections to users<sup>32</sup>
- The development of education initiatives and public education campaigns to counter the 'overwhelmingly positive messages children see about gambling', as part of a comprehensive public health approach'.<sup>33</sup>

The research literature also offers several recommendations for further research, including:

- Longitudinal research on children's gambling consumption<sup>34</sup>
- Research to better understand ways that involvement in simulated gambling may increase gambling risk, including convergence, normalisation of gambling, and the development of false gambling beliefs<sup>35</sup>
- Development of small, in-time digital interventions such as pop-up messages promoting limit setting tools and resources<sup>36</sup>
- Development of a harm reduction framework that prioritises excessive demand reduction at the individual level when emerging technologies 'make it increasingly difficult to impose regulations on gambling products'.<sup>37</sup>

All such recommendations could be reviewed by the ministerial advisory group suggested by AHISA.



Whatever form government interventions may take, it is evident that a clear strategic focus on the issue of exposure to gambling by children and young people at a national level is urgently required. For example, AHISA notes the recent agreement by Commonwealth, state and territory gambling ministers to introduce a range of options to support at-risk and problem gamblers take proactive measures for self-help. This is an important response to problem gambling. It is not clear, however, whether the new self-help measures such as the National Self Exclusion Register<sup>38</sup> will benefit children and young people who have not yet reached 18 years of age (that is, legal gambling age) but who find themselves in trouble.

Digital devices and the games available on them mean that consideration of children and young people as a specific sub-set of the gambling population is now required, and AHISA urges the Environment and Communications Reference Committee to give special attention to children and young people in its current inquiry.



