

Structural Model of Predicting Rumination in Individuals with Generalized Anxiety Disorder Based on Integrative Self-Knowledge and Mentalization: The Mediating Roles of Psychological Flexibility and Distress Tolerance

Masoumeh. Bakhtiarizadeh¹, Seyed Mohammad. Ebrahim Montazeri^{2*}

¹ Master of Clinical Psychology, Qom University of Medical Sciences, Qom, Iran

² Ph.D. Candidate in Educational Psychology, Department of Psychology, Ar.C., Islamic Azad University, Arak, Iran

* Corresponding author email address: S.m.e.montazeri1377@gmail.com

Editor

Izet Pehlić^{id}
Full professor for Educational sciences, Islamic pedagogical faculty of the University of Zenica, Bosnia and Herzegovina
izet.pehlic@unze.ba

Reviewers

Reviewer 1: Abolghasem Khoshkanesh^{id}
Assistant Professor, Counseling Department, Shahid Beheshti University, Tehran, Iran.
Email: akhoshkonesh@sbu.ac.ir
Reviewer 2: Ali Khodaei^{id}
Department of Psychology, Faculty of Educational Sciences and Psychology, Payam Noor University, Tehran, Iran. Email: alikhodaei@pnu.ac.ir

1. Round 1

1.1. Reviewer 1

Reviewer:

In the paragraph beginning “One such factor is integrative self-knowledge,” the theoretical rationale linking integrative self-knowledge to rumination remains relatively general. The authors should strengthen this section by explaining the cognitive mechanisms through which self-integration reduces repetitive negative thinking and by citing additional empirical studies directly examining self-knowledge, identity coherence, or self-concept clarity in anxiety-related populations.

The paragraph introducing mentalization argues that “deficits in mentalization may increase susceptibility to rumination.” This claim is theoretically plausible but currently underdeveloped. The manuscript would benefit from a more explicit explanation of how failures in reflective functioning contribute to repetitive self-focused cognition, particularly within the context of GAD.

The final paragraphs of the Introduction present the proposed mediation model but do not formulate explicit research hypotheses. I recommend that the authors conclude the Introduction with a clearly delineated set of hypotheses (e.g., H1–H8), specifying the expected direct and indirect relationships among integrative self-knowledge, mentalization, psychological flexibility, distress tolerance, and rumination.

In the Methods section, the statement “participants were assessed through clinical interviews based on diagnostic criteria for Generalized Anxiety Disorder” lacks sufficient methodological detail. The authors should specify which diagnostic interview was employed, who conducted the interviews, the qualifications of interviewers, and whether inter-rater reliability was assessed.

The sampling procedure requires further clarification. The manuscript states that 270 university students diagnosed with GAD were selected through purposive sampling, yet no information is provided regarding the number of individuals screened, excluded, or declining participation. A participant flow diagram would greatly improve transparency and methodological rigor.

Although the model demonstrated significant indirect effects, the manuscript does not report the proportion of variance explained (R^2) for rumination, distress tolerance, or psychological flexibility. Reporting these values would help readers evaluate the practical explanatory power of the proposed model.

The statement in the Declaration section that “we have used the language model ChatGPT” requires further specification. Many journals now require disclosure regarding the extent of AI assistance. The authors should clarify whether AI was used solely for language editing or also for conceptual development, analysis, interpretation, or manuscript preparation.

Response: Revised and uploaded the manuscript.

1.2. Reviewer 2

Reviewer:

The description of the Integrative Self-Knowledge Scale states that “with the exception of items 3, 6, and 9, all items are reverse scored.” This scoring pattern appears unusual for a 38-item instrument. The authors should verify the scoring instructions and provide a citation supporting the scoring procedure used.

The psychometric section for all instruments relies almost entirely on reliability estimates reported in previous studies. The manuscript should additionally report Cronbach’s alpha, composite reliability (CR), and average variance extracted (AVE) values calculated from the current sample to demonstrate measurement adequacy within the present dataset.

The description of the Acceptance and Action Questionnaire-II indicates that it contains “10 items.” This appears inconsistent with the widely used AAQ-II, which generally contains 7 items. The authors should verify whether they used the original version, an adapted version, or another instrument, and provide the appropriate citation and justification.

The Data Analysis section mentions that “the assumptions underlying path analysis were evaluated,” yet no information is reported regarding normality, multicollinearity, outliers, skewness, kurtosis, or common method variance. The manuscript should provide a dedicated subsection reporting these diagnostic assessments and their outcomes.

Table 1 presents means and standard deviations for the main variables but does not include minimum values, maximum values, skewness, kurtosis, or reliability coefficients. Including these descriptive indicators would provide a more comprehensive understanding of the data distribution and measurement quality.

A major limitation of the Results section is the absence of a correlation matrix. Since the proposed model assumes relationships among all study variables, a table reporting Pearson correlations among integrative self-knowledge, mentalization, psychological flexibility, distress tolerance, and rumination should be included before the structural model analysis.

The model fit indices reported in Table 2 are acceptable, yet several commonly recommended SEM indices are missing, including TLI, NFI, IFI, and SRMR. The inclusion of these indices would allow readers to evaluate model adequacy more comprehensively according to contemporary SEM reporting standards.

The structural model results report only standardized path coefficients and p-values. The authors should also report standard errors, critical ratios (CR values), and confidence intervals for each path coefficient to facilitate a more robust interpretation of statistical significance and effect magnitude.

The mediation analysis requires additional methodological detail. The manuscript reports indirect effects (e.g., $\beta = -0.101$, $p = .034$) but does not specify whether bootstrapping was used. The authors should report the number of bootstrap samples, bias-corrected confidence intervals, and the exact mediation testing procedure.

The Discussion repeatedly interprets statistically significant associations in causal language. For example, the statement that “greater integrative self-knowledge may indirectly reduce rumination” implies causality despite the cross-sectional design. The authors should revise causal wording throughout the Discussion and emphasize that the findings reflect associations rather than causal effects.

The Discussion adequately links findings to theory but insufficiently addresses alternative explanations. For instance, the observed relationships may be influenced by broader personality factors such as neuroticism, emotional stability, or trait anxiety. The authors should acknowledge these competing explanations and discuss their implications.

Response: Revised and uploaded the manuscript.

2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.