

The perceived role of food and eating among turkish women with obesity: A qualitative analysis

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Abstract

The studies show the link between Body Mass Index (BMI) and higher food responsiveness despite negative physical, social, and psychological outcomes. The descriptive studies examining what makes individuals with higher BMI values more likely to respond to food are limited, while there is none in the Turkish sample. This study aims to understand the subjective relationship of women with obesity/overweight related to food in Turkish culture. Turkish adult women (aged 22–54) who have BMI higher than 25 (overweight/obesity) participated in semi-structured interviews focusing on how they relate to food and obesity. Participants were reached through Ankara Etlik Zübeyde Hanım Obstetrics and Gynecology Hospital Obesity outpatient service. Audio-recorded interviews were analyzed predominantly inductively by thematic analysis principles. Analysis of these interviews reflected three main themes: (1) the act of eating: "I don't know why I eat when I'm full", (2) being overweight: "I am the kind of person who constantly tries to lose weight", and (3) sources of distress. The results indicated the dynamic relationship between the desire to eat, chronic stress, perceived unavailability of close ones, and low sense of self-worth among adult women with obesity/overweight. The other indication is the effect of culture in shaping the relationship dynamics, the sources of distress, and the eating patterns in developing and maintaining obesity.

Keywords Turkish women · Obesity · Qualitative research · Stress-induced eating · Body mass index

Introduction

Obesity has become a significant concern for societies at micro and macro levels in the last decades. World Health Organization (WHO) statistics revealed that 39% of adults were overweight and 13.1% with obesity worldwide in 2016, while it is estimated to increase rapidly (World Health Organization, 2020). While the United States is one of the leading countries with 36.2% of adults with obesity, the European average is 23.3% (WHO, 2017). Despite being a European country, Turkey follows the United States with

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² Faculty of Social Sciences, Department of Psychology, Ankara Yıldırım Beyazıt University, Ankara, Turkey 32.1% in 2017, which increased from 11.8% to 1983 (WHO, 2017).

While WHO proposes "increased intake of energy-dense foods" and "increased physical inactivity due to sedentary lifestyle" as two main reasons for obesity, studies focusing on the determinants propose it as a multifactorial phenomenon resulting from both genetics, psychological and behavioral factors, and social and environmental factors (Jelassi et al., 2015; Kadouh & Acosta, 2017; Haire-Joshu & Tabak, 2016). Though the fundamental equation of obesity is the cumulation of excessive energy in the body, what causes the intake of excessive amounts of energy or what prevents the burning of this excess energy has been discussed by these factors.

A recent review of genome-wide association studies on genetics of obesity, reflected the gene-environment interaction in the formation and maintenance of obesity (Loos & Yeo, 2022). According to the results, common obesity develops in an interaction of environment with a multiple genes which leads to hundreds of variants in obesity related traits. For example, increase in physical activity changes the reflection of the relevant gene. In line with the simple equation above, physical activity and a healthy diet were proven to be effective in weight loss by behavioral studies as well (Flore et al., 2022). However, in an overview of systematic reviews, while physical activity has been shown to be effective in weight loss, there was no difference in weight maintenance (Bellicha et al., 2021). Therefore, despite the effectiveness of behavioral interventions, there are missing parts in the whole picture of weight management.

Weight cycling is determined to be a major obstacle in the weight management. Quinn and his colleagues (2020) nation-wised cross-sectional survey of adults with obesity or overweight showed that %74,6 of those had intentional weight loss at least once, with an average number of 7.82 weight cycles over their lifetime. In other words, despite the effort, a significant part of the adults with higher-thannormal BMI values tends to gain the weight lost by physical activity and dieting (DerSarkissian et al., 2017; Lahti-Koski et al., 2005).

By considering environment with its psychological, social and cultural entities in addition to biological and physical elements, Greaves and his colleagues (2017) meta-synthesis of the qualitative studies from 7 countries reflected food availability, culture, life events, self-concept, self-regulation, stress-regulation, and mood among the most important psychosocial factors in weight management. Likewise, the prospective study conducted in 17 high- middle- and lowincome countries revealed the effect of perceived stress, diet, physical activity, hypertension and diabetes, anthropometry, and depression as the most frequent factors in the formation and maintenance of obesity (Rosengren et al., 2015).

