



RESEARCH ARTICLE / ARAŞTIRMA YAZISI

The Mediating Role of Impulsivity in the Relationship Between Excessive Food Cravings and Anxiety in Women

Kadınlarda Aşırı Besin İsteği ve Anksiyete İlişkisinde Dürtüselliğin Aracı Rolü

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Abstract:

Recently, with the increase in eating disorders, research in this field has gained importance. This study aimed to examine the role of impulsivity in the relationship between excessive food craving and anxiety in women. The study was conducted using a correlational survey model. The sample consisted of 699 female participants aged 18-65, selected using convenience sampling. Participants completed a Personal Information Form, the Excessive Food Craving Scale, the Beck Anxiety Scale, and the Barratt Impulsivity Scale. First, the suitability of the data set for analysis was examined. The missing value analysis revealed that there were no missing observations in the data set. The outlier analysis involved converting measurement tool scores to standard z-scores, excluding nine measurements outside the ± 3 Z-score range from the data set. The study found a near-normal distribution with kurtosis and skewness values within the ± 1.5 range, suitable for mediation analysis. Hayes' Process Macro Model 4 mediation model tested hypotheses, showing a positive correlation between excessive food cravings and anxiety and impulsivity in women. The study found a positive correlation between women's excessive food cravings and anxiety and impulsivity, with impulsivity partially mediating the relationship, suggesting anxiety indirectly influences cravings. The results show that both anxiety and impulsivity levels influence emotional eating behaviors in women. Therefore, we recommend developing strategies for anxiety management and impulse control in psychological counseling and psycho-education programs. The research aims to understand the psychological factors influencing women's eating behaviors and promote healthy eating habits.

Keywords: Women, Excessive food cravings, Anxiety, Impulsivity.

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Date of Received/Geliş Tarihi: 24.04.2025, **Date of Revision/Düzeltilme Tarihi:** 16.03.2026, **Date of Acceptance/Kabul Tarihi:** 01.11.2025, **Date of Online Publication/Çevrimiçi Yayın Tarihi:** 25.03.2026

Citing/Referans Gösterimi: Güçlü, D. M. (2026). The Mediating Role of Impulsivity in the Relationship Between Excessive Food Cravings and Anxiety in Women. *Cyprus Turkish Journal of Psychiatry & Psychology*, 8(1), 64-73, Doi: 10.35365/ctjpp.26.1.09.

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Öz:

Son dönemlerde yeme bozukluklarının artmasıyla birlikte bu alanda yapılan araştırmalar önem kazanmıştır. Bu çalışmada, kadınlarda aşırı besin isteğinin anksiyete ile olan ilişkisinde dürtüsellik rolünün incelenmesi amaçlanmıştır. Araştırma, ilişkiel tarama modelinde yürütülmüştür. Çalışmanın örneklemini 18-65 yaş aralığında yer alan ve kolayda örnekleme yöntemiyle seçilen 699 kadın katılımcı oluşturmuştur. Araştırmaya katılım gösteren kadınlara Kişisel Bilgi Formu, Aşırı Besin İsteği Ölçeği, Beck Anksiyete Ölçeği ile Barratt Dürtüsellik Ölçeği uygulanmıştır. Araştırmada öncelikle veri setinin analize uygunluğu incelenmiştir. Kayıp değer analizi sonucunda veri setinde eksik gözlem bulunmadığı belirlenmiştir. Üç değer analizi kapsamında ölçme araçlarına ait puanlar standart z puanlarına dönüştürülmüş ve Z puanı ± 3 aralığı dışında kalan dokuz ölçüm veri setinden çıkarılmıştır. Ayrıca basıklık ve çarpıklık değerlerinin $\pm 1,5$ aralığında olduğu saptanarak verilerin normal dağılıma yakın bir yapıda olduğu görülmüştür. Bu bulgu, aracılık analizine uygun bir dağılım sağlandığını göstermektedir. Araştırmanın hipotezlerini test etmek üzere Hayes'in Process Macro Model 4 aracılık modeli kullanılmış ve analizler %95 güven aralığında ($p = .05$) gerçekleştirilmiştir. Analiz sonuçlarına göre kadınlarda aşırı besin isteği ile anksiyete ve dürtüsellik arasında pozitif yönlü korelasyon tespit edilmiştir. Aracılık analizi sonucunda, dürtüsellik anksiyete ile aşırı besin isteği arasındaki ilişkide kısmi aracılık rolü üstlendiği belirlenmiştir. Bu sonuç, anksiyetenin aşırı besin isteğini yalnızca doğrudan değil, aynı zamanda dürtüsel eğilimler aracılığıyla dolaylı olarak da etkilediğini göstermektedir. Bulgular, kadınlarda duygusal yeme davranışlarının hem anksiyete hem de dürtüsellik düzeylerinden etkilendiğini ortaya koymaktadır. Bu doğrultuda, psikolojik danışma ve psiko-eğitim programlarında anksiyete yönetimi ve dürtü kontrolüne yönelik stratejilerin geliştirilmesi önerilmektedir. Araştırma sonuçlarının, kadınların yeme davranışlarını etkileyen psikolojik süreçlerin anlaşılmasına ve sağlıklı beslenme alışkanlıklarının desteklenmesine katkı sağlayacaktır.

