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THE EFFECT OF PSYCHOEDUCATIONAL PROGRAM FOR EMOTIONAL EATING BEHAVIOUR

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BERKAY ÇAKMAK

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ADVISOR

ASSOC. PROF. ELVIN DOĞUTEPE

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To my non-biological family.

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ÖZET

ÇAKMAK, Berkay. Duygusal Yeme Davranışı Üzerine Psikoeğitim Programı'nın Etkisi. Başkent Üniversitesi. Sosyal Bilimler Enstitüsü, Klinik Psikoloji Tezli Yüksek Lisans Programı, 2023

Bu çalışma, bilişsel davranışçı terapi (BDT) tekniklerini, duygu düzenleme stratejilerini ve bilgece farkındalık temelli pratikleri içeren, kısa 4 videodan oluşan Duygusal Yeme Davranışı Üzerine Psikoeğitim Programı'nın (DYPP) ön çalışmasıdır. Çalışma, DYPP'nin etkililiği ile birlikte, duygusal yeme davranışıyla depresyon, anksiyete ve stres arasındaki ilişkiyi ölçmeyi amaçlamaktadır. Araştırma, tamamı kadınlardan oluşan, yaşları 18-54 arasında değişkenlik gösteren, diyetisyen kontrolünde olan 52 obez katılımcı ile yapılmıştır. Katılımcılar, müdahale ve kontrol grubu olmak üzere iki farklı grupta incelenmiştir. Tüm katılımcılara, bilgilendirilmiş onam formunu imzalamalarını takiben Demografik Bilgi Formu, Depresyon Anksiyete Stres 21 Ölçeği (DASS 21), Duygusal İştah Anketi (EMAQ) uygulanmıştır. Ön testlerin verilmesinin ardından, müdahale grubu diyetisyen kontrolüne ek olarak DYPP'yi tamamlarken, kontrol grubu sadece diyetisyen kontrolü ile sürece devam etmiştir ve iki grubun son test ölçümleri alınmıştır. Analiz sonuçları, DYPP'nin pozitif duygulardan, negatif duygulardan ve negatif durumlardan kaynaklı duygusal yeme davranışını azaltmakta başarılı olduğunu göstermekle birlikte; DYPP'yi tamamlayan katılımcıların kontrol grubundaki katılımcılara göre anlamlı ölçüde daha çok kilo verdiğini göstermiştir. Buna karşın, DYPP'nin pozitif durumlardan kaynaklı duygusal yeme davranışının üzerinde anlamlı bir etkisi olmadığı görülmüştür. Ayrıca, depresyon, anksiyete ve stresin negatif duygu ve durumlardan kaynaklı duygusal yeme davranışı ile ilişkili olduğu görülmüştür. Bulgular, kısıtlılıklar ve ileri araştırmalara dair öneriler literatür çerçevesinde tartışılmıştır.

Anahtar Kelimeler: Duygusal yeme davranışı, psikoeğitim, obezite, bilişsel davranışçı terapi, olumsuz duygular

ABSTRACT

ÇAKMAK, Berkay. The Effect of Psychoeducation Program for Emotional Eating Behavior. Başkent University. Institute of Social Sciences, Master in Clinical Psychology, 2023.

This study is a preliminary research of Psychoeducational Program for Emotional Eating (PPEB), a self-help program consisted by 4 short videos that including cognitive behavioral therapy (CBT) techniques, emotion regulation strategies, and mindfulness-based practices. It aims to measure efficacy of PPEB in addition to relationship between emotional eating and depression, stress and anxiety. The study was conducted with 52 obese participants, all of whom were women and ranged in age from 18 to 54. The participants were under the supervision of a dietitian, and were divided into two groups, which are intervention group and the control group. After signing the informed consent form, all participants completed the Demographic Information Form, the Depression Anxiety Stress Scale 21 (DASS 21), and the Emotional Appetite Questionnaire (EMAQ). Following the administration of pre-tests, the intervention group completed the PPEB in addition to dietitian supervision, while the control group continued with only dietitian supervision. Post-test measurements were taken for both groups. The analysis results indicated that PPEB was successful in reducing emotional eating behavior related to positive emotions, negative emotions and situations, and the participants who completed PPEB significantly lost more weight compared to the participants in the control group. However, it was observed that PPEB did not have a significant effect on emotional eating behavior related to positive situations. Additionally, it was found that depression, anxiety, and stress were associated with emotional eating behavior related to negative emotions and situations. The findings, limitations, and suggestions for further research were discussed within the context of the current literature.

Keywords: Emotional eating, psychoeducation, obesity, cognitive behavioral therapy, negative emotions

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1. INTRODUCTION

Emotional eating has been defined as “eating as a response to a range of negative emotions” (Faith et al., 1997). In this context, it has been suggested that a relationship exists between emotional eating behavior and negative emotions (Annesi et al., 2016; Bilici et al., 2020; Macht, & Simons, 2000) like depression, anxiety, and stress (Dakanalis et. al., 2023; Devonport et. al., 2019). Also, emotional eaters are tended to prefer the consumption of energy-dense and high-fat foods in excessive amounts during the process (Nguyen-Rodriguez et. al., 2008).

Although negative emotions are usually emphasized, studies are showing that positive emotions are also related to emotional eating behavior. Macht et al. (2004) were suggested that in daily life, positive emotions are related to emotional eating behavior as much as negative emotions. However, as mentioned within the study itself, the small sample size has a negative impact on the generalizability of the study results. In parallel with this, van Strien et al. (2013) have suggested a relationship between emotional eating behavior and positive emotions. In this study, which also included the severity of emotional eating behavior, no significant difference was observed between the triggering of emotional eating behavior by positive and negative emotions in the low emotional eaters' group, whereas in the high emotional eaters' group, it was found that eating behavior was significantly more triggered by negative emotions. Additionally, other studies have also focused on the impact of positive emotions on emotional eating behavior (Bongers et al., 2013; Nolan et al., 2010).

While there are studies that demonstrate the association between positive emotions and emotional eating behavior, there are also studies that indicate the opposite (Braden et al., 2018). Considering these findings, it can be said that there is no consensus on the relationship between emotional eating behavior and positive emotions. Nevertheless, measurement tools have been developed to assess emotional eating behavior by also taking into account positive emotions (Geliebter, & Aversa, 2003; Nolan et al., 2010).

1.1. Prevalence

Due to the lack of data and cross-cultural studies concerning the prevalence of emotional eating, there have been no studies found in the literature regarding its prevalence worldwide, as much as physical illnesses or mental illnesses. In this section, the prevalence of emotional eating is presented through a review of findings in the literature.

Cultural differences are associated with variations in eating habits (Hawks et. al., 2003; Jansen, & Morgan, 2008; Sulmont-Rossé, 2019). To illustrate, in China, food carries a greater significance and is more closely linked with social status, achievements, and interpersonal relationships compared to Western cultures (Ma, 2015). In the emotional eating context, although several studies demonstrate that Western countries are prone to emotional eating behavior (Hawks et. al., 2003; Waller, & Matoba, 1999) the general literature focuses more on individual differences rather than cultural differences regarding emotional eating.

A determining role can be played by gender in eating behavior. Out of the 3,714 female participants and 1,808 male participants who took part in a study, males reported the tendency to overeat more frequently, while females were more likely to experience a loss of control during eating. Furthermore, there were significant gender differences observed, with females being more likely to report behaviors such as body checking, avoidance, binge eating, fasting, and vomiting compared to males (Striegel-Moore et. al., 2009). This difference is also manifested in emotional eating behavior. Previous researches were showed that emotional eating behavior is more likely to be exhibited by women than by men (Beydoun, 2014; Larsen, et. al., 2006; Lu et. al., 2016).

Research has been shown that emotional eating is a concept that can vary according to age. Previous research was conducted on different age groups (20-40, 41-60, 61-87), and emotional eating tends to decrease with age (Samuel & Cohen, 2018). Additionally, according to van Strien and Oosterveld (2008), an increase in emotional eating is observed between early childhood and adolescence. In light of these studies, it can be drawn that there is a trend of emotional eating that increases from early childhood to young adulthood and then decreases from young adulthood to old age.

1.2. Emotional Eating as a Risk Factor

Emotional eating is associated with many eating disorders and obesity in terms of its various behaviors. This relationship leads emotional eating to emerge as a risk factor in our daily lives. In this section, the relationship between emotional eating and obesity, as well as other eating disorders, will be examined within the framework of the literature.

1.2.1. Emotional eating and obesity

Obesity, a condition characterized by the excessive accumulation of body fat, is defined as having a Body Mass Index (BMI) of 30 or greater (WHO, 2000). Obesity is a

major health concern in many countries (WHO, 2022). Also, from 1999-2000 through 2020, an increase in obesity prevalence from 30.5% to 41.9% was observed in the US (NHANES, 2021). Additionally, during this time period, an increase in the prevalence of severe obesity from 4.7% to 9.2% was also noted (NHANES, 2021). Unfortunately, empirical studies have demonstrated that Türkiye has the highest prevalence of obesity among European nations (WHO, 2022). It is shown by these statistics that obesity is widespread and rapidly increasing globally.

Numerous studies were indicated a connection between obesity and emotional eating (Dakanalis et al., 2023; Deurenberg & Hautvast, 1989; Işık & Cengiz, 2020; Zijlstra, 2014). Furthermore, emotional eating is shown to be a mechanism between obesity and depression (Lazarevich et al., 2016; Konttinen et al., 2019; van Strien et al., 2016). Therefore, an increasing emphasis on emotional eating can be observed in studies examining the etiology of obesity in the literature.

In addition to etiology, the clinical implications of emotional eating in interventions targeting obesity treatment are also prominent. Bariatric surgery, recognized as one of the most effective methods for weight loss (Cheng et al., 2016; Gloy et al., 2013), has become popular in obesity treatment in recent times. However, emotional eating is observed as a risk factor for the successful outcome of the post-bariatric surgery process (Chesler, 2012; Nasirzadeh et al., 2018). Therefore, emotional eating is a behavior that needs to be addressed in weight management in the post-operation process (Sheets et al., 2015).

1.2.2. Emotional eating and eating disorders

Previous studies have suggested that emotional eating is associated with Bulimia Nervosa (Meule et. al., 2019; Ricca et. al., 2012), Binge Eating Disorder (Wiedemann et. al., 2018), and binge eating symptoms (Bernabéu-Brotóns et. al., 2022). Additionally, Reichenberger et. al. (2021) suggested that the various eating disorders involve distinct forms of emotional eating, which are influenced by different trigger emotions and result in varying changes in eating behavior (such as overeating or undereating). While positive emotions also have an effect, their influence on eating behavior in this context is often less well-defined compared to negative emotions in eating disorders. Also, the study was provided insights into possible interventions for emotional eating in different eating disorders. Individuals who exhibit significant emotional eating, particularly those diagnosed with Binge Eating Disorder (BED) and Bulimia Nervosa (BN), may benefit from

interventions that prioritize enhancing skills in emotion regulation and mindfulness. These strategies have demonstrated positive outcomes in reducing emotional eating and assisting with weight loss. Moreover, gaining an understanding of the precise emotional stimuli (such as anger, sadness, and anxiety) and the subsequent patterns of eating behavior (overeating or undereating) is essential. By recognizing these specific triggers and their associated eating behaviors, customized interventions can incorporate techniques to effectively address and modify both the triggers and the resulting eating behaviors. Also, BMI should be taken into account for these interventions.

1.3. Theoretical Background

1.3.1. Psychosomathic theory

Kaplan & Kaplan (1957) have constructed the theory in the frame of the possibility that obesity could be considered a psychosomatic disorder. Physical symptoms that are influenced or worsened by psychological factors are encompassed by psychosomatic disorders. Researchers were conducted a comprehensive analysis of existing literature on obesity and discovered indications that psychological elements like stress, anxiety, and depression could contribute to the development and persistence of obesity. Also, a background of emotional deprivation or trauma during childhood were observed in individuals with obesity. Overall, the theory proposed that obesity could serve as a mechanism for managing emotional distress. The theory argued that individuals with obesity might turn to food for comfort or as a means to numb their emotions. Excessive eating could also be a way to avoid or withdraw from stressful situations.

1.3.2. Psychosomathic theory of Bruch

Bruch (1973) was proposed a biopsychosocial model to explain the roles of biological, psychological and social factors that causes eating disorders. Based on the psychosomatic theory, individuals with eating disorders commonly face a distorted perception of their body and an intense fear of gaining weight. Such fear frequently stems from childhood encounters with parental criticism or neglect, fostering a pervasive feeling of insecurity and low self-esteem. As a result, people with eating disorders frequently resort to using food as a coping mechanism to effectively handle negative emotions and establish a sense of control over their lives. As mentioned, the psychosomatic theory acknowledges the influence of biological factors on eating disorders. To illustrate, individuals with anorexia nervosa may possess a lower body weight set point, increasing their susceptibility to hunger

and weight gain. Additionally, imbalances in certain neurotransmitters, such as serotonin, may be present in individuals with eating disorders, contributing to mood disturbances and impulsive behavior.

1.3.3. Externality theory

Schacter and Rodin (1974) were focused on the relationship between emotional eating behavior and external stimuli. According to the externality theory, what triggers emotional eating behavior is not the internal processes or physical needs of individuals, but the appetizing appearance, smell, or any advertising of a meal. Individuals who exhibit emotional eating behavior are placed at risk of obesity.

The theory, which includes a series of experiments evaluating sensitivity to external stimuli between obese individuals and those of normal body mass index, was also supported by the results of experiments conducted on animals, establishing a parallelism between animal and human behavior. In summary, the findings related to emotional eating suggest that individuals who are sensitive to environmental stimuli can be directed towards eating behaviors regardless of their physical hunger. The theory provides a different perspective on emotional eating behavior and emphasizes the effect of external stimuli.

1.3.4. Restraint theory

The restraint theory, which was proposed by Herman and Polivy (1980), emphasizes that self-restriction in terms of eating behavior leads to overeating. It is stated in the theory that the body has a predetermined range of weight set as homeostatic. When a person engages in activities such as dieting to exceed this weight range, a sense of deprivation can be created by the person. This feeling of deprivation can make the individual more susceptible to external cues related to eating while also triggering hunger. Additionally, individuals who are already experiencing a sense of deprivation may engage in eating behavior akin to binge eating to cope with feelings of anxiety or stress. These excessive eating patterns seen in individuals attempting to diet can also induce feelings of shame or guilt and trigger them to start another strict diet cycle, thereby indicating a cycle between dieting and overeating.

1.3.5. Escape theory

Escape theory has been suggested as an explanation framework for binge eating (Heatherton & Baumeister, 1991). Although it primarily explains binge eating, considering that emotional eating is a behavior that emerges as a coping strategy for negative emotions,

the theory offers significant insights into understanding emotional eating behavior. According to the theory, binge eating is rooted in a person's high standards and expectations. These standards are not only related to body size and attractiveness but also to standards of success. Individuals constantly compare their actual selves to these standards, which results in high self-awareness. Individuals, as a result of continuous self-monitoring, tend to focus too much on their mistakes and shortcomings. Therefore, high self-awareness leads to emotional distress, anxiety, and depression. As a coping mechanism for these emotions brought about by self-awareness, individuals may choose to focus only on the present moment and avoid thinking about negative thoughts and potential negative outcomes of their actions. This cognitive distortion emerges as an avoidance strategy because individuals find it difficult to cope with the emotions and thoughts that come with rational thinking. Binge eating is associated with coping with negative emotions and thinking meaningfully is associated with dealing with deficiencies.

1.3.6. Hedonic theory

The pleasure-inducing nature of eating behavior and its relationship with positive emotions are focused on by the theory. According to Macht et. al. (2005), hedonic eating experiences include a number of domains and conditions that enhance the enjoyment of eating which are characteristics of the physical environment, social context and food itself; a specific somato-psychic condition and a disposition towards hedonism; preparation to eating, distinct attributes of eating behaviors, and affirmative sensations and emotions; factors go beyond the food itself and encompass environmental and social characteristics that intensify positive emotional responses to food and create a personalized context; and motivational, cognitive and behavioral factors that organized under stimulus domain, organism domain, response domain, external conditions, and internal conditions titles, respectively.

Biological, psychological, and sociological insights are provided by the theory into factors that contribute to the pleasure of eating. The theory has exemplified the biological factors as positive reactions observed in facial expressions towards sweet ingredients in the experiments conducted on new-born humans, primates, and rats; psychological factors as the display of a hedonistic attitude by eating slowly and focusing on variables and the environment outside of eating behavior while performing the act of eating; and sociological factors as a demonstration of engaging in social interactions during meals, the presence of

familiar individuals, the easy access to tasty food in wealthy countries, and the performance of eating behavior as a social ritual.

1.4. Underlying Mechanisms of Emotional Eating

Looking at theories from a general perspective, both physiological and psychological factors underlie the behavior of emotional eating. While some individuals experience a decrease in their eating behavior during periods of stress, depression, or anxiety, others may use eating behavior as a coping mechanism, or individuals' susceptibility to food-related stimuli can be cited as an example of this. Therefore, studies have been conducted to identify the underlying mechanisms for emotional eating.

1.4.1. Physiological mechanisms

Despite numerous studies on the relationship between emotional eating and physiological factors, this issue still remains unclear. Studies related to the topic showed that emotional eating is associated with blunted/hyperactive hypothalamic pituitary adrenal (HPA) axis and serotonin intake.

Research have found that low functioning HPA axis may be one of the mechanisms underlying high emotional eating (van Strien, 2018; van Strien et. al., 2013; Wingenfeld et. al., 2017). Despite the many studies that reveal the connection between emotional eating and stress (Carpio-Arias, 2022; Spinosa et al., 2019) more research is needed to understand the causality. van Strien et al. (2013) were suggested comparing high emotional eaters that the group with a blunted HPA axis exhibited more eating behavior after stress compared to the other group

Studies have been conducted to show that the high activity HPA axis is also associated with emotional eating behavior, in addition to the blunted HPA axis. Chang et al. (2022) were founded stress caused by psychosocial factors can lead to hyperactivity in the HPA axis, which can result in eating behavior in individuals. Furthermore, Dallman et al. (2004) found a connection between HPA axis reactivity and eating behavior in samples of economically advantaged countries in their study. In light of these studies, it can be emphasized that there may be a connection between HPA axis activity and emotional eating behavior. However, more studies that examine HPA axis hyperactivity and emotional eating are needed to reach a definitive conclusion.

The connection between serotonin and emotional eating behavior is also considered as a physiological mechanism. Serotonin is a neurotransmitter that has significant effects on sleep, hunger, and mood (Macht, & Simons, 2011). However, it has been observed that individuals may tend to consume carbohydrate-rich foods to increase their serotonin levels (Fernstrom, & Wurtman, 1971). Similarly, it has been observed that consuming food rich in carbohydrates can lead to a decrease in depressive mood (Wurtman, 1982). While this coping mechanism that overlaps with emotional eating can lead to disrupted serotonergic signaling and obesity in the long run (Spadaro et. al., 2015), it has been observed to have a low impact in the short run (Markus et. al., 1998). In addition, studies on the serotonin transporter protein (5-HTT) encoded by the SCL6A4 gene have shown a relationship between emotional eating behavior and the serotonergic system. The serotonin transporter gene has moderated the relationship between depressive emotions and an increase in emotional eating after a period of four years (van Strien et. al., 2010). This finding also can be considered as a physiological cause underlying the hedonic theory discussed above.

1.4.2. Psychological mechanisms

Research conducted on the underlying psychological mechanisms of emotional eating appears to be more comprehensive compared to studies examining its physiological mechanisms. According to these studies, it has been observed that emotion dysregulation and alexithymia point to the reasons behind emotional eating.

Emotion dysregulation is one of the most commonly implied psychological variables in the connection between emotional eating studies that demonstrate a link between difficulty in emotion regulation and emotional eating also indicate that emotion dysregulation is one of the underlying mechanisms of emotional eating (Jones et. al., 2019; Michopoulos et. al., 2015; Usubini et. al., 2021). The emotional eating behavior that is observed as a result of emotion dysregulation is also in line with the insights of the escape theory. Food intake can be turned to as an escape mechanism by individuals who experience difficulty in coping with negative emotions.

The connection between alexithymia, which is characterized by difficulty in describing emotions and experiencing emotional awareness (Nemiah et. al., 1976), and emotional eating has also been revealed. According to the systematic review which included nine studies, there is a relationship between alexithymia and emotional eating (McAtamney et. al., 2023). The study also provided initial evidence of the potential for alexithymia to

predict emotional eating. In addition, it has been observed that alexithymia moderates the relationship between stress and food intake (van Strien, & Ouwens, 2007), and there is a relationship between emotional eating and alexithymia mediated by emotion dysregulation (McAtamney et. al., 2021). Moreover, the inverse relationship between interoceptive awareness and alexithymia (Herbert et al., 2011) aligns with the psychosomatic theory components conceptualized by Bruch (1973). The lack of awareness of one's internal processes can lead to emotional eating.

1.5. Dealing with Emotional Eating

It is discussed as a concept with its definition and underlying mechanisms, but there is currently no intervention method directly targeting emotional eating. Partial interventions targeting emotional eating are included in intervention methods designed for weight loss (Frayn & Knäuper, 2017). Therefore, in this section, interventions related to emotional eating will be examined through the applications of Acceptance and Commitment Therapy (ACT), Mindfulness-Based Eating Awareness Training (MB-EAT), Cognitive Behavioral Therapy (CBT), and Dialectical Behavioral Therapy (DBT), which have been developed with the goal of weight loss.

