The Effect of Job Stress on Diet Quality and Emotional Eating Among Hospital Employees

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Abstract

Hospital employees are considered one of the high-stress occupational groups due to their challenging working conditions and their responsibility for human health. Emotional eating, which describes the tendency to overeat in response to negative emotions, is expected to be more prevalent among hospital employees because of stressful working conditions. It is likely that emotional eating, alongside stressful working conditions, may negatively impact diet quality. This study aimed to investigate the effect of job stress on diet quality and emotional eating among hospital employees. In this study, 272 volunteers participated, consisting of 112 men and 160 women, with an average age of 34.26 ± 11.50 years. According to the Mediterranean Diet Quality Index (KID-MED), only 24.6% of the participants had optimal diet quality. In comparison, 28.3% were categorized as non-emotional eaters based on their Emotional Eating Scale (EES) scores. A positive and significant correlation was found between Body Mass Index (BMI) and EES scores (p<0.001). Participants who worked exclusively during the day had significantly lower job stress and EES scores than other participants (p<0.05), while their KID-MED scores were significantly higher (p<0.001). As workload increases, the role of evolutionary survival mechanisms in decreasing KID-MED scores becomes evident, suggesting that higher levels and intensity of stress lead to a predominance of homeostatic eating. Our findings support the negative impact of job stress on emotional eating and diet quality among healthcare workers.

Keywords: Diet quality, Emotional eating, Hospital employees, Job stress.

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1. Introduction

Emotions and eating are both natural and recurrent aspects of daily life. "Emotional eating" refers to consuming energy-dense and highly palatable foods in response to negative emotions. The responses to emotional eating vary among individuals. Although the exact causes of these individual differences are not fully understood, various mechanisms such as adverse childhood experiences, learning history, chronic stress, hypothalamic-pituitary-adrenal axis functioning, and cortisol secretion are believed to play a role (Konttinen, 2020).

Workplace stress is defined as a type of stress that arises from the conditions of the workplace, the nature of the job, or individual characteristics such as personality, skills, and knowledge. It also includes external factors that challenge a person's abilities, resources, knowledge, and physical, psychological, and

* Corresponding Author: Aliye Özenoğlu Email: aozenoglu@yahoo.com https://doi.org/10.56479/ijgr-42 professional capacity, often leading to negative outcomes (Yücel, 2022).

It has been emphasized that one of the most significant causes of stress is work and that job-related stress can manifest among hospital employees. Stress factors in the workplace for healthcare workers include verbal and physical abuse from patients, bullying/mobbing by colleagues or managers, the risk of lawsuits due to provided services, insufficient resources, fear of increased violence during visiting hours, low managerial support, role conflicts with other professional groups, heavy workload, low job control, patient expectations, the need to suppress negative emotional responses, shift work, and increasing administrative workload (Camkerten et al., 2020).

During episodes of stress-induced eating, both emotional eating and binge eating can occur simultaneously. An anxious mood can also trigger feelings of hunger. Awareness of one's emotions and thoughts is the first step to addressing this issue. It is

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well-established that the lack of awareness regarding emotional eating is a fundamental cause of unbalanced relationships with food (Arslan & Aydemir, 2019).

Although the connection between stress and emotional eating is well-established, there is limited research focusing on the underlying mechanisms that mediate this relationship. Notably, there has been little investigation into the impact of job stress on emotional eating behavior among high-stress occupational groups, such as hospital employees. Exposure to stress may increase the preference for comfort foods, particularly those rich in carbohydrates, which in turn may lead to a deterioration in diet quality. Therefore, this study aims to investigate the effect of job stress on emotional eating and diet quality among hospital employees.

2. Material and Methods

The study population consisted of 970 hospital staff working at İstinye University Medical Park Gaziosmanpaşa Hospital. The sample size was calculated using a power analysis formula in the G Power program, with a power of 0.95 and a significance level of 0.05, resulting in a required sample size of 74 participants.

