



Comparison of the effectiveness of self-compassion-based mindfulness package with mindfulness-based cognitive therapy package on emotional in overweight women

Azam. Hajirostam¹

Mohsen. Golparvar^{2*}

Felor. Khayatan³

1. Department of Psychology, Faculty of Educational Sciences and Psychology, Khorasgan Branch (Isfahan), Islamic Azad University, Isfahan, Iran

2. *Corresponding author: Professor, Department of Psychology, Faculty of Educational Sciences and Psychology, Khorasgan Branch (Isfahan), Islamic Azad University, Isfahan, Iran

3. Assitant Professor, Department of Psychology, Faculty of Educational Sciences and Psychology, Khorasgan Branch (Isfahan), Islamic Azad University, Isfahan, Iran

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Abstract

Aim: The purpose of this research was to compare the effectiveness of self-compassion-based mindfulness package with mindfulness-based cognitive therapy package on emotional eating in overweight women.

Method: The current research was practical and semi-experimental with a pre-test-post-test design along with a follow-up period. Among the overweight women in Isfahan who referred to weight control and weight loss centers and offices in 2019, 45 people were selected by convenience sampling and randomly assigned to the research groups. The research tool was the Van Strien et al Dutch Eating Behavior Questionnaire (1986). Each of the self-compassion-based mindfulness groups by Haji Rostam (2019) and the mindfulness-based cognitive therapy group Based on the approach of Teasdale et al (1995) underwent eight treatment sessions, and the control group did not receive any treatment. The results were analyzed using SPSS software and using variance analysis method with repeated measurements.

Results: The findings showed that the mindfulness package based on self-compassion and the cognitive therapy package based on mindfulness on the desire to eat ($F = 7.15, P = 0.001$) and eating behavior ($F = 5.74, P = 0.002$) have had a lasting positive effect on overweight women. **Conclusion:** In this way, in order to improve the desire to eat and eating behavior in overweight women, the mindfulness package based on self-compassion and the cognitive therapy package based on mindfulness can be used.

Keywords: *overweight, self-compassion-based mindfulness package, mindfulness-based cognitive therapy package, emotional eating.*

Introduction

Overweight, a chronic disorder and a risk factor for a range of diseases such as Type 2 diabetes, cardiovascular diseases, certain types of cancer, and hypertension (Crow, Randowa, Tsigos, Kaltsas, & Martin, 2018). This public health issue has been on the rise since the first half of the 20th century and is considered the most significant nutritional disorder and social problem globally (Lin & Li, 2021; Serkato & Fonseca, 2019), with its prevalence increasing in both developed and developing countries, including Iran (Azizi, Hosseini, & Hosseini, 2021; Tai, Barcelona, & Ganderson, 2018). The importance of investigating this issue stems from the fact that overweight is not only a precursor to physical health problems but also recognized as one of the interferences between physical and mental health and a factor in behavioral problems (Sobel-Goldberg & Rabinowitz, 2016). Overweight is bidirectionally linked with psychological disturbances and psychiatric states, such that many psychological issues can be primary and stable factors leading to obesity, and conversely, overweight can lead to many adverse psychological outcomes and dissatisfaction with life (Narimani & Nemati, 2020). Therefore, it is essential to encourage individuals who are overweight to take action to lose weight, and in this regard, attention to certain constructs related to weight loss is important.

Based on the theoretical foundations and empirical evidence presented, mindfulness and self-compassion therapy techniques have positive effects on emotional eating in overweight individuals, but a gap existed in the lack of attention to the specific characteristics of overweight women, which sometimes reduced the long-term effectiveness of these techniques. Hence, the researcher in this study aimed to identify the specific characteristics of overweight women and arrange the techniques of these two treatments based on these identified characteristics, to design a self-compassion-based mindfulness package, to ensure the lasting impact of both treatments on the emotional eating of overweight women. Furthermore, considering the empirical evidence on the usefulness of a cognitive therapy package based on mindfulness to help overweight women, this treatment package was used as a basis to determine the effectiveness of the developed package. Therefore, given the prevalence of overweight among Iranian women and the susceptibility of overweight to emotional eating, the present study aimed to answer the following questions:

1. Is the self-compassion-based mindfulness package effective in improving emotional eating in overweight women?
2. Is there a significant difference in the effectiveness of the self-compassion-based mindfulness package and the cognitive therapy package based on mindfulness in improving emotional eating in overweight women?