1.5.1. ACT

The potential of ACT in reducing emotional eating and promoting weight loss and weight maintenance has been recently proposed (Forman, & Butryn, 2015). The encouragement of tolerance of both internal cues, such as emotions, and external cues, such as food, is one of the essential features of ACT. A theoretical basis for applying ACT strategies to assist emotional eaters in overcoming weight loss challenges was constructed (Forman, & Butryn 2015). In the pursuit of weight control, the promotion of self-regulation skills through acceptance and commitment strategies is crucial. These strategies focus on developing psychological flexibility, which involves being aware of and accepting one’s thoughts and emotions without judgment, while also committing to values-based actions that align with one’s goals. By cultivating this mindset, challenges related to weight control, including maintaining motivation, coping with stress, and resisting temptation, can be more effectively managed. Additionally, Forman et. al. (2013) have compared the effectiveness of Standart Behavior Therapy (SBT) and ACT weight loss programs through weight loss. Study have shown that weight loss significantly higher in ACT than SBT group. Additionally, individuals with higher levels of emotional eating are tended to benefit more from ACT

intervention as compared to those with lower levels of emotional eating. In contrast, in their systematic review, Chew et. al. (2023) have found that although ACT is an effective method for weight loss, it does not change emotional eating behavior. In a nutshell, more research is needed that investigates the effectiveness of ACT for weight loss and its impact on emotional eating.

1.5.2. MB-EAT

Mindfulness is defined differently by various researchers and practitioners, but it is generally understood as a non-judgemental state of awareness and attention towards the current moment (Brown & Ryan, 2003). Kristeller and Hallett (1999) constructed Mindfulness-Based Eating Awareness Training (MB-EAT) to address binge eating, which is one of the most widely used mindfulness-centered approaches to eating. The MB-EAT program encompasses several sessions that are pertinent to people who tend to engage in emotional eating, such as identifying factors that may trigger binge eating, understanding hunger, recognizing taste satiety, and acknowledging fullness cues, although the program did not specifically address emotional eating. Intervention is primarily used in meditation to enhance mindfulness, which pertains to becoming more attentive to bodily sensations that influence binge eating, as well as identifying physical, cognitive, and emotional triggers for binge eating. One of the intervention's key components can be taken as eating meditations that concentrated on examining thoughts, beliefs, and emotions associated with food intake. Participants were instructed to pause and acknowledge their thoughts and feelings, especially before meals or when experiencing the urge to binge. In addition, the intervention is employed exercises and guided meditations that focused on mindful eating, which included the use of provided food. Several studies have been conducted to measure the effectiveness of mindfulness-based interventions. Pidgeon et. al. (2013) have suggested that the tendency to eat in response to stress, anxiety, and low levels of depression is reduced by mindfulness skills. Moreover, in the bariatric surgery-seeking sample, the results have revealed that there existed a relationship between less emotional and binge eating and higher levels of mindfulness specifically in acting with awareness facet (Levin et. al., 2014). Furthermore, Katterman et. al. (2014) have suggested that mindfulness meditation is a productive method to lessen binge and emotional eating among people who exhibit such behavior. To summarize, mindfulness and MB-EAT practices can help reduce emotional eating and weight loss.

1.5.3. DBT

The foundations of DBT have emerged in the direction of Borderline Personality Disorder (BPD) treatment (Linehan, 1993). The DBT approach suggests that behaviors related to problematic eating, such as emotional eating, can be explained as a means of providing temporary relief from negative emotions, similar to how impulsive behaviors in patients with BPD serve the same purpose (Telch, 1997). In line with this, Telch et al. (2000) have developed Group DBT for Binge-Eating Disorder program for the treatment of eating disorders based on the DBT model as an approach that combines constructs of cognitive-behavioral therapy, mindfulness, and dialectics. Regarding eating disorders, Group DBT typically consists of a combination of individual therapy, group therapy, skills training, and phone coaching. The individual therapy aspect concentrates on addressing the fundamental emotional and psychological factors that cause the eating disorder. Group therapy provides a supportive setting, where individuals can share their experiences, learn from others, and practice newly-acquired abilities. During the skills training sessions, the focus is on developing skills in emotion regulation, distress tolerance, interpersonal effectiveness, and mindfulness. Additionally, Roosen et. al. (2012) were adapted a DBT group therapy targeting emotional eaters. This preliminary research examined the efficacy of group DBT for emotional eating in individuals with obesity and demonstrated that the intervention is both highly effective and well-received. The group treatment consisted of 20 weekly 2-hour sessions of group therapy co-led by trained therapists, with the objectives of reducing eating-related psychopathology through the teaching of emotion regulation skills, encouraging the maintenance of a healthy weight and eating habits, and promoting adequate physical exercise. The study's results indicate that group DBT therapy successfully reduced emotional eating and other indicators of eating-related psychopathology in obese individuals. Further, Braden and O'Brien (2021) were conducted the pilot study examines the efficacy of Live FREE program developed by researchers. In the Live FREE pilot study, the researchers aimed to enhance outcomes in overweight adults with emotional eating by employing a combination of DBT and behavioral weight loss techniques. The participants received DBT skills training focused on developing emotion regulation abilities, mindfulness, distress tolerance, and interpersonal effectiveness. Meanwhile, the behavioral weight loss sessions offered guidance on dietary and physical activity best practices. As per the findings, a combination of DBT and behavioral weight loss may generate improvements in emotional eating and weight management because emotional eaters may be more successful in

maintaining the required behavioral changes for weight loss once they attain better emotion regulation skills. When considering these three adapted programs, it can be said that DBT has a rich range of interventions contributed by many techniques in terms of regulating eating behavior.

1.5.4. CBT

It is being discussed that weight loss programs are one of the most commonly used treatment methods (Moffitt et. al., 2015) and are developing with regard to their effectiveness. CBT therapy provides a long-lasting perspective for treatment, focusing on altering nutritional patterns. A lot of weight loss programs were developed in this frame. To illustrate, Eichler et. al (2007) were designed BASEL (Behandlungsprogramm Adipositas mit den Schwerpunkten Ernährungsverhalten und Lebensstiländerung) program. The program was specifically developed to assist adults who are overweight or obese in making adjustments to their eating habits and adopting a healthier lifestyle. The program incorporates various conventional behavioral strategies, including self-observation using a food and activity diary, problem-solving techniques, stimulus control, and training to prevent relapses. The study revealed that the program effectively led to weight loss and enhanced patient satisfaction. Additionally, Tham and Chong (2019) were assessed the Redefine CBT Weight Loss Program. The program, which was developed by the researchers, is comprised of 10 modules featuring 41 lessons. Participants complete each lesson every two weeks, spending around 10-15 minutes on each. The program incorporates videos, interactive activities, and practical tasks. The modules cover various topics such as motivation, goal setting, adopting healthy eating habits, increasing physical activity, overcoming obstacles to weight loss, behavioral techniques, cognitive therapy, addressing emotional eating and bingeing, body image concerns, managing chaotic and emotional eating, structured problem-solving, and preventing weight regain and setbacks. According to the study, the online CBT weight loss program proved to be effective in reducing weight and improving metabolic outcomes in obese patients who also received standard weight management care along with anti-obesity medications. Participants who successfully completed the program reported an average weight loss of 6.5% from their initial body weight, accompanied by improvements in blood pressure, blood glucose, and lipid levels. Therefore, the authors suggest that the online CBT program could serve as a valuable supplementary approach to anti-obesity medications and lifestyle interventions for managing weight in obese patients.

The CBT programs discussed in these examples have been and are being developed according to specific needs. The developed programs are designed to target cognitive, behavioral, and emotional patterns with the use of various techniques, aiming to modify them. They are tailored to specific conditions (e.g. with a dietary consultant/without a dietary consultant), platforms (e.g. online/face-to-face interviews), and different samples (e.g. individuals suffering from cancer/healthy).

1.6. Rationale of Psychoeducation Program for Emotional Eating Behavior (PPEB)

PPEB is a psychoeducation program that has been developed within the framework of the techniques proposed by Beck's (2007) book "The Beck Diet Solution: Train Your Brain to Think Like a Thin Person" to be applied together with a healthy food plan, aiming to provide individuals with video-based training on the fundamental techniques used to deal with emotional eating. In this section, the effectiveness of the psychoeducation method on weight loss and emotional eating, along with the elements within PPEB, are discussed.

1.6.1. Psychoeducation and emotional eating

Psychoeducation is an intervention aimed to provide information on a specific psychological topic, mental illness, or related variables concerning human beings. Psychoeducation can be applied to individuals or caregivers, and depending on the context of the psychoeducation, it aims to strengthen an individual's coping mechanisms and increase their sense of meaningfulness for their internal processes. Psychoeducation can be delivered through individual, or group psychotherapy sessions, workshops, or online resources, and it has a flexible application structure. The objective of psychoeducation may vary according to the specific topic it is applied for.

Beck (2007) were constructed a psychoeducation-centered program to deal with obesity and aimed at weight loss and weight management. The self-help program is utilized to aid individuals in achieving weight loss and sustaining it through the utilization of CBT techniques including self-monitoring, goal setting, stimulus control, cognitive restructuring, and food plan. It is divided into six weeks, each focusing on a different aspect of CBT. In the initial week, the concept of automatic thoughts - negative thoughts regarding oneself, weight, and food - is introduced by Dr. Beck readers are instructed on how to identify these thoughts and replace them with more realistic and beneficial thoughts. Other cognitive distortions that contribute to weight gain, such as all-or-nothing thinking, catastrophizing, and emotional reasoning, are addressed in subsequent weeks with other mentioned

techniques. The belief that individuals' thoughts and beliefs about weight and food significantly impact their weight loss progress forms the basis of The Beck Diet Solution. By challenging negative thoughts and beliefs, readers can redefine their relationship with food and achieve healthy and sustainable weight loss.

Psychoeducation about eating, which is considered to be an important aspect of the management of weight, can assist individuals in gaining an understanding of their eating habits and triggers (Beck, 2007). In addition to Beck, several studies have developed psychoeducational weight loss programs.

Czepczor-Bernat et. al (2020) were formed two experimental groups to receive web-based psychoeducation interventions focused on improving emotional functioning, eating behavior, and body image of premenopausal women with excess body weight. The first group received an intervention based on Emotional Schema Therapy with additional Mindfulness-Based Eating Training and Cash's Prevention of Body Image Disturbances module. On the other hand, the second group received an eclectic approach combining various therapies such as compassion-focused and dialectical behavioral therapy with the same additional training modules. Both groups accessed the interventions and educational materials remotely through a web-based platform. The research demonstrated that both forms of web-based psychoeducation interventions led to enhanced eating behaviors, emotional functioning, and body image in women with excess body weight who were premenopausal.

Barnes et. al. (2014) were constructed the Nutritional Psychoeducation and Internet Condition (NPC) Program and measured its efficacy by comparing the program with Usual Care (UC). The NPC Program was created as a psychoeducation-only intervention consisting of five sessions and an attention-control component. Its main goal was to furnish fundamental nutritional knowledge to participants by providing information in line with the American Heart Association and the United States Department of Agriculture guidelines. Essential topics covered during these sessions consist of recommendations for the intake of fruits and vegetables. The research indicated that the NPC program displayed marked advantages over the UC. The NPC program demonstrated lower weight levels, decreased triglyceride levels, and decreased depression scores compared to UC. Moreover, the findings revealed that weight loss results from the program were sustained at the three-month follow-up, with around 25% of NPC participants experiencing at least a 5% reduction in weight.

1.6.2. PPEB

Cognitive restructuring, cognitive distortions, information and strategies for recognizing and comprehending the connection between emotions and eating behaviors, stimulus control -modifying one's environment to reduce the frequency of cues or stimuli that trigger overeating or unhealthy food choices-, self-monitoring strategies, behavioral strategies to reduce eating, self-compassion practices, setting goals and food plan are provided through this method. Additionally, coping strategies for dealing with difficult emotions, such as stress, anxiety, and depression, without resorting to emotional eating are also taught through psychoeducation.

The behavioral strategies within the PPEB were selected according to their suitability to the psycho-education dynamics and effectiveness. In this context, decisions were made on the behavioral strategies within the psycho-education program by taking into account the dynamics of minimum time and maximum efficiency. The literature findings on the effectiveness of the behavioral strategies within the program on emotional eating are given below.

The concept of stimulus control has been shown to be associated with snacking (Schüz et al., 2015) and emotional eating (Cleobury & Tapper, 2014). Considering that easily consumable foods with high sugar and fat content in the environment can play a triggering role in the emergence of these behaviors, it is aimed to reduce emotional eating and snacking behaviors by including basic information on the concept of stimulus control in PPEB.

Emotional eating behavior can lead to feelings of shame (Frayn et al., 2018). In addition, shame can lead to emotional eating (Wong & Qian, 2016). In the light of the findings in the literature, this two-way relationship has been considered as a cycle that is one of the causes of emotional eating behavior. In this context, it is aimed to reduce the negative effects of shame, which is the cause and consequence of emotional eating, by teaching self-compassion practices.

As mentioned, mindful eating practices are included in weight loss programs. Additionally, mindful eating has been shown to be effective in reducing emotional eating (Morillo-Sarto et al., 2023). In this context, practices that increase eating awareness, which is the basis of mindful eating programs, are included in PPEB.

Finally, breathing exercises were included in the PPEB to reduce emotional eating. Although absence of studies in the literature that show the direct effect of breathing exercises on emotional eating, Lattimore (2019) showed that a mindfulness-based emotional eating awareness program based on mindful breathing has the potential to achieve success in reducing emotional eating. Additionally, focused breathing has been shown to be effective in dealing with emotional dysregulation, which is one of the mechanisms that lead to emotional eating (Arch & Craske, 2006; Zhang et al., 2019). Therefore, breathing exercises were included in the PPEB to reduce emotional eating.

1.7. Aims and Hypotheses

The concept of emotional eating is gaining increasing importance, particularly in terms of weight loss and weight maintenance. Studies underline the scarcity of interventions developed specifically for emotional eating behavior and highlight the significance of developing more comprehensive intervention methods for addressing emotional eating. Additionally, researching and implementing self-help techniques for eating behaviors have become popular worldwide. Moreover, accessing psychological services in the context of Türkiye is increasingly challenging. Hence, the PPEB was developed as an self-help program that focuses to emotional eating behavior.

In the current study, it is aimed to measure efficacy of PPEB, in addition to relationship between emotional eating and depression, stress and anxiety. PPEB was constructed in the frame of CBT, with mindfulness and emotion regulation practices which used by different weight loss programs. The following hypotheses were determined for the current research, which is described below, taking into account the literature review.

H_1: PPEB will be effective at decrasing emotional eating level.

H_2: Participants who took the PPEB will lose significantly more weight than control group.

H_3: There is a relationship between emotional eating and depression, anxiety, and stress.

2. METHOD

2.1. Participants

Seo, Kanda, and Fujikoshi (1995) demonstrated robustness to non-normality when applying MANOVA with a total sample size of 40 individuals, divided into 4 groups of 10 each. Additionally, Huitema (1980) proposed a formula that allows for the evaluation of a limit for the number of covariates in a model when dealing with limited sample sizes in ANCOVA [Number of covariates = (.10 * Sample size) – (Number of groups – 1)]. Therefore, the ideal sample size for this study was determined 40 participants for each group.

The study was conducted on adult individuals over the age of eighteen and BMI > 30 (overweight). People who have regularly applied the activities in the study and undergone a psychotherapy process related to weight loss were excluded from this study. Required permissions were taken by FBC Nutrition and Dietetics Consulting Center for the data collection process (Appendix 1). The participation is based on individual voluntary, and no incentives have been provided. Those who are insufficient in applying the techniques mentioned in psychoeducation were excluded from the study. The sufficiency state was determined according to the "weekly evaluation form".

The demographic characteristics of participants for each group were given (Table 2.1.). The data were collected from the woman clients who first applied to the contracted nutrition and dietetics consulting centers and their ages range from 18-55. In addition to the demographic characteristics in the table, the education level information was taken. In the intervention group, 7% of the participants are middle school graduates, 23.1% are high school graduates, 65.4% are university graduates, and 3% have a master's degree. On the other hand, in the control group, these proportions are measured as 3.8%, 30.8%, 57.7%, and 7.7% respectively.

Table 2. 1. *Demographic Information of Participants.*

	Intervention Group (N = 26)		Control Group (N = 26)	
	Mean	SD	Mean	SD
Age	38.23	9.53	37.03	10.15
BMI	35.58	2.61	35.77	2.24

Note. SD = Standart Deviation, BMI = Body Mass Index

2.2. Measures

2.2.1. Consent form

The form included short information about the purpose of the study, an explanation of the privacy of data, an account of the voluntary basicity of the participation, and researchers' e-mail addresses in addition to a statement of participants' rights to learn about the study (Appendix 2).

2.2.2. Demographic information form

Participants were asked about their name/surname, age, gender, marital status, academic background, weight, e-mail and phone number in addition to whether they have an ongoing physiological illness or psychological disorder (Appendix 3).

2.2.3. The depression anxiety stress scale 21

Lovibond & Lovibond (1995) developed the Depression Anxiety Stress Scale (DASS-42), the original form of the DASS-21, to assess depression and anxiety. DASS-21 has consisted of three dimensions which are depression (I found it difficult to work up the initiative to do things), anxiety (I was worried about situations in which I might panic and make a fool of myself), and stress (I found it hard to wind down). Each dimension is included 7 items. All items were rated on a 4-point Likert scale (0: Never, 3: Always). Scoring is done separately for each subscale and the highest score can be calculated as 21. For depression, 0-4, 5-6, 7-10, 11-13, 14-21; for anxiety, 0-3, 4-5, 6-7, 8-9, 10-21; for stress, 0-7, 8-9, 10-12, 13-16, 17-21 means normal, mild, moderate, severe, extremely severe respectively. The answering process of the scale is taken an average of 5 minutes.

Sarıçam (2018) standardized the DASS-21 to the Turkish language. Scoring, the number of items, or factor loadings were found to be compatible with the original scale. In the clinical sample, Cronbach's alpha internal consistency coefficient was found for depression, anxiety, and stress subscales .87, .85, .81, respectively. Additionally, in the healthy control sample, the test-retest reliability coefficient for the depression subscale was .68, the anxiety subscale was 0.66, and the stress subscale was .61; in the clinical sample, the corrected item-total correlations varied from .43 to .77. The DASS-21 is a reliable and valid tool for assessing the degree of stress, anxiety, and depression, according to psychometric properties (Appendix 4). Cronbach's alpha coefficients were found .95, .91, .84 for depression, anxiety, and stress submeasures in the current study, respectively.

2.2.4. Emotional appetite questionnaire

The scale (Appetite Questionnaire) was developed to assess emotional eating behavior that develops around positive and negative emotions and situations (Geliebter & Aversa, 2003). In the original form, the scale consisted of 22 items; 14 items evaluating eating behavior with positive and negative emotions, and 8 items evaluating eating behavior with positive and negative situations. Participants are expected to rate the change in their eating behaviors and the severity of this change according to positive/negative emotions (i.e., happy/angry) and situations (i.e., when fell in love). Items rated on a 9-point Likert scale rated 1 to 9 (1 to 4: decreased eating, 5: no change, 6 to 9: increased eating). Construct validity and reliability were later researched by Nolan et. al. (2010), and renamed as the current form: Emotional Appetite Questionnaire (EMAQ).

Demirel et. al. (2014) conducted the Turkish standardization study with hospital staff and university students. Cronbach's alpha coefficient was found .73. Factor analysis showed that there is a two-way factorial structure, which is a total of positive emotions and situations/negative emotions and situations. The EMAQ is scored by calculating separate scores for positive emotions (EMAQ-PE), negative emotions (EMAQ-NE), positive situations (EMAQ-PS), and negative situations (EMAQ-NS). A positive average score (EMAQ-POS) is obtained by averaging the scores for positive emotions and positive situations, and a negative average score (EMAQ-NEG) is obtained by averaging the scores for negative emotions and negative situations. The fifth item was excluded because it was not significantly correlated with other items. As a result, the Turkish version of the scale consisted of 21 items (Appendix 5). On average, 5 minutes are needed to complete the scale. Although the scale does not have any cut-off point that expresses emotional eating, the scale evaluates in which emotions and situations emotional eating behavior can be found. In the current study, Cronbach's alpha coefficients were found .85, .89, .94, .69 for the NE, PE, PS, and NS dimensions, respectively.

2.2.5. Weekly evaluation form

It is designed to measure wheter the participants benefit from the techniques taught in psychoeducation (Appendix 6). It was be used not for statistical analysis but rather to better delineate the exclusion criteria of the research. The questionnaire consists of 5 questions, with the first 4 questions being closed-ended 8-point Likert scale (0: Never, 7: Every day) and the last question being open-ended. Since not all cognitive distortions are

covered in psychoeducation, instead of closed-ended questions or scales, a question is included as “Write the cognitive distortions you have noticed in yourself”. Participants who answer this question were considered to have scored 7 points. The maximum score that can be obtained from the questionnaire is 35, but since it were applied 4 times during the research process, the maximum score that can be obtained from 4 questionnaires is calculated as 140. A cut-off point of 50 points has been determined out of 140 points.. The data of those who score less than 50 were not included in the study considering that participants are expected to complete at least one-third of the activities provided in the program.

2.2.6. Psychoeducation Program for Emotional Eating Behavior

The “Psychoeducation Program for Emotional Eating Behavior”, which was revised for the study, is from ‘The Beck Diet Solution’ (Beck, 2007), which outlines a 6-week weight loss program. The 6-week weight loss program was compiled into 4 separate videos, focused on reducing emotional eating behavior, with a total length of twenty minutes (Appendix 7). The techniques used in cognitive behavioral therapy for cope with emotional eating are taught in the videos and are designed to be integrated into individuals’ lives. The following content is contained in the videos in the order presented:

Video 1: The foundation of cognitive-behavioral therapy theory has been explained, and the connection between thoughts, behaviors, and emotions has been discussed. Disorders that cognitive-behavioral therapy is effective for have been mentioned. The definition of emotional eating behavior has been made, and this dysfunctional behavior has been explained through cognitive-behavioral therapy theory. The goal-setting, which is one of the important component of cognitive-behavioral therapy, has been detailed. The SMART (Specific, Measurable, Achieveable, Relevant, Time-bound) approach to goal-setting, which is an effective way of goal-setting, has been summarized. Sample goals that the participants can evaluate within the framework of SMART goal-setting have been given.

