

The Mediating Role of Digital Self-Control in the Relationship Between Fear of Missing Out, Passive Social Media Use, and Sleep Disturbance Among Adolescents

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E d i t o r	R e v i e w e r s
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1. Round 1

1.1. Reviewer 1

Reviewer:

The manuscript argues that “one mechanism that may help explain why fear of missing out and passive social media use contribute to sleep disturbance is digital self-control.” This is the central theoretical proposition of the article, yet the construct is not sufficiently anchored in an explicit psychological model. The authors should strengthen this section by explaining whether digital self-control is conceptualized as domain-specific inhibitory control, self-regulation, behavioral restraint, resistance to digital temptation, or goal-conflict management. The dual-systems framework mentioned later should be integrated directly into the mediation hypothesis so that each proposed path—FoMO to self-control, passive use to self-control, and self-control to sleep disturbance—is theoretically derived rather than primarily inferred from adjacent empirical findings.

The final portion of the Introduction states that “digital self-control may therefore represent a more proximal behavioral mechanism linking these emotional and usage-related vulnerabilities to concrete health-related consequences such as disturbed sleep.” This is an important claim, but the article should address alternative causal ordering before specifying the mediation model. Sleep disturbance itself can impair executive functioning and inhibitory control and may increase passive nighttime

social media use because adolescents are awake and seeking stimulation. Accordingly, the Introduction should acknowledge plausible reciprocal pathways and explicitly justify why the hypothesized direction was selected for testing, particularly given the cross-sectional design.

The measurement paragraph on digital self-control states that the instrument assessed “the ability to resist the urge to check social media immediately after receiving a notification, delay online engagement when completing important activities, discontinue social media use at an intended time, avoid habitual or automatic checking of digital platforms, control digital media use during study or family activities, and refrain from excessive smartphone or social media use before sleep.” Several of these items directly reference bedtime or nighttime behavior, which may create construct overlap with the sleep outcome. The authors should examine whether the digital self-control instrument contains sleep-specific items that artificially strengthen the mediator-outcome association. A sensitivity analysis excluding bedtime-related self-control items would materially improve confidence that the observed mediation is not partly due to criterion contamination.

Authors uploaded the revised manuscript.

1.2. Reviewer 2

Reviewer:

In the Study Design and Participants subsection, the manuscript reports that “a total of 612 adolescents were included in the final analytic sample” and that participants were recruited from “public secondary schools in several urban and suburban communities.” The sampling procedure requires substantially greater methodological transparency. The authors should report the number of schools approached, the number agreeing to participate, geographic distribution within Canada, how schools and classes were selected, the number of adolescents invited, parental consent rates, adolescent assent rates, exclusion numbers, and the final participation rate. Without this information, it is difficult to judge selection bias or the representativeness of the sample.

The Methods indicate that participants were “between 13 and 18 years of age” and enrolled in Canadian secondary schools, while the Findings report students from Grades 8 through 12. The authors should verify and explain the age-grade structure, particularly because Grade 8 placement varies across Canadian provinces and school systems. The article should specify the province or provinces in which data were collected and describe whether all participating schools used the same secondary-school grade configuration. This is important both for reproducibility and for assessing the developmental comparability of participants across educational settings.

The eligibility criteria include “using at least one social media platform on a regular basis,” but “regular basis” is not operationally defined. This criterion may meaningfully affect the sample and the distributions of the study variables. The authors should specify the minimum frequency or duration of use required for eligibility—for example, daily use, use on a specified number of days per week, or a minimum amount of time. The manuscript should also explain how eligibility was verified and whether adolescents with very low social media exposure were excluded before or after recruitment.

The Data Collection Tools subsection provides a detailed description of the standard Fear of Missing Out Scale but describes passive social media use and digital self-control in more generic terms without identifying the exact instruments, original developers, number of items, or validation sources. This is a major reproducibility concern. For example, the manuscript states that “items were formulated to distinguish passive consumption of social media content from active behaviors,” which suggests that the passive use scale may have been adapted or constructed for this study. If so, the authors must report item development procedures, expert review, pilot testing, factor structure, response format, scoring, and evidence of validity. The same level of documentation is needed for the digital self-control measure.

Authors uploaded the revised manuscript.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.