As one of the most widely studied psychological factors, emotional eating or stress-induced eating reflects functional position of eating in coping with stress while it is associated with a higher BMI value (Lazarevich et al., 2016; Sze et al., 2021), it predicts difficulties in weight loss maintenance (Frayn & Knäuper, 2018) and an increased BMI in seven years (Konttinen et al., 2019). In fact, experimental studies focusing on attentional bias in overweight individuals revealed that they tend to give more attention to foodrelated stimuli than normal-weight controls (Favieri et al., 2020; Nijs et al., 2008, 2010). Likewise, qualitative studies show that eating is frequently more than a physical need for individuals with overweight/obesity (Barber, 2017; Broers et al., 2021).

On the other hand, cultural dynamics shape the perceptions toward self and body (Branco & Silva, 2019; Agrawal et al., 2015), along with attitudes to eating. In a qualitative study comparing the attitudes toward food and the external effects on weight management in France and in United States, social interactions and pleasure from eating processed vs. natural foods were identified as distinguishing factors of weight management between two cultures (Dao et al., 2020). While French participants described their relationship to food through getting pleasure from life, earth, and human beings at once, pleasure and taste does not accord for American participants. Based on the data from 51 countries across the world, in a recent study analyzing the effect of individualistic vs. collective culture on obesity prevalence, flexibility trait, that reflects self-control and restraining desire, strongly predicted obesity (Akaliyski et al., 2022). Social interactions and peer effects on obesity and weight management are more important in collective cultures (Nie et al., 2017), in which individuals tend to define themselves primarily by their social roles and relationships. These culture-specific associates of overeating and obesity may emphasize the role of culture-specific interventions in the treatment and prevention of obesity.

Considering environment as a whole with its biological, social, psychological, cultural, and economical parts, and considering humans as biopsychosocial beings in a dynamic relation with their environments, it seems critical to examine obesity as a whole. However, compared to profound developments in the genetics, and in biological or behavioral interventions, social and psychological basis of obesity have relatively limited attention this far. Therefore, this study aims to fill in this gap by focusing on the psychosocial factors affecting the subjective relationship between women with obesity and food.

Studies examining how individuals with overweight/ obesity subjectively relate to food are minimal (Curtis & Davis, 2014), while it is none in the Turkish sample. Social constructivist theory points out the constitutive role of culture and society in how we make sense of our experiences. This study aims to understand the subjective relationship of women with overweight/obesity-related to food in Turkish culture. For this purpose, the research questions of this study are: (1) How do adult women with obesity/overweight experience this situation?; (2) How do adult women with obesity relate to food and eating behavior?; (3) How does culture shape their relationship with food?

Method

Methodology

Since qualitative analysis provides a deep and rich understanding of a phenomenon within its context by emphasizing subjectivity rather than obtaining a generalized idea about it (McCusker & Gunaydin, 2014), and overeating is a relatively subjective phenomenon, a qualitative approach and a thematic analysis method were preferred for the research question. Epistemology and ontology are essential

 Table 1 Participant Demographics

Participant	Age	Marital Status	Occupation	Interview Time	BMI Value (at the time of interview)
A	32	Married	Housewife	41:00 min.	(159 cm/89 kg) 35.2
В	22	Married	Housewife	64:37 min.	(161 cm/93.8 kg) 36.2
С	37	Married	Housewife	51:46 min	(155 cm/90kg) 37.5
D	54	Married	Housewife	47:16 min	(154 cm/ 96 kg) 40.5
E	23	Married	Housewife	54:06 min	(158 cm/108kg) 43.3
G	33	Married	Housewife	22:58 min.	(162 cm/97.7 kg) 37.2
Н	33	Married	Housewife	13:20 min.	(169 cm/82kg) 28.7
K	47	Married	Housewife	30:41 min.	(170 cm/109 kg) 37.7
М	40	Married	Nurse	33:49 min.	(165 cm/80 kg) 29.4
N	43	Married	Secretary	53:33 min.	(151 cm/64 kg) 28.1
U	41	Married	Housewife	40:11 min.	(163 cm/85 kg) 32

components of qualitative studies that direct the means of analysis and the researcher's view by providing an answer to how we know reality and what is the nature of this reality (Tuli, 2011). In this study, based on the premise that the perceived role of eating is a factor in the formation and maintenance of obesity, social constructivist epistemology - "there is no outer reality independent of human action, and we can obtain it only relatively and partially within its context and time"- (Willig, 2013; p.66) and relativist ontology- "there is no one objective reality, but multiple realities bounding on time and context," is preferred (Willig, 2013; p.61).

