



# Failure of industry self-regulation in loot box labelling

A recommendation by **Chris Chambers**  based on peer reviews by of the STAGE 2 REPORT:

Leon Y. Xiao (2023) Beneath the label: Unsatisfactory compliance with ESRB, PEGI, and IARC industry self-regulation requiring loot box presence warning labels by video game companies. Missing preprint\_server, ver. 2, peer-reviewed and recommended by Peer Community in Registered Reports. <https://doi.org/10.31219/osf.io/asbcg>

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Paid loot boxes – items bought for real-world money that offer randomised rewards – are a prevalent feature of contemporary video games (Zendle et al., 2020). Because they employ random chance to provide rewards after spending real money, loot boxes have been considered a form of gambling, raising concerns about risk of harm to children and other vulnerable users. In response, some countries have taken legal steps to regulate and even ban the use of loot boxes, with only limited success so far (Xiao, 2022). At the same time, the Entertainment Software Rating Board (ESRB) and PEGI (Pan-European Game Information) now expect games that contain loot boxes to be marked with warning labels that, in theory, will enable users (including parents) to make more informed decisions. These requirements by ESRB/PEGI are not legally binding and may be considered a form of industry self-regulation. In the current study, Xiao (2023) investigated the effectiveness of self-regulation in the use of loot box labels. Study 1 examined the consistency of warning labels by the ESRB and PEGI, with the expectation that if self-regulation works as it should then these labels should always (or nearly always) co-occur. Study 2 established the compliance rate for labelling among popular games that are known to contain loot boxes, with a rate of  $\geq 95\%$  considered to be successful. The results of both studies reveal deficiencies in industry self-regulation. The consistency rate of warning labels by the ESRB and PEGI was just 39.4% in preregistered analyses, rising to 83.9% in an unregistered exploratory analysis that took into account industry responses to the findings. Even at this upper bound, this rate is lower than expected by complete (or near-complete) consistency. The results of Study 2 indicate that only 29% of games on the Google Play Store known to contain loot boxes were accurately labelled, indicating that 71% were non-compliant with industry requirements. Following careful evaluation, the recommender judged that the manuscript met the Stage 2 criteria and awarded a positive recommendation. **URL to the preregistered Stage 1 protocol:**

<https://osf.io/e6qbm>

**Level of bias control achieved: Level 3.** *At least some data/evidence that was used to the answer the research question had been previously accessed by the authors (e.g. downloaded or otherwise received), but the authors certified that they had not yet observed ANY part of the data/evidence prior to in-principle-acceptance.*

**List of eligible PCI RR-friendly journals:**

- [Addiction Research & Theory](#)
- [F1000Research](#)
- [Peer Community Journal](#)
- [PeerJ](#)
- [Royal Society Open Science](#)
- [Swiss Psychology Open](#)
- [WiderScreen](#)

**References:**

1. Zendle, D., Meyer, R., Cairns, P., Waters, S., & Ballou, N. (2020). The prevalence of loot boxes in mobile and desktop games. *Addiction*, 115(9), 1768-1772. <https://doi.org/10.1111/add.14973>
2. Xiao, L. Y. (2022). Breaking Ban: Belgium's ineffective gambling law regulation of video game loot boxes. Stage 2 Registered Report, acceptance of Version 2 by Peer Community in Registered Reports. <https://doi.org/10.31219/osf.io/hnd7w>
3. Xiao, L. Y. (2023). Beneath the label: Unsatisfactory compliance with ESRB, PEGI, and IARC industry self-regulation requiring loot box presence warning labels by video game companies, acceptance of Version 2 by Peer Community in Registered Reports. <https://doi.org/10.31219/osf.io/asbcg>

## Reviews

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