



# The effectiveness of compassion-focused therapy on emotional eating behavior, emotional dysregulation, perceived stress and rumination in women with chronic obesity

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### Abstract

**Aim:** The present study was conducted with the aim of determining the effectiveness of compassion-focused therapy on emotional eating behavior, emotional dysregulation, perceived stress, and rumination in women with chronic obesity. **Method:** The current research was part of the semi-experimental designs with pre-test-post-test-follow-up with control group. The statistical population of the current study included all women with chronic obesity and body mass index who referred to the Kian nutrition counseling clinic in Tehran between May and July 2022. In order to form two groups using the purposeful sampling method (taking into account the entry and exit criteria), first 30 women with chronic obesity and body mass index were selected by screening method and then randomly 15 patients in the experimental group and 15 patients in the group The witnesses were grouped. The program of compassion-focused treatment sessions during 8 90-minute sessions was formed for the experimental group based on the protocol of Neff and Germer (2013). Also, the follow-up phase was performed three months after the post-test on all three groups. The research tools included the emotional eating behavior questionnaire of van Strein et al. (2009), the emotional dysregulation questionnaire of Gratz and Romer (2004), the perceived stress questionnaire of Cohen et al. (1983) and the rumination questionnaire of Nolen Hoeksma and Marrow (1991). The data of the research were analyzed using repeated measurement analysis of variance test. **Results:** The results of data analysis showed that the treatment focused on compassion in the participants of the experimental groups compared to the control group had a significant effect on improving emotional eating behavior ( $F=115.83, P<0.001$ ), emotional dysregulation ( $F=98.10, P<0.001$ ), perceived stress ( $F= 101.53, P<0.001$ ) and rumination ( $F= 74.52, P< 0.001$ ) in women with chronic obesity and body mass index. **Conclusion:** Therefore, it can be concluded that compassion-focused therapy improves emotional eating behavior, emotional dysregulation, perceived stress, and rumination in women with chronic obesity.

**Keywords:** *compassion, emotional eating behavior, emotional dysregulation, perceived stress, rumination.*

## Introduction

Eating disorders are one of the worrisome factors of public health, the rate of which is increasing drastically in recent decades. The prevalence of eating disorders and related problems such as obesity, dissatisfaction with body image, low self-confidence and depression has increased dramatically in the past years and is still increasing (American Psychological Association, 2013). Several factors play a role in eating disorders, among which the major role of emotional eating can be mentioned. Emotion is one of the influencing factors on human eating behavior. Emotional eating is a term related to a pattern of eating that is related to emotions and is separate from actual hunger. It is usually attributed to ineffective coping strategies in which effective emotional regulation takes place through eating behavior (Eustin et al., 2021). Therefore, a detailed understanding of the role of emotions and emotional regulation helps us to better understand emotional eating behavior (Reichenberger et al., 2020).

The side of emotional dysregulation, which leads to the emergence and continuation of psychological injuries through disruption of the emotional processing process, also applies to eating disorders (Givaya et al., 2021). Emotional dysregulation is often characterized by unsuccessful attempts to avoid emotions. Exacerbation and neutralization of emotion have been proposed as two forms of emotional dysregulation. Emotional regulation is defined as the process of initiating, maintaining, adjusting or changing the occurrence, intensity or continuity of inner feeling and emotion related to social-psychological and physical processes in achieving one's goals (Faustino, 2021). Difficulty in emotion regulation is defined as maladaptive methods of responding to emotions, which include non-acceptance responses, difficulty in controlling behaviors in the context of emotional distress, and defects in the functional use of emotions as information (Lee et al., 2020). Individual self-regulatory processes act as risk and protective factors in people's eating habits. According to the mentioned cases, emotional dysregulation is an important background for eating (De Biradis et al., 2020).

Perceived stress is considered to be one of the components explaining the possibility of adopting coping styles by people in stressful situations. Perceived stress intensity refers to a person's belief in the seriousness of stress. People can be more or less prone to obesity according to the coping style they use against perceived stress (Felicia et al., 2020). Another factor related to obesity is rumination (Delcioglou, Ogurello, Erdal, Malek-Qasmi and Cagil, 2021). Based on the response style theory, rumination has been defined as thinking in a negative and repetitive emotional way, which focuses on the causes and effects of events in a passive way.