While inductive reasoning, driven by what is in the data, is in line with relativist ontology, it is stated that it is impossible to conduct pure inductive or pure deductive reasoning (Saldana, 2013). Thus, predominantly inductive reasoning was used in this study while generating codes and themes by considering participants' statements rather than approaching the data with a theory.

In reporting the findings, Standards for Reporting Qualitative Research (O'Brien et al., 2014) were followed.

Participants

Participants were recruited with a purposive sampling methodology by targeting a specific group of women who have BMI higher than 25 (overweight or obese). The participants were reached through Ankara Etlik Zübeyde Hanım Gynecology Hospital Obesity service. In collaboration with the service doctor, the service patients were informed about the study and asked to participation without any push by the researcher or the doctors. There was no refusal or drop-out among the participants. In the data collection, it was considered to reach the saturation point after 11 participants. The details regarding participants are provided in Table 1.

Data Collection

Before the interviews were conducted, four research associates' expert opinions on eating disorders and qualitative methods were asked to approve the interview questions' reliability and validity before the interviews were conducted. The questions were revised into three categories (How they relate to others: e.g., "How do you describe your relationship with your family?"; How they relate to eating: e.g., "What do you think about the role of food and eating in your life?"; How they experience obesity: e.g. "How do you think obesity affects your life?") following the expert opinions. The audio-recorded semi-structured interviews (M = 41.2 min., (13.20-64.37)) were conducted by the corresponding author in a private room with the signed consent of the participants. All the participants were interviewed once. There was nobody else present in the room during the interviews besides the interviewer and the interviewee.

Analysis

In this study, a six-phase approach to thematic analysis was followed to analyze the data (Braun & Clarke, 2006) with the assistance of the MAXQDA software program. After the transcription of records, initial codes were created separately by reading the entire data set as draft notes in a non-systematic fashion. In the second reading with other researchers, the codes were checked with the data, turned into a systematic form, and summarized into the actual codes in the software. In this process, 'in vivo coding' and 'descriptive coding' was used at different data set points. The generated code list was categorized into groups as potential themes. Simultaneously, missing pieces of categories were added in the first check, and the relevance of the category and the

Main Themes	Subthemes	Example Quotes
Eating: "I don't know why I eat when I am full."	"The desire to eat"	" in my observations, you get stuck between your stomach and your brain your brain always gives directions as 'eat something!', there is always a desire to eat in the brain those who lose weight after the surgery can do this by their inability to eat even though they want to"
	Uncontrollable Eating	"it can be a glass of milk or yogurt, I even ate the leftover salad, whatever in the fridge, the fruit may be, whatever I can find I mean" "when I feel distressed, I don't eat just one chocolate, if there are ten choco- lates in front of me, I would eat them all"
	"To the kitchen"	"I mean when I get bored from the living room, from the atmosphere in the room, I feel like going to the kitchen to eat something and I fall into the kitchen most when I am in bad odor with my husband, I don't even want to sit in the living room, I just sit in the kitchen"
Being Overweight: "I am the kind of person who constantly tries to lose weight"	Gaining Weight	" our tea-time (çay faslı) begins, and the tea always has an accompany like biscuits, etc., I cannot help myself with them, I take one, and think about taking the second one" "you must eat, you have two stomachs", "you are pregnant, you should eat", or "if you don't eat, you wouldn't have breast milk"
	Losing Weight: "It is rather appearance than health"	"I don't like the way my clothes look on me, I mean I am not happy or comfort- able walking, I am not small so nothing looks good on me I don't like feeling hot but I'm wearing a jacket all the time"
	Being Overweight in the Eyes of Others	"their glimpses, their glances, I feel like they are looking at my back when I sit or stand up; when I turn back, I catch their eyes on my back"
Sources of Distress	The Feelings of Restriction due to Gender Roles	"My mother-in-law called me, she said, 'I heard you will start a job, but I don't want you to work" "We are daughter-in-law here, you never eat near the father-in-law, eating or drinking, your mouth is always covered" "like a servant, like a nurse, like I have to"
	Unavailability of Significant Others	"On a bad day, I cannot find anybody around me, including my husband, nobody is there I love my husband, but he is insensitive to me I do everything myself, I go to hospital myself, I do the shopping for my home myself, when 'my' child gets sick, I will take her to the hospital myself, my husband doesn't have a thing in these, he has his work, he does not like to talk that much, I mean he likes with others but not with me, he has that kind of personality"
	Low Self-worth	"He acts as if I do not exist" "Be nice to me for the sake of your child at least"

code list was checked in the second one. Once they seem all fit in, the themes were defined, and the thematic map was drawn as given in Table 2.