Method

The current research was practical and semi-experimental with a pre-test-post-test design along with a follow-up period. Among the overweight women in Isfahan who referred to weight control and weight loss centers and offices in 2019, 45 people were selected by convenience sampling and randomly assigned to the research groups. The research tool was the Van Strien et al Dutch Eating Behavior Questionnaire (1986). Each of the self-compassion-based mindfulness groups by Haji Rostam (2019) and the mindfulness-based cognitive therapy group Based on the approach of Teasdale et al (1995) underwent eight treatment sessions, and the

control group did not receive any treatment. The results were analyzed using SPSS software and using variance analysis method with repeated measurements.

Results

The findings showed that the mindfulness package based on self-compassion and the cognitive therapy package based on mindfulness on the desire to eat ($F = 7.15$, $P = 0.001$) and eating behavior ($F = 5.74$, $P = 0.002$) have had a lasting positive effect on overweight women.

Conclusion

The aim of the present study was to compare the effectiveness of a self-compassion-based mindfulness package with a cognitive therapy package based on mindfulness on emotional eating (desire to eat and eating behavior) in overweight women. The results of the study indicated that both the self-compassion-based mindfulness package and the cognitive therapy package based on mindfulness had positive and lasting effects on emotional eating (desire to eat and eating behavior) in overweight women. In other words, both the self-compassion-based mindfulness package and the cognitive therapy package based on mindfulness led to a reduction in emotional eating (desire to eat and eating behavior) in overweight women.

This study, like previous studies, had limitations that should be considered when generalizing the results. One of the limitations of the current study was that the sample was limited to overweight women in the city of Isfahan, thus caution should be exercised in generalizing the results to other populations. A short-term follow-up of three months was another limitation of the present study. Finally, in light of the study's findings, it is recommended that professionals use both self-compassion-based mindfulness and cognitive therapy based on mindfulness interventions to reduce emotional eating in overweight women, in order to ensure the continuation of dietary and exercise programs.

References

- Asar Kashani, H., Roshan, R., Khalaj, A., & Mohammadi, J. (2012). A comparison of emotional neglect and body image in obese, overweight, and normal-weight individuals. *Health Psychology*, 1(2), 1-12. (In Persian)
- Baker, J., Supriya, R., Duteil, F & Gao, Y. (2022). Obesity: Treatments, Conceptualizations, and Future Directions for a Growing Problem. *Biology*, 11(2), 1-12.
- Basaknejad, S., Arefi, N., & Arshadi, N. (2018). Investigating the pattern of emotional eating, emotional dysregulation, self-esteem, and resilience in the occurrence of food addiction in students. *Health Psychology*, 7(26), 132-145. (In Persian)
- Bongers, P., & Jansen, A. (2016). Emotional eating is not what you think it is and emotional eating scales do not measure what you think they measure. *Frontiers in Psychology*, 7, Article 1932.
- Carriere, K., Khoury, B., Gunak, M. M., & Knauper, B. (2018). Mindfulness-based interventions for weight loss: A systematic review and meta-analysis. *Obesity Reviews*, 19(2), 164-177.
- Cercato C, Fonseca FA (2019) Cardiovascular risk and obesity. *Diabetol Metab Syndr* 11: e74
- Dalen, J., Smith, B.W., Shelley, B.M., Lee Sloan, A., Leahigh, L., & Begay, D. (2010). Pilot study: Mindful Eating and Living (MEAL): Weight, eating behavior, and