Video 2: Cognitive distortions have been defined. Four cognitive distortions (all-or-nothing, catastrophizing, mind reading, overgeneralization) closely related to emotional eating behavior have been explained and exemplified to be associated with emotional eating behavior. To cope with cognitive distortions, a series of questions aimed at recognizing the distortions and questioning their truth has been taught. The question series consists of four questions (1: Is this thought true? What evidence do I have to support it?, 2: Is this thought helpful? Does it contribute to my well-being and happiness, or does it make me feel worse?,

3: What would I tell a friend who has this thought? Would I give them the same advice I give myself?, 4: What is a more balanced or realistic way to think about this situation?). Positive affirmations have been provided to change cognitive distortions. Finally, an introduction has been made to behavioral strategies (breathing exercise, dietary self-monitoring, mindful eating) that can be used to cope with emotional eating behavior.

Video 3: The behavioral strategies briefly described in the second video are discussed in detail. The application of the breathing exercise, which was identified as the first strategy, is explained and it is emphasized that this exercise should be performed when feeling emotionally hungry during the day. The second technique discussed is dietary self-monitoring, a method aimed at increasing awareness by writing down the foods consumed during the day, taking note of the times of meals, calculating how long the meals were consumed, writing down any solid or liquid extra foods consumed outside of meals. A 'dietary self monitoring schedule' was prepared to assist participants in applying this method, which was shared with them (Appendix 8). Finally, mindful eating was taught to participants as the last behavioral technique. The definition, benefits, and ways to increase mindful eating are detailed.

Video 4: The concept of self-compassion and how it can be used in reducing emotional eating behaviors, along with the implementation of these practices, are explained. The techniques informed in the context of self-compassion are highlighted as "mindful eating, be kind to yourself, personal care, support seeking, celebrating achievements".

2.3. Procedure

Data was collected via paper/pencil tests and pretest/intervention/posttest design was followed. The design included a one-month intervention application process by participants after the pretest, then a posttest was conducted. The consent form, social demographic form, Depression Anxiety Stress Scale 21, and EMAQ was used for the pretest, before the intervention.

The participants were assigned into two groups: those who worked on weight loss under the control of a dietitian and those who received psychoeducation in addition to dietitian control. The psychoeducation group was considered as the intervention group, the group that started the weight loss process only under the control of a dietitian was considered as the control group.

The Psychoeducation Program for Emotional Eating consists of 4 videos. The total duration of the videos are 20 minutes. The videos were sent to the participants sequentially, with one video sent each day for 4 days. After the last video is sent, a 30-day implementation process was begin. When the implementation process was completed, the Depression Anxiety Stress Scale 21 and EMAQ scales were administered again as post-tests.

2.4. Data Analysis

After the data collection phase, data were analyzed via Statistical Package for the Social Sciences 24 (SPSS 24) program. Descriptive analyses were performed to examine the key characteristics of the main measures. Bivariate Pearson's correlation coefficient analyses were conducted to measure the relationship between major variables. Also, multivariate analysis of variance (MANOVA) was used to evaluate the changes in weight, depression, anxiety, and stress levels among participants in the intervention and control group. 2x2 repeated MANOVA was used to determine within group differences in depression, anxiety, and stress scores. 2x2 mixed multivariate analysis of covariance (MANCOVA) was used to measure main effect of time and intervention in addition to interaction effect of the variables to emotional eating levels. PPEB and time were the independent variables while the emotional eating behaviors (EMAQ-NE, EMAQ-PE, EMAQ-NS, EMAQ-PS, seperately) were considered as the dependent variables. Depression, anxiety, and stress were evaluated as covariants.

3. RESULT

In the study, data was collected from a total of 87 individuals. Prior to commencing the statistical analysis, data were excluded based on the evaluation of missing data, outliers, and scores obtained from the weekly evaluation form (participants scoring below 50 points were excluded from the experiment). The data of eight participants were excluded from statistical analysis due to physical discomfort and the fact that they had previously received psychological counseling for weight loss, as determined by the researcher's evaluation. Eleven individuals were excluded from the study due to not meeting the criteria specified in the weekly evaluation form, and thirteen individuals were excluded because they did not participate in the data collection process for the pre-test/post-test measurements. To assess multicollinearity, Mahalanobis distance analysis was used, and three participants were excluded as they fell into the category of multivariate outliers. As a result, the study included 52 participants.

After the data cleaning process, the normality assessment, taking into account the skewness and kurtosis of the data, shows that it falls within an acceptable range for the application of parametric tests (George, & Mallery 2010) except positive emotions and positive situations and average positive scores sub-measures in post-test.

3.1. Descriptive Statistics

Descriptive statistics for Depression Anxiety Scale 21 (DASS 21) and Emotional Appetite Questionnaire (EMAQ) were given for pre-test (Table 3.1.) and post-test (Table 3.2.) separately, with their subscales.

Table 3. 1. *Descriptive Statistics of Pre-test Measures.*

Measures	Group	Mean	SD	Skewness	Kurtosis	Min	Max
DASS 21							
Depression	Intervention	21.31	12.57	.02	-1.53	2.00	40.00
	Control	16.69	12.35	.69	-.62	2.00	40.00
	Average	19.00	12.55	.33	-1.26	2	40.00
Anxiety	Intervention	10.54	8.55	.68	-.59	.00	28.00
	Control	7.92	8.38	1.07	.18	.00	28.00
	Average	9.23	8.49	.82	-.40	0	28
Stress	Intervention	17.69	7.67	.28	-.74	6.00	32.00
	Control	17.15	9.72	.27	-.40	.00	38.00
	Average	17.42	8.67	.25	-.44	0	38

EMAQ							
NE	Intervention	6.11	1.15	-.73	-.67	3.63	7.50
	Control	6.13	1.07	-.26	-.10	3.63	8.25
PE	Intervention	5.42	.55	.48	.20	4.40	6.80
	Control	5.44	.99	.50	.17	3.60	7.60
NS	Intervention	6.57	1.96	-1.01	-.46	2.80	8.40
	Control	6.74	1.82	-.97	-.32	3.00	8.80
PS	Intervention	5.49	.71	-.07	-.32	4.00	7.00
	Control	5.59	.99	.24	-.69	3.67	7.33
NEG	Intervention	6.34	1.52	-.95	-.57	3.31	7.83
	Control	6.43	1.42	-.75	-.35	3.31	8.53
POS	Intervention	5.45	.55	.22	.26	4.30	6.60
	Control	5.51	.94	.56	-.36	3.90	7.47

Note. DASS 21 = Depression Anxiety Stress Scale 21, EMAQ = Emotional Appetite Questionnaire, NE = Negative Emotions, NE = Positive Emotions, NS = Negative Situations, PS = Positive Situations, NEG = Negative Total Score, POS = Positive Total Score

Table 3. 2. *Descriptive Statistics of Post-test Measures.*

Measures	Group	Mean	SD	Skewness	Kurtosis	Min	Max
DASS 21							
Depression	Intervention	18.69	11.44	.08	-.84	.00	38.00
	Control	15.31	11.80	.63	-.50	.00	38.00
	Average	17	11.63	.33	-.85	0	38
Anxiety	Intervention	9.08	8.49	1.04	.19	.00	.28
	Control	7.46	7.47	.98	-.32	.00	.24
	Average	8.27	7.96	1.01	.02	0	28
Stress	Intervention	15.46	7.01	.21	-.76	4.00	28.00
	Control	15.31	7.71	.12	-.53	2.00	32.00
	Average	15.38	7.30	.15	-.66	2	32
EMAQ							
NE	Intervention	5.27	.84	.60	.25	3.88	7.00
	Control	6.01	1.06	-.66	-.11	3.38	7.75

PE	Intervention	5.08	.42	-1.15	3.17	3.80	6.00
	Control	5.36	.93	.55	.09	3.60	7.20
NS	Intervention	5.63	1.49	-.27	-.20	2.60	8.40
	Control	6.67	1.84	-.99	-.34	3.00	8.60
PS	Intervention	5.17	.57	-1.19	3.27	3.33	6.00
	Control	5.44	1.00	.08	-.07	3.33	7.33
NEG	Intervention	5.45	1.14	.03	-.09	3.36	3.70
	Control	6.34	1.43	-.88	-.36	3.19	8.18
POS	Intervention	5.13	.45	-1.04	2.92	3.77	6.00
	Control	5.40	.90	.56	-.16	3.83	7.27

Note. DASS 21 = Depression Anxiety Stress Scale 21, EMAQ = Emotional Appetite Questionnaire, NE = Negative Emotions, NE = Positive Emotions, NS = Negative Situations, PS = Positive Situations, NEG = Negative Total Score, POS = Positive Total Score

3.2. Correlation Analyses

As mentioned above, the analysis results indicate that the data does not violate the assumption of normality except PE, PS, and POS sub-measures in post-test. Therefore, bivariate Pearson correlation coefficient (Pearson's r) has been used in the correlation analyses. Separate correlation analyses have been conducted for pre-test/post-test measurements of the variables

The results of the pre-test correlation analyses (Table 3.3.) indicate that there is a significant relationship between depression and anxiety ($r = .33$, $p < .05$) as well as stress ($r = .40$, $p < .01$). Additionally, it can be observed that there is a connection between depression and NE ($r = .54$, $p < .01$), NS ($r = .56$, $p < .01$), and NEG ($r = .56$, $p < .01$) variables. Moreover, the correlation coefficients also demonstrate a significant relationship between stress and NEG ($r = .42$, $p < .01$), NE ($r = .38$, $p < .01$), and NS ($r = .44$, $p < .01$). These findings suggest that as depression and stress increase, anxiety, NE, NS, and NEG also tend to increase. Additionally, participants reporting higher levels of depression also reported higher levels of stress. Furthermore, anxiety is found to have a significant relationship with BMI ($r = .32$, $p < .05$), stress ($r = .45$, $p < .01$), NE ($r = .38$, $p < .01$), PS ($r = .31$, $p < .05$), and NEG ($r = .32$, $p < .01$). Hence, the analysis suggests that as anxiety scores increase, BMI, NE, PS, and NEG scores are also increase.

In addition to the positive correlation observed between NE and NS ($r = .92, p < .01$), a positive correlation between PE and PS was also observed ($r = .72, p < .01$). Therefore, it can be inferred that an increase in NE is associated with an increase in NS, and an increase in PE is associated with an increase in PS.

The results of the post-test correlation analyses (Table 3.4.) indicate a significant relationship between depression and anxiety ($r = .42, p < .01$), stress ($r = .60, p < .01$), NE ($r = .47, p < .01$), NS (r = .58, $p < .01$), and NEG ($r = .55, p < .01$). Therefore, it can be observed that as depression increases, anxiety, stress, NE, NS, and NEG also tend to increase. Additionally, it has been observed that depression coefficients decrease as educational level increases. Furthermore, analyse showed that a positive correlation between anxiety and BMI ($r = .32, p < .05$), stress ($r = .62, p < .01$), NE ($r = .35, p < .05$), NS ($r = .31, p < .05$), and NEG ($r = .33, p < .05$). Moreover, the correlation coefficients were also demonstrated a significant relationship between stress and NEG ($r = .50, p < .01$), NE ($r = .46, p < .01$), and NS ($r = .50, p < .01$). As a result, it can be observed that as anxiety scores increase, BMI, stress, NE, NS, and NEG scores tend to increase. Similarly, as stress increases, NEG, NE, and NS scores are also likely to increase.

Finally, a positive correlation was observed between NE and NS ($r = .92, p < .01$), in addition to PE and PS ($r = .73, p < .01$). Furthermore, a significant relationship was found between PE and NE ($r = .28, p < .05$). Therefore, it can be inferred that an increase in NE is associated with an increase in NS, an increase in PE is associated with an increase in PS, and an increase in NE is also indicative of an increase in PE.

The NEG measure is obtained by dividing the sum of NE and NS values by two, while the POS measure is obtained by dividing the sum of PE and PS values by two. Therefore, the correlation coefficients between the NEG and POS variables with their respective sub-measures are not included in the report. These correlation coefficients can be found in the tables provided.

3.3. Inferential Statistics

A MANOVA analysis was conducted to measure the differences of variables between groups in pre-test and post-test measurements. While the variables of depression, anxiety, stress, NE, PE, NS, PS, NEG, and POS were collectively considered in both pre-test and post-test measurements, the variables of age, BMI, and education were evaluated in addition

Table 3. 3. *Bivariate Correlations Among Variables for Pre-test.*

	1	2	3	4	5	6	7	8	9	10	11
1. Age											
2. BMI	.01										
3. Education	-.10	.10									
4. Depression	.06	.07	-.26								
5. Anxiety	.24	.32*	.08	.33*							
6. Stress	.06	.11	-.08	.40**	.45**						
7. NE	.13	.13	-.19	.54**	.38**	.38**					
8. PE	-.04	-.16	.11	.22	.18	-.02	.14				
9. NS	.15	.11	-.24	.56**	.27	.44**	.92**	.07			
10. PS	.04	-.13	.21	-.02	.31*	.09	.01	.72**	.04		
11. NEG	.15	.12	-.23	.56**	.32**	.42**	.97**	.10	.99**	.03	
12. POS	-.01	-.16	.18	.10	.26	.04	.08	.92**	.06	.93**	.07

Note. BMI = Body Mass Index, NE = Negative Emotions, PE = Positive Emotions, NS = Negative Situations, PS = Positive Situations, NEG = Negative Average Score,POS = Positive Average Score, $^{*}p <. .05$, $^{**}p <. .01$

Table 3. 4. *Bivariate Correlations Among Variables for Post-test.*

	1	2	3	4	5	6	7	8	9	10	11
1. Age											
2. BMI	.01										
3. Education	-.10	.11									
4. Depression	.09	.11	-.31*								
5. Anxiety	.32*	.28*	.05	.42**							
6. Stress	.10	.24	-.12	.60**	.62**						
7. NE	.03	.20	-.09	.47**	.35*	.46**					
8. PE	-.07	-.18	.14	.19	.05	-.03	.28*				
9. NS	.08	.17	-.21	.58**	.31*	.50**	.92**	.24			
10. PS	.32	-.22	.19	-.02	.17	.01	.17	.73**	.19		
11. NEG	.06	.19	-.17	.55**	.33*	.50**	.97**	.26	.99**	.19	
12. POS	-.02	-.22	.18	.09	.12	-.01	.24	.92**	.23	.94**	.24

Note. BMI = Body Mass Index, NE = Negative Emotions, PE = Positive Emotions, NS = Negative Situations, PS = Positive Situations, NEG = Negative Average Score,POS = Positive Average Score, $^{*}p <. .05$, $^{**}p <. .01$

to other variables in pre-test measurements, and the variable of weight change was considered in addition to other variables in post-test measurements, to assess their differences among the groups.

The results of the comparisons made between groups based on pre-test measurements are shown in Table 3.5. The MANOVA analysis is showed any significant multivariate effect of group in pre-test measures. Additionally, none of the variables showed a significant difference including mean EMAQ scores as shown in Figure 3.1. In a nutshell, the analysis showed that there is no difference between intervention and control group on the age, BMI, education, depression, anxiety, stress, NE, PE, NS, PS, NEG, and POS variables for pre-test scores.

Table 3. 5. *Differences Between Pre-test Measures of Intervention and Control Groups.*

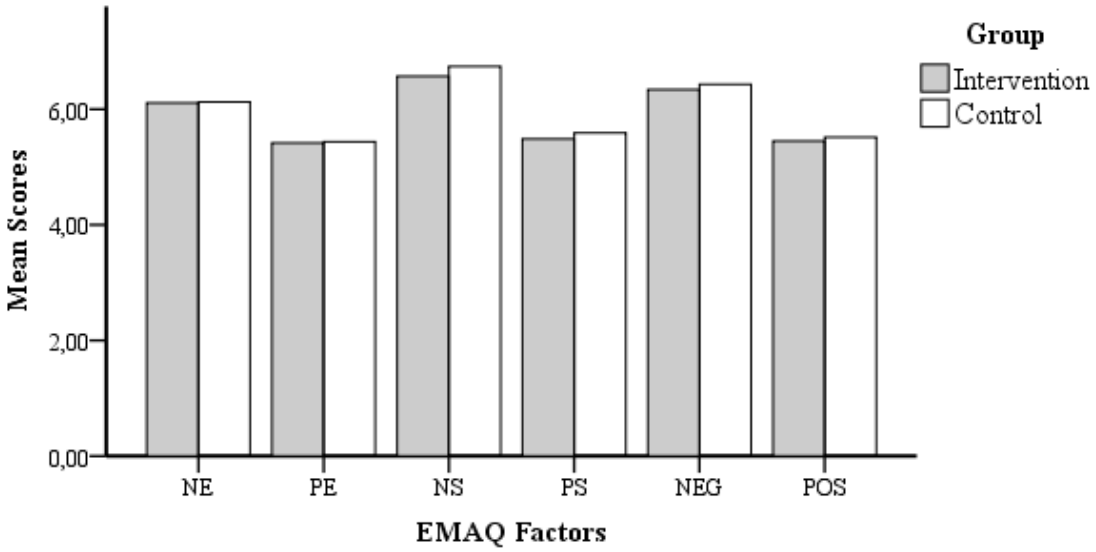
	Intervention		Control					
Variables	*M*	*SD*	*M*	*SD*	df	*F*	*p*	η_p^2
Age	38.23	9.53	37.04	10.15	1	.19	.66	.00
BMI	35.58	2.61	35.77	2.24	1	.08	.79	.00
Education	3.65	.69	3.69	.67	1	.04	.84	.00
Depression	21.31	12.57	16.69	12.35	1	.19	.19	.03
Anxiety	10.54	8.55	7.92	8.38	1	.27	.27	.02
Stress	17.69	7.67	17.15	9.72	1	.83	.83	.00
NE	6.11	1.15	6.13	1.07	1	.96	.96	.00
PE	5.42	.54	5.44	.99	1	.92	.92	.00
NS	6.57	1.96	6.74	1.82	1	.75	.75	.00
PS	5.49	.71	6.74	1.82	1	.67	.67	.00
NEG	6.34	1.52	6.43	1.42	1	.05	.82	.00
POS	5.45	.55	5.51	.94	1	.08	.77	.00

Note. M = Mean, SD = Standart Deviation, BMI = Body Mass Index, NE = Negative Emotions, PE = Positive Emotions, NS = Negative Situations, PS = Positive Situations, NEG = Negative Average Score, POS = Positive Average Score, [$\lambda = .89$, $F(10, 41) = .48$, $p > .05$, $\eta_p^2 = .11$], $^{*}p < .05$, $^{**}p < .01$

According to the results of the comparisons made between groups using post-test measurements (Table 3.6.), the analysis was indicated a significant difference among the groups

[$\lambda = .62$, $F(8, 43) = .3.33$, $p < .01$, $\eta_p^2 = .38$]. Furthermore, when the variables were considered separately,

Figure 3.1. *Mean Scores of Pre-test EMAQ Measures for Intervention and Control Groups.*



NE = Negative Emotions, PE = Positive Emotions, NS = Negative Situations, PS = Positive Situations, NEG = Negative Average Score, POS = Positive Average Score

it was observed that the variables of NS [$F(1, 43) = 5.00$, $p < .05$, $\eta_p^2 = .09$], and NEG [$F(1, 43) = 6.20$, $p < .05$, $\eta_p^2 = .11$] significantly differed. However, no significant differences were found among the variables of depression, anxiety, stress, PE, PS, and POS. Results of the analysis have indicated that there is no difference between intervention and control groups on the BMI, depression, anxiety, stress, PE, PS, and POS variables for post-test scores.Mean post-test EMAQ scores for intervention and control groups which indications were examined further parts of the section, has shown in Figure 3.2.

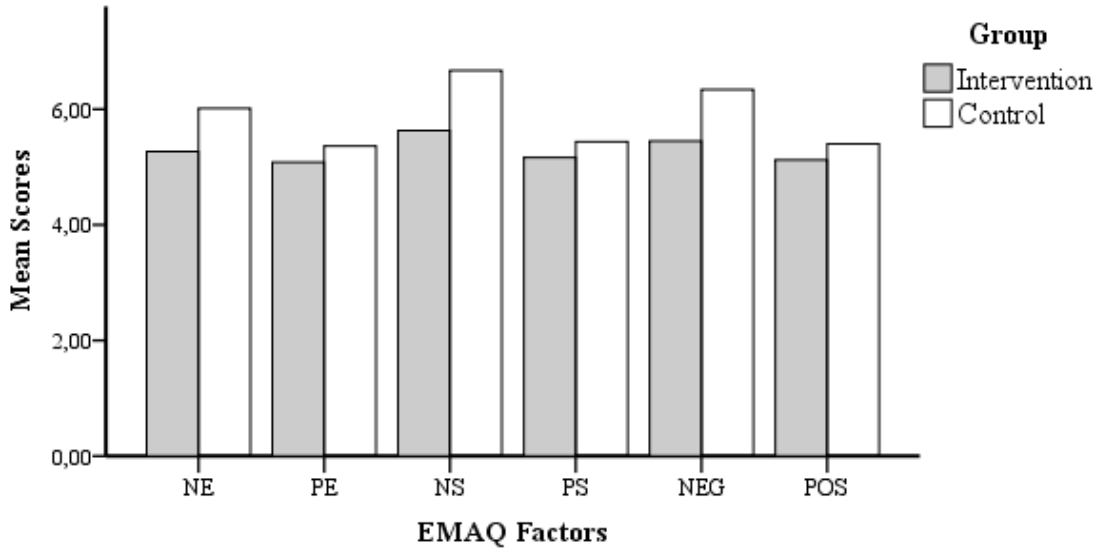
Table 3. 6. *Differences Between Post-test Measures of Intervention and Control Groups.*

	Intervention		Control					
Variables	*M*	*SD*	*M*	*SD*	df	*F*	*p*	η_p^2
Weight Change	5.11	1.35	4.02	1.26	1	9.26	.00**	.16
BMI	33.63	2.47	34.22	2.02	1	.91	.35	.02
Depression	18.69	11.44	15.31	11.80	1	1.10	.30	.02

Anxiety	9.08	8.49	7.46	7.47	1	.53	.47	.01
Stress	15.46	7.01	15.31	7.71	1	.01	.94	.00
NE	5.27	.84	6.01	1.06	1	7.84	.01**	.14
PE	5.08	.42	5.36	.93	1	1.90	.17	.04
NS	5.63	1.49	6.67	1.84	1	5.00	.03*	.09
PS	5.17	.57	5.44	1.00	1	1.43	.24	.03
NEG	5.45	1.14	6.34	1.43	1	6.20	.02*	.11
POS	5.13	.45	5.40	.90	1	1.91	.17	.03

Note. M = Mean, SD = Standart Deviation, BMI = Body Mass Index, NE = Negative Emotions, PE = Positive Emotions, NS = Negative Situations, PS = Positive Situations, NEG = Negative Average Score, POS = Positive Average Score, [$\lambda = .62$, $F(8, 43) = .3.33$, $p < .01$, $\eta_p^2 = .38$], $^{*}p < .05$, $^{**}p < .01$

Figure 3.2. *Mean Scores of Post-test EMAQ Measures for Intervention and Control Groups.*



NE = Negative Emotions, PE = Positive Emotions, NS = Negative Situations, PS = Positive Situations, NEG = Negative Average Score, POS = Positive Average Score

In addition to other variables, the BMI variable was not shown a significant difference in post-test measurements. However, the difference between participants' weights in pre-test and post-test measurements was evaluated as the 'weight change' variable. The analysis was found a significant difference in weight change between the groups [$F(1, 43) = 9.26$, $p < .001$, $\eta_p^2 = .16$], Moreover, it was indicated that intervention group ($M = 5.11$) lost more weight than control group ($M = 4.02$).

