IGEA

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Mr Neville Stevens AO
Review of Australia's Classification Regulation
Department of Communications and the Arts
Level 6, 23-33 Mary St
SURRY HILLS NSW 2010

Via email: consultation@classification.gov.au

Dear Mr Stevens

Please find enclosed in this letter some additional information that may assist your current review of Australia's Classification Regulation.

While we know that the formal consultation period for the review has concluded and you will shortly be reporting your findings and recommendations to Government, since we lodged our submission we have conducted a desktop review of research on the relationship between interactivity in video games and the effects of impactful content. We have prepared a summary of our findings that you may find helpful.

In our original submission to your review, we drew attention to the Guidelines for the Classification of Computer Games and the higher threshold and specific rules it places around the level of content permissible in video games compared to films. These differences exist for most of the classifiable elements and classification categories, but are especially evident for violence, drugs and sex. As our submission and many other submissions to the review pointed out, there is no evidence justifying these differences. Instead, the differences can best be understood from the prism of the decades-old moral panic around video games.

We note research from the Classification Branch that found that parents did not appear to consider that violence in video games were likely to have a higher degree of influence on their children's behaviour compared to film.[1] Even more intriguingly, in our submission we cited research conducted by the Branch that suggested that interactivity appeared to lessen the impact of violence on the player, a result that took the Branch by surprise.[2] Participants in the research cited some potential reasons that could explain their views, including that the sense of control given to the player as well as the focus on problem-solving had a moderating effect on the violence.

We wanted to investigate this latter finding further, given that it is contrary to the general prevailing narrative often cited by the media, certain advocacy groups and politicians when discussing the supposed dangers of video gaming. While we were unable to complete this work during the consultation period, we have done so now, and we welcome the opportunity to provide a summary for you.

With your approval, we would like to include this letter and enclosed summary into the body of evidence tendered for your review as an Addendum to our Submission.

We wish you all the best for the completion of your review.

Ron Curry
CEO

[1]. Department of Communications and the Arts, *Community standards and media content – research with the general public,* May 2017, https://www.classification.gov.au/sites/default/files/2019-10/community-standards-and-media-content-research-with-the-general-public.pdf, p.44

[2] ibid, p. 43.

Summary of our review of research on the relationship between interactivity and impacts in video games

Executive summary

There has been limited research conducted on the links between interactivity and the impact of content in video games. However, our review sheds light on a body of research that provides evidence for the view that interactivity can decrease the effect of content on a player compared to viewing content non-interactively. These findings offer an intriguing perspective that contradicts the prevailing view of a positive correlation between interactivity and impact.

In early 2019, IGEA conducted a simple desktop review of the available research on the interactivity in video games and whether there was evidence that it increased, decreased or had no effect on the impact of content compared to non-interactive content like film. The context of this research was the evidence given in our submission to the Australian Classification Review (the Review) citing research conducted by the then Department of Communications and the Arts (the Department) finding that, at least concerning violence, interactivity appeared to reduce the impact of content on the player.[1]

Limited research on interactivity available

Significant research has been conducted on whether violence in video games causes players and particularly children to be violent, with the overwhelming body of studies unable to show any evidence of a link. Even on the day that this summary was written, the American Psychological Association reaffirmed its resolution from 2015 that there is insufficient scientific evidence to support a causal link between violent video games and violent behaviour.[2] We address violence in detail in our submission, so we will not repeat this discussion here.

Most research on the psychological effects of video games to date has tended to focus on violence, meaning that much of the research on video game impacts has been limited to violence.[3] By contrast, we found that relatively little research

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[1] Department of Communications and the Arts, *Community standards and media content – research with the general public,* May 2017,
https://www.classification.gov.au/sites/default/files/2019-10/community-standards-and-media-content-research-with-the-general-public.pdf, p.43.

[2] American Psychological Association, *APA Reaffirms Position on Violent Video Games and Violent Behavior*, 3 March 2020, https://www.apa.org/news/press/releases/2020/03/violent-video-games-behavior.

[3] Hodge, S.E., Taylor, J. and McAlaney, J. (2019). It's Double Edged: The Positive and Negative Relationships Between the Development of Moral Reasoning and Video Game Play Among Adolescents. *Frontiers in psychology.* 10(28).

has been conducted on content other than violence, such as whether depictions of drug use or sex in video games had any impact on player behaviour, or studies on interactivity more generally.

We were unable to find much analysis postulating as to why there appeared to be an absence of such research, but in our view, possible reasons could include:

- the relatively greater political and media attention over the years on violence compared to other kinds of content in games has led to an overwhelming skew in research attention towards violence
- the relatively few games that include material like drug, nudity and sexual depictions compared with games that contain some level of violence
- difficulties in constructing useful or feasible research models or experiment parameters related to video games and drug use or sexual activity, compared to models that have sought to identify links between violent games and aggression, and
- regarding research on the impacts of content on children, the increased sensitivities and difficulties of conducting research on minors.

