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Investigating the Experiences of Individuals with Emotional Eating and Identifying Their Needs for Intervention: A Thematic Analysis Study

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Abstract

Emotional eating, characterized by a propensity for excessive consumption in response to positive or negative affect, is a primary factor contributing to numerous eating disorders. This phenomenon is prevalent among individuals experiencing stress and the rapid pace of contemporary life. The present study utilized thematic analysis, a qualitative research methodology, to discern the behavioral patterns of individuals exhibiting emotional eating tendencies. Data were gathered from participants using semi-structured, open-ended questions to explore their emotional eating behaviors. The study comprised twenty-two participants, including 12 females and 10 males. Data collection was conducted via 40-45 minute interviews using Zoom online video conferencing software. The findings indicate that emotional eating is precipitated by negative emotions such as loneliness and stress, as well as social influences. It is associated with adverse outcomes including weight gain, body image concerns, and feelings of guilt. Participants reported employing compensatory strategies, such as distraction techniques and dieting, to manage emotional eating; however, these methods proved ineffective in the long term, highlighting the necessity of addressing underlying causes. This study elucidates that the complexity of emotional eating is influenced by various individual and social factors. The participants emphasized the potential of mindfulness-based intervention programs, suggesting that such approaches could serve as effective components in multidimensional intervention strategies aimed at reducing emotional eating behaviors. Consequently, this study offers practical implications, advocating the incorporation of mindfulness-based strategies into individual, psychoeducational, and clinical interventions to mitigate emotional eating.

Keywords: Emotional eating, mindfulness, thematic analysis, qualitative research.

1. Introduction

The development of eating behavior, defined as attitudes and psychosocial factors influencing food selection and consumption, occurs predominantly in early childhood. During this period, children learn what, when, and how much to eat by internalizing the beliefs and attitudes imparted by their cultural and familial environments. Parents and caregivers are instrumental in shaping children's initial experiences of food and nutrition (Jalo et al., 2019). These experiences generate specific emotional associations that may be linked to emotional eating and food consumption patterns in adulthood, potentially supplanting physiological responses related to the hanger-

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satiety cycle (Litwin et al., 2017). Emotional eating is characterized by the propensity to overeat in response to negative emotions such as anxiety or irritability (van Strien, 2018). When a particular emotion predominates during an eating behavior, it is identified as emotional eating (Macht & Simons, 2000).

Numerous theories have been proposed to elucidate the concept of emotional eating, which remains an interesting topic. The psychosomatic theory posits that adverse childhood experiences hinder the accurate perception of hunger and satiety signals (Bruch, 1978). Pavlov's classical conditioning theory suggests that food is associated with negative emotional states, and emotional eating behavior develops through reinforcement of this association (Greeno & Wing, 1994; Jansen, 1998). The restraint theory argues that food intake restriction leads to overeating and emotional eating due to compromised physiological defenses (Herman, 1978; Herman & Mack, 1975; Herman & Polivy, 1980). Physiological theories propose that food influences mood by affecting energy metabolism and hormone and neurotransmitter levels. Specifically, carbohydrate-rich foods are believed to alleviate depressive moods by enhancing serotonin production (Macht, 2008; Markus et al., 2012), whereas sweet and fatty foods are thought to aid in stress management by reducing cortisol levels (Beyhan & Erkut, 2021; Wansink et al., 2003). Sweet snacks have been reported to increase energy levels and diminish feelings of tension and fatigue (Macht & Dettmer, 2006; Thayer, 2003).

In summary, the literature suggests that emotional eating may be mediated by multiple mechanisms. First, food characteristics, along with environmental and contextual factors, play a significant role in emotional eating. Energy-dense foods induce changes in metabolism, brain neurotransmitters, and neuroendocrine systems, resulting in affective balance. Second, flavor is a crucial factor as sweet and fatty foods evoke pleasurable sensations that terminate an emotional state. Both of these mechanisms are potentially related to emotional eating. Additionally, emotional eating is considered to be a learned behavior that originates in early life. Emotional eating has recently garnered substantial attention, primarily because it is perceived as a principal contributor to eating disorders (Lindeman & Stark, 2001). Furthermore, emotional eating behavior can significantly impact individuals' physical and psychological health. Prolonged emotional eating may lead to health issues, such as obesity, metabolic diseases, depression, and anxiety. Moreover, eating habits can adversely affect quality of life. Consequently, research on the causes and consequences of emotional eating is essential for developing healthier lifestyles and treatment strategies.