Repeated 2x2 MANOVA were conducted to determine of intervention and time on depression, anxiety, and stress scores that is important aspect of covariate selection. The result of the analysis were showed that there is no main effect of intervention. The main effect of time [$F(3, 48) = 5.70$, $p < .01$, $\eta_p^2 = .26$, $\lambda = .74$] was significant for depression [$F(1, 48) = 11.45$, $p < .01$, $\eta_p^2 = .19$, $\lambda = .74$], anxiety [$F(1, 48) = 4.36$, $p < .05$, $\eta_p^2 = .08$, $\lambda = .74$], and stress [$F(1, 48) = 12.25$, $p < .01$, $\eta_p^2 = .20$, $\lambda = .74$] scores in pre-test and post-test measures. Additionally, the interaction effect was not significant for depression, anxiety, and stress variables. As a result, depression, anxiety and stress variables are determined as covariates for further analyses.

A mixed 2x2 MANCOVA was conducted to test efficacy of PPEB (by comparing the intervention and control group's NE, PE, NS, and PS scores), and time; while depression, anxiety, and stress variables held constant (Table 3.7.). The main effect of intervention were found significant for NE [$F(1, 44) = 6.40$, $p < .05$, $\eta_p^2 = .12$, $V = .14$], and NS [$F(1, 44) = 5.65$, $p < .05$, $\eta_p^2 = .11$, $V = .14$] variables. When the means of NE, PE, and NS are considered, it is observed that NE, PE, and NS significantly decrease in the intervention group ($M_{NE} = 5.27$, $M_{PE} = 5.08$ $M_{NS} = 5.63$) compared to the control group ($M_{NE} = 6.01$, $M_{PE} = 5.36$, $M_{NS} = 6.67$). The main effect of time were found significant for PE [$F(1, 44) = 9.48$, $p < .01$, $\eta_p^2 = .17$, $V = .27$] and PS [$F(1, 44) = 5{,}26$, $p < .05$, $\eta_p^2 = .10$, $V = .27$] variables. The interaction effect between intervention and time were found significant for NE [$F(1, 44) = 18.25$, $p < .001$, $\eta_p^2 = .28$, $V = .38$], PE [$F(1, 44) = 8.16$, $p < .01$, $\eta_p^2 = .15$, $V = .38$], and NS [$F(1, 44) = 17.75$, $p < .01$, $\eta_p^2 = .27$, $V = .38$] variables. When the means of NE, PE, and NS are considered, it is observed that NE, PE, and NS significantly decrease in the intervention group.

Table 3. 7. *Interaction Effect of Intervention and Time for Emotional Eating Sub-measures*.

	Intervention		Control					
Variable	M	SD	M	SD	df	F	p	η_p^2
NE	5.27	.84	6.01	1.06	1	18.25	.00	.28

PE	5.08	.42	5.36	.93	1	8.16	.01	.15
NS	5.63	1.49	6.67	1.84	1	17.70	.00	.27
PS	5.17	.57	5.44	1.00	1	2.41	.13	.05

Note., NE = Negative Emotions, PE = Positive Emotions, NS = Negative Situations, PS = Positive Situations

4. DISCUSSION

The study was conducted to determine the effectiveness of the Psychoeducation Program for Emotional Eating Behavior (PPEB), an online self-help program designed to reduce emotional eating behavior. The sample consisted entirely of women, and the results demonstrate that PPEB is an effective psychoeducational program. In this section, the relationships between variables (separately for pre-test/post-test measures), the effectiveness of the PPEB program, strengths/limitations, suggestions for further research, and clinical implications will be examined in conjunction with the literature.

4.1. Relationships Between Variables

4.1.1. Depression, anxiety, and stress

In the pre-test and post-test measurements, a correlation was observed between depression, anxiety, and stress. Research conducted with clinical samples (Pompon et al., 2018), non-clinical samples (Wei & Sha, 2003), and mixed samples (Havnen et al., 2020) indicates the relation between depression, anxiety, and stress. In addition to studies examining these variables together, studies conducting on depression and anxiety (Lavigne et al., 2014; Rice et al., 2004; Vaccarino, 2008), depression and stress (Hammen et al., 2012; Phillips et al., 2015), and stress and anxiety (Daviu et al., 2019) also demonstrate their interrelationship. Therefore, the findings obtained in this research align with the existing literature.

As stated separately in the Method section, the scores obtained from the Depression Anxiety Stress Scale 21 (DASS 21) also provide an assessment of the severity of depression, anxiety, and stress. This assessment is classified as “normal, mild, moderate, severe, extremely severe.” Analyses considering the average scores of the depression, anxiety, and stress variables reveal that individuals’ severity levels were calculated as moderate, mild, mild for depression, anxiety, and stress, respectively, in both the pre-test and post-test measurements. In summary, in both measurements, the scores for depression, stress, and anxiety exceed the normal values.

As mentioned before, the sample of the study consists of obese individuals. Previous research has shown that obesity is related with depression (Luppino et al., 2010; Preiss et al., 2013), anxiety (Amiri & Behnezhad, 2018), and stress (Torres & Nowson, 2007). Therefore, the

fact that the individuals in the sample are obese can be considered as a contributing factor to the different average scores of the relevant variables measured in both assessments.

In addition to the participants being obese individuals, another characteristic is that they are women who have started a diet. Fallon and Rozin (1985) demonstrated that one of the reasons women start dieting is due to feeling anxious about societal ideals of an ideal body size being thin. Additionally, Dalley and Buunk (2009) showed that starting a diet behavior in women is predicted by the fear of having an "over-fat identity." Considering the link between diet initiation motivation and anxiety, the elevated anxiety scores can be considered as another effect of the sample structure.

The effect of the election period in Türkiye should also be taken into account during the period when the data was collected. According to research, elections have an impact on stress (Roche & Jacobson, 2018), anxiety, and depression (Mukhopadhyay, 2022). Studies were also found that levels of depression, anxiety, and stress decrease swiftly after the election even if they are tended to gradually increase before the elections. Hence, the fact that the data was collected during the election period can be considered as a contributing factor to the increase in reported levels of depression, anxiety, and stress in individuals.

Finally, the earthquake that occurred in Kahramanmaraş, Türkiye on February 6, 2023, measured at a magnitude of 7.8, affected many surrounding provinces and resulted in significant loss of life and economic damage (Goldberg et al., 2023). After a trauma like an earthquake, adults are more likely to develop intense posttraumatic stress responses, in addition to feelings of anxiety and depression (Goenjian et al., 2000). Furthermore, it is crucial to take into account vicarious trauma, which is the collective impact of natural disasters and other significant traumatic events on entire populations (Abramowitz, 2005) even though none of them were directly affected by the event. Vicarious trauma is also correlated with depression, anxiety, and stress (Kindermann et al., 2017; Vrklevski & Franklin, 2008). It is possible that the extremely devastating earthquake had an effect on the participants' reported levels of stress, anxiety, and depression.

4.1.2. Emotional eating

As stated in detail in the Method section, the Emotional Appetite Questionnaire (EMAQ) assesses emotional eating behavior in four different areas: negative emotions (NE), positive emotions (PS), negative situations (NS), and positive situations (PS). Relationships were evaluated separately for pre-test/post-test, and the variables showing correlation displayed significant similarities. While the similar variables were examined under the same framework, the non-correlating variables were specifically mentioned and their potential reasons were discussed.

The results indicate that NE is correlated with depression, stress, and anxiety. The current literature also supports the relationship between emotional eating and depression (Ouwens et al., 2009; Paans et al., 2018; Sevinçer et al., 2016), anxiety (Chen et al., 2012), and stress (Michels et al., 2012; Shen et al., 2020; Talbot et al., 2013). Furthermore, a study conducted by Kaner et al. (2022) on a sample from Türkiye also found similar results, examining the relationship between depression, stress, anxiety, and emotional eating. Therefore, the findings of the study are consistent with previous research conducted in the past.

It is observed that NE also exhibits a strong positive correlation with NS. This may be due to the triggering of negative emotions by the situations specified in the EMAQ (e.g., eating level after ending a relationship), which in turn measures the eating behavior resulting from these emotions. Taking this example into consideration, individuals may experience sadness after ending a relationship, which may lead them to engage in emotional eating as a result of acting upon this emotion. Hence, this mechanism could explain the high correlation between NE and NS. The relationship between NS and depression, anxiety, and stress can also be considered under the same mechanism.

Finally, it has been observed that PE shows a significant relationship with PS. In this context, it is thought that a similar mechanism to the mediation shown by negative emotions between NE and NS may also exist between PE and PS, but with positive emotions. For example, in the PE sub-measure, there is a question that assesses how participants' eating amounts change when they are "happy". Additionally, in the PS sub-measure, there is a question that evaluates how eating behaviors change "after receiving good news". The direct measurement of the happiness emotion triggered by receiving good news and its measurement

in two separate sub-measures may have increased the relationship between the two measures through the mediation of the happiness emotion.

In addition to systematically related variables between pre-test and post-test measurements, variables that were unrelated in the pre-test but showed a correlation in the post-test were also identified. In the post-test measurements, a positive correlation was observed between education level and depression. Akhtar-Danesh and Landeen (2007) also found a similar result when examining the relationship between depression and demographic variables. Moreover, while a positive low power and significance relationship was found between PE and NE, no supporting evidence was found in the literature to explain this correlation.

According to the literature findings, in addition to the previously mentioned relationships between obesity and depression, anxiety, and stress, there is also a relationship with emotional eating (Dakanalis et. al., 2023). However, in the current study, no relationship between BMI and any variable has emerged. It can be said that the underlying main reason for the lack of observed relationship is the fact that the entire sample consists of obese individuals.

4.2. Examining Differences Between Variables and Efficacy of PPEB

4.2.1. Differences between variables

Emotional eating is correlated with depression, anxiety, and stress. Therefore, in order to gain a better insight into whether the changes provided by PPEB on NE, NS, PE, and PS are related to negative emotions between groups or the level of emotional eating before participating in the study, the differences in these variables between groups were evaluated in pre-test and post-test measurements. In the pre-test measurements, there were found no significant differences between groups or any variable according to MANOVA analysis. Besides, post-test measures showed no significant group differences between the depression, anxiety, and stress variables.

4.2.2. Efficacy of PPEB

MANCOVA analysis revealed a significant change between NE, PE, and NS when taking into account the effects of depression, anxiety, and stress. Therefore, it can be observed that the PPEB is effective in reducing NE, PE, and NS in dieting women with obesity. Possible

reasons underlying the effectiveness of PPEB in reducing NE, PE, and NS have been discussed below.

The PPEB incorporates cognitive behavioral therapy (CBT) practices, such as goal setting, providing information about cognitive restructuring, and cognitive distortions. The current literature shows that CBT practices are effective in reducing emotional eating (Tham, & Chong, 2019). Gaining insight into automatic thoughts and cognitive distortions that can trigger negative emotions, as well as breaking these thought patterns through cognitive restructuring, can be seen as an effective mechanism for reducing NE, and NS.

Information about emotional eating and emotional hunger concept also provided in the program. It is suggested that informing participants in the PPEB program about the potential experience of hunger when they have negative emotions, explaining the concept of emotional hunger in detail, and addressing the differences between physical hunger and emotional hunger, play a role in reducing NE, PE, and NS scores. It is hypothesized that individuals carefully examining their internal processes when experiencing negative emotions, and evaluating whether their hunger is emotional or physical when they feel hungry, are factors contributing to the reduction in NE, PE, and NS values.

Coping strategies for dealing with negative emotions without resorting to emotional eating are also taught through psychoeducation (i. e. breathing exercise). Research has shown that difficulties in emotion regulation are one of the underlying causes of emotional eating (Jones et al., 2019; Usubini et al., 2021). Therefore, increased skills in coping with emotion dysregulation might be played an effective role in reducing negative emotional eating scores.

Another possible reason for the role of the PPEB program in reducing NE, PE, and NS scores could be the inclusion of dietary self-monitoring within the program. VanWormer et. al. (2009) were suggested that monitoring weight increases the awareness about how the weight related with food intake and consuming. Along the same line, PPEB aimed to provide dietary self-monitoring habit, tracking what they eat or drink in daily life.

It is suggested that teaching self-compassion techniques and the concept of stimulus control may have played a role in reducing negative emotional eating. Within the framework of stimulus control, participants may have become more attentive to avoiding unhealthy snacks in

environments that trigger negative emotions, such as at home or at work, and this may have contributed to the reduction in emotional eating. Additionally, it is thought that teaching self-compassion techniques can help break the cycle of negative emotional eating triggered by feelings of guilt and shame that often result from engaging in eating behaviors when experiencing negative emotions.

Finally, when the depression, anxiety, and stress variables were held constant, it was observed that the PPEB had no significant impact on PS. It is thought that one of the reasons for this could be the fact that the sample consisted entirely of women. Research has shown that men engage in more positive emotional eating behaviors compared to women (Kaner et al., 2022). In this context, the lack of significant differences in participants' PS could be attributed to the absence of noteworthy levels of these variables. Additionally, it is important to consider that high emotional eating is primarily triggered by negative emotions (van Strien et al., 2013), which is another factor that should be taken into account.

4.3. Limitations

Firstly, the small sample size can be considered among the limitations. Although a sufficient sample size was obtained for the analysis measuring the effectiveness of PPEB, it is assumed that the examined correlation and difference values may have been influenced by the small sample size factor. One possibility is that using a sample size smaller than what is considered ideal raises the likelihood of accepting a false assumption as true (Faber & Fonseca, 2014). This situation may pose a problem in terms of the generalizability of the study results. However, it can be concluded that the correlations and differences between variables that may be due to small sample size are generally consistent with the findings in the literature, indicating that the inferences of the study are not significantly affected by the problems that may arise from small sample size.

Another limitation of the study can be identified as the sample consisting only of women. Presnell et al. (2008) suggested that when implementing weight loss interventions, it is important to consider specific psychological and behavioral factors and recognize the importance of gender variations in predictors of weight loss treatment. Therefore, having a sample consisting only of women prevents obtaining generalizable data for men, despite demonstrating the impact of PPEB on women. Although the study initially aimed to include

male participants, an adequate number of male participants could not be reached. This situation can be explained by men seeking less help for problematic eating behaviors (Guerdjikova et al., 2007).

The distribution of participants in terms of education can be considered another limitation of the study. The majority of the sample analyzed in the study consists of individuals who have completed university education. Education can potentially influence the utilization of cognitive behavioral strategies, one's self-belief in memory capabilities, and the improvement observed after cognitive training (Teixeira-Fabrício et al., 2012). Considering that PPEB was developed within the framework of CBT practices, it is hard to achieve sufficient generalizability in evaluating the effectiveness of PPEB for individuals with different educational backgrounds.

EMAQ evaluates emotional eating behavior in the domains of NE, PE, NS, and PS, by considering the variables "negative average score (NEG)" and "positive average score (POS)" obtained from these measurements (Nolan et al., 2010). However, the domains NE, NS, PE, and PS were developed based on the researchers' observations. Nevertheless, Demirel et. al. (2014), while conducting a standardization study for the Turkish sample of the questionnaire, also determined the construct validity, demonstrating that the questionnaire has a two-factor structure in the NEG and POS domains. However, in the current study, the original four-factor structure mentioned in the questionnaire was utilized in order to gain better insight into different domains of emotional eating.

Another issue to consider regarding the EMAQ is the exclusion of anxiety as a variable in the original version, which considers it as a component of the NE factor. In the standardization study conducted for the Turkish sample, anxiety was eliminated from the scale as it did not load onto either factor. However, as previously mentioned, there are studies that demonstrate a link between anxiety and emotional eating (Chen et al., 2012). Additionally, there is a positive correlation between anxiety and NE in the present study. Therefore, the absence of anxiety as a component in the applied scale can be considered a limitation.

The participants' implementation degree of the techniques taught within the PPEB framework was measured through the "weekly evaluation form." Although the relevant form has strengths such as being designed to include all the practices provided within the PPEB

program and being administered on a weekly basis, no validity and reliability study has been conducted on it. Additionally, 11 participants were excluded from the study based on the cut-off point determined by the scale. Therefore, the lack of validity for the form emerges as a limitation.

Due to time constraints, follow-up data could not be reported for this study. As a result, the lack of a follow-up study can be considered as another limitation. Systematic reporting of follow-up completeness is crucial for ensuring reliable outcome assessment (von Allmen et al., 2015). Therefore, considering a follow-up study is essential for PPEB to provide more reliable results. Also, Hawthorne Effect, the occurrence of modified conduct or achievement as a consequence of realizing one's involvement in an experimental investigation (Campbell et. al., 1995), might be emerged.

Finally, the lack of anonymity can be considered another limitation of the research. Anonymizing research participants is important for ensuring the overall quality of the research. Even in situations where there are no ethical risks involved, participants may prefer not to remain anonymous or guaranteeing their anonymity may not be possible (Vainio, 2012). The absence of anonymity can be a critical risk factor in obtaining biased answers influenced by social desirability, particularly when sensitive topics are involved (Ong & Weiss, 2000).

4.4. Further Studies

Research suggests that individuals who experience negative emotions are tended to reduce their eating behavior, whereas some individuals have their eating behavior triggered by negative emotions. The reason behind this variation is commonly addressed in the literature within the framework of genetic factors, eating habits, emotion dysregulation and the factors contributing to emotion dysregulation. In this context, conducting exploratory research to examine these contradicting reactions to negative emotions can provide us with a more comprehensive theoretical framework regarding the underlying mechanisms of emotional eating.

The tools commonly used to measure emotional eating primarily focus on measuring emotional eating stemming from negative emotions. The EMAQ stands out among these tools as it measures PE and PS. However, considering the standardization study of EMAQ in Türkiye,

it is apparent that it was conducted with a healthy and limited representative sample. Hence, it is recommended to conduct standardization studies of EMAQ with more represenative and clinical sample pools as well.

Finally, it is recommended to evaluate the effectiveness of PPEB with more comprehensive sample pools that include representation of men and to conduct follow-up studies.

4.5. Clinical Implications and Conclusion

Research has shown that in dieting women with obesity, PPEB is effective supportive method to deal with NE, PE, and NS. Emotional eating has emerged as an increasingly important concept, as shown in studies examining the psychological factors influencing weight loss. However, there are very few weight loss and weight maintenance programs specifically addressing emotional eating. Therefore, because PPEB encompasses studies focusing on cognitive, emotional, behavioral, and environmental factors related to emotional eating, it proves to be an important program.

In addition to specifically addressing emotional eating, PPEB differentiates itself from other programs by being a psychoeducational self-help program. Most weight loss programs are designed as interactive individual/group sessions. PPEB, on the other hand, stands out from other programs by focusing on providing individuals with a toolbox to deal with emotional eating in a non-interactive format. Considering the time and economic challenges associated with implementing a structured program with a mental health professional, PPEB proves to be a strong alternative due to its free and concise nature. Additionally, the increase in the use of online platforms for various societal needs, including education, during the COVID-19 quarantine, is believed to have increased the population's habit of utilizing online resources for learning. In this context, the online availability of PPEB provides an advantage.

When evaluating the effectiveness of PPEB, although the limitation section states that the sample consists of women, it should also be noted that this aspect is advantageous. Considering that the effectiveness of weight loss programs varies depending on the individual's gender, it can be concluded that PPEB is an effective program specifically targeted towards women.

Another important feature of PPEB is its short duration. Nowadays, it is observed that individuals prefer to watch a series of shorter contents instead of watching lengthy content from start to finish in many areas. In this context, PPEB aims to provide participants with techniques used in emotional eating and weight loss programs in a “to the point” manner. Although the techniques used are based on CBT, mindfulness-based and emotion regulation techniques have also been incorporated into the program.

PPEB is designed as a supportive method that can be used by doctors and dieticians in their work with individuals who want to lose weight, in addition to individual use. In this way, relevant healthcare professionals can choose to learn and apply some techniques within the program to their own patients, or they can directly share PPEB with their patients. PPEB aims to increase awareness of the concept of emotional eating in society and promote a more effective approach to the concept in weight loss programs.