Ethical considerations

Ethical standards were taken into consideration throughout the study. The permissions were taken from Ankara Yıldırım Beyazıt University Ethical Committee (Protocol no: 14.06.21-53), and Ankara Etlik Zübeyde Hanım Gynecology Hospital (Protocol no: 19.11.21-13). Participants' and the related persons' identities were abbreviated and changed to provide confidentiality and anonymity. In the Informed Consent Form and by the researcher before the interview, the participants were informed that they were free to quit the study at any point in case of any discomfort. By the Informed Consent Form, the participants' consent to both the participation and the publishing their data were taken.

Results

<u>Theme 1: Eating: "I don't know why I eat when I'm</u> <u>full."</u>

"The Desire to eat."

All the participants stated *the desire to eat* out of physical hunger. This non-physically motivated eating was described through the urge to eat (*unintentional eating*), emotion regulation, and a life "built on food." Almost all participants mentioned the urge they feel about eating, which arises primarily at times of hunger or when they feel restricted. Participant N, who has gone through a laparoscopic sleeve gastrectomy, described this desire after the surgery as follows:

"... in my observations, you get stuck between your stomach and your brain ... your brain always gives directions as 'eat something!',.... there is always a desire to eat in the brain ... those who lose weight after the surgery can do this by their inability to eat even though they want to ... ".

Participant C pointed out that she becomes wrapped up in the thoughts of food until she eats, even though she tries to engage herself in drinking coffee or any other thing. Likewise, nearly half of the participants described "*unintentional*" eating. For example,

Participant B: "... I was trying to lose weight, and when I wake up, I was telling myself that don't you eat today, I think about that again and again, but once I prepare the breakfast, then there is nothing, I forgot that I wasn't going to eat, that always happens...".

Nine participants described their relationship with eating through feelings. Most of the time, the precipitating feeling is sadness, while the following feeling is a relief. Participant B explains this with the Turkish idiom "kendini yemeğe vurmak" which means giving yourself entirely to the food to leave out any other thoughts or feelings and relief. Participant A describes the feeling after eating as "This is happiness, what a relief I said, I am not supposed to eat, yes, but it is good once you eat."

Lastly, nearly half of the participants described their life as built on eating. They explain their eating out of physical hunger by frequent engagement in eating throughout the day. They stated that food is always at their fingertips since they are primarily at home, or "the table is always set."

Uncontrollable eating

For most participants, it does not matter what they eat when this urge arises; it can be anything in the fridge, *"something sweet"* or *"something salty."*

Participant D: "...it can be a glass of milk or yogurt; I even ate the leftover salad, whatever in the fridge, the fruit may be, whatever I can find, I mean...".

Yet, the most frequently mentioned food for these times is bread and pastry, then the "sweet things" like chocolate, coke, Turkish delight, and lastly, junk food. Participant K stated her addiction to eating sunflower seeds.

Participant C: "...somehow, I turned to bread, I don't know why, I don't know if the bread was so tasty, but I was finding excuses to eat bread, I mean, even if I drink a beverage, I was eating at least half a bread with it...".

Participants described eating as an uncontrollable experience. They explain this by the statements like "I don't feel like I'm full," or "I cannot stop after a spoon, I'm longing for it, just have another spoon, one more and one more, to the point that I cannot eat anymore." This uncontrollable eating behavior arises mainly in a negative mood; "when I feel distressed, I don't eat just one chocolate; if there are ten chocolates in front of me, I will eat them all."

"To the kitchen."

The kitchens are frequent places for the participants. Going to the kitchen not just out of obligation to cook or eat, but simply spending time in the kitchen is a regular activity, in their statements. Participant E described her relationship with the kitchen by *"I love everything in and about the kitchen."* Participant N and Participant D point to the strong association between the kitchen and eating for them, while Participant U describes the kitchen as a place to go in a bad mood.

"...I mean when I get bored from the living room, from the atmosphere in the room, I feel like going to the kitchen to eat something ... and I fall into the kitchen most when I am in bad odor with my husband, I don't even want to sit in the living room, I just sit in the kitchen...".

<u>Theme 2: Being overweight: "I am the kind of person</u> who constantly tries to lose weight."