Research has been conducted to elucidate the connection between emotions and food consumption. Mehrabian (1980) found that individuals tend to consume more food during states of boredom, depression, and fatigue than during periods of fear, tension, or pain. Similarly, Lyman (1982) demonstrated that positive emotions are associated with a preference for healthy foods, whereas negative emotions are correlated with an increased consumption of junk foods. Patel and Schlundt (2001) further reported that both positive and negative moods result in greater food intake than neutral states, with positive moods exerting a more pronounced influence on food consumption than negative moods. Despite promising theoretical insights, the precise origin of emotional eating remains unclear. Theories suggest that the association between emotion and eating is learned in early childhood. However, cultural factors such as food abundance and prevalent stress in certain societies, along with biological factors such as taste sensitivity, may also contribute to emotional eating behaviors. The primary objective of this study was to conduct an in-depth examination of how individuals who engage in emotional eating experience this behavior, the emotions and life events they associate with it, and the meanings they attribute to this process. By focusing on individuals' subjective experiences, this study analyzed intrinsic and extrinsic triggers, bodily perceptions, coping and compensatory strategies, the impact of sensory

stimuli, and the level of individual awareness in this process. By emphasizing personal accounts, this study aimed to elucidate how emotional eating is shaped within individual, social, and cultural contexts. The secondary aim was to develop a needs map to inform intervention programs for emotional and body awareness in managing emotional eating behavior based on the findings obtained. Mindfulness-based interventions such as MBSR, MB-EAT, and MBCT aim to enhance conscious and controllable eating behaviors by increasing awareness of bodily sensations and emotional processes. These approaches are frequently employed in interventions that target eating behaviors (Sala et al., 2020). Given the limited long-term efficacy of traditional dietary approaches in addressing emotional eating, mindfulness-based strategies are recommended as psychoeducational and preventive tools (Kristeller & Wolever, 2011). Within this framework, participants' perspectives on the proposed Mindfulness-Based Emotional Eating Reduction program were gathered. The study's findings underscore the need for emotional eaters to develop mindfulness, self-compassion, emotion regulation, and awareness of environmental triggers in a multidimensional manner, thus providing a valuable foundation for the program's content and goal setting.

2. Method

This section includes information on the research design, study group, data collection tools, data collection/analysis, and reliability of the research.

2.1. Research Design

This study employed a qualitative research design to explore the perspectives, experiences, and needs of individuals exhibiting emotional eating behavior. Qualitative research seeks to comprehend phenomena in a multidimensional manner by emphasizing individuals' experiences, meaning structures, and subjective interpretations. In this context, the thematic analysis method was selected because of its flexible analytical approach, which facilitates the derivation of themes from data (Braun & Clarke, 2006). Thematic analysis enables researchers to systematically code participants' expressed experiences, consolidate these codes into meaningful themes, and present findings with a coherent integrity. This method, chosen to align with the nature of the research, addressed various aspects, such as the triggers underlying emotional eating behavior, levels of bodily awareness, coping strategies, and the emotions experienced, employing a holistic approach.

2.2. Research Group

This study, conducted between 2022 and 2023 across Turkey, employed purposive sampling to include individuals exhibiting specific characteristics or behaviors within the study group. The focus was on individuals demonstrating emotional eating behavior, with participant selection based on the Emotional Eating Scale (EES-30). The criterion sampling method was utilized, and because of the absence of a standard cutoff score for the EES-30, the average score obtained from the scale was calculated, resulting in a value of 90 points. The research group was comprised of individuals who scored 90 and above on the scale and participated voluntarily. This approach aimed to provide qualified data from individuals with pronounced emotional eating tendencies to ensure data suitability for the study. The sample comprised 22 participants who met the inclusion criteria and volunteered to participate. The participant information is detailed in Table 1.

Table 1

Needs Analysis Study Group Information Regarding Individuals with Emotional Eating

Demographic Information	Category	N	%
Gender	Female	12	54,5
	Male	10	45,4
Mean Age	28,5	22	100
Mean Weight	81,5	22	100
Degree	Primary	1	4,5
	Secondary	3	13,6
	High School	6	27,2
	Undergraduate	9	40,9
	Graduate	3	13,6
Having a Chronic Disease	Yes	3	13,6
	No	19	86,3
Having Any Type of Eating Disorder	Yes	0	0
	No	22	100
Judging Oneself for Weight	Often	15	68,2
	Sometimes	6	27,3
	Never	1	4,5
Value Attributed to Physical Appearance	I like my appearance	10	45,5
	I do not like my appearance	11	50
	I feel neutral form y appearance	1	4,5
Visiting Dietitian	Yes	16	72,7
	No	6	23,3
Dieting Frequency	Never	1	4,5
	Rarely	3	13,6
	Sometimes	7	31,8
	Often	8	36,4
	Always	3	13,6

As illustrated in Table 1, among the 22 participants in the study, 12 (54.5%) were female and 10 (45.4%) were male. The mean age of emotional eaters was 28.5 years, with an average weight of 81.5. Regarding educational attainment, 1 participant (4.5%) reported primary school education, 3 (13.6%) secondary school, 6 (27.2%) high school, 9 (40.9%) university, and 3 (13.6%) graduate school. Concerning chronic illness, 3 participants (13.6%) reported having a chronic condition, while 19 (86.3%) did not. Of those with a chronic illness, 2 had diabetes and 1 had asthma. In response to inquiries about eating disorders, all 22 participants (100%) indicated that they had no eating disorders. When evaluating self-perception regarding weight, 15 participants (68.2%) frequently judged themselves, 6 (27.3%) occasionally did so, and 1 (4.5%) never did. In terms of satisfaction with physical appearance, 10 participants (45.5%) expressed contentment, 11 (50%) were dissatisfied, and 1 (4.5%) was neutral. Regarding consultations with a dietitian, 16 participants (72.7%) affirmed that they had visited one, whereas 6 (27.3%) did not. Analyzing dieting frequency, 1 participant (4.5%) reported never dieting, 3 (13.6%) rarely, 7 (31.8%) occasionally, 8 (36.4%) frequently, and 3 (13.6%) consistently engaged in dieting.

