

Review: Reconstructing Gaming Disorder: A Taxonomy by Registered Report

I very much enjoyed reviewing this registered report, documenting a large longitudinal project aiming to provide a qualitative foundation for an in-depth understanding of gaming disorder. It is timely and will make a great contribution to the current state of the scientific literature. I enjoyed reading about this multi-site approach and congratulate the authors for the great coordinate effort.

I have split my review into major and minor points and hope they help the authors improve the registered report, as there are a couple areas where more attention is warranted.

Major

- 1) The manuscript emphasises the clinical relevance of quantitative research on gaming addiction to inform contemporary thinking and classification instruments. However, this is no further mentioned throughout the paper and it remains unclear whether the present analysis approach can meet these ambitions. In particular, the authors indicate that that the health scale data will not be used in later analyses, without providing reason for doing so. I believe a concrete plan of how the present research may inform gaming disorder classification (with or without analysing health outcomes) would positively contribute to the quality of this work. Besides, if health outcomes are not to be analysed, please provide reasons for doing so. I was surprised to see health removed from the analysis given it is a primary outcome of interest, with direct relevance to research question A: can passionate and pathological gaming be distinguished? A data analysis table may be utilized to demonstrate how the present research aims to fulfil the ambitious objectives.
- 2) The present proposal sets out to measure participants 'health' via different measurement scales that remain to be named. Please define the to-be assessed constructs and what measures will be used to capture the said constructs. In the current state, the reader is left guessing which data may later be used for clustering analyses.
- 3) The sampling approach involves asking local esports organisations to recruit participants for the project. This introduces systematic bias and players who are doing well may be more inclined to participate in this research. While it may be hard to circumvent this bias in a hard-to-reach population, this should be acknowledged in the manuscript and later analyses.
- 4) The authors anticipate 33% dropout in the first year and will sample another batch of participants after 12 months. However, no such procedure is described for the 2nd and 3rd year. How will later dropout be dealt with? Perhaps, oversampling is an appropriate way of dealing with anticipated dropout? Moreover, the fact that participants start at different times means later analyses will collate data from different time periods. How will time be accounted for?
- 5) The analyses procedures are far too vague and "culture specific contextual factors" should be known prior to data collection. As such, the researchers need to specify which factors they aim to include in the analyses and for what reason.
- 6) "Depending on the time of writing, we may utilize cross-sectional or longitudinal data" (l. 407) is too vague to be included in a registered report.

Minor

- 1) While I do appreciate the sentiment, the first paragraph of the analysis section does not provide information on to-be performed analyses (pp. 6-7, ll. 261-269). I believe this statement is of little interest to readers and should be devoted to the present analyses instead. More generally, I am not familiar with the term 'bayesiastic' and think you may be referring to 'bayesian'?
- 2) The authors mention that 45 participants from group C are selected for an additional phenomenological annual interview. Currently, there is no information on how these individuals will be selected.
- 3) Raters are repeatedly used throughout the procedure. To quantify their agreement, I would suggest documenting their inter-rater reliability coefficient.
- 4) Please use consistent formatting throughout the manuscript.
- 5) Many, if not most gamers will be playing several games at a time. Likewise, the games played may change over the three years of participation. How will this be reflected in the research procedure and analyses?
- 6) For the sake of readability, avoid abbreviations (e.g., IPA p. 9, l. 358) and/or make sure to define any acronyms.
- 7) The data statement and ethics (p. 10, ll. 381-389) is too vague. "Big qual" datasets and "non-open forms of participation" should be further defined. I would suggest focusing on the to-be performed analyses, rather than the underlying motivations (e.g., "our goal is to share as much as possible of the generated data").
- 8) Please combine supplementary files for readability.