REFERENCES

Abramowitz, S. A. (2005). The poor have become rich, and the rich have become poor: Collective trauma in the Guinean Languette. *Social Science & Medicine*, *61*(10), 2106–2118. https://doi.org/10.1016/j.socscimed.2005.03.023

Akhtar-Danesh, N., & Landeen, J. (2007). Relation between depression and sociodemographic factors. *International Journal of Mental Health Systems*, *1*(1), 4. https://doi.org/10.1186/1752-4458-1-4

Amiri, S., & Behnezhad, S. (2019). Obesity and anxiety symptoms: a systematic review and meta-analysis. *Neuropsychiatrie*, *33*(2), 72–89. https://doi.org/10.1007/s40211-019-0302-9

Annesi, J. J., Johnson, P. H., Tennant, G. A., Porter, K. J., & McEwen, K. L. (2016). Weight loss and the prevention of weight regain: Evaluation of a treatment model of exercise self-regulation generalizing to controlled eating. *The Permanente Journal*, *20*(3). https://doi.org/10.7812/tpp/15-146

Arch, J. J., & Craske, M. G. (2006). Mechanisms of mindfulness: Emotion regulation following a focused breathing induction. *Behaviour Research and Therapy*, *44*(12), 1849–1858. https://doi.org/10.1016/j.brat.2005.12.007

Barnes, R. D., White, M. A., Martino, S., & Grilo, C. M. (2014). A randomized controlled trial comparing scalable weight loss treatments in primary care. *Obesity*, *22*(12), 2508-2516. https://doi.org/10.1002/oby.20889

Beck, J. S. (2007). *The Beck Diet Solution: Train your brain to think like a thin person*. Hachette UK.

Bernabéu-Brotóns, E., & Marchena-Giráldez, C. (2022). Emotional eating and perfectionism as predictors of symptoms of binge eating disorder: The role of perfectionism as a mediator between emotional eating and body mass index. *Nutrients*, *14*(16), 3361. https://doi.org/10.3390/nu14163361

Beydoun, M. A. (2014). The interplay of gender, mood, and stress hormones in the association between emotional eating and dietary behavior. *Journal of Nutrition*, *144*(8), 1139–1141. https://doi.org/10.3945/jn.114.196717

Bilici, S., Ayhan, B., Karabudak, E., & Köksal, E. (2020). Factors affecting emotional eating and eating palatable food in adults. *Nutrition Research and Practice*, *14*(1), 70-75. https://doi.org/10.4162/nrp.2020.14.1.70

Bongers, P., Jansen, A., Havermans, R., Roefs, A., & Nederkoorn, C. (2013). Happy eating. The underestimated role of overeating in a positive mood. *Appetite*, *67*, 74–80. https://doi.org/10.1016/j.appet.2013.03.017

Braden, A., Musher-Eizenman, D., Watford, T., & Emley, E. (2018). Eating when depressed, anxious, bored, or happy: Are emotional eating types associated with unique psychological and physical health correlates? *Appetite*, *125*, 410–417. https://doi.org/10.1016/j.appet.2018.02.022

Braden, A., & O'Brien, W. (2020). Pilot study of a treatment using dialectical behavioral therapy skills for adults with overweight/obesity and emotional eating. *Journal of Contemporary Psychotherapy*, *51*(1), 21–29. https://doi.org/10.1007/s10879-020-09477-1

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822–848. https://doi.org/10.1037/0022-3514.84.4.822

Bruch, H. (1973). *Eating disorders. Obesity, anorexia nervosa, and the person within*. New York: Basic Books.

Campbell, J. P., Maxey, V. A., & Watson, W. A. (1995). Hawthorne effect: Implications for prehospital research. *Annals of Emergency Medicine*, *26*(5), 590–594. https://doi.org/10.1016/s0196-0644(95)70009-9

Carpio-Arias, T. V., Manzano, A. M. S., Sandoval, V., Vinueza-Veloz, A. F., Betancourt, A. R., Ortíz, S. L. B., & Vinueza-Veloz, M. F. (2022). Relationship between perceived stress and emotional eating. A cross sectional study. *Clinical Nutrition ESPEN, 49*, 314-318.

Chang, R. S., Cerit, H., Hye, T., Durham, E. L., Aizley, H., Boukezzi, S., Haimovici, F., Goldstein, J. M., Dillon, D. G., Pizzagalli, D. A., & Holsen, L. M. (2022). Stress-induced alterations in HPA-axis reactivity and mesolimbic reward activation in individuals with emotional eating. *Appetite*, *168*, 105707. https://doi.org/10.1016/j.appet.2021.105707

Chen, J., Wang, Z., Guo, B., Arcelus, J., Zhang, H., Jia, X., Xu, Y., Qiu, J., Xiao, Z., & Yang, M. (2012). Negative affect mediates effects of psychological stress on disordered eating

in young Chinese women. *PLOS ONE*, *7*(10), e46878. https://doi.org/10.1371/journal.pone.0046878

Cheng, J., Gao, J., Shuai, X., Wang, G., & Tao, K. (2016). The comprehensive summary of surgical versus non-surgical treatment for obesity: a systematic review and meta-analysis of randomized controlled trials. *Oncotarget*, *7*(26), 39216–39230. https://doi.org/10.18632/oncotarget.9581

Chesler, B. E. (2012). Emotional Eating: A virtually untreated risk factor for outcome following bariatric surgery. *The Scientific World Journal*, *2012*, 1–6. https://doi.org/10.1100/2012/365961

Cleobury, L., & Tapper, K. (2013). Reasons for eating 'unhealthy' snacks in overweight and obese males and females. *Journal of Human Nutrition and Dietetics*, *27*(4), 333–341. https://doi.org/10.1111/jhn.12169

Czepczor-Bernat, K., Brytek-Matera, A., & Staniszewska, A. (2020). The effect of a web-based psychoeducation on emotional functioning, eating behaviors, and body image among premenopausal women with excess body weight. *Archives of Women's Mental Health*, *24*(3), 423–435. https://doi.org/10.1007/s00737-020-01077-1

Dakanalis, A., Mentzelou, M., Papadopoulou, S. K., Papandreou, D., Spanoudaki, M., Vasios, G. K., Pavlidou, E., Mantzorou, M., & Giaginis, C. (2023). The association of emotional eating with overweight/obesity, depression, anxiety/stress, and dietary patterns: A review of the current clinical evidence. *Nutrients*, *15*(5), 1173. https://doi.org/10.3390/nu15051173

Dalley, S. E., & Buunk, A. P. (2009). "Thinspiration" vs. "fear of fat". Using prototypes to predict frequent weight-loss dieting in females. *Appetite*, *52*(1), 217–221. https://doi.org/10.1016/j.appet.2008.09.019

Dallman, M. F., la Fleur, S. E., Pecoraro, N. C., Gómez, F., Houshyar, H., & Akana, S. F. (2004). Minireview: glucocorticoids—food intake, abdominal obesity, and wealthy nations in 2004. *Endocrinology*, *145*(6), 2633–2638. https://doi.org/10.1210/en.2004-0037

Daviu, N., Bruchas, M. R., Moghaddam, B., Sandi, C., & Beyeler, A. (2019). Neurobiological links between stress and anxiety. *Neurobiology of Stress*, *11*, 100191. https://doi.org/10.1016/j.ynstr.2019.100191

Demirel, B., Yavuz, F. K., Karadere, M. E., Şafak, Y., & Türkçapar, M. H. (2014). Duygusal İştah Anketi'nin Türkçe geçerlik ve güvenilirliği, beden kitle indeksi ve duygusal şemalarla ilişkisi. *Bilişsel Davranışçı Psikoterapi ve Araştırmalar Dergisi*, 3, 171-181.

Deurenberg, P., & Hautvast, J. G. (1989). Prevalence of overweight and obesity in the Netherlands in relation to sociodemographic variables, lifestyle and eating behavior: Starting points for the prevention and treatment of obesity. In *Bibliotheca nutritio et dieta*. Karger Publishers. https://doi.org/10.1159/000417295

Devonport, T. J., Nicholls, W., & Fullerton, C. (2017). A systematic review of the association between emotions and eating behaviour in normal and overweight adult populations. *Journal of Health Psychology*, *24*(1), 3–24. https://doi.org/10.1177/1359105317697813

Eichler, K., Zoller, M., Steurer, J., & Bachmann, L. M. (2007). Cognitive-behavioural treatment for weight loss in primary care: a prospective study. *Schweizerische Medizinische Wochenschrift*. https://doi.org/10.4414/smw.2007.11873

Faber, J., & Fonseca, L. M. (2014). How sample size influences research outcomes. *Dental Press Journal of Orthodontics*, *19*(4), 27–29. https://doi.org/10.1590/2176-9451.19.4.027-029.ebo

Faith, M. S., Allison, D. B., & Geliebter, A. (1997). *Emotional eating and obesity: theoretical considerations and practical recommendations*. In S. Dalton, *Overweight and weight management: The health professional's guide to understanding and practice* (pp. 439–465). Aspen Publishers.

Fallon, A. E., & Rozin, P. (1985). Sex differences in perceptions of desirable body shape. *Journal of Abnormal Psychology*, *94*(1), 102–105. https://doi.org/10.1037/0021-843x.94.1.102

Fernstrom, J. D., & Wurtman, R. J. (1971). Brain serotonin content: Increase following ingestion of carbohydrate diet. *Science*, *174*(4013), 1023–1025. https://doi.org/10.1126/science.174.4013.1023

Forman, E. M., & Butryn, M. L. (2015). A new look at the science of weight control: How acceptance and commitment strategies can address the challenge of self-regulation. *Appetite*, *84*, 171–180. https://doi.org/10.1016/j.appet.2014.10.004

Forman, E. M., Butryn, M. L., Juarascio, A. S., Bradley, L. E., Lowe, M. R., Herbert, J. D., & Shaw, J. A. (2013). The mind your health project: A randomized controlled trial of an

innovative behavioral treatment for obesity. *Obesity*, *21*(6), 1119–1126. https://doi.org/10.1002/oby.20169

Frayn, M., & Knäuper, B. (2017). Emotional eating and weight in adults: A review. *Current Psychology*, *37*(4), 924–933. https://doi.org/10.1007/s12144-017-9577-9

Geliebter, A., & Aversa, A. (2003). Emotional eating in overweight, normal weight, and underweight individuals. *Eating Behaviors*, *3*(4), 341–347. https://doi.org/10.1016/s1471-0153(02)00100-9

George, D., & Mallery, P. (2010). *SPSS for Windows Step by Step: A Simple Guide and Reference 17.0 Update* (10th ed.). Pearson, Boston.

Gloy, V. L., Briel, M., Bhatt, D. L., Kashyap, S. R., Schauer, P. R., Mingrone, G., Bucher, H. C., & Nordmann, A. J. (2013). Bariatric surgery versus non-surgical treatment for obesity: a systematic review and meta-analysis of randomized controlled trials. *BMJ*, *347*. https://doi.org/10.1136/bmj.f5934

Goenjian, A. K., Steinberg, A. M., Najarian, L. M., Fairbanks, L. A., Tashjian, M., & Pynoos, R. S. (2000). Prospective study of posttraumatic stress, anxiety, and depressive reactions after earthquake and political violence. *American Journal of Psychiatry*, *157*(6), 911–895. https://doi.org/10.1176/appi.ajp.157.6.911

Goldberg, D. E., Taymaz, T., Reitman, N. G., Hatem, A. E., Yolsal-Çevikbilen, S., Barnhart, W. D., Irmak, T. S., Wald, D. J., Öcalan, T., Yeck, W. L., Özkan, B., Jobe, J. a. T., Shelly, D. R., Thompson, E. M., DuRoss, C. B., Earle, P. S., Briggs, R. W., Benz, H. M., Erman, C., Doğan, A. H., Altuntaş, C. (2023). Rapid characterization of the February 2023 Kahramanmaraş, Türkiye, earthquake sequence. *The Seismic Record*, *3*(2), 156–167. https://doi.org/10.1785/0320230009

Guerdjikova, A. I., McElroy, S. L., Kotwal, R., & Keck, P. E. (2007). Comparison of obese men and women with binge eating disorder seeking weight management. *Eating and Weight Disorders-Studies on Anorexia Bulimia and Obesity*, *12*(1), e19–e23. https://doi.org/10.1007/bf03327777

Hammen, C., Hazel, N. A., Brennan, P. A., & Najman, J. M. (2011). Intergenerational transmission and continuity of stress and depression: depressed women and their offspring in 20 years of follow-up. *Psychological Medicine*, *42*(5), 931–942. https://doi.org/10.1017/s0033291711001978

Havnen, A., Anyan, F., Hjemdal, O., Solem, S., Riksfjord, M., & Hagen, K. (2020). Resilience moderates negative outcome from stress during the COVID-19 pandemic: A moderated-mediation approach. *International Journal of Environmental Research and Public Health*, *17*(18), 6461. https://doi.org/10.3390/ijerph17186461

Hawks, S. R., Madanat, H. N., Merrill, R. M., Goudy, M. B., & Miyagawa, T. (2003). A cross-cultural analysis of 'motivation for eating' as a potential factor in the emergence of global obesity: Japan and the United States. *Health Promotion International*, *18*(2), 153–162. https://doi.org/10.1093/heapro/18.2.153

Heatherton, T. F., & Baumeister, R. F. (1991). Binge eating as escape from self-awareness. *Psychological bulletin*, *110*(1), 86.

Herman, C., & Polivy, J. (1980). *Restrained Eating*. Saunders, Philadelphia.

Herbert, B. M., Herbert, C., & Pollatos, O. (2011). On the relationship between interoceptive awareness and alexithymia: Is interoceptive awareness related to emotional awareness? *Journal of Personality*, *79*(5), 1149–1175. https://doi.org/10.1111/j.1467-6494.2011.00717.x

Huitema, B. E. (1980). *The Analysis of Covariance and Alternatives*. New York

Işık, K., & Cengiz, Z. (2020). The effect of sociodemographic characteristics of university students on emotional eating behavior. *Perspectives in Psychiatric Care*, *57*(1), 214–218. https://doi.org/10.1111/ppc.12550

Jansen, A., & Morgan, B. L. (2008). A cross cultural study of body image and eating habits between genders. *UW-L Journal of Undergraduate Research*, *9*, 1-4.

Jones, J., Kauffman, B. Y., Rosenfield, D., Smits, J. A., & Zvolensky, M. J. (2019). Emotion dysregulation and body mass index: The explanatory role of emotional eating among adult smokers. *Eating Behaviors*, *33*, 97–101. https://doi.org/10.1016/j.eatbeh.2019.05.003

Kaner, G., Yurtdaş-Depboylu, G., Çalık, G., Yalçın, T., & Nalçakan, T. (2022). Evaluation of perceived depression, anxiety, stress levels and emotional eating behaviours and their predictors among adults during the COVID-19 pandemic. *Public Health Nutrition*, *26*(3), 674–683. https://doi.org/10.1017/s1368980022002579

Kaplan, H. I., & Kaplan, H. S. (1957). The psychosomatic concept of obesity. *The Journal of Nervous and Mental disease*, *125*(2), 181-201.

Katterman, S. N., Kleinman, B. M., Hood, M. M., Nackers, L. M., & Corsica, J. A. (2014). Mindfulness meditation as an intervention for binge eating, emotional eating, and weight loss: A systematic review. *Eating Behaviors*, *15*(2), 197–204. https://doi.org/10.1016/j.eatbeh.2014.01.005

Kindermann, D., Schmid, C., Derreza-Greeven, C., Huhn, D., Kohl, R. M., Junne, F., Schleyer, M., Daniels, J. K., Ditzen, B., Herzog, W., & Nikendei, C. (2017). Prevalence of and risk factors for secondary traumatization in interpreters for refugees: A cross-sectional study. *Psychopathology*, *50*(4), 262–272. https://doi.org/10.1159/000477670

Konttinen, H., van Strien, T., Männistö, S., Jousilahti, P., & Haukkala, A. (2019). Depression, emotional eating and long-term weight changes: A population-based prospective study. *International Journal of Behavioral Nutrition and Physical Activity*, *16*(1). https://doi.org/10.1186/s12966-019-0791-8

Kristeller, J. L., & Hallett, C. B. (1999). An exploratory study of a meditation-based intervention for binge eating disorder. *Journal of Health Psychology*, *4*(3), 357–363. https://doi.org/10.1177/135910539900400305

Larsen, J. K., van Strien, T., Eisinga, R., & Engels, R. C. (2006). Gender differences in the association between alexithymia and emotional eating in obese individuals. *Journal of Psychosomatic Research*, *60*(3), 237–243. https://doi.org/10.1016/j.jpsychores.2005.07.006

Lattimore, P. (2019). Mindfulness-based emotional eating awareness training: taking the emotional out of eating. *Eating and Weight Disorders-studies on Anorexia Bulimia and Obesity*, *25*(3), 649–657. https://doi.org/10.1007/s40519-019-00667-y

Lavigne, J. V., Hopkins, J., Gouze, K. R., & Bryant, F. B. (2014). Bidirectional influences of anxiety and depression in young children. *Journal of Abnormal Child Psychology*, *43*(1), 163–176. https://doi.org/10.1007/s10802-014-9884-7

Lazarevich, I., Camacho, M., del Consuelo Velázquez-Alva, M., & Zepeda, M. Z. (2016). Relationship among obesity, depression, and emotional eating in young adults. *Appetite*, *107*, 639–644. https://doi.org/10.1016/j.appet.2016.09.011

Levin, M. E., Dalrymple, K., Himes, S., & Zimmerman, M. (2014). Which facets of mindfulness are related to problematic eating among patients seeking bariatric surgery? *Eating Behaviors*, *15*(2), 298–305. https://doi.org/10.1016/j.eatbeh.2014.03.012

Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. Guilford Publications.

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, *33*(3), 335–343. https://doi.org/10.1016/0005-7967(94)00075-u

Lu, Q., Tao, F., Hou, F., Zhang, Z., & Ren, L. L. (2016). Emotion regulation, emotional eating and the energy-rich dietary pattern. A population-based study in Chinese adolescents. *Appetite*, *99*, 149–156. https://doi.org/10.1016/j.appet.2016.01.011

Luppino, F. S., de Wit, L. M., Bouvy, P. F., Stijnen, T., Cuijpers, P., Penninx, B. W., & Zitman, F. G. (2010). Overweight, obesity, and depression. *Archives of General Psychiatry*, *67*(3), 220. https://doi.org/10.1001/archgenpsychiatry.2010.2

Ma, G. (2015). Food, eating behavior, and culture in Chinese society. *Journal of Ethnic Foods*, *2*(4), 195–199. https://doi.org/10.1016/j.jef.2015.11.004

Macht, M., Haupt, C., & Ellgring, H. (2005). The perceived function of eating is changed during examination stress: a field study. *Eating behaviors*, *6*(2), 109-112.

Macht, M., Haupt, C., & Salewsky, A. (2004). Emotions and eating in everyday life: Application of the experience-sampling method. *Ecology of Food and Nutrition*, *43*(4), 11–21. https://doi.org/10.1080/03670240490454723

Macht, M., & Simons, G. (2000). Emotions and eating in everyday life. *Appetite*, *35*(1), 65–71. https://doi.org/10.1006/appe.2000.0325

Macht, M., & Simons, G. (2011). Emotional eating. In *Emotion regulation and well-being*, 281-295.

Markus, C. R., Panhuysen, G., Tuiten, A., Koppeschaar, H., Fekkes, D., & Peters, M. L. (1998). Does carbohydrate-rich, protein-poor food prevent a deterioration of mood and cognitive performance of stress-prone subjects when subjected to a stressful task? *Appetite*, *31*(1), 49–65. https://doi.org/10.1006/appe.1997.0155

McAtamney, K., Mantzios, M., Egan, H., & Wallis, D. J. (2021). Emotional eating during COVID-19 in the United Kingdom: Exploring the roles of alexithymia and emotion dysregulation. *Appetite*, *161*, 105120. https://doi.org/10.1016/j.appet.2021.105120

McAtamney, K., Mantzios, M., Egan, H., & Wallis, D. J. (2023). A systematic review of the relationship between alexithymia and emotional eating in adults. *Appetite*, *180*, 106279. https://doi.org/10.1016/j.appet.2022.106279

Meule, A., Richard, A., Schnepper, R., Reichenberger, J., Georgii, C., Naab, S., Voderholzer, U., & Blechert, J. (2019). Emotion regulation and emotional eating in anorexia nervosa and bulimia nervosa. *Eating Disorders*, *29*(2), 175–191. https://doi.org/10.1080/10640266.2019.1642036

Michels, N., Sioen, I., Braet, C., Eiben, G., Hebestreit, A., Huybrechts, I., Vanaelst, B., Vyncke, K., & De Henauw, S. (2012). Stress, emotional eating behaviour and dietary patterns in children. *Appetite*, *59*(3), 762–769. https://doi.org/10.1016/j.appet.2012.08.010

Michopoulos, V., Powers, A., Moore, C., Villarreal, S., Ressler, K. J., & Bradley, B. (2015). The mediating role of emotion dysregulation and depression on the relationship between childhood trauma exposure and emotional eating. *Appetite*, *91*, 129–136. https://doi.org/10.1016/j.appet.2015.03.036

Moffitt, R., Haynes, A., & Mohr, P. (2015). Treatment beliefs and preferences for psychological therapies for weight management. *Journal of Clinical Psychology*, *71*(6), 584–596. https://doi.org/10.1002/jclp.22157

Morillo-Sarto, H., López-Del-Hoyo, Y., Pérez-Aranda, A., Modrego-Alarcón, M., Barceló-Soler, A., Borao, L., Puebla-Guedea, M., Demarzo, M. M. P., García-Campayo, J., & Montero-Marin, J. (2022). 'Mindful eating' for reducing emotional eating in patients with overweight or obesity in primary care settings: A randomized controlled trial. *European Eating Disorders Review*. https://doi.org/10.1002/erv.2958

Mukhopadhyay, S. (2022). Elections have (health) consequences: Depression, anxiety, and the 2020 presidential election. *Economics & Human Biology*, *47*, 101191.