2.3. Data Collection Tools

2.3.1. Emotional Eating Scale (EES-30)

Bilgen (2018) developed a measurement instrument to elucidate the relationship between emotions and eating. This scale comprises four sub-dimensions: Eating in Tense Situations,

Eating to Cope with Negative Emotions, Self-Control, and Control in the Face of Stimuli. It employs a 5-point Likert scale, with response options ranging from "Never (1)" to "Always (5)." Both the sub-dimensions and the overall scale yield a total score, with higher scores indicating greater tendencies toward emotional eating. The scale's maximum and minimum scores were 150 and 30, respectively. The scale included three reverse-coded items. The Cronbach's alpha coefficient for the entire scale was .96, whereas for this study, it was .89.

2.3.2. Semi-Structured Interview Form

The researcher developed a semi-structured interview form, drawing upon the existing literature and insights of academics specializing in dietetics, psychology, and psychological counseling. The questions were designed to elucidate the characteristics and needs of individuals exhibiting emotional eating behaviors. Three professional groups were identified in the pilot interviews: dietitians, psychologists, and psychological counselors. Two individuals from each group were selected for preliminary interviews. Following the pilot phase, the form was finalized, incorporating questions that achieved consensus, and the research data were subsequently collected. The finalized form comprises 5 closed-ended and 17 open-ended questions aimed at uncovering the causes, disadvantages, triggers, and coping mechanisms associated with emotional eating.

2.4. Data Collection

Following the acquisition of requisite approval from the Düzce University Ethics Committee, all interviews were conducted online between 2022 and 2023, due to pandemic-related constraints. During these interviews, stakeholders were initially briefed on the research's purpose, significance, scope, and confidentiality. Participants' responses were recorded with their consent. The interviews were facilitated by video conferencing on the ZOOM platform. Pseudonyms were used throughout the study to ensure participant anonymity. Each participant was interviewed at approximately one-week intervals, and the entire data collection process spanned six months.

The Emotional Eating Scale (EES) was used to identify individuals exhibiting emotional eating behaviors. The questions from this scale were digitized into a 'Google Form' and made accessible online. This form was disseminated through various social media platforms including Instagram, Facebook, and mass email groups. The form information section elucidates the study's purpose and scope. Participants were informed that by completing the form, their data would be analyzed, and those consenting to an online interview would participate in sessions lasting approximately 45-50 minutes.

2.5. Data Analysis

A purposive sampling method was employed in the data analysis process, necessitating the analysis of quantitative data related to scores on the Google Form containing the Emotional Eating Scale to select participants. The highest and lowest scores of the 98 respondents for this form were calculated using SPSS 22.0. As the scale lacks a predefined cutoff score, a cutoff score was established using the average method (Erkuş & Selvi, 2021). This method aims to eliminate extreme values and reduce error rates. According to the SPSS results, the highest score obtained by the participants was 140, whereas the lowest was 40. The scores were averaged, resulting in an average score of 90. Within the scope of the study, 35 individuals with scores of 90 and above were identified from 98 applicants, 22 of whom voluntarily participated in the study. Qualitative data were analyzed using the thematic analysis method developed by Braun and Clarke (2006). Thematic analysis is a qualitative method that systematically codes meaningful patterns from

data, and derives themes from these codes. The data analysis procedure involved the following steps:

- **Data Transcription and Familiarization:** Interviews were recorded using a voice recorder and transcribed in detail. The researcher familiarized herself with the data by repeatedly reading all the interview texts and noting her initial impressions in a reflective diary.
- **Generating the First Code:** By analyzing the data line by line, meaningful segments of participants' statements were identified, and codes were assigned to these segments. The coding process was performed manually and the data were transferred to Microsoft Excel. These codes were developed to encompass both explicit statements (e.g., "I eat junk food when I am stressed") and implicit meanings (e.g., "ignoring bodily signals").
- **Grouping the Codes into Themes:** The codes were grouped according to content similarity, sub-themes were created, and these sub-themes were grouped under higher-level themes. For instance, codes such as "stress," "anger," and "sadness" were grouped under the sub-theme "Negative Emotions," which was subsequently grouped under the title "Triggering Emotions." Review of
- **Themes:** All themes were reviewed for consistency and inclusiveness by comparing them with relevant interview texts. Inconsistent codes were re-evaluated, and some themes were simplified or merged.
- **Theme Identification and Tagging:** The final themes were named meaningfully, and their contents were clearly defined.
- **Supporting Direct Quotations:** Under theme, participants' original statements were included, with quotations selected to exemplify the themes. To ensure coding confidentiality, participants were coded with labels such as EEF 1 (emotional eater female 1st person) and EEM 1 (emotional eater male 1st person). Ensuring Reliability: Throughout the analysis process, the researcher maintained a reflective journal to enhance self-awareness and monitor interpretations. Additionally, the data analysis process was regularly evaluated in a peer supervision group, and themes were refined with feedback from the thesis supervisor, which was implemented to increase the reliability and accuracy of qualitative data analysis.