Anahtar Kelimeler: Kadın, Aşırı besin isteği, Anksiyete, Dürtüsellik.

Introduction

Although nutrition is one of the basic physiological needs, it is a complex behavior shaped by sociocultural influences. The eating habits acquired in childhood are shaped by the geographical region and cultural elements in which individuals live; this situation leads to the development of intense cravings for certain foods (Meule, Hermann, and Kübler, 2014). These cravings are too complex to be explained solely by physiological hunger and are closely related to the individual's psychological state. Especially in adulthood, an excessive desire for certain foods without a corresponding increase in energy needs is explained by the activation of hedonic appetite control mechanisms (Rogers and Brunstrom, 2016). These mechanisms cause individuals to consume foods driven by the expectation of pleasure (De Oliveira et al., 2022). Research has shown that excessive food cravings have similar mechanisms to addiction processes at the neurobiological level and are associated with dopaminergic activation in the brain's reward system (Campana, Brasiel, de Aguiar, and Dutra, 2019). This indicates that excessive food cravings should be explained not only by physiological but also by psychological processes.

It has been noted that excessive food cravings are particularly associated with foods rich in sugar and fat, and restricting such foods can further increase the desire for them (Hall et al., 2019). Additionally, excessive food cravings are reported to be more common in women compared to men, and are linked to health issues such as obesity and binge eating disorder (Reents and Pedersen, 2021). The frequent occurrence of excessive food cravings in women's eating behaviors warrants more detailed research in this area.

On the other hand, anxiety is a normal response to threats encountered in daily life, but if this response becomes persistent, it can negatively affect an individual's functionality and quality of life (Pinquart, 2019). The

chronicity of anxiety can trigger emotional eating behaviors, increasing the desire for high-calorie and unhealthy foods (Bongers, van den Akker, Havermans, and Jansen, 2015a). Indeed, research supports that anxiety, especially, triggers the consumption of energy-dense foods and that eating is used as a coping mechanism for stress (Hussenoeder et al., 2022; Nitturi et al., 2021). This situation highlights the importance of examining the impact of anxiety on eating behaviors.

The role of impulsivity as a third factor in the relationship between excessive food cravings and anxiety is noteworthy. Impulsivity is defined as an individual's tendency to exhibit sudden, uncontrolled behavior without considering the consequences, and it is associated with risk-taking, poor planning, and self-control issues (Patton, Stanford, and Barratt, 1995; Stevens, 2017). High levels of impulsivity lead to a loss of control over food consumption, especially toward energy-dense foods (Awad et al., 2021; Melby-Lervåg, Redick, and Hulme, 2016). Additionally, it is noted that impulsivity may further increase emotional eating behaviors in individuals experiencing anxiety (Akkuş et al., 2024). However, research on the relationship between anxiety and impulsivity presents conflicting findings. Some studies indicate that anxiety increases impulsivity (Eysenck and Derakshan, 2011; Xia, Gu, Zhang, and Luo, 2017), while others suggest that anxiety prompts individuals to behave more controlled (Kurien and Palanisamy, 2024; Preve, Mula, Maltini, and Pini, 2014). This suggests that the relationship between anxiety and impulsivity is complex and depends on individual differences. The sample group for this study consisted of women. The reason for selecting women as the sample group is that levels of excessive food cravings (Reents and Pedersen, 2021) and anxiety (Bongers et al., 2015a) are higher and more prevalent in women compared to men. Additionally, women are more susceptible to impulsivity and emotional eating behaviors due to hormonal (Mikhail et al., 2021) and psychosocial

