Beneath the label: Assessing video games' compliance with ESRB and PEGI loot box warning label industry self-regulation

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AUTHOR'S NOTE

INTRODUCTION

This extended abstract considers the 'margins' between video games and gambling embodied by so-called 'loot boxes' and the regulation thereof. Players spend real-world money on this form of in-game monetisation to obtain randomised rewards (Nielsen and Grabarczyk 2019). Concerns have been raised about loot boxes' similarities with gambling and the risks that consumers might overspend money and experience harm (Zendle and Cairns 2018; Garea et al. 2021; Spicer et al. 2021). Children and other vulnerable consumers (*e.g.*, people experiencing problem gambling issues) might be at particular risk of harm. Many countries are considering imposing legal regulation and a few countries have already taken regulatory actions. However, in most countries at present, paid loot boxes are specifically regulated only through industry self-regulation (Xiao et al. 2022). Previous research has repeatedly considered probability disclosures informing players of their odds of winning specific items (e.g., Xiao, Henderson, and Newall 2021), but another measure, text-based warning labels attached to age ratings, has received little research attention.

The Entertainment Software Rating Board (ESRB) (2022) reviews the content of video games and provides age ratings depending on the inclusion of certain material, *e.g.*, the amount and degree of violence and sexual content, in North America. PEGI (Pan-European Game Information) (2022) performs a similar function in Europe generally. Both organisations were initially hesitant to tackle the loot box issue (Perks 2021). However, recognising the concerns that have been raised about loot boxes, on 13 April 2020, the ESRB and PEGI announced that they will attach an additional text-based warning to the age ratings of video games containing loot boxes (Xiao 2021). The ESRB uses the 'In-Game Purchases (Includes Random Items)' 'interactive element', whilst PEGI uses the 'In-game Purchases (Includes Paid Random Items)' 'content

descriptor'. These two largely identical labels are intended to cover, according to the ESRB (2020), 'all transactions with randomized elements.' The ESRB (2020) and PEGI both consciously chose to specifically *not* use the term 'loot boxes' to 'avoid confusing consumers.'

These labels were intended to provide additional information to help consumers make more informed purchasing decisions. However, they have been criticised for not providing sufficient information (Xiao 2021) and for being ineffective under experimental conditions (Garrett et al. 2022).

Countries have considered, or are considering, requiring games containing loot boxes to display a warning by law (Xiao 2022). Previous research has found that other industries, such as alcohol, tobacco, and gambling, have all taken various corporate actions that likely reduced the effectiveness of product warnings. Loot box probability disclosures are known to have been implemented sub-optimally by video game companies: specifically, lacking prominence and being difficult to access (e.g., Xiao et al. 2021). Compliance with Belgium's 'ban' on loot boxes through applying pre-existing gambling law has also been poor (Xiao 2023). Considering prior research, reasonable doubt must be cast on the compliance rate with the self-regulatory requirement of attaching loot box warning labels.

The present series of two studies will not seek to empirically assess the efficacy of the loot box self-regulatory labels on consumer behaviour and instead will seek to assess (i) whether the ESRB and PEGI have *consistently* applied the loot box self-regulatory warning label and (ii) whether companies have complied with this self-regulation by *accurately* labelling games containing loot boxes with the relevant notice.

STUDY 1
Because the ESRB and PEGI use the same definition for what monetisation mechanics would be covered by the label. One must reasonably expect that the ESRB and PEGI applied the warning to games *consistently*, such that all games that have been labelled with the 'In-Game Purchases (Includes Random Items)' interactive element by the ESRB should also have been labelled with the 'In-game Purchases (Includes Paid Random Items)' content descriptor by PEGI and *vice versa*.

A list of games that have been marked with the label by the ESRB would be produced through its age rating search tool, as will a list of games so labelled by PEGI. The games on these two lists would be cross-checked to confirm whether the other organisation has also labelled the game as containing loot boxes. A 'consistency rate' will be calculated as follows:

$$\frac{Games\ that\ have\ been\ labeled\ with\ the\ loot\ box\ warning\ by\ both\ the\ ESRB\ and\ PEGI}{(All\ games\ on\ the\ ESRB\ and\ PEGI\ Lists\ -\ Any\ duplicate\ or\ excluded\ games)}$$

If a consistency rate of less than 95% is found, then the measure would be criticised as not having been consistently applied by the ESRB and PEGI.

STUDY 2
The ESRB and PEGI only play a direct role when rating *physically* published games and are only *indirectly* involved in the rating of each individual *digitally* released game. The IARC (International Age Rating Coalition) (2022) instead provides the label for games on the Google Play Store after the company completes a self-reporting questionnaire.

A list of 100 random games that were previously observed as having contained loot boxes in prior studies will be generated. The Google Play Store pages of those games will be accessed to check whether the label is being displayed. If so, then the game will be marked as 'compliant.' If no label is displayed, then the game will be replayed in accordance with the methodology of previous loot box studies (e.g., Zendle et al. 2020) to confirm that it continues to contain loot boxes: if it still does, then the game will be marked as 'non-compliant,' but if it no longer does, then it will be excluded from the sample. The 'compliance rate' with the loot box warning self-regulation will be calculated as follows:

$$1 - \frac{\textit{Games newly assessed as containing loot boxes but not displaying the interactive element}}{(\textit{All games previously known to previously contain loot boxes} - \textit{Games newly assessed as not containing loot boxes})}$$

If the compliance rate will be less than 95%, then the measure will be criticised as not having been effectively complied with by companies.

CONCLUSIONS

Conclusions will be drawn as to whether the measure has been complied with by companies to an adequate degree and whether the measure has achieved its self-regulatory aims or require improvements. If so, then no further regulation would be recommended. If not, then the study will recommend the existing measure be improved or stricter regulation be brought to ensure consumer protection against loot box harms.

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