2.6. Research Reliability and the Researcher's Role

In this qualitative study, the concepts of validity, reliability, and generalizability were approached contextually and interpretively. To enhance the study's reliability, a systematic method was adopted based on the thematic analysis framework proposed by Braun and Clarke (2006). The researcher employed a reflective approach during the processes of theme development, revision, and verification. To support this process, a reflective diary was maintained, systematically recording the researcher's thoughts, emotions, and observations encountered during data collection and analysis. This practice enabled the researcher to identify and manage subjective influences throughout the study. Additionally, four peer supervision meetings were held with two colleagues during the analysis phase. These sessions allowed for a holistic evaluation of the codes and themes from multiple perspectives. The researcher's undergraduate and graduate training in guidance and psychological counseling, along with her expertise in eating behavior, body perception, and emotional regulation, significantly contributed to the study's reliability. Her participation in internationally recognized programs such as Mindfulness-Based Stress Reduction (MBSR), Mindful Eating (MB-EAT), and the Mindful Self-Compassion (MSC) program further strengthened her professional competence and awareness in this field. Moreover, her individual counseling experience with adolescents and young adults provided her with valuable insights and observational skills, especially in recognizing emotional eating behaviors, which directly

informed the data collection and interpretation processes. The findings were substantiated through direct quotations from participants, ensuring that the interpretations remained coherent and consistent with the data. The entire process was conducted with integrity, reflecting the researcher's self-awareness, reflective stance, and professional expertise, in alignment with the principles of thematic analysis.

2.7. Ethics Committee Approval

All ethical principles included in the Higher Education Institutions Scientific Research and Publication Ethics Directive were complied with in the research. The necessary ethics committee approval for the study was given by the Duzce University Educational Research Ethics Committee with the decision numbered 2023/72 dated 17 December 2022.

3. Findings

This section presents the research findings in detail, incorporating direct quotations from the participants. These quotations reflect participants' perspectives. The coding for the direct quotations was as follows: EEF1 (emotional eater female, first participant) or EEM1 (emotional eater male, first participant). This coding method was consistently applied to represent the views of the 12 female and 10 male participants.

The responses to the research question, "What emotions and situations trigger emotional eating behavior?" are presented in Table 2.

Table 2

Participants' Opinions on Triggering Emotions or Situations

Theme	Sub-Theme	Code	f
Emotion	Negative Emotions	Inadequacy	12
		Failure	19
		Worthlessness	15
		Unhappiness	18
		Stress	20
		Boredom	16
		Emptiness	15
		Sadness	17
		Frustration	5
		Helplessness	2
		Anger	14
		Loneliness	17
		Anxiety	12
	Positive Emotions	Success	10
		Trust	7
		Joy	11

Table 2 (continued)

Participants' Opinions on Triggering Emotions or Situations

Theme	Sub-Theme	Code	f
Situation	Negative Situations	Pre-exam	11
		Post-exam	9
		After arguing	12
		Being judged for weight	17
		Negative comments about appearance	9
		Mishaps during work	16
	Positive Situations	Relief after accomplishing a difficult task	5
		Reaching the desired goal	5
		Friend meetings	6
		Joining social events	4
		Reaching the desired weight after dieting	3

As indicated in Table 2, negative emotions elicited responses from a greater number of participants than positive emotions. The perspectives of some participants regarding the influence of negative emotions on emotional eating behavior were as follows:

"Generally, negative emotions affect my eating behavior. For example, if I feel sad, angry, or unsuccessful, I feel the need to eat more." (EEM7) *"When I am alone at home, I feel empty. This situation bores me and I find myself in front of the refrigerator."* (EEF4) *"The periods when I experience intense test anxiety are among the periods when I overeat to suppress this anxiety."* (EEM6) *"I cannot stop my eating behavior when I am angry for whatever reason."* (EEM4) *"Stress is the emotion I have the most difficulty coping with. Especially when I experience stress at work, the junk food in my drawer is full of foods that I use to control my anger."* (EEM9)

From Table 2, it can be seen that negative situations trigger participants more than positive situations. Some of the participants' views on triggering emotional eating behavior in negative situations are as follows.

