Peer Review Report

Review Report on Behind the screen: Associations between focus on self-presentation and social comparison on social media and mental well-being in early adolescence.

Original Article, Int. J. Public Health

Reviewer: Reviewer 1 Submitted on: 19 Mar 2025

Article DOI: 10.3389/ijph.2025.1608425

EVALUATION

Q 1 Please summarize the main findings of the study.

Self-presentation and upward social comparison on social media is significantly associated with decreased well-being, especially in girls

Q 2 Please highlight the limitations and strengths.

strengths: timely topic; high-quality sample

limitations: the paper needs a more thorough literature review (used in both the intro and discussion); some methodological aspects need justification or rework (especially the categorization of some variables)

Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

The paper "Behind the Screen: Associations Between Focus on Self-Presentation and Social Comparison on Social Media and Mental Well-Being" appeared highly promising, given the relevance of the topic and the quality of data. Overall, the paper is well-written and easy to follow. However, several aspects require further attention.

First, the literature review appears somewhat lacking. Several statements would benefit from citations—this is particularly evident in the discussion section, for example, in lines 300–310, where references from developmental psychology are absent (this is just an example, the problem is throughout the text). Additionally, some key aspects relevant to this study are not sufficiently introduced. In particular, I expected a more detailed description and theoretical reasoning of gender differences (related to media use & self-presentation) in the introduction. Furthermore, in lines 49–55, the claim that older studies examined the effects of social media use on mental health primarily through time spent online is described as a questionable approach. Does this imply that time spent online has no effect? Is this the reason why no time-related variables were included in the analysis?

Second, I have concerns regarding certain aspects of the analysis and results. For instance, why was the Social Media Disorder Scale categorised? As I understand it, this is a hypothesised disorder that is not officially recognised, and no clinically validated cut-off exists—only hypothetical thresholds derived from survey studies. In this context, treating it as a continuous variable that reflects the degree of the potential issue, rather than as a binary disorder/non-disorder classification, would seem more appropriate. However, I may be mistaken and would appreciate further clarification on this point.

Additionally, I am not entirely convinced by the primary analysis and the results presented in Table 2. In particular, the rationale behind dividing the independent variable into four quartiles is unclear. Did the authors assume that self-presentation does not increase linearly and therefore categorised the variable? If so, a quartile-based division is not the most suitable approach, and a method such as categorisation based on standard deviations would have been preferable. However, if there is no theoretical justification for

categorisation, I do not see its purpose at all. Moreover, the analysis in Table 2 raises another concern. The way it was conducted seems like over-testing, which may increase the risk of a Type I error.

PLEASE COMMENT	
Q 4	Is the title appropriate, concise, attractive?
yes	
Q 5	Are the keywords appropriate?
yes	
Q 6	Is the English language of sufficient quality?
yes	
Q 7	Is the quality of the figures and tables satisfactory?
Yes.	
Q 8	Does the reference list cover the relevant literature adequately and in an unbiased manner?)
no - the l	terature review should be more thorough
QUALITY	ASSESSMENT
Q 9	Originality
Q 10	Rigor
Q 11	Significance to the field
Q 12	Interest to a general audience
Q 13	Quality of the writing
Q 14	Overall scientific quality of the study
REVISION	LEVEL
Q 15	Please make a recommendation based on your comments:
Major rev	sions.