factors (Annesi, Mareno, and McEwen, 2016) (Elkin and Kalabaş, 2023). This indicates that women's eating behaviors are more complexly intertwined with psychological processes.

Research has shown that the relationships between excessive food cravings, anxiety, and impulsivity in women are not yet fully understood, and there are various conflicting results (Eysenck and Derakshan, 2011; Kurien and Palanisamy, 2024; Preve, Mula, Maltini, and Pini, 2014; Xia, Gu, Zhang, and Luo, 2017). In this context, examining the role of impulsivity in the relationship between excessive food cravings and anxiety in women appears to be important. The aim of this study is to investigate the mediating role of impulsivity in the relationship between anxiety and excessive food cravings in women.

Within the scope of this general aim, the questions of whether the level of anxiety in women has a significant effect on excessive food cravings, whether the level of impulsivity in women has a significant effect on excessive food cravings, and whether impulsivity plays a mediating role in the relationship between anxiety and excessive food cravings in women will be explored. It is anticipated that the findings of this research will highlight the importance

of strategies such as impulse control and anxiety management in psychological support programs, guiding interventions aimed at promoting healthier eating behaviors in women. Additionally, it is expected that this study will contribute to understanding the interaction between psychological and nutritional processes in women, offering a unique contribution to the field.

Materials and Methods

Research Model

This study, which examines the mediating role of impulsivity in the relationship between anxiety and excessive food craving, is designed with a relational pattern. In the relational model, the aim is to determine the direction of the relationship between at least two variables (Karasar, 2009). In the current study, excessive food craving is considered the outcome (dependent) variable, while anxiety is regarded as the predictor (independent) variable. Impulsivity is added to the model as a mediating variable.

Population

The study group comprises 699 women aged 18-65 (Table 1). The study group was selected using convenience sampling.

Table 1. Demographic Characteristics (n=699)

Variables	Group	n	%
Age	18-25	358	51,2
	36-35	225	32,2
	36-45	95	13,6
	45-55	16	2,3
	55 and over	5	,7
Marital Status	Married	254	36,3
	Single	423	60,5
	Divorced	22	3,1
Education Level	Primary School	3	,4
	Secondary School	9	1,3
	High School	66	9,4
	University	552	79,0
	Master's Degree	46	6,6
	Doctorate (PhD)	23	3,3
Occupation	Student	326	46,6
	Unemployed	15	2,1
	Housewife	56	8,0
	Civil Servant	157	22,5
	Worker	8	1,1
	Self-Employed	10	1,4
	Private Sector Employee	73	10,4
	Retired	5	,7
	Other	49	7,0
Economic Status	Income Less Than Expenses	338	48,4
	Income Equal to Expenses	244	34,9
	Income More Than Expenses	117	16,7
Place of Residence	With Family	441	63,1
	Alone	31	4,4
	With Friends	9	1,3
	In a Dormitory	197	28,2
Psychiatric Diagnosis	Other	21	3,0
	Yes	95	13,6
	No	604	86,4

Data Collection Tools

A Personal Information Form, an Excessive Food Craving Scale, a Beck Anxiety Scale, and a Barratt Impulsivity Scale were administered to the women participating in the study.

Personal Information Form

The Personal Information Form has been prepared by the researcher to determine sociodemographic characteristics, including age, marital status, education level, and economic status.