"I feel very bad, no matter who I argue with. The easiest way for me to calm myself down after these arguments is to eat." (EEF6) *"I judge myself enough about my weight. When others judge me, it becomes more unbearable and I feel out of control. My judgments about myself increase even more, and I can't cope with this situation anymore, and I eat again."* (EEF9) *"I get extremely tense, especially at work. These tensions are usually caused by mishaps during work, but there are periods in which these situations become intolerable for me. At those times, eating seems to be a good escape for me."* (EEM9) *"I get very anxious before exams because fear of failure takes over me. To avoid taking the exam like this, I consume sweet foods."* (EEM6)

The responses to the research question, "How do individuals with emotional eating behaviors perceive bodily signals related to nutrition?" are presented in Table 3.

Table 3

Participants' Opinions on Perceived Nutrition and Body Signals

Theme	Code	f
Chewing Rate	Swallowing without chewing	7
	0-5 times	9
	5-10 times	1
	Not knowing the chewing number	8
Perceived Nutrition Speed	Very fast	5
	Fast	12
	Medium	5
The Way Hunger Signal is Perceived in Body	Gurgling stomach	16
	Heartburn	11
	Chills	9
	Dizziness	4
	Feeling faint	15
	Slowing cognitive performance	8
	Inability to perceive hunger	5
The Way Fullness Signal is Perceived in Body	Bloating	18
	Nausea	4
	Wanting to throw up	2
	Inability to perceive fullness	15

Upon examination of Table 3, it is evident that a greater number of participants reported an average chewing frequency of to 0-5 times. The perspectives of some participants regarding their chewing rates are as follows:

"... In general, I chew very little. I chew maybe 5 times at most." (EEF3) *"I don't know my chewing number at all. It was very difficult for me to provide numbers. The number of chews varies from situation to situation. I usually chew less if I am angry or frustrated."* (EEM1) *"I usually swallow my food without chewing. I think this is the characteristic I would like to change the most."* (EEF8) *"I paid attention to chewing my food. I try to chew 5-10 times on average."* (EEF1)

According to Table 3, the number of participants who said that they ate fast was higher. Some of the participants' views on their eating speed are as follows:

"I eat so fast that I usually get warnings from my environment... If I am in a group eating environment, I usually finish my meal first." (EEM10) *"When I compare myself with other people, I realize that I eat fast...At dinner, I usually eat the main course first after the soup."* (EEM2) *"I think my eating speed is average. But it varies according to the rush of the day."* (EEF10)

As shown in Table 3, the number of participants expressing hunger signals such as stomach rumbling and weakness was higher. Some of the participants' views on how they perceive hunger signals in the body are as follows.

"My stomach often growls when I am hungry. There are times when I feel cold about it. I usually have less energy." (EEF11) *"When I am hungry, I feel very weak. There is a tiredness in my body, and I find it difficult to move my body."* (EEM5) *"When I am hungry, I feel a burning sensation in my stomach because I have an ulcer."* (EEM4) *"I don't remember the last time I felt hungry because I usually always eat something."* (EEF6)

When Table 3 is examined, it is seen that the number of participants who expressed the way satiety signals were perceived in the body as stomach swelling was higher. Some of the participants' views on how they perceive satiety signals in the body are as follows:

"Sometimes I eat so much that I notice that my stomach is bloated. At such times, I have to unbutton a button on my pants. When I do that, I realize that I am full." (EEF3) *"I can tell when I am full at meals when I have to unbutton my pants. My stomach is bloated, and I cannot fit my clothes."* (EEF6) *"I can't tell when I'm full. If I could tell, I think I could stop eating."* (EEM3) *"Satiety is a difficult signal for me to perceive because I do not make an effort to feel it. I mean, in order to perceive it, I would either need to run out of my plate or I would need an indicator like the bloating I feel after overeating."* (EEM4)

The responses to the research question, "What strategies do individuals use to cope with or compensate for emotional eating behavior?" are presented in Table 4.

Table 4

Participants' Views on Coping with or Compensating for Emotional Eating Behavior

Theme	Code	f
Compensating	Counting Calories	2
	Excessive exercise	5
	Skipping meals	7
	Intermittent fasting	6
	Dieting	18
	Eating low-calory foods	11
Coping	Calling a loved friend	7
	Taking a walk	5
	Watching videos	4
	Seeing a psychologist	1
	Keeping the hand busy with activities (painting, calligraphy etc.)	9
	Chewing gum to keep the mouth busy	10
	Keeping emotion journal	5
	Watching the TV	7
	Taking up hobbies	8
	Listening to music	5
	Keeping the mouth busy with drinks	6
	Drinking water	6

When Table 4 is examined, it can be seen that the number of participants who diet to compensate for emotional eating behavior is higher. Some of the participants' views on compensating for emotional eating are as follows:

"*I can usually stop emotional eating only by dieting. That's why I often diet*." (EEF10) "*If I overindulged in one meal, I prefer to eat a salad with a lower calorie level at the next meal to compensate for it*." (EEF4) "*I usually don't eat at the next meal when I overindulge in dessert and have an emotional eating attack*." (EEF8)

Moreover, the number of participants who chewed gum to cope with emotional eating behavior was higher. Some of the participants' views on coping with emotional eating are as follows:

"*Even though I am full, when I feel like eating something, I prefer to chew gum to trick my stomach*." (EEF9) "*To avoid reaching for the fridge, I immediately find something to keep my*

hands busy. I have exercise equipment I bought just for this purpose." (EEM7) "*When I want to consume something excessively, I switch to one of my favorite things, painting. I try to channel my mind away from food.*" (EEF8) "*I usually call a dear friend. Sometimes I talk to her for hours to distract myself from food*." (EEF10)

Responses to the research question "What are the goals for participating in the planned Mindfulness-based emotional eating reduction program?" are presented in Table 5.