Nasirzadeh, Y., Kantarovich, K., Wnuk, S., Okrainec, A., Cassin, S. E., Hawa, R., & Sockalingam, S. (2018). Binge eating, loss of control over eating, emotional eating, and night eating after bariatric surgery: Results from the Toronto Bari-PSYCH cohort study. *Obesity Surgery*, *28*(7), 2032–2039. https://doi.org/10.1007/s11695-018-3137-8

National Center for Health Statistics. (2021). NHANES 2017–March 2020 Pre-Pandemic.

Nemiah, J. C., Freyberger, H., & Sifneos, P. E. (1976). *Alexithymia: A view of the psychosomatic process*. London: Butterworths.

Nguyen-Rodriguez, S. T., Chou, C. P., Unger, J. B., & Spruijt-Metz, D. (2008). BMI as a moderator of perceived stress and emotional eating in adolescents. *Eating Behaviors*, *9*(2), 238–246. https://doi.org/10.1016/j.eatbeh.2007.09.001

Nolan, L. J., Halperin, L. B., & Geliebter, A. (2010). Emotional Appetite Questionnaire. Construct validity and relationship with BMI. *Appetite*, *54*(2), 314–319. https://doi.org/10.1016/j.appet.2009.12.004

Ong, A. D., & Weiss, D. J. (2000). The impact of anonymity on responses to sensitive questions. *Journal of Applied Social Psychology*, *30*(8), 1691–1708. https://doi.org/10.1111/j.1559-1816.2000.tb02462.x

Ouwens, M. A., van Strien, T., & van Leeuwe, J. F. (2009). Possible pathways between depression, emotional and external eating. A structural equation model. *Appetite*, *53*(2), 245–248. https://doi.org/10.1016/j.appet.2009.06.001

Paans, N. P., Bot, M., Brouwer, I. A., Visser, M., Roca, M., Kohls, E., Watkins, E. R., & Penninx, B. W. (2018). The association between depression and eating styles in four European countries: The MooDFOOD prevention study. *Journal of Psychosomatic Research*, *108*, 85–92. https://doi.org/10.1016/j.jpsychores.2018.03.003

Phillips, A. C., Carroll, D., & Der, G. (2015). Negative life events and symptoms of depression and anxiety: stress causation and/or stress generation. *Anxiety Stress and Coping*, *28*(4), 357–371. https://doi.org/10.1080/10615806.2015.1005078

Pidgeon, A., Lacota, K., & Champion, J. (2013). The moderating effects of mindfulness on psychological distress and emotional eating behaviour. *Australian Psychologist*, *48*(4), 262–269. https://doi.org/10.1111/j.1742-9544.2012.00091.x

Pompon, R. H., Amtmann, D., Bombardier, C., & Kendall, D. (2018). Modifying and validating a measure of chronic stress for people with aphasia. *Journal of Speech Language and Hearing Research*, *61*(12), 2934–2949. https://doi.org/10.1044/2018_jslhr-l-18-0173

Preiss, K., Brennan, L., & Clarke, D. (2013). A systematic review of variables associated with the relationship between obesity and depression. *Obesity Reviews*, *14*(11), 906–918. https://doi.org/10.1111/obr.12052

Presnell, K., Pells, J., Stout, A., & Musante, G. (2008). Sex differences in the relation of weight loss self-efficacy, binge eating, and depressive symptoms to weight loss success in a

residential obesity treatment program. *Eating Behaviors*, *9*(2), 170–180. https://doi.org/10.1016/j.eatbeh.2007.07.005

Reichenberger, J., Schnepper, R., Arend, A. K., Richard, A., Voderholzer, U., Naab, S., & Blechert, J. (2021). Emotional eating across different eating disorders and the role of body mass, restriction, and binge eating. *International Journal of Eating Disorders*, *54*(5), 773–784. https://doi.org/10.1002/eat.23477

Ricca, V., Castellini, G., Fioravanti, G., Sauro, C. L., Rotella, F., Ravaldi, C., Lazzeretti, L., & Faravelli, C. (2012). Emotional eating in anorexia nervosa and bulimia nervosa. *Comprehensive Psychiatry*, *53*(3), 245–251. https://doi.org/10.1016/j.comppsych.2011.04.062

Rice, F., Van den Bree, M., & Thapar, A. (2004). A population-based study of anxiety as a precursor for depression in childhood and adolescence. *BMC Psychiatry*, *4*(1). https://doi.org/10.1186/1471-244x-4-43

Roche, M. J., & Jacobson, N. C. (2018). Elections have consequences for student mental health: An accidental daily diary study. *Psychological Reports*, *122*(2), 451–464. https://doi.org/10.1177/0033294118767365

Roosen, M. A., Safer, D., Adler, S. S., Cebolla, A., & van Strien, T. (2012). Group dialectical behavior therapy adapted for obese emotional eaters; a pilot study. *DOAJ (DOAJ: Directory of Open Access Journals)*, *27*(4), 1141–1147. https://doi.org/10.3305/nh.2012.27.4.5843

Samuel, L., & Cohen, M. (2018). Expressive suppression and emotional eating in older and younger adults: An exploratory study. *Archives of Gerontology and Geriatrics*, *78*, 127–131. https://doi.org/10.1016/j.archger.2018.06.012

Sarıçam, H. (2018). The psychometric properties of Turkish version of Depression Anxiety Stress Scale-21 (DASS-21) in community and clinical samples. *Journal of Cognitive-Behavioral Psychotherapy and Research*, 1. https://doi.org/10.5455/jcbpr.274847

Schacter, S., & Rodin, J. (2014). *Obese humans and rats*. Psychology Press.

Schüz, B., Bower, J., & Ferguson, S. G. (2015). Stimulus control and affect in dietary behaviours. An intensive longitudinal study. *Appetite*, *87*, 310–317. https://doi.org/10.1016/j.appet.2015.01.002

Seo, T., Kanda, T., & Fujikoshi, Y. (1995). The effects of nonnormality of tests for dimensionality in canonical correlation and MANOVA models. *Journal of Multivariate Analysis*, *52*(2), 325-337.

Sevinçer, G. M., Konuk, N., İpekçioğlu, D., Crosby, R. D., Wang, Z., Coşkun, H., & Mitchell, J. E. (2016). Association between depression and eating behaviors among bariatric surgery candidates in a Turkish sample. *Eating and Weight Disorders-studies on Anorexia Bulimia and Obesity*, *22*(1), 117–123. https://doi.org/10.1007/s40519-016-0296-2

Sheets, C. S., Peat, C. M., Berg, K. C., White, E. K., Bocchieri-Ricciardi, L., Chen, E. Y., & Mitchell, J. E. (2014). Post-operative psychosocial predictors of outcome in bariatric surgery. *Obesity Surgery*, *25*(2), 330–345. https://doi.org/10.1007/s11695-014-1490-9

Shen, W., Long, L. M., Shih, C. H., & Ludy, M. J. (2020). A humanities-based explanation for the effects of emotional eating and perceived stress on food choice motives during the COVID-19 pandemic. *Nutrients*, *12*(9), 2712. https://doi.org/10.3390/nu12092712

Spadaro, P. A., Naug, H. L., Du Toit, E. F., Donner, D., & Colson, N. J. (2015). A refined high carbohydrate diet is associated with changes in the serotonin pathway and visceral obesity. *Genetics Research*, *97*. https://doi.org/10.1017/s0016672315000233

Spinosa, J., Christiansen, P., Dickson, J. M., Lorenzetti, V., & Hardman, C. A. (2019). From socioeconomic disadvantage to obesity: The mediating role of psychological distress and emotional eating. *Obesity*, *27*(4), 559–564. https://doi.org/10.1002/oby.22402

Striegel-Moore, R. H., Rosselli, F., Perrin, N., DeBar, L., Wilson, G. L., May, A., & Kraemer, H. C. (2009). Gender difference in the prevalence of eating disorder symptoms. *International Journal of Eating Disorders*, *42*(5), 471–474. https://doi.org/10.1002/eat.20625

Sulmont-Rossé, C., Drabek, R., Almli, V. L., van Zyl, H., Silva, A. P., Kern, M., McEwan, J. R., & Ares, G. (2019). A cross-cultural perspective on feeling good in the context of foods and beverages. *Food Research International*, *115*, 292–301. https://doi.org/10.1016/j.foodres.2018.12.012

Talbot, L. S., Maguen, S., Epel, E. S., Metzler, T. J., & Neylan, T. C. (2013). Posttraumatic stress disorder is associated with emotional eating. *Journal of Traumatic Stress*, *26*(4), 521–525. https://doi.org/10.1002/jts.21824

Teixeira-Fabrício, A., Lima-Silva, T. B., Kissaki, P. T., Vieira, M. G., Ordonez, T. N., Oliveira, T. B. D., Aramaki, F. O., Souza, P. F., & Yassuda, M. S. (2012). Treino cognitivo em adultos maduros e idosos: impacto de estratégias segundo faixas de escolaridade. *Psico-USF*, *17*(1), 85–95. https://doi.org/10.1590/s1413-82712012000100010

Telch, C. F. (1997). Skills training treatment for adaptive affect regulation in a woman with binge-eating disorder. *International Journal of Eating Disorders*, 22(1), 77-81.

Telch, C. F., Agras, W. S., & Linehan, M. M. (2000). Group dialectical behavior therapy for binge-eating disorder: A preliminary, uncontrolled trial. *Behavior Therapy*, *31*(3), 569–582. https://doi.org/10.1016/s0005-7894(00)80031-3

Tham, M., & Chong, T. T. (2019). Evaluation of an online cognitive behavioural therapy weight loss programme as an adjunct to anti-obesity medications and lifestyle interventions. *Australasian Psychiatry*, *28*(2), 140–147. https://doi.org/10.1177/1039856219871882

Torres, S. J., & Nowson, C. A. (2007). Relationship between stress, eating behavior, and obesity. *Nutrition*, *23*(11–12), 887–894. https://doi.org/10.1016/j.nut.2007.08.008

Usubini, A. G., Cattivelli, R., Varallo, G., Castelnuovo, G., Molinari, E., Giusti, E. M., Pietrabissa, G., Manari, T., Filosa, M., Plazzi, G., & Musetti, A. (2021). The relationship between psychological distress during the second wave lockdown of COVID-19 and emotional eating in Italian young adults: The mediating role of emotional dysregulation. *Journal of Personalized Medicine*, *11*(6), 569. https://doi.org/10.3390/jpm11060569

Vainio, A. (2012). Beyond research ethics: anonymity as 'ontology', 'analysis' and 'independence'. *Qualitative Research*, *13*(6), 685–698. https://doi.org/10.1177/1468794112459669

van Strien, T. (2018). Causes of emotional eating and matched treatment of obesity. *Current Diabetes Reports*, *18*(6). https://doi.org/10.1007/s11892-018-1000-x

van Strien, T., Cebolla, A., Etchemendy, E., Gutiérrez-Maldonado, J., Ferrer-García, M., Botella, C., & Baños, R. M. (2013). Emotional eating and food intake after sadness and joy. *Appetite*, *66*, 20–25. https://doi.org/10.1016/j.appet.2013.02.016

van Strien, T., Konttinen, H., Homberg, J. R., Engels, R. C., & Winkens, L. H. (2016). Emotional eating as a mediator between depression and weight gain. *Appetite*, *100*, 216–224. https://doi.org/10.1016/j.appet.2016.02.034

van Strien, T., & Oosterveld, P. (2008). The children's DEBQ for assessment of restrained, emotional, and external eating in 7- to 12-year-old children. *International Journal of Eating Disorders*, *41*(1), 72–81. https://doi.org/10.1002/eat.20424

van Strien, T., & Ouwens, M. A. (2007). Effects of distress, alexithymia and impulsivity on eating. *Eating Behaviors*, *8*(2), 251–257. https://doi.org/10.1016/j.eatbeh.2006.06.004

van Strien, T., Roelofs, K., & de Weerth, C. (2013). Cortisol reactivity and distress-induced emotional eating. *Psychoneuroendocrinology*, *38*(5), 677–684. https://doi.org/10.1016/j.psyneuen.2012.08.008

van Strien, T., van der Zwaluw, C. S., & Engels, R. C. (2010). Emotional eating in adolescents: A gene (SLC6A4/5-HTT) – Depressive feelings interaction analysis. *Journal of Psychiatric Research*, *44*(15), 1035–1042. https://doi.org/10.1016/j.jpsychires.2010.03.012

VanWormer, J. J., Martinez, A. M., Martinson, B. C., Crain, A. L., Benson, G. A., Cosentino, D. L., & Pronk, N. P. (2009). Self-weighing promotes weight loss for obese adults. *American Journal of Preventive Medicine*, *36*(1), 70–73. https://doi.org/10.1016/j.amepre.2008.09.022

von Allmen, R. S., Weiss, S., Tevaearai, H. T., Kuemmerli, C., Tinner, C., Carrel, T. P., Schmidli, J., & Dick, F. (2015). Completeness of follow-up determines validity of study findings: results of a prospective repeated measures cohort study. *PLOS ONE*, *10*(10), e0140817. https://doi.org/10.1371/journal.pone.0140817

Vrklevski, L. P., & Franklin, J. (2008). Vicarious trauma: The impact on solicitors of exposure to traumatic material. *Traumatology*, *14*(1), 106–118. https://doi.org/10.1177/1534765607309961

Waller, G., & Matoba, M. (1999). Emotional eating and eating psychopathology in nonclinical groups: A cross-cultural comparison of women in Japan and the United Kingdom. International Journal of Eating Disorders, 26(3), 333-340.

Wei, L., & Sha, T. (2003). The relationship between perceived stress and depression and anxiety in college students: The effect of social support. *Chinese Journal of Clinical Psychology, 11*(2), 108–110.

Wiedemann, A. A., Ivezaj, V., & Barnes, R. D. (2018). Characterizing emotional overeating among patients with and without binge-eating disorder in primary care. *General Hospital Psychiatry*, *55*, 38–43. https://doi.org/10.1016/j.genhosppsych.2018.09.003

Wingenfeld, K., Kuehl, L. K., Boeker, A., Schultebraucks, K., Ritter, K., Hellmann-Regen, J., Otte, C., & Spitzer, C. (2017). Stress reactivity and its effects on subsequent food intake in depressed and healthy women with and without adverse childhood experiences. *Psychoneuroendocrinology*, *80*, 122–130. https://doi.org/10.1016/j.psyneuen.2017.03.014

Wong, M., & Qian, M. (2016). The role of shame in emotional eating. *Eating Behaviors*, *23*, 41–47. https://doi.org/10.1016/j.eatbeh.2016.07.004

World Health Organization. (2000). Obesity: preventing and managing the global epidemic.

World Health Organization. (2022). WHO European regional obesity report 2022. World Health Organization. Regional Office for Europe

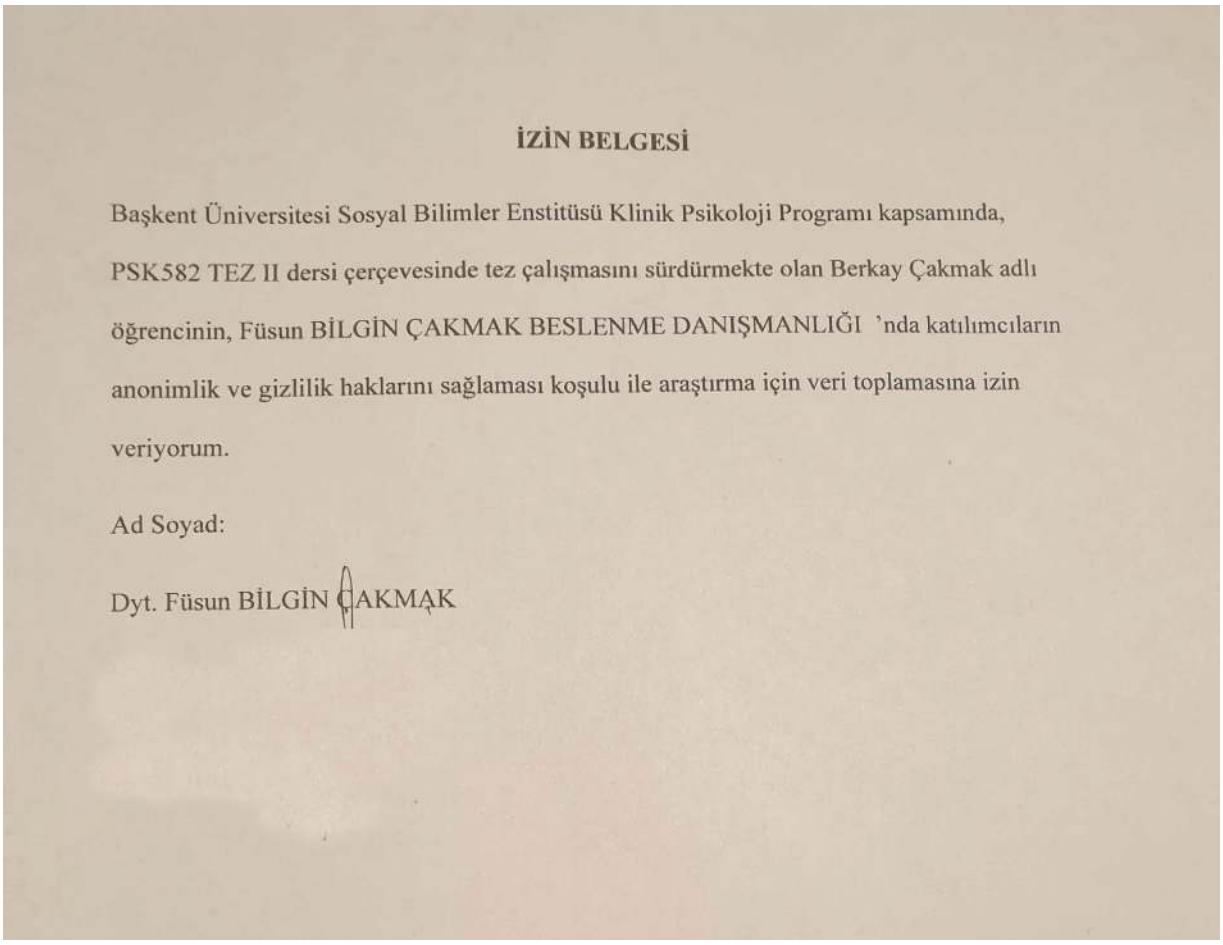
Wurtman, R. J. (1982). Nutrients that Modify Brain Function. *Scientific American*, *246*(4), 50–59. https://doi.org/10.1038/scientificamerican0482-50

Zhang, W., Ouyang, Y., Tang, F., Chen, J., & Li, H. (2019). Breath-focused mindfulness alters early and late components during emotion regulation. *Brain and Cognition*, *135*, 103585. https://doi.org/10.1016/j.bandc.2019.103585

Zijlstra, H., van Middendorp, H., Devaere, L., Larsen, J. K., van Ramshorst, B., & Geenen, R. (2012). Emotion processing and regulation in women with morbid obesity who apply for bariatric surgery. *Psychology & Health*, *27*(12), 1375–1387. https://doi.org/10.1080/08870446.2011.600761

APPENDICES

APPENDIX 1: FBC NUTRITIONAL CONSULTING CENTER DATA COLLECTION APPROVAL



İZİN BELGESİ

Başkent Üniversitesi Sosyal Bilimler Enstitüsü Klinik Psikoloji Programı kapsamında, PSK582 TEZ II dersi çerçevesinde tez çalışmasını sürdürmekte olan Berkay Çakmak adlı öğrencinin, Füsun BİLGİN ÇAKMAK BESLENME DANIŞMANLIĞI 'nda katılımcıların anonimlik ve gizlilik haklarını sağlaması koşulu ile araştırma için veri toplamasına izin veriyorum.

Ad Soyad:

Dyt. Füsun BİLGİN ÇAKMAK

APPENDIX 2: INFORMED CONSENT FORM

BİLGİLENDİRİLMİŞ ONAM FORMU

Sayın Katılımcı,

Bu çalışma, Başkent Üniversitesi Psikoloji Bölümü Klinik Psikoloji Yüksek Lisans öğrencisi Psk. Berkay Çakmak tarafından, Doç. Dr. Elvin Doğutepe danışmanlığında yüksek lisans tezi kapsamında yürütülmektedir. Araştırmanın amacı, duygusal yeme davranışına etki eden bazı pratiklerin etkililiği hakkında bilgi edinmektir. Bu araştırma kapsamında katılımcılardan bazı anket sorularına yanıt vermeleri ve ilgili diyetisyen tarafından bilgilendirilecekleri yönlendirmeleri uygulamaları istenecektir.

Bu çalışma birden fazla psikolojik test içermektedir. Lütfen her testin başındaki yönergeyi dikkatli okuyunuz ve size en uygun şekilde cevaplayınız. Araştırmadan sağlıklı sonuçlar elde edebilmek için soruları içten bir şekilde ve eksiksiz doldurmanız önemlidir. Soruların DOĞRU ya da YANLIŞ cevapları yoktur. Çalışma süresince ve sonrasında kimlik bilgileriniz çalışmada yer alan araştırmacılar dışındaki hiç kimseyle izniniz dışında paylaşılmayacaktır.

Tüm katılımcılardan elde edilen bilgiler bir arada ele alınarak değerlendirilecektir. Bu çalışma kapsamında elde edilecek olan bilimsel bilgiler sadece araştırmacılar tarafından yapılan bilimsel yayınlarda, sunumlarda ve eğitim amaçlı çevrimiçi bir ortamda, kimlik bilgileri verilmeksizin paylaşılacaktır.

Bu çalışmaya katılım gönüllük esasına dayalıdır. Araştırmada yer alan uygulamalar kişisel rahatsızlık verecek nitelikte değildir ve bir zarara sebep olmamaktadır. Ancak herhangi bir nedenden ötürü kendinizi rahatsız hissederseniz, nedenini açıklamaksızın araştırmadan ayrılabilirsiniz. Çalışmaya katıldığınız için şimdiden teşekkür ederiz.