#### **NOTES**

- <sup>1</sup> Johnson D, Jones C, Scholes L & Carras M (2013) *Video games and wellbeing: A comprehensive review.* Melbourne: Gaming Research Group, Young and Well Cooperative Research Centre. Accessed at <a href="https://eprints.qut.edu.au/105915/1/2013%20CRC%20Report%20Videogames">https://eprints.qut.edu.au/105915/1/2013%20CRC%20Report%20Videogames</a> and Wellbeing.pdf.
- <sup>2</sup> Dickins M & Thomas A (2016) *Is it gambling or a game? Simulated gambling games*: Their use and regulation. Australian Gambling Research Centre. Accessed at <a href="https://aifs.gov.au/agrc/sites/default/files/agrc-dp5-simulated-gambling-paper.pdf">https://aifs.gov.au/agrc/sites/default/files/agrc-dp5-simulated-gambling-paper.pdf</a>.
- <sup>3</sup> This research is discussed at Drummond A & Sauer J (2018) Video game loot boxes are psychologically akin to gambling, accessed at <a href="https://www.nature.com/articles/s41562-018-0360-1.epdf?author\_access\_token=raxrw9GLiFTk0XGW64NfOdRgN0jAjWel9jnR3ZoTv0OKJNHXq8sGbZ\_YLpClnAs\_0rzRetn6FMTPN\_cH-8-gfM3iM9M9YTvrz7Pp6snTN8N7jkz-rzfLKAnoADWMxgoeQWBaRACTsk3EIN1SHCnSl-w%3D%3D.</a> The research was also discussed in an article published by *The Conversation*, 28 June 2018, Gaming or gambling: study shows almost half of loot boxes in video games constitute gambling, accessed at <a href="https://theconversation.com/gaming-or-gambling-study-shows-almost-half-of-loot-boxes-in-video-games-constitute-gambling-99013">https://theconversation.com/gaming-or-gambling-study-shows-almost-half-of-loot-boxes-in-video-games-constitute-gambling-99013</a>.
- <sup>4</sup> UK Gambling Commission (2017a) Commission warns parents over the perils of gambling linked to video games. Media release, 15 March 2017, posted at <a href="http://www.gamblingcommission.gov.uk/news-action-and-statistics/news/2017/Commission-warns-parents-over-the-perils-of-gambling-linked-to-video-games.aspx">http://www.gamblingcommission.gov.uk/news-action-and-statistics/news/2017/Commission-warns-parents-over-the-perils-of-gambling-linked-to-video-games.aspx</a>.
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- <sup>6</sup> UK Gambling Commission (2017b) *Virtual currencies*, eSports and social casino gaming position paper. <a href="http://www.gamblingcommission.gov.uk/PDF/Virtual-currencies-eSports-and-social-casino-gaming.pdf">http://www.gamblingcommission.gov.uk/PDF/Virtual-currencies-eSports-and-social-casino-gaming.pdf</a>.
- <sup>7</sup> UK Gambling Commission (2017c) *Young people and gambling 2017: A research study among 11-16 year olds in Great Britain.* Accessed at <a href="http://www.gamblingcommission.gov.uk/PDF/survey-data/Young-People-and-Gambling-2017-Report.pdf">http://www.gamblingcommission.gov.uk/PDF/survey-data/Young-People-and-Gambling-2017-Report.pdf</a>.
- <sup>8</sup> Gerken T (2018) Video game loot boxes are 'in violation of gambling legislation', according to the Belgium Gaming Commission. Published by BBC News, 26 April 2018. Accessed at <a href="https://www.bbc.com/news/technology-43906306">https://www.bbc.com/news/technology-43906306</a>.
- <sup>9</sup> Busby M (2018) 'Easy trap to fall into': why video-game loot boxes need regulation. *The Guardian*, 29 May 2018. Accessed at <a href="https://www.theguardian.com/games/2018/may/29/gamers-politicians-regulation-video-game-loot-boxes">https://www.theguardian.com/games/2018/may/29/gamers-politicians-regulation-video-game-loot-boxes</a>.
- <sup>10</sup> McCormack A (2018) Gamers call for government to act on 'gambling' loot boxes in video games. Published by *Hack*, ABC Online, 26 February 2018. Accessed at <a href="http://www.abc.net.au/triplej/programs/hack/gamers-call-for-action-on-loot-boxes/9485856">http://www.abc.net.au/triplej/programs/hack/gamers-call-for-action-on-loot-boxes/9485856</a>.
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- <sup>12</sup> Ferguson CJ (2018) It's time to end the debate about video games and violence. *The Conversation*, 16 February 2018. Accessed at <a href="https://theconversation.com/its-time-to-end-the-debate-about-video-games-and-violence-91607">https://theconversation.com/its-time-to-end-the-debate-about-video-games-and-violence-91607</a>.
- <sup>13</sup> Gray R (2015) Baroness Susan Greenfield slammed by Oxford colleagues over 'misleading and unfounded' claims the internet damages children's brains. *The Daily Mail*, 13 August 2015. Accessed at <a href="http://www.dailymail.co.uk/sciencetech/article-3196340/Baroness-Susan-Greenfield-slammed-Oxford-colleagues-misleading-unfounded-claims-internet-damages-children-s-brains.html.">http://www.dailymail.co.uk/sciencetech/article-3196340/Baroness-Susan-Greenfield-slammed-Oxford-colleagues-misleading-unfounded-claims-internet-damages-children-s-brains.html.</a>
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- <sup>18</sup> Dickins & Thomas, op. cit.
- <sup>19</sup> Blaszczynski A, Anjoul F, Shannon K, Keen B, Pickering D & Wieczorek M (2015) *Gambling harm minimisation report*. Report commissioned by the NSW Department of Trade and Investment, Regional Infrastructure and Services via the NSW Office of Liquor, Gambling and Racing's Responsible Gambling Fund. Accessed at <a href="https://www.liquorandgaming.nsw.gov.au/Documents/gaming-and-wagering/problems-with-gambling/research/gambling-harm-minimisation-report.pdf">https://www.liquorandgaming.nsw.gov.au/Documents/gaming-and-wagering/problems-with-gambling/research/gambling-harm-minimisation-report.pdf</a>.
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- <sup>21</sup> UK Gambling Commission (2017c), op. cit.
- <sup>22</sup> Dickins & Thomas, op. cit.
- <sup>23</sup> Stated in the section, 'Risks associated with gambling' on the raisingchildren.net.au website, at <a href="http://raisingchildren.net.au/articles/gambling.html">http://raisingchildren.net.au/articles/gambling.html</a>.
- <sup>24</sup> McGaurr L (2015) *Youth gambling in Australia*. Face the Facts Briefing, published by the Australian Clearinghouse for Youth Studies. Accessed via <a href="http://acys.info/resources/gambling/youth-gambling-australia-briefing/">http://acys.info/resources/gambling/youth-gambling-australia-briefing/</a>.
- <sup>25</sup> Accessed at https://www.esafety.gov.au/esafety-information/esafety-issues/online-gaming.
- <sup>26</sup> Accessed at https://www.esafetv.gov.au/education-resources/iparent/staving-safe/online-gambling.
- <sup>27</sup> Accessed at <a href="https://www.accc.gov.au/consumers/internet-phone/in-app-purchases">https://www.accc.gov.au/consumers/internet-phone/in-app-purchases</a>.
- <sup>28</sup> Accessed at https://childrenandmedia.org.au/app-reviews/watchlist.
- <sup>29</sup> Accessed at <a href="http://nogame.com.au/">http://nogame.com.au/</a>.
- <sup>30</sup> Accessed at https://www.esafety.gov.au/education-resources/iparent/online-safeguards/parental-controls.
- <sup>31</sup> Pitt et al, op. cit.
- <sup>32</sup> Dickins & Thomas, op. cit.
- 33 Pitt et al, op. cit.
- 34 Ibid.
- <sup>35</sup> Dickins & Thomas, op. cit.
- <sup>36</sup> Ibid.
- <sup>37</sup> Blaszczynski et al, op. cit.
- <sup>38</sup> Commonwealth Department of Human Services (2017) Gambling ministers agree to stronger online gambling protections. Media release, 8 September 2017. Accessed at <a href="http://pandora.nla.gov.au/pan/65939/20171219-1410/www.mhs.gov.au/media-releases/2017-09-08-gambling-ministers-agree-stronger-online-gambling-protections.html">http://pandora.nla.gov.au/pan/65939/20171219-1410/www.mhs.gov.au/media-releases/2017-09-08-gambling-ministers-agree-stronger-online-gambling-protections.html</a>.