Gaining weight

All the participants described weight cycling in their past. For example,

Participant B: "I just had this desire to eat, I said to myself, 'let it go, forget about the losing weight or the diet, ' and I was eating again, then after a while, I came to my senses and said to myself that 'am I insane or what, I strived for two weeks, and I lost weight, why did I quit it again, 'and I stopped eating once again."

In this cycle, gaining weight is characterized by four factors in participants' statements: stress, health problems, pregnancy and birth, and lifestyle. Most of the participants stated family histories of obesity, mood disorders, and Type-2 diabetes, along with personal health issues like polycystic ovary syndrome, chronic lymphocytic thyroiditis, or chronic constipation. Nearly half of the participants pointed to the cultural associates of eating as facilitators of weight gain, one of which is tea-times, including gathering all family around the tea. Participant A described the tea times as breaking points of her diet; even though she can follow her diet all day, after the dinner, "… our tea-time (çay faslı) begins, and the tea always has an accompany like biscuits, etc., I cannot help myself with them, I take one, and think about taking the second one…".

Participant D mentioned that she was preparing pastry, cakes, and potato salads for hours after school for her children. Participant C remembered that there had always been a pastry on the table during Ramadan when they got up for the 'sahur' - the meal eaten before dawn.

On the other hand, three participants pointed out the effect of physical inactivity resulting from being a housewife or being in the perinatal or the postpartum period. The cultural discourses related to pregnancy and giving birth like "you must eat, you have two stomachs," "you are pregnant, you should eat," or "if you don't eat, you wouldn't have breast milk" directed the participants to eat. Participant B described her experience as follows;

"...they said eat sweet things to make your milk sweet, eat rice, eat onion, they make me eat rice, bread and that kind of things, and I started to gain weight again...".

Although only Participant C associated her weight gain with the COVID-19 pandemic and the isolation at home, most participants stated the loss of progress in their diets after the pandemic. Lastly, stress is the indirect cause of weight gain through increased eating activity.

Losing weight: "it is rather the appearance than health."

All the participants except for one explained that their desire to lose weight is very much related to their dissatisfaction with how they look and their health problems in order. Three participants described their avoidance of going shopping because of not finding their size for a dress they like and the accompanying embarrassment. Participant M explained how she restricted herself because she was dissatisfied with her body:

"I don't like the way my clothes look on me, I mean I am not happy or comfortable walking, I am not small... so nothing looks good on me ... I don't like feeling hot, but I'm wearing a jacket all the time...".

The second main reason for the participants to lose weight is the physical problems like hypertension, type-2 diabetes, menstruation cycle irregularity, the necessity for losing extra weight to start the in-vitro fertilization process, and the severe issues after laparoscopic surgery. They resorted to dietary supplements, diet teas, fasting, acupuncture, and laparoscopic surgery to lose weight in their trials. However, despite all the diets by themselves and with the assistance of a dietician, they could not reach the target weight at the time of the interviews. Yet, they also described obstacles like difficulty finding food due to lack of market and transportation in the village, difficulty in regular attendance to a dietician or having laparoscopic surgery due to economic reasons, or difficulty having support from their spouses in gaining healthy eating habits.

Referring to the importance of others, the participants described socializing, problem sharing, and doing exercise with friends as the motivational factors in weight loss and having positive feedback from them regarding their weight. Yet, the most frequent motivation described by the participants is the assistance of the dietician.

Being overweight in the eyes of others

The participants, in their statements, pointed out their discomfort about being overweight in the others' looks. Almost all participants expressed their feeling about being watched by others.

Participant U: "...their glimpses, their glances, I feel like they are looking at my back when I sit or stand up; when I turn back, I catch their eyes on my back"

They stated that it is even more challenging when a close relative looks at their appearance and makes a negative comment or a joke about their weight. Participant C, for example, described how she felt in response to her son's statement that *"How can you go out with this belly? Aren't you ashamed at all?"*

Participant C: "I wanted to die at that moment...; when someone else says this, you know that they don't know you, they just talk, they are not aware of your health problems, they just talk, and you don't care about it, but, when a close one, someone in your blood tells this, the bottom falls out of your world."

Moreover, nearly half of the participants heard the directive 'become thin!' from their close ones. These "close ones" include the small and the prominent family members like the participants' husbands, their mother-in-law, their sister-in-law, their co-sister-in-law, their aunt, etc.

Theme 3: Sources of distress.

