

Structural Modeling of Nomophobia Based on Brain–Behavioral Systems and Intolerance of Uncertainty: The Mediating Role of Emotional Self-Efficacy among University Students

Amin. Moareknezhad¹, Andisheh. Golshan^{1*}

¹ Department of Psychology, Badrud Branch, Islamic Azad University, Isfahan, Iran

* Corresponding author email address: andisheh_golshan@yahoo.com

E d i t o r	R e v i e w e r s
Thseen Nazir ¹ Professor of Psychology and Counseling Department, Ibn Haldun University, Istanbul, Turkey thseen.nazir@ihu.edu.tr	Reviewer 1: Mohammadreza Zarbakhsh Bahri ¹ Associate Professor, Department of Psychology, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran. Email: M.Zarbakhsh@Toniau.ac.ir Reviewer 2: Seyed Ali Darbani ¹ Assistant Professor, Department of Psychology and Counseling, South Tehran Branch, Islamic Azad University, Tehran, Iran. Email: Ali.darbani@iau.ac.ir

1. Round 1

1.1. Reviewer 1

Reviewer:

The paragraph stating that “The original methodology section proposed multistage cluster random sampling” followed by “for the present article, the sampling procedure is reported as convenience sampling” should be completely rewritten. A scientific article should describe the procedure that was actually implemented rather than narrating differences between an earlier thesis proposal and the final manuscript. The present wording reads as an editorial note and creates uncertainty regarding whether participants were recruited randomly, through classes, through online channels, or solely by accessibility. The authors should provide one transparent, reproducible description of the final sampling procedure, including how students were approached, which faculties or classes were accessed, whether recruitment occurred online or in person, who distributed the invitation, and whether participation was open to all eligible students. Any discussion of procedures that were originally planned but not implemented should be removed from the published article because it does not constitute part of the completed methodology.

The manuscript needs to report psychometric evidence for every multi-item instrument in the present sample. The Methods provide descriptions of the BIS/BAS scale, Intolerance of Uncertainty Scale, emotional self-efficacy measure, and NMP-Q,

but the Results do not report internal consistency coefficients or evidence supporting their measurement structure in these 186 participants. Reliance on psychometric findings from previous studies is not sufficient, particularly when the scales are being used in a different linguistic and cultural setting and when SEM constitutes the principal analysis. At minimum, report Cronbach's alpha and preferably McDonald's omega for each total scale and any subscale used in the analyses. If constructs were modeled as latent variables, confirmatory factor analysis should precede the structural model, with standardized factor loadings, composite reliability, and convergent/discriminant validity reported. If only total scores were used as observed variables, this should be explicitly stated and the implications of measurement error acknowledged.

The descriptive reporting of nomophobia requires correction and clarification. The manuscript states that the NMP-Q contains 20 items rated on a 7-point scale, for which conventional reporting typically produces a total score, yet Table 2 reports a nomophobia mean of 3.85 with $SD = 0.89$. This appears to be an item-level average rather than the original total score, but the transformation is never explained. The authors should state whether scale totals, item means, standardized scores, or some other transformation were used throughout the analyses. If an item mean was calculated, provide the rationale and explain how it maps onto the original instrument. For descriptive interpretability, it would also be useful to provide the corresponding total NMP-Q mean and standard deviation and, if severity categories are used, the numbers and percentages of participants within established nomophobia severity bands. All tables, regression coefficients, and SEM analyses must use a consistently defined score metric.

The SEM methodology is insufficiently specified. The manuscript states that "Brain-behavioral systems and intolerance of uncertainty were specified as exogenous predictor variables, emotional self-efficacy as an endogenous mediator, and nomophobia as the final endogenous outcome," but it is unclear whether these constructs were modeled as latent variables defined by questionnaire indicators or as observed composite scores. This distinction is fundamental. If total scale scores were entered directly into AMOS, the analysis is more accurately described as observed-variable path analysis within an SEM framework rather than a full latent-variable structural equation model. Conversely, if latent variables were used, the authors must report the measurement model, indicator assignment, factor loadings, measurement-error terms, construct correlations, and measurement-model fit before evaluating structural paths. A path diagram should also be included showing all estimated paths, covariances among exogenous variables, residual terms, and standardized coefficients. Without this information, readers cannot reproduce or critically evaluate the reported model.

Authors uploaded the revised manuscript.