A total of 272 volunteers participated in the study, including 112 men (41.2%) and 160 women (58.8%), with an average age of 34.26±11.50 years. Data collection tools included a personal information form, the Emotional Eating Scale (EES), the Job Stress Scale, and the Mediterranean Diet Quality Index (KID-MED).

2.1. Personal Information Form

The researcher developed this form using relevant literature. The form consists of 12 questions about socio-demographic information such as age, educational level, marital status, health status, and alcohol or tobacco use.

2.2. Emotional Eating Scale

The Emotional Eating Scale (EES) was originally developed by Garaulet et al. (2012), and its Turkish validity and reliability were established by Arslantaş et al. (2019). The scale aims to assess individuals' emotional eating behaviors and consists of 10 items and 3 subscales (disinhibition, type of food, and guilt). Responses are recorded on a 4-point Likert scale ("o" Never, "1" Sometimes, "2" Usually, and "3" Always). The scale scores range from a minimum of "o" to a maximum of "30." Higher scores indicate higher levels of emotional eating behavior. Garaulet et al. (2012) reported that scores between "o-5" indicate nonemotional eaters, "6-10" indicate low emotional eaters, "11-20" indicate emotional eaters, and "21-30" indicate highly emotional eaters.

2.3. Job Stress Scale

This Likert-type scale evaluates job stress, including workload, job control, social support, decision latitude, skill use, and job stress. Reported Cronbach's alpha coefficients for the workload, control, and social support subscales range from 0.51 to 0.72. The validity and reliability of a model-based version of this scale for Turkiye were established by Demiral et al. (2007). The questionnaire consists of 17 questions and has three main subscales: 5 questions for workload, 6 for job control, and 6 for social support. Of the 6 questions used to measure job control, 4 pertain to skill use and 2 to decision latitude. Response options for the workload, skill use, and decision latitude subscales range from "often, sometimes, rarely, and never." For social support, the response options are "strongly agree, somewhat agree, somewhat disagree, and strongly disagree." In the evaluation of the scale, responses are coded between 1 and 4, and the total score for each subscale is obtained by summing the scores. High scores indicate high workload, high job control, and high social support. Job stress is assessed as the ratio of workload to job control (Demiral et al., 2007).

2.4. Mediterranean Diet Quality Index (KID-MED)

The Mediterranean Diet Quality-KID-MED scale was originally developed by Serra-Majem et al. (2004) and adapted for Turkiye by Şahingöz et al. (2019). The scale consists of 16 items, 4 of which address negative associations with the Mediterranean diet (e.g., fast food, baked goods, sweets, and skipping breakfast), and 12 of which pertain to positive associations (e.g., consumption of oil, fish, fruits, vegetables, grains, nuts, legumes, pasta or rice, dairy products, and yogurt). Responses are scored as yes (1) and no (2). Items 6, 12, 14, and 16 are scored as -1, while the remaining 12 items are scored as +1. In the interpretation of the scores, a range of 0-3 points indicates poor adherence to the Mediterranean diet, 4-7 points indicate average adherence and 8-12 points indicate good adherence (Serra-Majem et al., 2004).

2.5. Statistical Analysis

IBM SPSS 22 statistical software package was used for data analysis. Descriptive tests such as frequency, percentage, mean, and standard deviation were employed in the analysis, along with independent groups t-tests, one-way ANOVA, and correlation analysis. All analyses were interpreted at a significance level of 0.05.

2.6. Ethical Approval

The ethical approval for the study was obtained from the İstinye University Social and Humanities Research Ethics Committee with the decision dated 11.03.2022 and numbered 11.

