



The Effect of Mindfulness Therapy on Treatment Adherence, Self-Efficacy, and Emotion Regulation in Patients with Type 2 Diabetes

Fatemeh. Zadehhasan¹, Mehdi. Arab Kalmari^{*}, Hossein. Rahimlooei Aghdam³

¹ MA Student of Clinical Psychology, Department of Psychology, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran

² Ph.D., Department of Psychology, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran

³ MD, Talieh Mehr Yazdan Medical Center, Tehran, Iran

* Corresponding author email address: mehdi.arab.k@gmail.com

Editor

Stefano Vinaccia^{id}
Profesor de psicología Universidad
del SINU, Montería, Colombia
Vinalpi47@hotmail.com

Reviewers

Reviewer 1: Mohammad Salehi^{id}
Associate Professor, Department of Educational Management, Sari Branch, Islamic
Azad University, Sari, Iran. Email: drsalehi@iausari.ac.ir
Reviewer 2: Sadegh Maleki Avarsin^{id}
Associate Professor, Department of Educational Sciences, Tabriz Branch, Islamic
Azad University, Tabriz, Iran. Email: s.maleki@iaut.ac.ir

1. Round 1

1.1. Reviewer 1

Reviewer:

"Objective: This study aims to investigate the effect of mindfulness therapy on treatment adherence self-efficacy and emotion regulation in patients with type 2 diabetes."

Comment: The abstract should provide a clearer summary of the study's key findings and the implications of the results. Consider adding a brief mention of the statistical significance and practical implications of the findings.

"Thirty patients with type 2 diabetes referred to Sari medical centers were selected through non-random convenience sampling."

Comment: The choice of non-random convenience sampling needs further justification. Discuss the potential biases this method might introduce and how they were mitigated.

"The experimental group received 90-minute sessions of mindfulness therapy once a week for eight weeks while the control group did not receive any intervention."

Comment: Provide more details on the control group's activities or lack thereof. Were they given any form of placebo treatment or standard care to compare against the intervention?

"Both groups completed measures of treatment adherence (Modanloo 2013) self-efficacy (Sherer et al. 1982) and emotion dysregulation (Gratz & Roemer 2004)."

Comment: Elaborate on the specific tools and questionnaires used, including their reliability and validity in previous studies. Describe the scoring system and interpretation of results.

"Data were analyzed using covariance analysis and SPSS version 22 software."

Comment: Provide a more detailed explanation of the statistical methods used, including assumptions checked, and why these methods were chosen. Include a brief mention of how outliers and missing data were handled.

"Diabetes mellitus is characterized by chronic hyperglycemia and impaired metabolism of carbohydrates proteins and fats (Galicia-Garcia et al. 2020)."

Comment: The introduction would benefit from a more detailed discussion on why mindfulness therapy is particularly relevant for type 2 diabetes, possibly including a review of previous research findings.

Comment: The discussion should delve deeper into the possible mechanisms by which mindfulness therapy impacts self-efficacy, treatment adherence, and emotion regulation. Refer to relevant psychological theories and previous studies.

"Mindfulness therapy sessions were conducted over eight weekly 90-minute sessions."

Comment: Include a more detailed description of what each mindfulness therapy session entailed. This will help in replicating the study and understanding the intervention's components.

"Post-test - Follow-up -25.54 (2.51) 0.001."

Comment: Provide more information on the long-term effects of the intervention. Did the benefits of mindfulness therapy sustain beyond the follow-up period, or was there a decline?

"Ethical considerations ensured that participation was voluntary."

Comment: Provide more details on the ethical considerations, such as the approval process from an ethics committee, and how informed consent was obtained and documented.

"Further studies are suggested for non-diabetic populations to compare results."

Comment: Expand on specific future research directions. What other populations or settings could benefit from similar studies? Suggest potential modifications to the intervention for broader application.

Authors uploaded the revised manuscript.

1.2. Reviewer 2

Reviewer:

"The results indicated significant improvements in treatment adherence ($F=154.84$ $p<0.001$) self-efficacy ($F=59.45$ $p<0.001$) and emotion regulation ($F=144.42$ $p<0.001$)."

Comment: Expand on the interpretation of these results. How do these findings compare with existing literature? What might be the practical implications for clinical practice?

"Mindfulness may positively impact the health of individuals with type 2 diabetes by enhancing self-efficacy (Zhang et al. 2023)."

"The frequency distribution of the sample based on gender shows that 63.4% of the participants are male while 36.66% are female."

Comment: Discuss any potential gender effects on the outcomes. Was there any significant difference in how mindfulness therapy affected male versus female participants?

"Control group members were offered the intervention post-study."

Comment: Clarify what measures were taken to ensure that control group participants received the intervention post-study and how this might have influenced their long-term outcomes.

"This research was conducted exclusively among patients with type 2 diabetes so caution is needed when generalizing the results."

Comment: Acknowledge additional limitations, such as the small sample size and potential selection biases. Discuss how these limitations could impact the study's findings and generalizability.

"Mindfulness helps individuals perceive internal and external realities without distortion and enhances their ability to face a wide range of thoughts emotions and experiences (Bao 2022)."

Comment: Strengthen the theoretical framework by linking mindfulness therapy to specific psychological theories or models that explain its efficacy in treating type 2 diabetes.

"This study aims to investigate the effect of mindfulness therapy on treatment adherence self-efficacy and emotion regulation in patients with type 2 diabetes."

Comment: Discuss the practical applications of the findings in more detail. How can healthcare providers integrate mindfulness therapy into routine care for type 2 diabetes patients?

Authors uploaded the revised manuscript.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.