1.2. Reviewer 2

Reviewer:

The final analytic sample comprised 186 students, yet the manuscript notes that the original sampling plan anticipated approximately 300–350 participants for structural modeling. This discrepancy requires a formal justification of sample adequacy. The statement that 186 usable questionnaires were ultimately analyzed is insufficient to demonstrate that the study had adequate statistical power for the proposed SEM, particularly because several direct and indirect pathways were simultaneously estimated. The authors should provide an a priori or sensitivity power analysis based on the number of predictors, expected effect sizes, significance level, and desired statistical power, or alternatively provide a simulation-based justification appropriate for SEM. The number of freely estimated parameters and the ratio of cases to parameters should also be reported. The issue is particularly relevant to the relatively small FFS coefficient and indirect effect, whose statistical stability may be sensitive to sample size. The manuscript should therefore demonstrate empirically, rather than assume, that $N = 186$ was sufficient for the specified model.

The participant-flow information needs substantially greater transparency. The manuscript states that "A total of 200 questionnaires were distributed" and that 186 complete questionnaires were retained, but the reader is not told precisely why the remaining 14 cases were excluded. Elsewhere, incomplete questionnaires, patterned responses, and apparently inconsistent responses are mentioned as exclusion reasons, but the number excluded for each criterion is not reported. Please provide a clear participant-flow statement indicating the number approached or invited, number who began participation, number who

submitted questionnaires, number excluded for incompleteness, invalid response patterns, withdrawal, or other reasons, and the final number analyzed. The criteria used to define a “patterned” or “clearly invalid” response should also be operationalized. Additionally, the authors should explain whether item-level missing data occurred among the 186 retained cases and, if so, how these missing values were handled statistically. Transparent reporting of attrition and data screening is necessary for assessing potential selection bias and reproducibility.

The eligibility criteria contain an internal inconsistency that must be resolved before publication. The manuscript explicitly acknowledges that an earlier eligibility section referred only to undergraduate and master’s students, whereas the analyzed sample includes 25 doctoral students, and then instructs that the article “should use the broader and empirically accurate criterion.” Such editorial commentary should not remain in the Methods. The authors must verify the actual protocol under which participants were recruited and report the eligibility criteria exactly as applied during data collection. If doctoral students were eligible from the outset, this should simply be stated. If they were recruited despite an originally narrower protocol, the authors should explain whether this constituted a protocol amendment and whether institutional approval covered the expanded population. Eligibility criteria cannot be retrospectively modified solely to match the resulting dataset without explanation because this affects reproducibility and potentially the interpretation of the target population.

The exclusion criterion concerning “a history of a diagnosed severe psychiatric disorder” requires clarification and methodological justification. The manuscript does not indicate how this information was obtained, whether participants were asked a screening question, whether diagnoses were self-reported, whether any diagnostic documentation was required, or how “severe psychiatric disorder” was defined. If this criterion was actually applied, the authors should specify the disorders included, the assessment method, and the number of students excluded on this basis. If no systematic assessment was performed, the criterion should not be presented as an operational exclusion criterion. The rationale also requires consideration because excluding students with psychiatric disorders may restrict the natural variability of anxiety, uncertainty intolerance, and emotion-regulation difficulties and consequently affect generalizability. The authors should explain why this exclusion was scientifically necessary for a study of nomophobia and acknowledge the implications for external validity.

The ethical reporting is currently insufficient for a human-participant psychological study. The manuscript states that institutional permissions were obtained and participants were informed about voluntariness and confidentiality, but it does not clearly identify an ethics committee or institutional review board, provide an approval code, state the approval date, or explicitly indicate whether the study was conducted in accordance with an applicable ethical framework. Please add the full name of the approving ethics body and approval/reference number, and clearly state that informed consent was obtained before participation. Because questionnaires were administered electronically through educational messaging channels and university communication systems, the authors should also explain how consent was documented, how anonymity or confidentiality was maintained, where data were stored, and who had access to the dataset. Ethical approval should be distinguished from administrative permission to recruit participants; the latter cannot substitute for formal research-ethics review when such review was required.

The description of the emotional self-efficacy measure contains several serious inconsistencies. The manuscript states that emotional self-efficacy was assessed using a “12-item, 5-point Likert-type measure,” but then acknowledges that another Methods narrative describes an 11-item instrument and that the Results section reportedly attributes the measure to “Kirk et al. (2008),” whereas the reference list identifies Caprara et al. These discrepancies must be resolved by checking the questionnaire that participants actually completed, not by selecting the most likely source retrospectively. The final manuscript should report the exact instrument name, original authors, publication year, number of administered items, response options, subscales if applicable, score range, scoring direction, and interpretation. If a translated or adapted Persian version was administered, the adaptation source and evidence of validity must be provided. Because emotional self-efficacy is the central mediator, uncertainty about its measurement directly threatens the interpretability of the mediation model.

Authors uploaded the revised manuscript.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.