Araştırmaya yönelik soru ve önerileriniz için Psk. Berkay Çakmak ile iletişime geçebilirsiniz. Değerli katkılarınız için teşekkür ederiz.

Araştırmacı tarafından bu araştırma ile ilgili yeteri kadar bilgilendirildim. Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman sebep göstermeksizin araştırmadan ayrılabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayınlarda kullanılmasını kabul ediyorum. Araştırmada verdiğim bilgilerin bilimsel makaleler,

akademik sunumlar ve çevrimiçi bir eğitim ortamı dışında kesinlikle kullanılmayacağını biliyorum.

Okudum ve kabul ediyorum

APPENDIX 3: DEMOGRAPHIC INFORMATION FORM

DEMOGRAFİK BİLGİ FORMU

1. Adınız:_____ Soyadınız: _____
2. Yaşınız:
3. Cinsiyetiniz:
4. Boyunuz (cm):
5. Kilonuz (kg):
6. Medeni Durumunuz:
7. Eğitim Durumunuz (En son mezun olduğunuz öğretim düzeyini yazınız):_____

Örneğin: Üniversite okumaktaysanız cevabınız Lise olmalıdır.

8. Herhangi bir fiziksel sağlık sorununuz var mı?

Evet Hayır

9. Sağlık sorununuz varsa nedir?:
10. Geçmişte veya şu anda bir psikiyatrik tanı aldınız mı?

Evet Hayır

11. Cevap evet ise bu tanı nedir? _____
12. Daha önce kilo vermek amacıyla bir psikoterapi süreci geçirdiniz mi?

Evet Hayır

13. Düzenli olarak kullandığınız herhangi bir ilaç varsa lütfen belirtiniz:_____
14. İletişim Bilgileri:

E-mail: _____

Cep Telefonu:_____

APPENDIX 4: DEPRESSION ANXIETY STRESS SCALE 21 (DASS 21)

DEPRESYON ANKSİYETE STRES ÖLÇEĞİ (DASS 21)

Aşağıdaki soruları **SON BİR HAFTADAKİ** durumunuzu göz önüne alarak yanıtlayınız. Seçeneklerin arasında size en uygun gelen cevabı, altındaki kutucuğa **(X)** işareti koyarak belirtiniz. **Lütfen sadece bir madde işaretleyiniz ve boşluk bırakmayınız.**
Örneğin: 1. maddedeki durumu son bir hafta içerisinde her zaman yaşadığınız düşünüyorsanız, "Her Zaman" sütunun altındaki kutucuğun içine X işareti koyunuz.

	SON BİR HAFTADAKİ DURUMUNUZ	Hiçbir Zaman	Bazen ve Ara Sıra	Oldukça Sık	Her Zaman
1	Gevşeyip rahatlamakta zorluk çektim.				
2	Ağzımda kuruluk olduğunu fark ettim.				
3	Hiç olumlu duygu yaşayamadığımı fark ettim.				
4	Soluk almada zorluk çektim *(örneğin fiziksel egzersiz yapmadığım halde aşırı hızlı nefes alma, nefessiz kalma gibi).*				
5	Bir iş yapmak için gerekli olan ilk adımı atmada zorlandım.				
6	Olaylara aşırı tepki vermeye meyilliyim.				
7	Vücudumda *(örneğin ellerimde)* titremeler oldu.				
8	Sinirsel enerjimi çok fazla kullandığımı hissettim.				
9	Panikleyip kendimi aptal durumuna düşüreceğim durumlar nedeniyle endişelendim.				
10	Hiçbir beklentimin olmadığı hissine kapıldım				
11	Kışkırtılmakta olduğumu hissettim				
12	Kendimi gevşetip salıvermek zor geldi				
13	Kendimi perişan ve hüzünlü hissettim				
14	Beni yaptığım işten alıkoyan şeylere dayanamıyordum				
15	Panik haline yakın olduğumu hissettim				
16	Hiçbir şey bende heyecan uyandırmıyordu				
17	Birey olarak değersiz olduğumu hissettim				
18	Alıngan olduğumu hissettim				
19	Fizik egzersiz söz konusu olmadığı halde kalbimin hareketlerini hissettim *(kalp atışlarımın hızlandığını veya düzensizleştiğini hissettim)*				
20	Geçerli bir neden olmadığı halde korktuğumu hissettim				
21	Hayatın anlamsız olduğu hissine kapıldım				

APPENDIX 5: EMOTIONAL APPETITE QUESTIONNAIRE (EMAQ)

DUYGUSAL İŞTAH ÖLÇEĞİ

Lütfen yemek yeme davranışınızın belirtilen duygulara, şartlara ve durumlara göre nasıl etkilendiğini tablodan bir numarayı işaretleyerek belirtiniz. Tablodaki puanlar 1 ile 9 arasında değişmektedir. 1 puan ile 4 puan arası normalden daha az yemek yediğinizi, 5 puan yeme davranışınızda bir değişim olmadığını, 6 puan ile 9 puan arası ise yeme davranışınızın normalden daha fazla olduğunu ifade etmektedir.

	Normalden Daha Az				Aynı	Normalden Daha Fazla					
Üzgün (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Sıkılmış (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Güvenli (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Kızgın (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Mutlu (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Yılgın (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Yorgun (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Karamsar (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Korkmuş (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Rahat (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Neşeli (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB

Yalnız (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB
Hevesli (olduğunuzda)	1	2	3	4	5	6	7	8	9	UD	CB

Eğer soru sizin için UYGUN DEĞİLSE UD seçeneğini işaretleyiniz. Eğer sorunun CEVABINI BİLMİYORSANIZ CB seçeneğini işaretleyiniz. Aşağıdakiler **DUYGULARINIZI** ifade etmektedir

Aşağıdakiler içinde bulunduğunuz **ŞARTLARI** ifade ediyor.

	Normalden Daha Az				Aynı	Normalden Daha Fazla					
Baskı altındayken	1	2	3	4	5	6	7	8	9	UD	CB
Hararetli bir tartışmadan sonra	1	2	3	4	5	6	7	8	9	UD	CB
Size yakın olan biri felakete uğradıktan sonra	1	2	3	4	5	6	7	8	9	UD	CB
Aşık olduğunuzda	1	2	3	4	5	6	7	8	9	UD	CB
Bir ilişkiyi bitirdikten sonra	1	2	3	4	5	6	7	8	9	UD	CB
Keyif veren bir hobiyle meşgul olduğunuz sırada	1	2	3	4	5	6	7	8	9	UD	CB
Para veya bir eşyanızı kaybettikten sonra	1	2	3	4	5	6	7	8	9	UD	CB
İyi haberler aldıktan sonra	1	2	3	4	5	6	7	8	9	UD	CB

APPENDIX 6: WEEKLY EVALUATION FORM

Haftalık Değerlendirme Formu

	Hiç	1 Gün	2 Gün	3 Gün	4 Gün	5 Gün	6 Gün	7 Gün
1) Duygusal açlık hissettiğimde nefes egzersizi yaptım (Duygusal açlık hissetmediğiniz gün varsa gün sayısını belirtiniz _____)	0	1	2	3	4	5	6	7
2) Gün içerisinde aldığım besinlerin kaydını tuttum.	0	1	2	3	4	5	6	7
3) Yeme farkındalığını artırma tekniklerini kullandım. (Gün içerisinde bir öğününüzde de uygulasanız yeterli sayılmaktadır)	0	1	2	3	4	5	6	7
4) Öz-şevkat uygulamalarının herhangi birinden faydalandım. (öz şevkat uygulamaları: kendinize karşı nazik olma, egzersiz ve doğada zaman geçirme gibi kişisel bakım uygulamaları, destek arama)	0	1	2	3	4	5	6	7

5) Kendinizde fark ettiğiniz olumsuz düşünce kalıplarını kısaca yazınız.

APPENDIX 7: PSYCHOEDUCATIONAL PROGRAM FOR EMOTIONAL EATING (TRANSCIPTED)

TRANSKRİPTE EDİLMİŞ PSİKOEĞİTİM METNİ

Video 1

BDT veya bilişsel-davranışçı terapi, olumsuz düşünce ve davranış kalıplarını değiştirmeye odaklanan bir terapi türüdür. Düşüncelerimizin, duygularımızın ve davranışlarımızın birbirine bağlı olduğu ve birini değiştirmenin diğerlerini etkileyebileceği fikrine dayanır. BDT'nin depresyon, anksiyete ve yeme bozuklukları dahil olmak üzere çok çeşitli zihinsel sağlık sorunlarının tedavisinde etkili olduğu görülmektedir.

Duygusal Yeme

Duygusal yeme, birçok insanın mücadele ettiği yaygın bir sorundur. Stres, üzüntü, can sıkıntısı veya yalnızlık gibi duygusal sıkıntılarla başa çıkmak için yemek yeme eğilimini ifade eder. Duygusal yeme, aşırı yemeye, suçluluk döngüsüne, olumsuz düşüncelere ve duygulara yol açabilir, bu da daha fazla duygusal yeme davranışı olarak geri dönebilir. Özetle, duygusal yeme davranışının beraberinde getirdiği olumsuz duygular, bizi daha fazla duygusal yeme davranışına itebilir.

Duygusal yemenin sadece irade eksikliği veya karakter kusuru değil, üstesinden gelmek için anlayış ve destek gerektiren karmaşık bir konu olduğunu kabul etmek önemlidir.

Düşünceler, Duygular ve Davranışlar Arasındaki Bağlantı

Düşüncelerimiz, duygularımız ve davranışlarımız arasındaki bağlantı nedir ve bunun duygusal yeme ile nasıl bir ilişkisi vardır? Düşüncelerimiz iç diyaloğumuz, kendimiz ve çevremizdeki dünya hakkında kendimizle konuşma şeklimizdir. Olumlu ya da olumsuz olabilirler ve nasıl hissettiğimizi ve davrandığımızı etkileyebilirler. Örneğin, yeteneklerimiz veya görünüşümüz hakkında olumsuz düşüncelerimiz varsa, endişeli veya depresif hissedebiliriz ve sosyal ortamlardan kaçınmak veya aşırı yemek yemek gibi olumsuz düşünceleri pekiştiren davranışlarda bulunabiliriz. Buradan da olumsuz düşüncelerin sonucunda sergilediğimiz davranışların, bizi daha fazla olumsuz duygu hissetmeye götürebildiğini çıkartabiliriz.

Duygularımız, düşüncelerimize ve deneyimlerimize tepki olarak ortaya çıkar. Olumlu ya da olumsuz olabilirler ve davranışlarımızı da etkileyebilirler. Örneğin, kendimizi stresli veya üzgün hissediyorsak, fiziksel olarak aç olmasak bile olumsuz duygularımızla başa çıkmak için yemeğe yönelebiliriz.

Davranışlarımız, düşünce ve duygularımıza karşılık olarak yaptığımız eylemlerdir. Davranışlarımız da olumlu ya da olumsuz olabilirler ve sırayla düşüncelerimizi ve duygularımızı etkileyebilirler. Örneğin, duygusal yeme davranışında bulunursak, kendimizi suçlu veya utanmış hissedebiliriz, bu da kendimizle ilgili olumsuz düşünce ve duyguları pekiştirebilir.

BDT ve Duygusal Yeme

Peki, BDT duygusal yeme konusunda nasıl yardımcı oluyor? Olumsuz düşünceleri belirleyip bunlarla mücadele ederek, hissetme ve davranma şeklimizi değiştirebiliriz. Başa çıkma stratejilerini öğrenerek ve sağlıklı alışkanlıklar geliştirerek, duygularla başa çıkmanın bir yolu olarak yemeği kullanma dürtüsünü azaltabiliriz.

Bu programda, duygusal yeme ile ilgili olarak düşünceleriniz, duygularınız ve davranışlarınız arasındaki bağlantıyı anlamanıza yardımcı olmak için BDT ilkelerini kullanacağız. Size olumsuz düşünce kalıplarını belirleme, başa çıkma stratejileri geliştirme, farkındalık ve porsiyon kontrolü uygulama, benlik saygısı ve beden imajı oluşturma ve ilerlemenizi sürdürme teknikleri öğreteceğiz.

Hedeflerin belirlenmesi

BDT ve duygusal yemenin ayrıntılarına inmeden önce, program için bazı hedefler belirlemek üzere biraz zaman ayıralım. Hedef belirlemek, bir sürece başlamadan önce yapılması katkı sağlayacak ve hafife alınmayacak bir etkendir. Dolayısıyla, hedefleri belli kriterleri göz önüne alarak belirlemeliyiz.

Hedefler: spesifik, ölçülebilir, ulaşılabilir, alakalı ve zamana bağlı olmalıdır. Bu kriterleri kısaca özetlemek gerekirse:

Spesifik: Hedefler spesifik ve iyi tanımlanmış olmalıdır. "Daha sağlıklı beslenmek istiyorum" gibi belirsiz bir hedef belirlemek yerine, "Günde en az iki porsiyon meyve ve sebze yemek istiyorum" gibi belirli bir hedef belirlemek daha etkilidir.

Ölçülebilir: Hedefler ölçülebilir olmalıdır, böylece ilerlememizi izleyebilir ve onlara ulaşma yolunda ilerleme kaydedip kaydetmediğimizi belirleyebiliriz. Örneğin, amacımız daha fazla egzersiz yapmaksa, ilerlememizi her gün attığımız adım sayısını takip ederek ölçebiliriz.

Ulaşılabilir: Motivasyonumuzu koruyabilmemiz ve değişim sürecine bağlı kalabilmemiz için hedefler ulaşılabilir ve gerçekçi olmalıdır. Zorlayıcı ama bunaltıcı veya ulaşılmaz hissettirecek kadar da zor olmayan hedefler belirlemek önemlidir.

Alakalı: Hedefler, değerlerimiz ve önceliklerimizle ilgili olmalı ve daha geniş hedeflerimiz ve özlemlerimizle uyumlu olmalıdır. Örneğin, sağlığımıza ve esenliğimize değer veriyorsak,

diyet ve egzersiz alışkanlıklarımızı iyileştirmek için bir hedef belirlemek alakalı ve anlamlı olabilir.

Zamana Bağlı: Hedefler, tamamlanması için belirli bir zaman çizelgesi ile zamana bağlı olmalıdır. Bu, bir aciliyet duygusu yaratmaya yardımcı olur ve hedeflerimize ulaşmak için bir son tarih sağlar. Örneğin, hedefimiz 10 kilo vermekse, bunu başarmak için üç aylık bir süre belirleyebiliriz.

Şimdi bahsedeceğim sorular doğrultusunda hedeflerinizi bir kağıda yazabilirsiniz.

Bu programın sonunda neye ulaşmak istersiniz?

Duygusal yeme miktarını azaltmak istiyor musunuz?

Duygularınızla daha sağlıklı başa çıkma stratejileri geliştirmek ister misiniz?

Sonuç

Bugünkü oturumda BDT'nin temelini, duygusal yeme davranışını kontrol etmeyle ilişkisini, düşünce ve davranış arasındaki bağlantıyı ve hedef belirlemenin önemini inceledik. Bir sonraki oturumda olumsuz düşünce kalıplarından ve olumsuz düşünce kalıplarının duygusal yeme davranışı ile ilişkisinden bahsedeceğiz. Dinlediğiniz için teşekkür ederim.

Video 2

Duygusal yeme için BDT tabanlı psikoeğitim programımıza tekrar hoş geldiniz. Son oturumumuzda, BDT'nin temel ilkelerinden ve hedef belirlemekten bahsettik. Düşüncelerimiz, duygularımız ve davranışlarımız arasındaki bağlantıyı, özellikle de yemekle olan ilişkimizi keşfettik. Bugün, olumsuz düşünce kalıplarını belirlemeye ve bunların duygusal yemeye nasıl katkıda bulunduğuna odaklanacağız.

Olumsuz Düşünce Kalıpları

Olumsuz düşünce kalıpları, zihinsel sağlığımız ve esenliğimiz için yararsız veya zararlı olan düşünce kalıplarıdır. Otomatik -yani bir anda gelen- ve bilinçsiz olabilirler ve nasıl hissettiğimizi ve davrandığımızı etkileyebilirler. Duygusal yeme bağlamında, olumsuz düşünce kalıpları aşırı yemeye, suçluluk duygusuna ve utanca yol açabilir.

Duygusal yeme ile ilişkili birkaç yaygın olumsuz düşünce kalıbı vardır:

Ya hep ya hiç düşüncesi: Bu, olayları ortası olmayan siyah beyaz terimlerle görme eğilimidir. Örneğin, ya mükemmel ya da başarısız olduğunuzu ve ikisinin arasının olmadığını düşünmek. Bu tür düşünme, mükemmeliyetçilik ve özeleştiriye yol açabilir. Örneğin diyetinize tamamen uymadığınız takdirde "Zaten bir öğünümde çok yedim, bugünkü programı bozmuş oldum. Akşam da diyet programına göre yememin bir anlamı kalmadı,

kendimi kontrol edemiyorum" gibi bir düşünce silsilesine sebep olabilir. Sonuç olarak telafi edilme imkanı olan bir öğünlük kaçamak programı tamamen bozmaya ve olumsuz duygulara sebep olabilir. Mükemmelliyetçilik ve özeleştiri duygusal yemeyi beraberinde getirebilir.

Felaketleştirme: Bu, herhangi bir durumda en kötü senaryoyu varsayma eğilimidir. Örneğin, küçük bir hatanın her şeyi mahvedeceğini ya da iş yerinde kötü bir gün geçirmenin başarısız olduğunuz anlamına geldiğini düşünmek. İstemeden porsiyonunuzun çok az miktarda üzerine çıkmak, size hissettirmesi gerekenden daha şiddetli olumsuz duygular hissettirebilir. Bu tür düşünme, duygusal yemeye katkıda bulunabilecek umutsuzluk ve çaresizlik duygularına yol açabilir.

Akıl Okuma: Bu, tahminlerinizi destekleyecek herhangi bir kanıt olmaksızın, başkalarının ne düşündüğünü veya hissettiğini bildiğinizi varsayma eğilimidir. Örneğin, arkadaşlarınızın sizi kilonuz için yargıladığını veya eşinizin aşırı yemek yemeniz nedeniyle sizi hayal kırıklığına uğrattığını düşünmek. Bu tür düşünme, kendinden şüphe duymaya ve güvensizliğe yol açabilir. Bu duygular da duygusal yeme davranışını tetikleyebilir.

Aşırı genelleme: Bu, bir veya iki münferit olaya dayanarak kapsamlı olumsuz ifadeler yapma eğilimidir. Örneğin, bir öğünde fazla yemek yediğiniz için başarısız olduğunuzu veya geçmişte başarısız olduğunuz için asla kilo veremeyeceğinizi düşünmek. Bu tür düşünme, duygusal yemeye katkıda bulunabilecek kendi kendini baltalayan tutum ve davranışlara yol açabilir.

Olumsuz Düşünce Kalıplarını Belirlemek

Olumsuz düşünce kalıplarından bahsettik. Peki, içimizdeki olumsuz düşünce kalıplarını nasıl tespit edebiliriz? Bunun bir yolu, iç diyaloğumuza, kendimiz ve çevremizdeki dünya hakkında kendimizle konuşma şeklimize dikkat etmektir. Yani, olumsuz bir duygu hissettiğimizde bir anda kendimize odaklanıp "Şu an aklımdan hangi düşünce geçiyor?" sorusunu sormak bizi bir sonuca ulaştırabilir. Bunu yapmak başlangıçta kolay olmayabilir. Kötü hissettiğimiz zaman zihnimizi durdurup kendimize soru sormak ve bu soruyu cevaplayabilmek zamanla gelişebilecek bir beceridir. Sürekli bir biçimde denemek burada kilit rol oynamaktadır.

Olumsuz bir düşünce kalıbını belirlediğimizde, kendimize bir dizi soru sorarak ona meydan okuyabiliriz:

1) Bu düşünce doğru mu? Bunu desteklemek için hangi kanıtlara sahibim?

2) Bu düşünce faydalı mı? İyiliğime ve mutluluğuma katkıda bulunuyor mu yoksa kendimi daha kötü mü hissettiriyor?

3) Bu düşünceye sahip bir arkadaşıma ne derdim? Onlara kendime verdiğim tavsiyenin aynısını verir miydim?

4) Bu durum hakkında düşünmenin daha dengeli veya gerçekçi bir yolu nedir?

Olumsuz düşünce kalıplarına bu soruları sorarak meydan okuyarak, düşüncemizi daha olumlu bir zihniyete doğru değiştirmeye başlayabiliriz.

Olumsuz Düşünce Kalıplarını Değiştirmek

Olumsuz düşünce kalıplarına meydan okumanın yanı sıra, onları daha olumlu ve faydalı düşüncelerle değiştirebiliriz. Bu, bir kişi olarak değerimizi ve değerimizi olumlayan ifadeler geliştirerek yapılabilir. Duygusal yeme için bazı olumlama örnekleri şunları içerebilir:

Vücudum nasıl görünürse görünsün, sevgiye ve saygıya layığım.

Vücudumu sağlıklı, besleyici yiyeceklerle beslemeyi seçiyorum.

Duygusal yeme alışkanlıklarımın üstesinden gelme ve yemekle sağlıklı bir ilişki kurma becerisine sahibim.

Değerim kilom veya yeme alışkanlıklarım tarafından belirlenmiyor.

Düşüncelerimin ve davranışlarımın kontrolü bende.

Olumlama geliştirmek pratik gerektirir, ancak zamanla olumsuz düşünce kalıplarıyla mücadele etmek ve kendini sevmeyi teşvik etmek için güçlü bir araç haline gelebilirler.