All participants pointed out the role of stress in eating behavior. Their statements refer to the feelings of restriction and unavailability of significant others as the primary sources of distress in unity with the feelings of low self-worth.

The feelings of restriction due to gender roles

Three participants described being grown up in a village as having restrictions due to gender roles and patriarchy (dress codes, honor culture, working woman stereotypes, education, etc.). For example, Participant C pointed out her brothers as authoritarian and tried to take their father's role by tyrannizing and restricting her as a girl. Most of the participants had to quit school early, while three finished high school and got their degrees afterward.

While six of the participants expressed that they married at an early age (14–18 years), five of those are stated as arranged marriages. Nine of the participants lived with the husband's family in various ways, like living in the same house, living in the same building but spending a significant amount of time together, or going to the husband's family's home every evening. For example,

Participant E: "until my son was born, as soon as I woke up, I was going upstairs to stay with my mother-in-law, I just came back to sleep again, I was not doing anything for my home, not even shopping, we were doing all the eating at upstairs. "

Most of the participants stated their mother-in-law was the person they had the most problems with within the family. In the formation of this problematic relationship, the family elderly's involvement in the participants' decisions on any topic may be relevant, which leads the feelings of being restricted on various subjects (working, marriage, where to go, what to wear, or when and what to eat, etc.). For example,

"My mother-in-law called me, ... she said, 'I heard you will start a job, but I don't want you to work,' I said why not, and she said 'I'm watching all these things on tv, those women, who start working, would abandon their families."

Participant B used the expression 'being a daughter-inlaw' to literally "keep her mouth closed" in the father-inlaw's presence.

"We are daughter-in-law here, you never eat near the father-in-law, eating or drinking, your mouth is always covered, for example, my mother and other women are also like that, it is a common thing for Kurdish people, your mouth must always be covered with your headscarf."

Moreover, the participants' husbands were described as the second decision-makers, while the participants themselves had the tiniest voice. After the intervention of the family elderly, Participant C described the reaction of her husband to her work decision as follows;

"...you will call and tell them that you will not go to work...".

Nine of the participants defined themselves as housewives and associated that with not having a life outside the home and taking care of everything at home. Their instrumental position was described by the statement "*like a servant, like a nurse, like I have to*" and by the Turkish idiom "*make, cook, rub, clean*" ('yap, pişir, yuğ, yıka').

Participant U described her anger and associated her overeating with being able to eat after satisfying the expectations of other family members (like bread, water, etc.).

Unavailability of significant others

In the statements, participants refer to the unavailability of their significant others in need. For more than half of the participants, the husbands were frequently characterized by their absence rather than presence. The husband's family took more place in their statements than the husbands themselves. This absence was experienced as physical and emotional. Three participants stated their husbands as working away because of economic necessities; therefore, they are physically unavailable most of the time. On the other hand, participants expressed their husbands' emotional unavailability in the couple's relationship and the childcare. Only Participant H defined her relationship as *"mutually respectful and affectionate."* For example,

Participant E: "On a bad day, I cannot find anybody around me, including my husband, nobody is there ... I love my husband, but he is insensitive to me ... I do everything myself, I go to hospital myself, I do the shopping for my home myself, when 'my' child gets sick, I will take her to the hospital myself, my husband doesn't have a thing in these, he has his work, he does not like to talk that much, I mean he likes with others but not with me, he has that kind of personality."

On the other hand, eight participants described their mothers as sick, depressed, or stressed in their childhood. Therefore, they remembered themselves in a position to take care of their mother and housework at the expense of their own physical and emotional needs. For example,

Participant A: "when I was a child, I remember the most that my mother was calling me and saying that 'I'm not feeling good today, I cannot get out of bed' I was preparing my sister and myself for the school, I always remember this, I did not know back then, but that was depression... that's why I did not share much with my mom now."

Low self-worth

Concerning the subthemes above, more than half of the participants stated their feelings of insignificance, not being cared for, not being admired, or their thoughts not being taken seriously by their close ones. Participant A said she "knows" that her thoughts are not essential for her husband, so she does not tell them. While Participant D states how being valued by her husband makes her happy, three other participants expressed insignificance and worthlessness by saying that "he acts as if I do not exist" or "Be nice to me for the sake of your child at least. " Participant G explains that her husband's insulting her leads to her insulting herself while associating feelings of worthlessness with being overweight and not being admired by her husband.