Table 5

Views on the Purposes of Participating in Mindfulness-Based Emotional Eating Reduction Program

Theme	Code	f
Body Awareness	Connecting with the body	5
	Gaining body awareness	4
	Noticing satiety	6
	Respecting the body	3
Emotional Awareness	To realize the connection between emotions and food	9
	To understand the effect of emotions on food	12
	To gain emotion regulation skills	8
	To gain emotional awareness	19
Nutrition Awareness	Recognizing and regulating nutritional irregularities	2
	Recognizing the meanings attributed to foods	6
	Distinguishing between emotional and physical eating	7
Environmental Awareness	Recognizing the influence of the environment on eating behavior	13
	Breaking the influence of the environment on nutrition	5
Personal Awareness	Developing self-esteem	3
	Developing self-compassion	2
	Respecting my body	6
	Making peace with myself	3
	Learning to love myself	6
	Accepting myself as I am	9
	Ability to say no	10

Upon examination of Table 5, it is evident that the participants' perspectives on the objectives of engaging in the mindfulness-based emotional eating reduction program were diverse, encompassing various thematic elements. The following are some of the participants' insights regarding their motivations for participating in the programme:

"I don't understand the connection between my emotions and food. Why do I think of food every time I feel bored? Why cannot I say no to someone when they offer me something? I would participate in this program to find answers to many questions like these." (EEF1) *"I cannot accept my body and myself as I am. I always try to change something through my diet. I would love to make peace with myself instead."* (EEF3) *"I believe that everything comes from childhood. The fact that I eat in this way may be a product of my family's habits. I would like to learn how I have been affected in this process and what I can do to change."* (EEF2)

The responses to the research question, "What types of internal and external stimuli accompany emotional eating episodes?" are presented in Table 6.

Table 6

Participant Views on Whether There is an Accompanying Stimulant During Eating

Theme	Sub-Theme	Code	f
Internal Stimuli	Negative Feelings	Guilt	8
		Despair	6
		Disappointment	4
		Stress	18
		Sorrow	15
		Troubled feelings	12
	Negative Thoughts	You ate too much, eat less at the next meal	6
		I'm overweight	5
		I'm ugly	4
		How many calories did I eat	7
		Nobody likes me	5
		I have to exercise a lot after eating	8
		I won't be able to lose this food	3
External Stimuli	Visual Stimuli	TV	15
		Youtube Video	20
		Netflix series or movies	13
		Instagram	8
		Twitter	5
	Auditory Stimuli	Music	4

As illustrated in Table 6, stimuli associated with eating were assessed using two distinct themes. Some participants' perspectives regarding intrinsic stimuli related to eating were as follows:

"When I eat, I often think about negative things. I usually talk to myself. You ate too much; you should stop now. I wonder how many calories I have eaten?" I struggle with these thoughts." (EEF12) *"...I usually eat more when I'm very stressed, and the more I eat, the more I blame myself."* (EEF9) *"When I eat, I feel sad. This sadness evolves into despair that I won't succeed in losing weight."* (EEF7) *"I often watch myself eat. It is weird, but I watch myself eat and see how ugly I look. It makes me stop eating sometimes."* (EEF1)

The following are some views of the participants regarding external stimuli accompanying eating:

"...I like to eat more when I watch series on Netflix." (EEM4) *"...TV accompanies my meals, especially in the evening. There are evening programs that I like to watch. Even if I don't eat, I always have a snack while watching them."* (EEF5) *"I like to follow the agenda while eating. I usually check Twitter to see what is going on that day."* (EEM3)

4. Discussion and Conclusion

This qualitative study undertook a comprehensive exploration of the complex nature of emotional eating behavior and its impact on various dimensions of an individual's life. This research thoroughly examined participants' emotional experiences, the role of environmental factors in influencing this behavior, the cognitive and emotional processes associated with eating behaviors, and the coping strategies employed.