- psychological outcomes associated with a mindfulnessbased intervention for people with obesity. *Complementary Therapies in Medicine*, 18, 260–264.
- Forman, E.M., & Herbert, D. (2009). New directions in cognitive behavior therapy: acceptance based therapies, chapter to appear. In: O'Donohue WT, Fisher, JE, editors. *Cognitive behavior therapy: applying empirically supported techniques in your practice*. 2nd ed. Hoboken, NJ: John Wiley & Sons. 263-268.
- Ghaderi, S., Gholamrezaei, S., & Rezaei, F. (2016). The effectiveness of cognitive-behavioral therapy based on mindfulness on reducing perceived stress and eating disorders in students with eating disorder symptoms. *Urmia Medical Journal*, 27(9), 801-810. (In Persian)
- Gilbert P. (2009). Introducing compassion-focused therapy. *Advances in Psychiatric Treatment*, 15(3): 199-208.
- Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology*, 53(1), 6-41.
- Hajirastem, A. (2020). Development of a self-compassion-based mindfulness package and comparison of its effectiveness with mindfulness-based cognitive therapy on body image dissatisfaction, weight self-efficacy, food cravings, emotional eating, and body mass index in overweight women. Doctoral dissertation, Islamic Azad University, Isfahan (Khorasgan) Branch. (In Persian)
- Hübinger, C. (2019). Runoff modelling and assessment of treatment wetland performance using a triangular form based multiple flow algorithm. <http://lup.lub.lu.se/student-papers/record/8986191>
- Jordan, C. H., Wang, W., Donatoni, L., & Meier, B. P. (2014). Mindful eating: Trait and state mindfulness predict healthier eating behavior. *Personality and Individual Differences*, 68: 107–111.
- Katterman, S.N., Goldstein, S.P., Butryn, M.L., Forman, E.M., & Lowe, M.R. (2014). Efficacy of an acceptancebased behavioral intervention for weight gain prevention in young adult women. *Journal of Contextual Behavioral Science*, 3(1), 45-50.
- Kring, R. (2021). Mindfulness-based cognitive therapy: Emphasizing distinctive features. Tehran: Basat Publishers. (In Persian)
- Kristeller, J.L., & Wolever, R.Q. (2011). Mindfulnessbased eating awareness training for treating binge eating disorder: The conceptual foundation. *Eating Disorders*, 19: 49–61.
- Kopelman P. (2007). Health risks associated with overweight and obesity. *Obesity Reviews*, 8, 13-17.
- Kyrou, L., Randeava, H., Tsigos, C., Kaltsas, G & Martin, M. (2018). Clinical Problems Caused by Obesity. <https://www.ncbi.nlm.nih.gov/books/NBK278973/>
- Leahy, R., Tirch, D., & Napolitano, L. (2014). *Emotion regulation in psychotherapy: A practitioner guide*. Translated by: A, Mansouri rad. Tehran: Arjmand.
- Limbers, C.A & Summers, E. (2021). Emotional Eating and Weight Status in Adolescents: A Systematic Review. *Int. J. Environ. Res. Public Health*, 18, 991. <https://doi.org/10.3390/ijerph18030991>
- Lin, X & Li, H. (2021). Obesity: Epidemiology, Pathophysiology, and Therapeutic. *Front. Endocrinol.* 12, 706978. doi: 10.3389/fendo.2021.706978.
- Lotfi Kongarshahi, A., Dehghani Arani, F., Rostami, R., Ashraf Talash, H., & Abolhasani, M. (2019). A comparison of cognitive-behavioral therapy with mindfulness-based cognitive therapy in increasing activity and reducing weight in overweight individuals with coronary artery disease. *Health Psychology*, 8(3), 53-78. (In Persian)
- MasoumiAlamout, M., Rahmanian, M., Aghamohammadi, V., Mohammadi, E., KhadijehNasiri, K. (2020). Effectiveness of mindfulness based cognitive therapy