3. Results

A total of 272 participants, including 112 men (41.2%) and 160 women (58.8%), were included in the study. All participants were hospital employees, with the majority (64.3%) having a university degree. Of the participants, 47.4% were married, and 80.1% reported living with their families. The mean age of the participants was 34.26 ± 11.50 years (ranging from 18 to 65 years), and the mean BMI was 24.08 ± 4.41 kg/m². The mean BMI of men (25.70 ± 3.78 kg/m²) was significantly higher than that of women (22.94 ± 4.47 kg/m²) (p<0.001, t=5.484). A total of 44.1% of participants reported smoking and 46.0% reported

Table 1. Mean scores of participants from the scales

consuming alcohol. Moreover, 55.1% of participants worked only during the day, while 44.9% worked in a shift system. Additionally, 37.9% of participants had been working for less than five years, while 17.6% had been working for more than twenty years.

The mean scores obtained from the scales applied to the participants are presented in Table 1. The mean Emotional Eating Scale (EES) score was found to be 9.82 ± 6.45 , and the mean Mediterranean Diet Quality Index (KID-MED) score was 5.02 ± 2.75 .

The evaluation of the scores obtained from the Mediterranean Diet Quality Index (KID-MED) and the Emotional Eating Scale is presented in Table 2. According to the KID-MED score assessment, 27.6% of all participants were found to have very poor diet quality, 46.3% had diet quality that needed improvement, and 26.6% had optimal diet quality.

When evaluating the Emotional Eating Scale scores, it was found that 28.3% of the participants were categorized as non-emotional eaters, 46.3% as lowlevel emotional eaters, 32.4% as emotional eaters, and 6.6% as highly emotional eaters.

		Mean	Std. Dev.	Min.	Max.
Emotional Eating Scale		9.82	6.45	0	30
Job Stress Scale Subscales	Workload	15.19	2.90	5	20
	Skill usage	13.19	2.16	5	16
	Decision latitude	6.68	1.55	2	8
	Social support	20.64	4.20	9	63
	Job control	19.87	2.99	10	24
	Job stress	0.78	0.19	0.23	1.82
KID-MED		5.02	2.75	2	11

Table 2. Evaluation of KID-MED and emotional eating scale scores

		N	%
KID-MED	Very poor diet quality	75	27.6
	Diet quality needing improvement	126	46.3
	Optimal diet quality	67	24.6
Emotional Eating	Non-emotional eater	77	28.3
Scale	Low-level emotional eater	89	32.7
	Emotional eater	88	32.4
_	Highly emotional eater	18	6.6

		Ν	Emotional Eating Mean Score ±Std. Dev.	t	p
Gender	Male	112	9.49±6.45	0 =10	0.478
	Female	160	10.06±6.46	-0.710	
Smoking	Yes	120	9.63±6.30	0.450	o (- o
	No	152	9.98±6.58	-0.450	0.653
Alcohol	Yes	125	9.80±6.51	-0.055	0.956
Consumption	No	147	9.84±6.42		
Chronic Illness	Yes	71	10.04 ± 7.10	0.321	0.748
	No	200	9.76 ± 6.23		
Marital Status	Married	129	9.23±5.42	-1.459	0.146
	Not Married	143	10.36±7.23		
Work Schedule	Daytime	150	9.01±5.90	-2.315	0.021*
	Shift Work	122	10.82±6.96		
Living Situation	With Family/Friends	232	9.71±6.45	-0.717	0.474
	Alone	40	10.50 ± 6.45		

Table 3. T-Test results for factors affecting emotional eating scale scores

* p<0.05

The results of the analysis regarding the factors affecting the Emotional Eating Scale (EES) score are presented in Table 3. A significant difference was found between the work schedule and EES score. It was observed that participants who worked only during the day had significantly lower EES scores compared to participants with other work schedules (night, mixed, shift work) (p=0.021).