4.1. Emotional and Situational Triggers

An analysis of participants' responses regarding the emotions they experienced revealed a predominance of negative emotions, such as stress, boredom, loneliness, and sadness. Numerous studies within the academic literature have demonstrated a significant association between emotional eating behavior and specific forms of negative affect. Notably, psychosocial factors, such as boredom (Koball et al., 2012), stress (Tan & Chow, 2014), loneliness (Jamshed & Arslan, 2022), and sadness (van Strien et al., 2013), have been identified as triggers of emotional eating behaviors in individuals. Furthermore, an examination of participants' responses to various situations indicated that predominantly negative circumstances, such as being judged about weight, work-related stress, and post-argument scenarios, elicit emotional eating behaviors. A review of the literature reveals an absence of studies on emotional eating, independent of emotions related to specific situations, as it is challenging to dissociate emotional states from situational emotions (Demirel et al., 2014). The impact of negative emotional states on emotional eating can be elucidated using the affect-regulation model. This model posits that an increase in negative mood triggers emotional eating, which serves to alleviate negative emotions by providing temporary distraction, emotional numbing, and/or a sense of comfort (Haedt-Matt & Keel, 2011). Although eating offers short-term relief, temporary mood regulation may hinder individuals from developing long-term coping strategies. Consequently, emotional eating behavior may evolve into a persistent cycle (Haedt-Matt et al., 2014).

4.2. Perceived Nutrition and Bodily Signals

In examining the rate and speed at which participants consumed their food, it was observed that 7 out of 22 participants swallowed without chewing, 9 participants chewed between 0 to 5 times, 12 out of 22 participants reported eating quickly, and 5 reported eating very quickly. These findings suggest a generally rapid eating pace among participants. Previous research has indicated that individuals exhibiting emotional eating behaviors tend to eat more rapidly because of impulsive eating driven by emotional cravings (Schnepper et al., 2019). The participants' accounts regarding the influence of emotional cravings on chewing and eating speed may exemplify the impact of emotional cravings on impulsive behaviors. One participant noted difficulty in determining the number of chews, which often varied with her emotional state: she chewed less when experiencing anger or frustration. Another participant mentioned that while she generally perceived her eating speed as moderate, it could fluctuate depending on the daily circumstances.

Participants were also queried about their perceptions of hunger and satiety signals within their bodies. The most frequently reported bodily signals of hunger based on their location in the body include stomach rumbling, weakness, low energy, and heartburn. Conversely, the most common signs of satiety were swelling of the stomach and nausea. Empirical research on how emotional eaters perceive hunger and satiety cues at the body level remains limited or insufficiently addressed in the literature. However, it has been documented that individuals with emotional eating behaviors often exhibit unresponsiveness or insensitivity to internal cues, such as hunger and fullness, relying instead on external factors to regulate food intake (Tan & Holub, 2011). This lack of trust in accurately interpreting bodily signals has been attributed to desensitization to genuine hunger and satiety signals, following intense emotional arousal (van Strien & Ouwens, 2007). Supporting this perspective, previous studies have demonstrated a significant increase in subjective hunger levels when individuals are exposed to high stress levels (Groesz et al. 2012; Wallis and Hetherington, 2009). However, given that physiological reactions to negative affect and stress resemble the sensation of satiety post-feeding, it has been reported that appetite loss and reduced food intake occur in response to negative emotions (Sevinçer & Konuk, 2013). This finding suggests the presence of contradictory signals induced by negative emotional states within

the body. A comprehensive examination of these signals across the psychological, biological, and sociological dimensions of individuals with emotional eating behaviors could significantly contribute to resolving the existing contradictions in the literature.

4.3. Compensating and Coping

When participants were queried regarding their strategies to mitigate emotional eating behaviors, the predominant responses included dieting, consuming low-calorie foods, skipping meals, fasting, engaging in physical exercise, and counting calories. The literature categorizes compensatory strategies of emotional eaters into four primary domains (Frayn et al., 2018): physical activity, alternative stress reduction and coping strategies, compensatory eating behaviors (e.g., dieting, calorie counting, and meal skipping), and metabolic effects. Among the participants' responses, behaviors such as dieting, consuming low-calorie foods, and skipping meals were particularly prominent. One participant indicated that dieting was the sole method to prevent emotional eating behavior, frequently feeling compelled to diet. Another participant reported that after overeating during one meal, she compensated by consuming low-calorie foods such as salads at the subsequent meal. Similarly, another participant mentioned that following an indulgence in desserts and an emotional eating episode, she opted to abstain from eating the next meal.

When participants were asked about their coping mechanisms for emotional eating behavior, it was observed that they engaged in various activities (such as taking up a hobby, chewing gum, engaging in activities that occupied their hands, and watching television) to distract themselves from eating. Three fundamental coping strategies have been proposed for managing emotional eating: task-oriented, emotion-focused, and distracted coping (Endler & Parker, 1994). Spoor et al. (2007) concluded that emotion-focused and distraction-coping strategies are more effective in managing emotional eating behaviors. In the examples provided by the participants regarding distraction behaviors, one participant stated that he purchased exercise equipment to keep his hands occupied and immediately engaged in activities to avoid turning to the refrigerator. Another participant mentioned that he began painting, one of his preferred activities, to manage the urge to eat and to divert his mind from food.