For nearly half of the participants, these feelings were not shared with anyone; instead, they were repressed most of the time. The Turkish idiom they used for repression of emotions can be translated literally as *(içine atmak)* "throwing the troubles inside." (bottle it up).

The participants explained their tendency to repress their feelings by lacking support in their close relationships. More than half of the participants describe themselves as taking care of everything on their own. For example, Participant E explains her situation by her obligation to take care of everything at a very early age and by her desolation after the loss of her mother. The findings of the study are mainly in line with the literature. The participants explained their eating out of hunger by the desire and an urge to eat, especially in response to negative emotions to get relief. The urge to eat in response to stress-related psychological factors is much higher in individuals with obesity than in normal-weight adults (Yanover & Sacco, 2008; Rabiei et al., 2019; Kaur & Jensen, 2021; Şarahman-Karaman & Akçil-Ok, 2022; Ribeiro et al., 2018; Klatzkin et al., 2018). In understanding the cause of the urge to eat, enjoyment of food scores were higher, and satiety responsiveness scores were lower in children who have MC4R polymorphism rs17782313 (Ho-Urriola et al., 2014). Therefore, these individuals may physiologically enjoy eating more than others, while the sense of satisfaction arrives later than others. While hedonic hunger was found to be reduced after gastric bypass surgery (Schultes et al., 2010), one of the participants in our study explained this reduced motivation to eat by not a reduced hunger but an increased fear of death since consuming high amounts of food in a short period would be vital for these patients. On the other hand, in Klatzkin et al. (2018), stress-induced eating was associated with negative affect reduction in women with high chronic stress. A recent experimental study pointed out the HPA axis disruption in emotional eaters; the combination of hyperactive HPA-axis response with hypoactive reward circuit may pave the way for emotional eating (Chang et al., 2022).

The participants stated their tendency *to eat anything* in the presence of 'hunger,' but they also added their preference for bread if it is available. The relationship between obesity and the tendency to eat white bread is well-known (Serra-Majem & Bautista-Castano, 2015). Specifically, in Turkish culture, white bread has an important place. For example, there are Turkish idioms like 'earning your bread' or 'bread money' as referring to working, 'taking one's bread out of his hands' as referring to firing someone, or 'the bread is in the mouth of the lion' as referring to that living is not an easy job (Zülfikar, 2012). In all the examples, bread is presented as a significant thing that one strives to get. Therefore, their preference for bread instead of junk food may be explained by cultural attributions to the bread or the availability of bread more than junk food (Jia et al., 2021).

Acknowledging that women's relationship with the kitchen is a topic of anthropological studies, the participants' having a close relationship with the kitchen may be further questioned to understand its impact on the development and maintenance of obesity among women.

As the second theme, being overweight has been experienced by the participants through weight cycling and the others' looks. Even though there is no study examining weight cycling prevalence in Turkey, the association between weight cycling tendency and BMI value was shown across different countries (Quinn et al., 2020; Santamaria et al., 2009). In this sample, weight cycling may be explained by the participants' relief about being able to lose weight when they try, which also makes them eat more comfortably the next time.

In the statements, weight gain was explained by health problems, pregnancy, birth, lifestyle, and stress, while weight loss was motivated by body dissatisfaction and health problems. Health conditions like polycystic ovary are associated with unintentional weight gain through changing hormonal activities (NHLBI, 2012; Lee et al., 2019). The effect of the lifestyle arises from the table's readiness at several time points in a day. Food availability is associated with BMI value (Emery et al., 2015; Wansink et al., 2016). In a study conducted in nineteen European countries, it was found that household availability of palatable foods increased the likelihood of obesity by 0-25% (Monteiro et al., 2018). The participants pointed out the impact of cultural connections with food, like tea-times or Ramadan preparations. Tea is an essential beverage in Turkish culture; tea service after dinner with accompanying tea-time recipes, including pastries, cakes, etc., is a widespread tradition in Turkish houses. Likewise, Ramadan is a particular time for Muslims at which they do not eat or drink anything from dawn to dusk. Still, in the hours approaching the evening, there are preparations to have a square table filled with delicious foods. These can be considered culturally defined ways of food availability.

Most participants stated pregnancy as a period of weight gain because of the others' -mainly the relatives'- demands to eat energy-dense foods like rice and bread to increase their breastmilk or sweet things to make their breastmilk sweater. In line with this, one of the participants stated her comfort in eating bread during the postpartum period by encouraging others to eat.