A correlation test was conducted to evaluate whether there was a correlation between the Emotional Eating Scale (EES) score of the participants and certain continuous variables, as well as other scale scores. The results are presented in Table 4. According to the findings, there was a positive and significant correlation between BMI and EES score (p<0.001). In other words, as BMI increased, the Emotional Eating Scale score also increased. A positive and significant correlation was also found between weight and the EES score (p<0.001), indicating that as weight increased, the EES score increased as well. Additionally, there was a converse and statistically significant correlation between the Workload score and the EES score (p=0.036), meaning that as the workload increased, the EES score also decreased. A negative and statistically significant correlation was observed between Decision Latitude and the EES score (p=0.025), showing that as decision latitude increased, the EES score decreased. Finally, there was a negative and statistically significant correlation between Social Support and the EES score (p=0.001), indicating that as social support increased, the EES score decreased.

Table 4. Pearson correlation test results for factors affecting the emotional eating scale score

Group	Pearson Correlation	р
Age	-0.050	0.407
BMI	0.229	<0.001*
Weight	0.212	<0.001*
KID-MED Score	-0.037	0.542
Workload Score	-0.127	0.036*
Skill Use Score	-0.064	0.296
Decision Latitude Score	-0.136	0.025*
Social Support Score	-0.192	0.001*
Job Control Score	-0.116	0.055
Job Stress Score	-0.034	0.577
* m < 0.05		

* p<0.05

Table 5 presents an examination of certain factors affecting the job stress scores, which are subcomponents of the Job Stress Scale. The analysis

		Ν	Job Stress Mean Score ±Std. Dev.	t	р
Gender	Male	112	0.78 ± 0.21	0.105	0.893
	Female	160	0.78 ± 0.18	0.135	
Smoking	Yes	120	0.80 ± 0.23	0.016	0.045*
	No	152	0.76 ± 0.16	2.016	
Alcohol Consumption	Yes	125	0.76±0.18	-1.362	0.174
	No	147	0.79 ± 0.20		
Chronic Illness	Yes	71	0.80 ± 0.25	1.249	0.213
	No	200	0.77±0.17		
Marital Status	Married	129	0.77±0.20	-0.425	0.671
	Not Married	143	0.78 ± 0.18		
Work Schedule	Daytime	150	0.75 ± 0.21	-2.262	0.025*
	Shift Work	122	0.81±0.17		
Living Situation	With Family/Friends	232	0.77±0.18	-0.988	0.324
	Alone	40	0.80 ± 0.24		

Table 5. T-Test results for factors affecting job stress subscale scores

* p<0.05

results indicated that there was no significant relationship between job stress scores and gender, alcohol consumption, the presence of chronic illness, marital status, or living situation (p>0.05). However, it was observed that participants who smoked had significantly higher job stress scores compared to nonsmokers (p=0.045). Additionally, participants who worked only during the day had significantly lower job stress scores than other participants (p=0.025).

A positive and statistically significant correlation was found between BMI and Emotional Eating Scale (EES) scores (r=0.229, p<0.05). This indicates that as BMI increases, the score on the Emotional Eating Scale also increases. However, the correlation between BMI and the scores from the subscales of the Job Stress Scale was not statistically significant. The analysis of factors affecting the KID-MED scores (Table 6) revealed no significant relationship between KID-MED scores and gender, alcohol consumption, or the presence of chronic illness (p>0.05). However, participants who smoked had significantly lower KID-MED scores compared to non-smokers (p=0.013). Additionally, married participants had significantly higher KID-MED scores compared to unmarried participants (p=0.037). Furthermore, participants who worked only during the day had significantly higher KID-MED scores than those with other work schedules (p<0.001). Finally, participants who lived alone had significantly lower KID-MED scores compared to those living with family or friends (p=0.041).

4. Discussion

Hospital employees work in a stressful environment characterized by a heavy workload, long and sometimes shift-based working hours, and high levels of responsibility. This stress can influence individuals' health behaviors, particularly their nutritional habits. Job stress may restrict healthy food choices and increase emotional eating behaviors. Over time, this can lead to a decline in diet quality and an elevated risk of chronic diseases such as obesity and diabetes. This study aims to examine the effects of job stress on diet quality and emotional eating, with the goal of raising awareness and informing intervention strategies to improve the quality of life for healthcare workers.