Similarly, limited research has been undertaken on the general relationship between interactivity in video games and video game effects, and some of these studies have shown mixed results.[4] Some commentators have noted in particular the difficulties of successfully isolating and measuring the impact of interactivity separate to other potential variables. Others have highlighted flaws and biases in sampling interactive content in existing studies that may have inadvertently favoured hypothesised patterns.

Acknowledging the constraints of our modestly-scoped desktop review, a key finding has been that there does not appear to be incontrovertible evidence one way or another that interactivity either increases or decreases the impact of content on the player, whether violence or any other content. However, while the effect of interactivity in games is surprisingly an area of limited research and therefore highlights the need for further academic attention in the future, such as through longitudinal studies, we have been able to identify some intriguing research that appears to help explain and provide an empirical basis to the Department's finding that interactivity can decrease the effect of impactful content in a game.

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[4] For example, see: DeHaan, J., Reed, W.M., & Kuwada, K. (2010). The effect of interactivity with a music video game on second language vocabulary recall. *Language Learning & Technology*, 14(2). Also see: Peng, W. (2008). The mediational role of identification in the relationship between experience mode and self-efficacy: Enactive role-playing versus passive observation. *Cyberpsychology & Behavior*, 11(6).

How interactivity can reduce content impacts

Overall, there is a commonly accepted academic view that the effects of interactivity should not be exaggerated, and that interactivity may instead moderate both the negative (eg. behavioural) and positive (eg. educational) effects of video games.[5] Notwithstanding this view, the objective of our review was to investigate a potential theoretical basis for the Department's research finding that interactivity in video games appeared to decrease the impact of content compared to film content, at least concerning violence. Our review, therefore, sought to identify academic studies and research that might explain or at the very least help us better understand why this may be the case.

Before we explore this, we will briefly note the more popular narrative around video games in the media and policy discourse, being the prevailing assumption that interactivity accentuates the risks and impacts of media content compared to observed content like film. There are two primary theories around how interactivity might be positively correlated with the impact level of content in games. One argument is that the interactivity of video games assists players to form specific, favourable attitudes to certain patterns of behaviour, reinforcing the player's learning and increasing the likelihood that the player will repeat that behaviour in the future - either inside or outside of the game.[6] Another argument is that by providing immediate and ongoing feedback on a player's decisions through in-game consequences, both positive and negative, the immersive nature of interactivity in games may intensify game effects.[7]

However, the focus of our review was to highlight research that appears to show or explain how interactivity may instead decrease the impact of certain content compared to non-interactive content such as film and television programs. Research findings that we found to demonstrate this link include:

Interactivity and mental processes

- Interactivity occupies a greater proportion of a player's mental capacity compared to non-interactive media, reducing the impact of game effects as fewer mental resources are left for other cognitive processes.[8]

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[5] Weber, R., Behr, K.M., & Demartino, C. (2014). Measuring Interactivity in Video Games. *Communication Methods and Measures*. 8.

[6] For example, see: Bandura, A. (2009). Social cognitive theory of mass communication. In J. Bryant & D. Zillman (Eds.), *Media effects. Advances in theory and research* (pp. 94-124). Mahwah, NJ. Lawrence Erlbaum Associates.

[7] For example, see: Carnagey, N.L., & Anderson, C.A. (2004). Violent video game exposure and aggression. *Minerva Psichiatrica*, 45.

[8] For example, see: Lang, A. (2000). The information processing of mediated messages: A framework for communication research. *Journal of Communication*, 50(1). Also see: Yoo,

- The brain's focus on problem-solving in video games may moderate other effects of interactivity. In particular, a meta-analysis has found that violent games, and especially shooting games, helped to focus and develop the cognitive functions and spatial awareness of children.[9]
- Video games and particularly violent games may provide an emotional release for players, such as enabling them to vent existing aggression and help them to 'get it out of their system' in a safe digital environment.[10]

Player agency within games

- The ability to interact and make decisions in a video game can give players a sense of agency and allow them to more closely identify with their character, compared to merely viewing a protagonist in a film, potentially reducing the effects of impactful content as the player has a more nuanced understanding of what is happening on-screen.[11]
- The ability to carry out violence and other 'bad' behaviour in the virtual environment of games appears to accentuate feelings of guilt associated with ethical violations and increase the moral sensitivity of players.[12]
- Some studies have shown that rather than desensitising players to violence and other impactful content, which has been used as a rationale for highlighting the dangers of video games, interactivity in games has no negative impact on a player's empathy or ability to process emotion.[13]

Games as a moral educator

- Playing video games in a multi-player context helps players to learn to cooperate with others, stimulating higher moral reasoning and forcing them to consider the societal impacts of their behaviours better.[14]

S.C., & Peña, J. (2010). Do violent video games impair the effectiveness of in-game advertisements? The impact of gaming environment on brand recall, brand attitude, and purchase intention. *Cyberpsychology, Behavior, and Social Networking*. 14(7-8).