- on weight loss, improvement of hypertension and attentional bias to eating cues in overweight people
- Masuda, A & Hill, M.L. (2013). Mindfulness as therapy for disordered eating: a systematic review. *Neuropsychiatry*, 3(4), 433-447
- Mercado, D., Robinson, L., Gordon, G., Werthmann, J., Iain C. Campbell, I Schmidt, U. (2021). The outcomes of mindfulness-based interventions for Obesity and Binge Eating Disorder: A meta-analysis of randomised controlled trials. *Appetite*, 166(1), 105-464.
- Moor, K. R., Scott, A. J., & McIntosh, W. D. (2013). Mindful eating and its relationship to body mass index and physical activity among university students. *Mindfulness*, 4(3), 269–274.
- Mousavi, A., Bahrami, F., Hosseini Fard, H., Pourhossein, R., & Jafarian, M. (2019). Evaluating the effectiveness of mindfulness-based cognitive therapy on body image in overweight individuals. *Roshd-e-Ravanpsy*, 3(36), 175-186. (In Persian)
- Mousavian, N., Moradi, A., Mirzaei, J., Sheyder, F., Mahmoudi Kahriz, B., & Taheri, F. (2010). The effectiveness of mindfulness-based cognitive therapy in reducing obesity. *Andisheh va Raftar*, 4(16), 57-49. (In Persian)
- Narimani, M., & Namati, M. (2020). The relationship between psychological distress and self-esteem with somatic indices in overweight children. *Journal of Shahid Sadoughi University of Medical Sciences*, 28(9), 3030-3043. (In Persian)
- Nauta, H., Hospers, H., & Jansen, A. (2001). One-year follow-up effects of two obesity treatments on psychological well-being and weight. *British Journal of Health Psychology*, 6(3), 271–284.
- Pearson, A.N., Follette, V.M., & Hayes, S.C. (2012). A pilot study of acceptance and commitment therapy as a workshop intervention for body dissatisfaction and disordered eating attitudes. *Cognitive and Behavioral Practice*, 19(1): 181-197.
- Ricca, C., Fioravanti, G., Sauro, C.L., Rotella, F., Ravaldia, C. (2012). Emotional eating in anorexia nervosa and bulimia nervosa. *Comprehensive Psychiatry*, 53, 245-251.
- Salehifard, J., Madah Shorjeh, R., & Namati, M. (2011). A comparison of motivational structure and eating styles in overweight and obese women with normal-weight women. *Journal of Mental Health Principles*, 13(2), 170-181. (In Persian)
- Sarmad, Z., Bazargan, A., & Hejazi, E. (2022). *Research methods in behavioral sciences*. Tehran: Agah Publishers. (In Persian)
- Segal, Z. V., Williams, J. M. G, Teasdale, J. D. (2013). *Mindfulness-based cognitive therapy for depression*. New York: The Guilford Press.
- Sobol-Goldberg, S & Rabinowitz, J. (2016). Association of childhood and teen school performance and obesity in young adulthood in the US National Longitudinal Survey of Youth. *Prev Med*, 89, 57-63.
- Soltanzadeh, M. (2022). The Effectiveness of Mindfulness-Based Cognitive Therapy (MBCT) on Sexual Self-Esteem in Obese Women. *Diabetes & Obesity Journal*, 15(4), 555916. DOI: 10.19080/CRDOJ.2022.15.555916
- Steindl, S. R., Buchanan, K., Goss, K., & Allan, S. (2017). Compassion focused therapy for eating disorders: A qualitative review and recommendations for further applications. *Clinical Psychologist*, 21(2), 62–73.
- Taherpour, M., Sohrabi, A., & Zomestani, M. (2018). The effectiveness of mindfulness-based treatment on reducing perceived stress and eating disorders in students with eating disorder symptoms. *Urmia Medical Journal*, 26(4), 505-513. (In Persian)
- Tay, K., Barcellona, D & Gunderson, M. (2018). Obesity trends in developing countries: Evaluation of a rural clinic population in the Dominican Republic. <https://pediatrics.aappublications.org>

- Teasdale, J.D.; Segal, Z.V. and Williams, M.G. (1995). How does cognitive therapy prevent depressive relapse and why should attentional control mindfulness training help? *Behaviour Research and Therapy*, 33, 25-39.
- Van Strien, T., Frijters, J. E., Bergers, G. P & Defares, P. B. (1986). The Dutch Eating Behavior Questionnaire (DEBQ) for assessment of restrained, emotional, and external eating behavior. *International Journal of Eating Disorders*, 5(2), 295–315.
- Volkow, N. D., Wang, G. J., Tomasi, D., & Baler, R. D. (2013). Unbalanced neuronal circuits in addiction. *Current Opinion in Neurobiology*, 23(4), 639–648.