According to the Emotional Eating Scale (EES) scores, only 28.3% of the participants were classified as non-emotional eaters, while the rest were determined to be emotional eaters to varying degrees. It was observed that participants who worked only during the day had significantly lower EES scores compared to

		Ν	KID-MED Mean Score ±Std. Dev.	t	р
Gender	Male	112	4.98 ± 2.82	0.000	0.842
	Female	160	5.05 ± 2.71	-0.200	
Smoking	Yes	120	4.56±2.77	0.400	0.013*
	No	152	5.39 ± 2.69	-2.492	
Alcohol	Yes	125	5.06 ± 2.71	0.197	0.852
Consumption	No	147	4.99 ± 2.79	0.187	
Chronic Illness	Yes	71	5.56 ± 2.59	1.0.19	0.052
	No	200	4.83 ± 2.79	1.948	
Marital Status	Married	129	5.39 ± 2.76	2.093	0.037*
	Not Married	143	4.69 ± 2.71		
Work Schedule	Daytime	150	5.56 ± 2.60	3.654	<0.004*
	Shift Work	122	4.36 ± 2.80		<0.001*
Living Situation	With Family/Friends	232	5.16 ± 2.72	2.057	0.041*
	Alone	40	4.20±2.79		

Table 6. T-Test results for factors affecting KID-MED scores

* p<0.05

those with other work schedules (night, mixed, shift work) (p=0.021). Similarly, in a study by Akkuş and Mermer (2022), it was found that individuals working in shifts were more likely to lack control over their eating compared to daytime workers, and their emotional eating scores during meals were higher (p<0.05). Another study by Vidafar et al. (2020) showed that among shift workers, poor sleep quality and short sleep duration were associated with increased food cravings, while poor sleep hygiene and quality were linked to a higher appetite for palatable foods (greater hedonic drive). Similarly, in the study conducted by Erden et al., shift work was associated with an increase in emotional eating, consistent with our findings. The findings of the studies confirm that shift work tends to increase emotional eating as well as cause disruptions in sleep quality and patterns.

In our study, although not statistically significant, EES scores were found to be higher in women, and a significant positive correlation was observed between EES scores and both BMI and body weight (p<0.001). Similar to our findings, İbrahimova (2020) and Akpınar (2019) reported no significant association between emotional eating scores and gender. In contrast, Özkan and Bilici (2018) noted that men had significantly higher "Emotional Eating" scores compared to women. In Sağlam's (2021) study, men were found to have higher "Emotional Eating" scores but lower scores in "Eating Control," "Awareness," and "Eating Discipline" compared to women. Additionally, Barak et al. (2021) found that emotional eating scores were higher in women. Our study also revealed a statistically significant difference in BMI between nonemotional eaters and both emotional eaters (p<0.001)and highly emotional eaters (p=0.021), with the highest BMI values observed in the highly emotional eater group. Similar to our findings, studies by Bilici et al. (2019) and Spinosa et al. (2019) also reported a positive correlation between BMI and EES scores. Various studies have shown that emotional eating disorders are more prevalent in obese individuals (43.5%) compared to those of normal weight (33.5%) and underweight (18.4%) (Madali et al., 2021). Furthermore, it was found that emotional eating disorders, independent of depressive symptoms, led to higher increases in BMI only in women (Van Strier et al., 2016). Studies indicate that women are more sensitive to emotional eating and that an increase in emotional eating is accompanied by an increase in BMI. However, in our study, no significant relationship was found between EES scores and gender.

The relationship between stress and eating behavior is well-established, with studies demonstrating that stress leads to changes in food consumption among adults (Hill et al., 2022; Dakanalis et al., 2023). The stress-induced eating response causes an increase in the consumption of energy-dense and highly palatable foods as a coping mechanism. In our study, a negative correlation was found between workload scores and Emotional Eating Scale (EES) scores, indicating that as workload increased, emotional eating decreased. Additionally, the negative and significant correlation between decision latitude scores and EES scores suggests that as decision latitude increased, emotional eating scores decreased. Similarly, the negative and statistically significant correlation between social support scores and EES scores indicates that as social support increased, emotional eating scores decreased. Güneşer and Atalay (2020) also reported that employees with higher levels of job stress had higher emotional eating scores.

