I thank the managing board of PCI Registered Reports and the authors for the opportunity to peer review this interesting stage 1 report using digital trace data alongside longitudinal wellbeing data to explore the quality and context of play on a large scale.

Reviewer's disclosure:
I am a first-year PhD-student, and lack expertise to comment on things like measures and statistical R-analysis. I hope my comments are still useful for the authors.

Technical:

-The ORCID-link supposedly for Przybylski A. is actually the link to Ballou's ORCID.
-The authors may consider registering Limitations already at Stage 1, e.g. for reflexive reporting

Basic Psychological Needs in Games and Wellbeing (Study 1)

The simultaneous validity testing of BANG hypotheses and expanding it is impressive and commendable. I hope its use will give qualitative context to the idea of problematic displacements through games. Consider the subjectivity and limitations of self-reporting displacements and related information.

Game Genres and Wellbeing (Study 3)

The choice to use structured metadata repositories for genre categorization is sufficiently justified, and the acknowledgment of the limitations of self-report and researcher-ascribed taxonomies is valuable.
One of these justifications is the accomodation of genre fluidity and evolution (p. 13). This is true within the context of contemporary, user-generated tags and genres. However, I recommend consideration of the fact that once analysis is being done, the genre classifications will have to become a fixed set and can desync with the genres presented by the database.

Page 13 talks of the community repositories in generalities, and the service used in the study is only specified in the method-section. It then remains unclear if the genre classifications on Internet Games Database are controlled by developers, service admins, the public, or some combination of these. I read it as implied that the study will not consider "themes", only "genres" within the service, but I wish it was explicitly stated and the definitions considered. The categorization used by IGDB can be questioned and the choice to include or exclude these different layers of classification should receive careful justification despite the already explored limitations of all genre categorization.

Method:

It would be interesting to see both details and analysis of the Nintendo data (Table 1). What is the exact definition (or list) of "close partners"? The note on the sales-dominance of 1st party games is valuable, but increased analysis could help the paper show how the lack of 3rd party data could affect, for example, genre-related data. This consideration would increase data validity and transparency.

Page 14 has the only mention of "game modes" in the paper. Such data is not mentioned in Table 1, so I deduce that this data will be extracted through the surveys. Details on the extraction and relevance of this data would be useful.

Exclusion Criteria and Missingness

Consider if additional work into understanding and excluding false hours from digital tracking could help increase validity and reflexivity. While technical problems and system clock manipulation are concerns, I would also consider the risk of "idle hours", leaving games on while not actively playing. Ensuring that self-reported and digital trace data correlate is a good way to mitigate this risk, but I didn't see specifications on how closely the hours should correlate to be considered valid.

I considered the report novel, well-written, and impressive in its depth and scale.