



Structural Modeling of the Relationship Between Mindfulness and Posttraumatic Growth: The Mediating Role of Difficulties in Emotion Regulation and Self-Compassion in Patients with Rheumatoid Arthritis

Fatemeh. Naseri^{1*}, Mohammad Reza. Hadi Omid²

¹ Department of Clinical Psychology, WT.C., Islamic Azad University, Tehran, Iran



² PhD student in Health Psychology, Faculty of Psychology and Educational Sciences, University of Tehran, Tehran, Iran

* Corresponding author email address: fatemehnaseri13300@gmail.com

Editor

Ali Navidian
Professor, Mental Health Nursing &
Counseling, Zahedan University of
Medical Sciences, Zahedan, Iran
alinavidian@gmail.com

Reviewers

Reviewer 1: Seyed Abdolmajid Bahrainian
Department of Clinical Psychology, School of Medicine, Shahid Beheshti University
of Medical Sciences, Tehran, Iran. Email: majid.bahrainian@gmail.com
Reviewer 2: Hoshang Zahiri
Assistant Professor, Department of Social Sciences, Garmsar Branch, Islamic Azad
University, Garmsar, Iran. Email: hoshzahiri@gmail.com

1. Round 1

1.1. Reviewer 1

Reviewer:

The paragraph stating “These conditions can create a psychological context similar to chronic traumatic stress...” requires stronger theoretical justification. Rheumatoid arthritis is a chronic illness rather than a discrete traumatic event, and the authors should more explicitly justify the application of posttraumatic growth theory to chronic autoimmune disease populations by citing trauma conceptualization frameworks specific to chronic illness adaptation.

The authors state that “Mindfulness may facilitate posttraumatic growth not only directly, by helping patients reinterpret illness-related suffering, but also indirectly...”; however, the manuscript does not clearly distinguish between trait mindfulness and mindfulness cultivated through intervention exposure. Since no intervention was conducted, the repeated discussion of mindfulness-based treatments creates conceptual ambiguity. The authors should clarify throughout the paper that the study measured dispositional mindfulness rather than treatment-induced mindfulness.

In the paragraph beginning “The combined study of mindfulness, emotion regulation, self-compassion, and posttraumatic growth is theoretically important...”, the proposed mediation model is described as sequential and process-oriented, yet the statistical model tested appears to involve parallel mediators rather than a serial mediation pathway. The authors should explicitly clarify whether the mediators were modeled in parallel or sequence and revise the theoretical language accordingly.

The statement “all factor loadings of the posttraumatic growth dimensions were equal to 0.97” is statistically implausible and suggests either overfitting or reporting error. It is highly unusual for all indicators of a multidimensional psychological construct to load identically at such a high level. The authors should verify these coefficients and provide the full CFA output.

The confirmatory factor analysis section reports only global fit indices but omits key psychometric indicators such as Average Variance Extracted (AVE), Composite Reliability (CR), standardized residuals, and modification indices. Given the complexity of the SEM model, these indices are necessary to evaluate convergent and discriminant validity adequately.

The manuscript repeatedly uses causal language despite the cross-sectional design. For example, the sentence “mindfulness influenced posttraumatic growth...” implies causality that cannot be established through correlational SEM. Throughout the Discussion, causal verbs such as “influenced,” “enhanced,” and “reduced” should be replaced with non-causal language such as “was associated with” or “predicted statistically.”

The bootstrap mediation analysis requires additional reporting transparency. The manuscript reports the indirect effect coefficient and confidence interval but does not indicate whether standardized or unstandardized estimates were used in the confidence intervals. Moreover, the reported total-effect confidence interval (“0.760 to 1.436”) appears inconsistent with the standardized coefficient of 0.423 and should be rechecked for accuracy.

Authors revised and uploaded the document.

1.2. Reviewer 2

Reviewer:

The Methods section reports that the study used “purposive sampling” from multiple hospitals and clinics, but no information is provided regarding refusal rates, incomplete participation, or participant flow. A detailed participant recruitment flowchart should be added, including the number screened, excluded, declined, and retained for final analysis.

The sentence “To compensate for possible attrition and increase statistical power, 550 patients were selected...” raises concerns because the study was cross-sectional and did not involve longitudinal attrition. The use of the term “attrition” is methodologically inaccurate in this context and should be revised to refer instead to anticipated incomplete responses or unusable questionnaires.

The inclusion criterion requiring “at least a high school diploma” may have introduced educational bias and reduced generalizability to lower-literacy rheumatoid arthritis populations. The authors should justify this criterion more carefully and discuss how excluding less educated patients may have influenced the findings, particularly regarding self-report comprehension and mindfulness measurement.

The paragraph describing exclusion criteria includes “major depressive disorder accompanied by active suicidal ideation,” but the manuscript does not explain how psychiatric screening was conducted. Were structured clinical interviews used, were psychiatric diagnoses obtained from medical records, or were exclusions based solely on self-report? This procedure must be clarified to establish methodological rigor.

The authors report that “the questionnaires were randomly arranged for each participant” to control order effects, which is commendable; however, no explanation is provided regarding the implementation procedure. The manuscript should specify whether full randomization or counterbalancing was used and how consistency across administrations was maintained.

The Instruments section contains a substantial methodological inconsistency regarding the Difficulties in Emotion Regulation Scale. The text cites “Largatetta et al., 2025,” whereas the reference list contains “Largatta et al., 2025.” This discrepancy suggests either a citation error or reference inconsistency and must be corrected throughout the manuscript.

The psychometric description of the Self-Compassion Scale requires greater precision. The authors state that “self-judgment, isolation, and over-identification subscales are reverse scored,” yet later the Results section interprets positive correlations involving self-judgment as adaptive. The manuscript should clarify whether reverse scoring was applied before analysis because the interpretation of findings currently appears contradictory.

In Table 1, the descriptive statistics for the posttraumatic growth dimensions indicate means around 2.9 on a 0–5 scale, yet the manuscript repeatedly refers to “meaningful positive growth.” The authors should contextualize whether these values represent clinically meaningful or merely moderate levels of posttraumatic growth relative to normative or prior rheumatoid arthritis samples.

The Results section reports that “all dimensions of mindfulness had positive and significant correlations with all dimensions of posttraumatic growth”; however, many coefficients are statistically weak despite large sample size (e.g., correlations around .10–.20). The discussion overstates the strength of these associations. The authors should differentiate between statistical significance and practical significance more carefully.

Several correlations in Table 2 appear unusually high and raise potential concerns regarding discriminant validity. For example, the correlation between B4 and B6 is reported as .89, and several posttraumatic growth dimensions exceed .80. The authors should report discriminant validity indices such as AVE, CR, or HTMT ratios to demonstrate that the constructs are empirically distinguishable.

Authors revised and uploaded the document.

2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.