In a study comparing the health behaviors of medical students, residents, and senior physicians, it was found that residents had the poorest dietary habits, while students exhibited the best. However, a higher proportion of physicians, compared to students, reported perceiving their health as poorer (Wilf-Miron et al., 2021). The study concluded that the healthy lifestyle of medical students deteriorates as they transition into residency, primarily due to increased emotional stress and workload. In the analysis of factors affecting job stress subscale scores, it was found that participants who worked only during the day had significantly lower job stress scores than other participants, and that smokers had significantly higher job stress scores compared to non-smokers. A similar study also reported that participants who worked only during the day had significantly lower job stress scores than other participants (Güneşer ve Atalay, 2020).

In a study examining the effects of the COVID-19 pandemic on the physical and mental health of healthcare workers in intensive care units, it was found that ³/₄ of the participants experienced a heavy workload, and the majority showed signs of poor sleep quality, depression, anxiety, and burnout. Additionally, deteriorations in mental health were accompanied by decreases in serum vitamin levels (B12 and D) and an increase in smoking (Duru, 2022). In another study examining the relationship between perceived stress and emotional eating in adults during the COVID period, it was found that individuals with perceived stress were more likely to be emotional eaters and were particularly sensitive to weight gain (Carpio-Arias et al., 2022). Klatzkin et al. (2019) investigated whether perceived life stress or cognitive restraint increased snack consumption under stress, finding that perceived life stress amplified the hyperphagic effects of stressinduced negative affect.

Both the findings of our study and the literature suggest that the impact of intense and prolonged stress on hedonic, emotional, or homeostatic eating behaviors may vary depending on an individual's physiological, psychological, and environmental factors. Heavy workloads can influence individuals' stress-coping strategies, leading them to engage in more hedonic and emotional eating behaviors as a form of self-reward. This behavior is often associated with a search for "escape" or "reward," frequently resulting in increased consumption of unhealthy foods, such as snacks and junk food. Individuals who constantly feel under pressure due to heavy workloads may seek to meet their emotional needs through physiological eating. Moreover, long working hours can limit the time and energy available for preparing healthy meals, pushing individuals towards easily accessible, often nutritionally poor but highly palatable foods. However, while short-term stressors may increase emotional eating, prolonged and intense stress exposure can shift eating behaviors from hedonic cravings to the satisfaction of homeostatic needs. This type of response may vary depending on an individual's coping mechanisms, environmental conditions, and the nature of the stressor (Reichenberger et al., 2020; Pannicke et al., 2021). In "survival-oriented situations" (e.g., war, natural disasters, or famine), people are more likely to prioritize their basic needs. Such stress can lead individuals to adopt a rational approach to eating in order to maintain essential life functions. Energy storage or maintaining physical resilience becomes a priority. Indeed, our study's finding that emotional eating decreases as workload increases supports the notion that stress induced by heavy workloads shifts individuals away from pleasureoriented eating behaviors and towards meeting their fundamental survival needs.

There was no statistically significant correlation between BMI and scores from the subscales of the Job Stress Scale in our study. However, a study by Özcan and Kızıl (2020) found that staff members' workload scores were negatively correlated with BMI and waist circumference (Özcan and Kızıl, 2020).