4.4. Purposes of Participating in the Mindfulness-Based Emotional Eating Reduction Program (MB-EER)

Participants' motivations to engage in a mindfulness-based emotional eating reduction program were categorized into five themes: body awareness, emotional awareness, nutritional awareness, environmental awareness, and personal awareness. These findings align directly with the study's initial objective of identifying the intervention needs of individuals exhibiting emotional eating behaviors. Participants' expressed needs extended beyond eating behaviors, indicating a requirement for multidimensional psychoeducational support in areas such as emotional coping, body connection, and awareness of environmental triggers. A review of the literature revealed that mindfulness-based intervention programs addressing these needs have demonstrated promising outcomes in the domain of emotional eating and eating disorders in recent years. These programs have been shown to differentiate between hunger/fullness signals and emotional cues (Manasse et al., 2015), diminish automatic responses to reward food cues (Papies et al., 2012), promote healthier food preferences (Lattimore, 2020), reduce stringent dietary restrictions (Smith et al., 2020), and enhance motivation, cognitive flexibility, and emotion regulation skills (Beccia et al., 2020). In this context, the themes identified in the research findings also correspond to the areas of change targeted by mindfulness-based practices. Consequently, the results obtained reflect the motivations and expectations of individuals with emotional eating behaviors for

participating in such programs, while also informing the goals and objectives of the Mindfulness-Based Emotional Eating Reduction Program (MB-EER), which constitutes the secondary aim of the study.

4.5. Stimuli Accompanying Eating

When participants were queried regarding the presence of internal or external stimuli during episodes of emotional eating, it was predominantly reported that negative emotions and thoughts were present internally. The literature indicates that individuals often experience relief by suppressing their emotional state during eating (Sevinçer & Konuk, 2013). Conversely, a study entitled 'Is it possible to think while eating?' highlighted that stimuli associated with food possess both initiating and sustaining functions (Köse 2020). Analysis of participants' responses revealed that negative thoughts persist during eating, influencing eating behaviors. One participant reported engaging in self-talk while eating, expressing concerns about overeating, and preoccupation with caloric calculations. Another participant conveyed feelings of sadness during eating, which evolved into hopelessness regarding weight loss, thereby reinforcing emotional eating behavior.

This suggests that the suppression of emotions during eating serves as a temporary distraction, masking negative emotions. Consequently, food acts merely as a barrier between negative emotions and thoughts, which continues to persist. Thus, emotional eating may be considered a dysfunctional defense mechanism against negative emotions and thoughts.

External stimuli accompanying eating were primarily visual, such as television and YouTube. Research has demonstrated that visual stimuli during eating increases food consumption (Tucker & Bagwell, 1991), which is attributed to the diversion of attention to screen content, thereby increasing food intake. Another study proposed that screen exposure during meals can lead to automatized or reflexive eating behaviors, causing individuals to disregard satiety signals and consume more (Van der Horst et al., 2019). Studies have shown that eating behavior triggered by internal or external stimuli results in adverse outcomes in the context of emotional eating.

In summary, the present study is significant in elucidating the triggers, perpetuators, and correlates of emotional eating behavior, thereby identifying individuals who exhibit this behavior. The research findings indicate that emotional eating is precipitated by negative emotions such as loneliness and stress, as well as the social environment. It was found that this behavior resulted in adverse outcomes, including weight gain, body image issues, and feelings of guilt. Participants typically employ distraction techniques and compensatory behaviors such as dieting to manage their behavior. However, it was concluded that these methods are ineffective in the long term, highlighting the importance of addressing the underlying causes of emotional eating behavior. These findings underscore the eating cycle initiated by an individual's desensitization to bodily signals, acceleration of eating behavior, and impulsive reactions, offering significant implications for both dietitians and mental health professionals. It is crucial for dietitians to develop individualized plans that extend beyond calorie- and macronutrient-focused interventions, incorporating the client's psychological connections with food, emotional triggers, and motivations behind eating behaviors, to create sustainable nutrition interventions. Psychological processes such as guilt, inadequacy, and internal conflict appear to be the primary factors that sustain emotional eating behaviors. In this context, structuring mindfulness-based therapy interventions to enhance clients' emotion regulation skills may facilitate the long-term transformation of eating behaviors. Nonetheless, this study had certain limitations. The qualitative research method employed limits the generalizability of the findings. The relatively small sample size and specific demographic characteristics of the participants necessitated cautious interpretation in broader populations. Furthermore, data based on participants' self-reports may

be subject to cognitive limitations such as social desirability and recall biases. Future research should conduct comparative analyses across different age groups, cultural contexts, and socioeconomic levels. In addition, mixed-method designs that integrate qualitative and quantitative data may yield more valid and comprehensive results. Long-term follow-up studies are warranted to evaluate the effectiveness of intervention programs. The findings obtained in this context contribute not only to the understanding of emotional eating behavior, but also to the development of intervention programs grounded in scientific evidence by professionals in this field.

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Ethics Committee Approval

All ethical principles included in the Higher Education Institutions Scientific Research and Publication Ethics Directive were complied with in the research. The necessary ethics committee approval for the study was given by the Düzce University Educational Research Ethics Committee with the decision numbered 2023/72 dated 17 December 2022.