Duygusal Yeme ile Mücadelede Davranışsal Stratejiler

Olumsuz düşünce kalıplarını ele almanın yanı sıra, duygusal yemeyi yönetmek için yardımcı olabilecek çeşitli davranışsal stratejiler de vardır. Bu stratejilerden ayrıntılı bir biçimde sonraki oturumda bahsedeceğiz. Bunlar şunları içerir:

Yeme Farkındalığını Artırma: Bu, gıdanın tadı, dokusu ve kokusu gibi duyusal yeme deneyiminin yanı sıra vücuttaki fiziksel duyumlara dikkat etmeyi içerir. Şimdiki ana odaklanarak ve her lokmanın tadını çıkararak, açlık ve tokluk ipuçlarımızın daha fazla farkına varabilir ve neyi, ne kadar yediğimiz konusunda daha bilinçli seçimler yapabiliriz.

Sosyal Destek: Destekleyici bir arkadaş ve aile üyesi ağına sahip olmak duygusal yemeyi yönetmek için değerli bir kaynak olabilir. Mücadele ederken başkalarına ulaşarak cesaret ve onay alabilir ve mücadelelerimizde daha az yalnız hissedebiliriz.

Nefes Egzersizi: Stresli, sıkıntılı veya üzgün zamanlarımızdaki yeme isteğinin, gerçekten aç olduğumuz için mi yoksa duygularımızı bastırmak için mi geldiğini anlamamıza yardımcı olur. Stres, üzüntü, öfke veya sıkıntı duygularını yönetmemize yardımcı olur.

Kayıt Tutma: Gün içerisinde yediklerimizin ve içtiklerimizin kaydını tutmak ve kalorilerini hesaplamak, nasıl beslendiğimizi daha iyi anlamlandırmamızı sağlar. Her ne kadar aksini düşünsek de, zaman zaman gün içerisinde ne yediğimizi tam olarak bilemeyiz. Dolayısıyla aldığımız kalori hakkında tam farkındalığa sahip olamayabiliriz. Gün içinde yediklerimizin ve içtiklerimizin kaydını tutmak, bu konuda bizi farkındalığa ulaştırabilmekte ve daha dikkatli davranmamızı sağlayabilmektedir.

Sonuç

Bugünkü oturumda, olumsuz düşünce kalıpları kavramını ve bunların duygusal yeme üzerindeki etkilerini inceledik. Ya hep ya hiç düşüncesi, felaketleştirme, zihin okuma ve aşırı genelleme gibi birkaç yaygın olumsuz düşünce kalıbını belirledik ve bu düşüncelere meydan okumak ve bu düşünceleri daha olumlu ve yararlı olanlarla değiştirmek için stratejiler tartıştık. Ayrıca, yeme farkındalığı, sosyal destek, nefes egzersizi ve kayıt tutma dahil olmak üzere duygusal yemeyi yönetmek için çeşitli davranışsal stratejileri tartıştık. Bu stratejileri uygulayarak, düşünce ve davranışlarımızı yiyeceklerle daha sağlıklı ve daha dengeli bir ilişkiye doğru kaydırmaya başlayabiliriz. Bir sonraki oturumumuzda, bu davranışsal stratejileri nasıl uygulayacağımızı daha ayrıntılı öğreneceğiz. Oturumu dinlediğiniz için teşekkür ederim.

Video 3

Duygusal yeme için psikoeğitim programımıza tekrar hoş geldiniz. Son oturumumuzda, duygusal yeme davranışını azaltmak için kullanabileceğimiz davranışsal stratejilerden bahsetmiştik. Bu oturumda, bu stratejilerin nasıl uygulanması gerektiğine dair daha ayrıntılı bilgiler vereceğiz.

Nefes Egzersizi

Nefes egzersizi, iki binli yılların başlarında popülerleşmiş bir teknik olmakla birlikte, köklerini uzak doğu kültüründen almaktadır. Bilimsel olarak "stres ve kaygı seviyesini düşürdüğü, sinir sistemi üzerinde olumlu etkileri olduğu, odaklanmayı arttırdığı, uyku düzenlemede etkili olduğu ve kilo vermede yardımcı olduğunu" gösteren çalışmalar vardır. Peki bu nefes egzersizi nasıl yapılır?

Öncelikle dilimizi, dilimizin ucu da damağın içinde kalacak şekilde damağımıza yaslıyoruz. Egzersiz boyunca dilimiz bu pozisyonda kalmalı.

Şimdi başlayalım.

1) Dilinizi konumlandırdıktan sonra tüm nefesimizi dilimizin etrafından olacak biçimde veriyoruz. (whoosh sound çıkartıyoruz – nefes verme sesi fuuuu diye). Dudaklarımızı büzmek bu noktada işimizi kolaylaştırabilir.

2) Ağzımızı kapatıp burnumuzdan nefes alıyoruz. Nefes alırken zihnimizden 4'e kadar sayıyoruz.

3) Nefesimizi tutuyoruz. Nefesimiz tutuluyken zihnimizden 7'ye kadar sayıyoruz.

4) Şimdi de zihnimizden 8'e kadar sayarak nefesimizi yavaş yavaş veriyoruz. Bu 4 adım 1 nefesti.

5) Bu işlemi bir egzersizde 4 kere tekrarlayacağız.

Egzersiz sırasında nefes alırken konsantre olmuş bir şekilde almaya, nefes verirken sesli bir biçimde vermeye özen göstermeliyiz.

Kayıt Tutma

Zaman zaman çok dikkat etsek de, çoğunlukla gün içinde tükettiğimiz tüm besinlerin farkında olmayabiliyoruz. Zamanımız yokken atıştırdıklarımız, kalori değerine hakim olmadan zararını bilmeden tükettiğimiz besinler, geç saatte ufak bir atıştırma olarak gördüğümüz kaçamaklar gözümüze küçük görünebilir. Ancak, sağlıklı beslenmek bir süreçtir. Yediğimiz/içtiğimiz besinlerde veya yeme saatlerimizde yaptığımız ufak kaçamaklar birleştiğinde ortaya çıkan tablo düşündüğümüz kadar masum olmayabilir. Neyse ki elimizde kendimizin farkında olabilmemiz için uygulayabileceğimiz, sağlıklı beslenme sürecine daha iyi adapte olmamızı sağlayacak bir yöntem var!

1 ay boyunca yediğimiz içtiğimiz her şeyin kaydını tutmak kendimizin farkında olmamızı sağlayabiliyor. Aynı zamanda bu besinlerin kalorisini araştırmak, günlük aldığımız kalori miktarını görmemizle birlikte yiyeceklerin/içeceklerin besin değerlerini öğrenmemizde bize yardımcı oluyor. Dolayısıyla, bu çalışmadan sonra günlük yaşamınızda kendinizi daha iyi takip edebileceksiniz. Peki bu çalışmayı yapmak için uygulanması gereken adımlar neler?

1) Yenilen içilen her şeyin miktarıyla beraber kaydının tutulması.

2) Yenilen saatin kaydının tutulması.

3) Gün sonunda veya ertesi günün başında internetten bu besinlerin kalorisine bakıp basit bir toplama yapılması.

Günde sadece 15 dakikanızı ayırarak, çok basit bir işlemle kendiniz hakkında farkındalık kazanıp, kilo verme ve kilo koruma sürecini daha etkili geçirmek mümkün. Bu konuda kayıt tutmanızı kolaylaştıracak bir şablon, diyetisyeniniz tarafından size verilecektir.

Yeme Farkındalığını Artırma

Yeme Farkındalığı Nedir?

Yeme farkındalığı, ortaya çıkan fiziksel duyumların ve duygusal tepkilerin farkında olarak yeme deneyimine dikkat etme uygulamasıdır. Yargılamadan veya dikkati dağıtmadan yeme eylemiyle tam olarak meşgul olmayı içerir. Öğünlerde acele etmek veya otomatik pilotta yemek yemek yerine yavaşlama ve her lokmanın tadını çıkarma pratiğidir.

Yeme Farkındalığını Artırmanın Faydaları

Artan Farkındalık: Yeme farkındalığı, vücudumuzun açlık ve tokluk ipuçlarının daha fazla farkına varmamıza yardımcı olur, bu da yeme alışkanlıklarımızı daha iyi düzenlememize yardımcı olabilir.

Geliştirilmiş Sindirim: Yeme hızını yavaşlatarak ve vücudun yiyecekleri uygun şekilde sindirmesine izin vererek sindirimi iyileştirebilir.

Artırılmış Keyif: Her lokmanın tadına vararak ve yemeğimizin tatlarını ve dokularını gerçekten deneyimleyerek yemek yeme zevkini artırabiliriz.

Stresi Azaltır: Yemek zamanı sırasında sakinlik ve rahatlama hissini teşvik ederek stresi azaltmaya yardımcı olabilir.

Daha Sağlıklı Seçimler: Vücudumuzun ihtiyaçlarına ve tepkilerine dikkat ederek, vücudumuzu besleyen ve genel sağlığımızı destekleyen daha sağlıklı yiyecek seçimleri yapabiliriz.

Yeme Farkındalığı Nasıl Artırılır?

Yavaşla: Acele etme ve yemek yerken yavaşla. Lokmalar arasında çatalınızı bırakın, birkaç derin nefes alın ve yemeğinizin tatlarının ve dokularının tadını çıkarın.

Duyularınızı Etkileyin: Yemeğinizi deneyimlemek için görme, koku, tat ve doku dahil olmak üzere tüm duyularınızı kullanın.

Dikkatinizi Dağıtan Şeyleri Ortadan Kaldırın: Televizyonu kapatın, telefonunuzu kaldırın ve yeme deneyiminizi olumsuz etkileyebilecek diğer dikkat dağıtıcı unsurları ortadan kaldırın.

Vücudunuzu Kontrol Edin: Yemek boyunca, ne kadar aç veya tok olduğunuzu görmek için vücudunuzu kontrol edin. Açlık sancıları veya tokluk hissi gibi fiziksel hislere dikkat edin.

Yargılayıcı Olmayın: Yeme deneyiminize yargılamadan veya eleştirmeden yaklaşın. Yiyeceklerin ne "iyi" ne de "kötü" olduğunu, aksine vücudunuz için bir besin kaynağı olduğunu kabul edin.

Duygusal Tetikleyicilere Dikkat Edin: Sizi yemek yemeye sevk edebilecek duygusal tetikleyicilere dikkat edin. Birkaç derin nefes alın ve yemeye karar vermeden önce sakinleştirici bir aktivite yapın. Bu noktada önceki oturumlarda öğrendiğiniz nefes egzersizini uygulayabilirsiniz.

Öz-şevkati unutmayın: Yeme farkındalığının bir süreç olduğunu ve hataların ve yanlışlıkların yolculuğun doğal bir parçası olduğunu kabul ederek kendinize karşı nazik ve şefkatli olun.

Yeme Farkındalığını Hayatınıza Dahil Etmenin İpuçları

Küçük Başlayın: Dikkatli yemeyi her gün bir öğün veya atıştırmalıkla birleştirerek başlayın ve kendinizi rahat hissettikçe kademeli olarak artırın.

Önceden Planlayın: Yemek zamanı sırasında karar vermeyi azaltmak için yemeklerinizi ve atıştırmalıklarınızı önceden planlayın.

Destek Arayın: Sorumlu kalmanıza yardımcı olması ve sizin gibi cesaretlendirmesi için bir arkadaşınızın veya aile üyenizin desteğini alın.

Sonuç

Bu oturumda duygusal yeme davranışın ile baş ederken kullanabileceğimiz davranışsal stratejilerin nasıl uygulanacağına ayrıntılı bir biçimde göz attık. Sonraki oturumumuzda duygusal yeme davranışı ile mücadelede önemli bir etken olan öz-şevkat kavramından bahsedeceğiz. Oturumu dinlediğiniz için teşekkür ederim.

Video 4

Duygusal yeme için psikoeğitim programımızın final oturumuna hoş geldiniz. Son oturumumuzda, duygusal yeme davranışının üzerinden gelmek için uygulayabileceğimiz davranışsal stratejileri nasıl uygulayabileceğimizi ayrıntılı bir şekilde inceledik. Bugün, duygusal yeme bağlamında öz şefkat ve öz bakımın önemine odaklanacağız.

Öz-Şefkat Nedir?

Öz-şefkat, Kristin Neff tarafından ortaya atılan bir terimdir ve kendimize yakın bir arkadaşa veya sevilen birine sunacağımız aynı nezaket, özen ve ilgiyle davranma pratiğini ifade eder. Öz-şefkat üç temel unsuru içerir:

Öz-Nezaket: Bu, kendimize karşı nazik ve anlayışlı olmayı ve değer verdiğimiz birine sunacağımız desteğin ve cesaretlendirmenin aynısını kendimize sunmayı içerir.

Ortak İnsanlık: Bu, mücadelelerimizde yalnız olmadığımızı ve tüm insanların zaman zaman acı ve ıstırap çektiğini kabul etmeyi içerir.

Farkındalık: Bu, yargılamadan veya eleştirmeden mevcut olmayı ve düşüncelerimizin ve duygularımızın farkında olmayı içerir.

Öz-Şefkat Duygusal Yeme Konusunda Nasıl Yardımcı Olur?

Duygusal yeme genellikle bir rahatsızlık veya sıkıntı hissinden kaynaklandığını ve zor duygu veya durumlarla baş etmenin bir yolu olduğunu biliyoruz. Aynı zamanda duygusal yemenin suçluluk döngüsüne sebep olduğunu ve suçluluk döngüsünün daha fazla duygusal yeme davranışı ile sonuçlandığını da geçtiğimiz programlarda konuştuk. Öz-şefkat uygulayarak,

duygusal yeme alışkanlıklarımıza yargılamak veya eleştirmek yerine nezaket ve anlayışla karşılık vermeyi öğrenebiliriz. Bu, duygusal yemeğe eşlik eden utanç ve suçluluk döngüsünden kurtulmamıza yardımcı olabilir ve yeme alışkanlıklarımızda kalıcı değişiklikler yapmamıza destek olabilir.

Duygusal Yeme Bağlamında Öz-Şefkat Uygulaması

Duygusal yeme bağlamında öz-şefkat uygulamak için bazı stratejilere bir göz atalım:

Yeme Farkındalığı Uygulaması: Dikkatli bir şekilde yemek yediğimizde, yemeğimize ve vücudumuzun açlık ve tokluk sinyallerine dikkat ederiz. Bu, yediklerimiz hakkında daha kasıtlı seçimler yapmamıza yardımcı olabilir ve yiyeceklerle daha sağlıklı bir ilişki geliştirmemize destek olabilir.

Kendinize Karşı Nazik Olun: Duygusal yemek yeme konusunda kendinizi eleştirmek yerine, nazik ve anlayışlı olmaya çalışın. Kendinize duygusal yemenin yaygın bir deneyim olduğunu ve zaman zaman bununla mücadele etmenin sorun olmadığını hatırlatın.

Kişisel Bakım Uygulamalarını Geliştirin: Kişisel bakım uygulamaları, duygusal refahımızı desteklemek ve bir başa çıkma mekanizması olarak gıdaya olan bağımlılığımızı azaltmak için güçlü bir araç olabilir. Kişisel bakım uygulamalarına örnek olarak egzersiz ve doğada zaman geçirme sayılabilir.

Destek Arayın: Bir destek grubundan, güvenilir bir arkadaştan veya aile üyesinden destek almak yararlı olabilir. Duygusal yeme ile mücadelemiz hakkında konuşmak, daha az yalnız hissetmemize yardımcı olabilir ve bize duygularımızı yönetmek için yeni yollar ve stratejiler sağlayabilir.

Başarılarınızı Kutlayın: Ne kadar küçük görünürlerse görünsünler, yol boyunca başarılarınızı kutlamayı unutmayın. Kaydettiğiniz ilerlemenin farkına varın ve olumlu değişim yaratmak için gösterdiğiniz çabayı ve taahhüdü kabul edin.

Çevre Kontrolü

Duygusal yeme davranışının, çoğunlukla stres, sıkıntı, kaygı, üzüntü gibi duygusal durumların etkisiyle ortaya çıkan bir tür yeme davranışı olduğuna sıklıkla atıfta bulunduk. Bildiğimiz gibi, bu durumlarda genellikle rahatlamak ya da negatif duyguları bastırmak için yiyecekleri tercih edebiliyoruz. Ancak, bu tür yiyecekler genellikle sağlıksız ve kalorisi yüksek olan atıştırmalıklardır ve aşırı tüketimi obezite gibi bir dizi sağlık sorununa neden olabiliyor.

Birçok çalışma, çevre kontrolünün duygusal yeme davranışını azaltma konusunda oldukça yardımcı olduğunu göstermiştir. Çevre kontrolü, kişinin çevresindeki yiyecekleri kontrol etmesini sağlar.

İşte çevre kontrolünü sağlamak için bazı öneriler:

Çevrenizde Sağlıklı Yiyecekler Bulundurun: Yiyecek stoğunuzda sağlıklı seçenekler bulundurun. Bu, atıştırmalık ihtiyacınızı karşılamak için daha sağlıklı seçenekleri tercih etmenize yardımcı olur. Bu sağlıklı yiyeceklerin hangileri olduğuna diyetisyeniniz vasıtasıyla ulaşabilirsiniz.

Sağlıksız Yiyecekleri Gizleyin: Evinizdeki sağlıksız yiyecekleri saklayarak, çevre kontrolünü olumsuz etkileyen çevresel faktörleri ortadan kaldırabilirsiniz. Bu, sağlıksız yiyecekleri daha az çekici hale getirir ve duygusal yeme davranışını azaltabilir.

Yiyecekleri Olası Yemek Saatlerinde Planlayın: Yemek saatlerinizi önceden planlayarak, atıştırmalarınızı azaltabilirsiniz. Bu, düzenli bir yemek alışkanlığına sahip olmanıza yardımcı olur ve düşük kalorili atıştırmalıklar gibi daha sağlıklı seçenekler tercih etmenizi sağlar.

Sonuç olarak, çevre kontrolünüzü geliştirerek duygusal yeme davranışını azaltmanız mümkündür. Yapmanız gereken tek şey, sağlıklı yiyecekler bulundurmak, sağlıksız yiyecekleri gizlemek ve yeme zamanlarını planlamaktır. Bu yöntemler, sadece duygusal yeme davranışınızı azaltmakla kalmaz, aynı zamanda daha sağlıklı bir yaşam tarzına sahip olmanızı da sağlayabilir.

Sonuç

Kendimize şefkat ve öz bakım uygulamak, duygusal yeme için değişim sürecinin önemli bir parçasıdır. Kendimize nezaket ve anlayışla davranarak ve duygusal refahımıza öncelik vererek, genellikle duygusal yemeye eşlik eden utanç ve suçluluk döngüsünden kurtulabilir ve kalıcı bir değişim yaratabiliriz. Aynı zamanda çevre kontrolünü sağlayarak duygusal yeme davranışını azaltabiliriz. Bu yolculukta ilerlerken kendinize karşı sabırlı ve nazik olmayı ve yol boyunca başarılarınızı kutlamayı unutmayın. Oturumlara katıldığınız için teşekkür ederim.

APPENDIX 8: DIETARY SELF MONITORING SCHEDULE

Kayıt Tutma Çizelgesi

1. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
2. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
3. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
Ekstralar	

1. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
2. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
3. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
Ekstralar	

1. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
2. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
3. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
Ekstralar	

1. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
2. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
3. Öğün (Saat:) Yeme süresi:	İçecekler/Yiyecekler
Ekstralar	

APPENDIX 9: ETHICS COMMITTEE APPROVAL

Evrak Tarih ve Sayısı: 15.05.2023-231183

1993
BAŞKENT ÜNİVERSİTESİ
Akademik Değerlendirme Koordinatörlüğü

Sayı : E-62310886-605.99-231183
Konu : Berkay Çakmak'ın Etik Onay Başvurusu Hk. 15.05.2023

SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi : 30.03.2023 tarih ve 219778 sayılı yazınız.

Enstitünüz Psikoloji Ana Bilim Dalı Klinik Psikoloji Tezli Yüksek Lisans Programı öğrencisi Berkay Çakmak'ın, Doç. Dr. Elvin Doğutepe danışmanlığında yürüteceği "The Effect of Psychoeducational Program for Emotional Eating Behaviour" adlı tez çalışması değerlendirilmiş ve bilgilerinize ekte sunulmuştur.

Prof. Dr. M. Abdülkadir VAROĞLU
Kurul Başkanı

Ek: Değerlendirme Formu

Sayı : 17162298.600-101
Konu : Tez Çalışması

19 NİSAN 2023

İlgili Makama

Üniversitemiz Sosyal Bilimler Enstitüsü Psikoloji Ana Bilim Dalı Klinik Psikoloji Tezli Yüksek Lisans Programı öğrencisi Berkay Çakmak'ın, Doç. Dr. Elvin Doğutepe danışmanlığında yürüteceği "The Effect of Psychoeducational Program for Emotional Eating Behaviour" başlıklı tez çalışması değerlendirilmiş ve yapılmasında bir sakınca olmadığı tespit edilmiştir.
Bilgilerinize saygılarımızla sunarız.

Başkent Üniversitesi Sosyal ve Beşeri Bilimler ve Sanat Alan Araştırma Kurulu

Ad, Soyad	Değerlendirme	İmza
Prof. Dr. M. Abdülkadir Varoğlu	Olumlu/~~Olumsuz~~	
Prof. Dr. Gözen Güner Aktaş	Olumlu/~~Olumsuz~~	
Prof. Dr. Sadegül Akbaba Altun	Olumlu/~~Olumsuz~~	
Prof. Dr. Hasan Tahsin Fendoğlu	Olumlu/Olumsuz	
Prof. Dr. Filiz Kalelioğlu	Olumlu/~~Olumsuz~~	
Prof. Dr. Hidayet Hale Künüçen	Olumlu/Olumsuz	
Prof. Dr. Özcan Yağcı	Olumlu/~~Olumsuz~~	

Prof. Dr. Sadegül Akbaba Altun'un çalışmaya ilişkin görüşleri:

Tez çalışmasında kullanılan ölçekler için izin alınması gerekir.

Prof. Dr. Filiz Kalelioğlu'nun çalışmaya ilişkin görüşleri:

Ölçekleri kullanmak üzere ölçek sahiplerinden / araştırmacılardan izin alınması uygun olur.