In our study, 27.6% of the participants were found to have very poor diet quality according to their KID-MED scores, while 46.3% had diet quality that needed improvement. In a study by Carlos et al. (2020), low adherence to the Mediterranean diet (15.5%) and significant levels of emotional eating (29%) and anxiety (23.6%) were reported among university students. The correlation between KID-MED scores and Emotional Eating Scale (EES) scores in our study was not statistically significant (p>0.05), while smokers had significantly lower KID-MED scores compared to non-smokers (p=0.013). A study conducted by Gençalp in 2020 among first aid and emergency care students similarly found that non-smokers had significantly higher KID-MED scores than smokers, supporting our findings (Gençalp, 2020).

Participants who were married had significantly higher KID-MED scores than those who were unmarried (p=0.037). However, a study by Ciğerli (2023) found no significant difference in KID-MED scores between married and unmarried individuals in terms of marital status (Ciğerli, 2023).

In our study, participants who worked only during the day had significantly higher KID-MED scores compared to other participants (p<0.001). In contrast, a study by Leyva-Vela et al. (2021) among nurses found no significant relationship between shift work and KID-MED scores (Leyva-Vela et al., 2021). Similarly, Radoncic (2023) found that employees working shifts had lower KID-MED scores (Radoncic, 2023).

In our study, participants who lived alone had significantly lower KID-MED scores compared to those living with family or friends (p=0.041). This finding highlights the potential impact of social support on nutrition. However, a study by Gümüş and Yardımcı (2020) among university students found no significant relationship between KID-MED scores and the people participants lived with (Gümüş and Yardımcı, 2020).

5. Conclusions

This cross-sectional study, which investigated the relationship between job stress and emotional eating among hospital employees, found that participants working only during the day had lower Emotional Eating Scale (EES) scores compared to other participants, and a positive correlation was observed between BMI and EES scores. No significant relationship was found between KID-MED scores and emotional eating, but it was concluded that increased decision latitude and social support reduced emotional eating behavior. While no significant relationship was found between job stress scores and emotional eating, it was observed that smokers and those working in shifts or mixed schedules experienced higher job stress. Additionally, an increase in job stress was found to be associated with lower KID-MED scores, indicating poorer adherence to the Mediterranean diet.

On the other hand, the significant inverse relationship found between workload and emotional eating scores suggests that as the intensity and duration of stress increase, individuals may regulate their eating behaviors based on an evolutionary logic. This shift indicates a movement away from emotional eating towards meeting homeostatic needs, prioritizing survival, and ultimately settling for what is available.

Factors influencing eating behavior under stress include an individual's coping mechanisms and whether their food choices are driven by emotional or physiological needs. While some individuals are more prone to emotional eating as a way of coping with stress, others may adopt goal-oriented eating and prioritize healthier food choices in managing stress.

These behaviors can vary significantly among individuals. In extreme situations such as war or disasters, some people may fully adopt homeostatic eating behaviors, while others may continue to engage in hedonic or emotional eating. In other words, certain individuals may view eating as a tool for "relaxation" and turn to sugary or high-calorie foods under stress.

In summary, the tendency of individuals under intense stress to shift towards homeostatic eating aligns with an evolutionary rationale, potentially enhancing their adaptability to survival requirements. However, it should be noted that this process is influenced by personal and environmental factors, and behavioral responses can differ significantly across individuals.

Based on our findings and the existing literature, it can be concluded that increases in psychological distress, stress, and depressive symptoms are associated with an increased risk of emotional eating, often accompanied by an increase in BMI. Furthermore, stress negatively impacts diet quality. Developing positive coping mechanisms for managing stress and providing education on healthy eating may help prevent the prevalence of emotional eating. Future studies could focus on better elucidating the underlying mechanisms between mental health conditions such as stress, anxiety, and depression, and their relationships with emotional eating, overweight/obesity, and dietary patterns. Such research would provide valuable insights for designing effective interventions in this area.

Declaration of Competing Interest

The authors declare that they have no financial or nonfinancial competing interests.

Author's Contributions

A. Özenoğlu ((b) 0000-0003-3101-7342): Conceptualization; original draft; methodology; review and editing. C. Erkul ((b) 0000-0003-0940-1129): Resources; methodology; writing, and editing.

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