[9] Granic, I., Lobel, A., & Engels, R.C.M.E. (2014). The benefits of playing video games. *American Psychologist, 69*(1).

[10] Cunningham, S., Engelstätter, B., & Ward, M.R. Understanding the Effects of Violent Video Games on Violent Crime (2011). ZEW - *Centre for European Economic Research Discussion Paper*. No. 11-042.

[11] Walter, N. & Tsfati, Y. (2018). Interactive Experience and Identification as Predictors of Attributing Responsibility in Video Games. *Journal of Media Psychology*, 30

[12] Grizzard, M., Tamborini, R., Lewis, R., Wang, L., & Prabhu, S. (2014). Being Bad in a Video Game Can Make Us Morally Sensitive. *Cyberpsychology, behavior and social networking*. 17.

[13] Szycik, G.R., Mohammadi, B., Münte, T.F., & Te Wildt, B.T. (2017). Lack of Evidence That Neural Empathic Responses Are Blunted in Excessive Users of Violent Video Games: An fMRI Study. *Frontiers in psychology*, 8(174).

[14] Khoo, A. (2012). Video games as moral educators? *Asia Pac. J. Educ.* 32.

- The fact that games can reward or punish in-game decisions provides a powerful mechanism that can affect impact, as it helps the player to understand 'right' and 'wrong' behaviour.[15] Given that the vast majority of video games perpetuate a 'righteous' narrative, such as defeating an evil enemy or saving an innocent party, even high impact content is moderated by interactivity where it is justified by that narrative.[16]
- The impact of interactivity is not a blunt instrument and can be safely calibrated, such as for education. For example, the evaluation of the Australian drug education game *Pure Rush* (see below) showed that it was an effective way to teach players, despite the sensitive topic.[17]

Pure Rush: Drug Education Game

Pure Rush is a drug education game created by [Positive Choices](), an Australian Government-funded online resource providing interactive evidence-based drug education resources for schools. Developed by the University of Sydney's Matilda Centre for Research in Mental Health and Substance Use and educational game designer 2and2, *Pure Rush* is a side-scrolling platform game that enables the player to choose to consume or avoid particular drugs. Consuming a drug will show an on-screen drug effect and display a warning, while avoiding a drug enables the player to proceed towards a music festival.
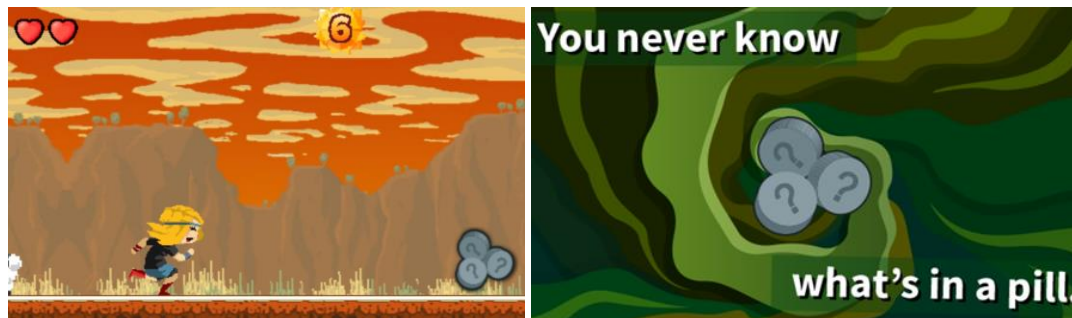
As an aside, *Pure Rush* has not been classified by the Classification Board, although it has been classified G under the IARC tool. If the Board had classified it, we argue that this Government-funded game for children may need to be classified R18+ due to interactive drug use, again highlighting the problematic treatment of game content under the Classification Guidelines.

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[15] Heron, M.J., & Belford, P.H. (2014). Do you feel like a hero yet? Externalised morality in video games. *J. Games Crit.* 1.

[16] Stang, S. (2019). "This Action Will Have Consequences": Interactivity and Player Agency, *Game Studies*, 19(1).

[17] Stapinski, L.S., Reda, B., Newton, N., Lawler, S., Rodriguez, D., Chapman, C., & Teesson, M. (2010). Development and evaluation of 'Pure Rush': An online serious game for drug education. *Drug and Alcohol Review*. 37(1).