For the participants, predominantly body dissatisfaction and health conditions are the primary reasons for weight loss. In literature, body dissatisfaction is a significant correlate of obesity, which brings about lower self-esteem and depression (Richard et al., 2016). In a meta-analytic study, adult women with obesity were found to have higher body dissatisfaction than both normal-weight adults and adult men with obesity (Weinberger et al., 2016). This result may not be surprising considering the societal standards of beauty and higher expectations of women. The participants of our study stated that their family expects and demands them to be 'thin.' Body dissatisfaction brings about symptoms of depression in both men and women (Soares-Filho et al., 2020; Bornioli et al., 2020; Morken et al., 2019). The participants expressed their feelings of constantly being watched, feelings of unworthiness, insignificance, not being admired, desolation, and that they don't have any support; these feelings were associated with being overweight in their statements due to the judgmental position of their close ones. In the form of receiving compliments, social support is an essential source of motivation for weight loss maintenance (Karfopoulou et al., 2016; Varkevisser et al., 2019; Williams et al., 2019).

Stress has been pointed out as a frequent precipitator of overeating in the cycle. In the statements, sources of distress include the feeling of being restricted, physical and emotional unavailability of the significant others, and thereby appearing low self-worth. Feelings of being restricted seem to concern gender roles and cultural expectations. In the participant's reflections, they have been expected to be a daughter-in-law and a housewife and act by the dress codes, honor culture, and working/educated woman stereotypes. From their childhood on, they have been frequently excluded from the decisions regarding their lives like marriage, education, working, etc. While "the outside" decisions are taken by the family elderly and the husband, the women have been expected to take care of everything regarding home as 'housewives' who have 'no life outside the home. While the broad restrictions prompt the lack of control over their lives, their instrumental position as homemakers and daughter-in-law may prevent their perceiving themselves as subjects end in itself. Turkey is a collective and predominantly patriarchal society in which societal rules and standards are maintained based on gender roles and gender identity (Ozdemir-Sarigil & Sarigil, 2021; Engin & Pals, 2018). Restrictions toward women and the expectations to be and behave in specific ways rather than being valued correlated with women's self-worth. On the other hand, both physical and emotional unavailability of the participants' mothers in childhood and their husbands in adulthood may foster feelings of loneliness and worthlessness, leading them to repress and cope with stress by eating.

Implications

The findings of this study mainly align with the literature. Unlike previous studies, this study presented the effect of culture on the formation of low self-worth, distress, and the function of overeating as an acceptable way of coping with their stress.

Despite the effect of Western culture, Turkey continues to have a predominantly collective culture, in which gender roles are deemed vital in one's place in society. Supporting that, the participants in this study described their overeating behavior in relation to stress. They described their stress arising from the demands and the restriction of their position (daughter-in-law, housewife, mother, sister, girl, etc.). The restriction about their position necessitates them to take care of everything as demanded by elderly families while not involving in any decision regarding their lives. Not surprisingly, the kitchen is an essential place in the participants' lives, in which they get relief by cooking, eating, or simply spending time.

Thus, the development of culture-specific intervention programs is vital in treating and preventing obesity. For example, the empowerment of women in Turkey may pave the way for them to express and cope with their stress differently.

Limitations

There are certain limitations that may be considered while analyzing the results. Firstly the participants were reached through Ankara Etlik Zübeyde Hanım Gynecology Hospital obesity service, which is in a relatively conservative region. Conducting the research in this area may lead to a sample with specific group of women. That is to say, even though these are not participation conditions, all the participants are married while majority of them housewives with low education levels. Therefore, how they make sense of their obesity and their relationship to food may inevitably ascribe to their social and physical environment. However, considering the female employment rate (28.7%) in Turkey (Turkey Statistical Institute, 2021), the sample may not be very specific.

On the other hand, there is an age variation (M=36.4, 22-54) across participants which may interfere with their attributions toward eating, obesity, life and relationships. However, the similarity across their lives (their professions, socioeconomic background, their families etc.) may lessen the importance of this age variation.

Lastly, the participants' situation as the patients of the obesity service may cause two situations that interfere with their statements: firstly, that may affect their participation in the study even though they were informed that there is no push; and secondly, that reflect their intention and motivation to lose weight.

In this respect, considering the limitations above, the study may represent a specific group of women with obesity in Turkey. In further studies, expanding the study to other regions of Turkey with varying socioeconomic backgrounds may provide a better reflection of and an understanding towards the effect of culture.

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