Rumination is recurrent or resistant thoughts that revolve around a common theme. These thoughts involuntarily enter the consciousness and divert attention from the desired topics and current goals (Jorman, 2006). In the theory of attention, rumination is focused on the inner self-awareness that a person turns to his mind to gain this awareness and provides information that is in conflict with the external awareness and that information is provided through the senses. In other words, the difference between what happens in reality and what happens in the mind and thought provokes rumination in a person. People who have high levels of rumination do not analyze the situation in bad and negative situations but blame themselves (Murray & Tanno, 2015). They cannot find adequate and effective

solutions to their problems, they focus more on the negative aspects of events and remain in negative emotional states more than people who do not ruminate (Molds et al., 2007; Nolen-Hoeksma et al., 2008). Research shows that rumination also plays an essential role in the occurrence, persistence and exacerbation of overweight and obesity (Wong et al., 2017). Based on the theory of escape from rumination, unpleasant thoughts that are usually caused by not meeting the standard of body shape or weight are caught in a cycle that leads them to eat more (Watkins & Roberts, 2020).

Until now, various psychological treatments have been used to improve positive variables and reduce negative variables in women suffering from chronic obesity and body mass index. In recent decades, many researchers have confirmed the need to consider a wider role for psychological interventions in order to improve the conditions of women suffering from chronic obesity and body mass index (Validipak et al., 2015). Compassion-based therapies can be appropriate approaches to improve quality of life.

Compassion-focused therapy is a system of psychotherapy developed by Gilbert that integrates techniques from cognitive behavioral therapy with concepts from developmental psychology, social psychology, developmental psychology, Buddhist psychology, and neuroscience. According to Gilbert, "One of its main concerns is to use compassionate mind training to help people develop and work with inner warmth, safety, and comforting experiences through compassion and self-compassion (Gilbert, 2009).

The current research sought to answer the following questions:

- 1- Was compassion-focused therapy effective on emotional eating behavior, emotional dysregulation, perceived stress, and rumination in women with chronic obesity and body mass index in the post-examination phase?
- 2- Was the treatment focused on compassion on emotional eating behavior, emotional dysregulation, perceived stress and rumination in women with chronic obesity and body mass index stable in the follow-up phase?

### **Method**

The current research was part of the semi-experimental designs with pre-test-post-test-follow-up with control group. The statistical population of the current study included all women with chronic obesity and body mass index who referred to the Kian nutrition counseling clinic in Tehran between May and July 2022. In order to form two groups using the purposeful sampling method (taking into account the entry and exit criteria), first 30 women with chronic obesity and body mass index were selected by screening method and then randomly 15 patients in the experimental group and 15 patients in the group The witnesses were grouped. The program of compassion-focused treatment sessions during 8 90-minute sessions was formed for the experimental group based on the protocol of Neff and Germer (2013). Also, the follow-up phase was performed three months after the post-test on all three groups. The research tools included the emotional eating behavior questionnaire of van Strein et al. (2009), the emotional dysregulation questionnaire of Gratz and Romer (2004), the perceived stress questionnaire of Cohen et al. (1983) and the rumination questionnaire of Nolen Hoeksma and Marrow (1991). The data of the research were analyzed using repeated measurement analysis of variance test.

## Results

Analysis of variance with repeated measures was used to investigate the significance of the difference between the quality of life score and marital turmoil in the two imagotherapy groups and the control group.

The results of the analysis of variance of the repeated measurement of several variables among the studied groups in the research variables showed that the effect between the subject (group) is significant and this effect means that at least one of the groups differs from each other in at least one of the research variables. The within-subject effect (time) was also significant for the research variables, which means that there was a change in at least one of the average variables during the time from pre-test to follow-up.

The F-ratio obtained in the group factor is significant in the dimensions of emotional eating behavior ( $p < 0.01$ ), emotional dysregulation ( $p < 0.01$ ), perceived stress ( $p < 0.01$ ) and rumination ( $p < 0.01$ ). . This finding indicates that compassion-focused therapy was effective on emotional eating behavior, emotional dysregulation, perceived stress, and rumination in women with chronic obesity.

The dimensions of emotional eating behavior, emotional dysregulation, perceived stress and rumination were significant in the compassion-focused treatment group in the post-test compared to the pre-test ( $P < 0.001$ ). Also, a significant difference was observed in the follow-up phase compared to the pre-test ( $P < 0.001$ ). No significant difference was observed in the follow-up compared to the post-test ( $p < 0.001$ ).

## Conclusion

The present study was conducted with the aim of determining the effectiveness of compassion-focused therapy on emotional eating behavior, emotional dysregulation, perceived stress, and rumination in women with chronic obesity. Increasing self-compassion in compassion-focused therapy acts as a buffer against the negative outcomes of unpleasant events. Therefore, people with a high level of self-compassion evaluate themselves less, evaluate themselves less, are less hard on themselves and put themselves under pressure, and deal with life's problems more easily (Bai et al., 2020).

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