Excessive Food Craving Scale

The Excessive Food Craving Scale was developed by Cepeda-Benito, Gleaves, and Williams (2001) to identify levels of excessive food craving, and its adaptation into our language was carried out by Müftüoğlu, Kızıltan, and Akçil (2017). The scale consists of 39 items, and its internal consistency coefficient was 0.97. In the current study, the internal consistency coefficient was 0.97. As scores on the scale increase, the level of excessive food craving also increases.

Beck Anxiety Inventory

The Beck Anxiety Scale was developed by Beck, Epstein, Brown, and Steer (1988) to assess anxiety, and its adaptation into our language was carried out by Güleç and colleagues (2008). The scale consists of 21 items, and its internal consistency coefficient was 0.93. For the current study, the internal consistency coefficient was 0.94. As the scores obtained from the scale increase, the level of anxiety also increases.

Barratt Impulsivity Scale

The Barratt Impulsivity Scale was developed by Barratt (1959) to assess impulsiveness, and its adaptation into Turkish was carried out by Ulusoy, Şahin, and Erkmen (1996). The scale consists of 30 items, and its internal consistency coefficient was 0.78. In the current study, the internal consistency coefficient was 0.79. As the scores obtained from the scale increase, the level of anxiety also increases.

Ethics Approval and Process

Before starting the data collection process, the necessary ethical approval for the study was obtained from the Iğdır University Social and Human Sciences Research Ethics Committee (08/01/2025; Meeting No: 2025/2). Subsequently, an Informed Consent Form was presented to the women, along with explanations of the study process and the confidentiality of the information collected. During this process, there was no guidance or intervention directed at the participants. Participation in the study was entirely voluntary, and no data requesting identifying information about the women participating in the research were collected. The data were collected online via Google Forms, and the participation link was shared with women on social media. The form was accessible for 6 weeks, and only responses received during this period were included in the analysis.

Statistical Approach

In this study, first, missing value analysis was conducted, and it was determined that there were no missing values in the data set. As a result of outlier analysis, scores related to measurement tools were converted to standard z-scores. Tabachnick and Fidell (2007) indicated that values with Z-scores between ± 3 are suitable for analysis, and in this study, measurements with Z-scores outside ± 3 ($n = 9$) were removed from the data set. Additionally, it was determined that the skewness and kurtosis values were within ± 1.5 , indicating that the data did not deviate excessively from normality (Tabachnick and Fidell, 2007) and that the data were suitable for factor analysis. To determine the relationships between the scale scores obtained from the study, Pearson product-moment correlation analysis was performed. In the analysis of demographic variables, since the group counts for age, marital status, education level, occupation, and place of residence fell below 35, the Kruskal-Wallis test was used to compare excessive food craving scores. For economic status, the One-Way ANOVA was used, while for psychiatric diagnosis status, the Independent Samples t-test was applied. To test the hypotheses of the study, a mediator variable model was created, and analysis was performed using the Process Macro Hayes with the Model 4 mediation model. In all analyses of the study, the confidence interval was set at 95% ($p = 0.05$).

Findings

In the findings section of the study, a correlation analysis between women's excessive food cravings, anxiety, and impulsivity was conducted, highlighting the mediating role of impulsivity in the relationship between anxiety and excessive food cravings.

Findings Related to Correlation Analysis

To identify the relationship between women's excessive food cravings, anxiety, and impulsivity, simple (zero-order) correlation coefficients were examined. According to the results obtained from the correlation analysis, a positive and statistically significant relationship was found between anxiety and excessive food cravings ($r = .25$, $p < .01$; 95% CI [.18, .34]). The relationship between anxiety and impulsivity was also positive and significant ($r = .28$, $p < .01$; 95% CI [.19, .38]). Similarly, a positive and significant correlation was found between impulsivity and excessive food cravings ($r = .28$, $p < .01$; 95% CI [.19, .38]). These results indicate that the variables are significantly related. The correlation coefficients were moderate. The bootstrap method ($k = 1000$) was used to calculate confidence intervals in the analyses, and since none of the confidence intervals included zero, the results were considered significant. All correlation coefficients were positive, indicating a trend of simultaneous increase among the variables. These findings are presented in Table 2.

Table 2. Correlation Analysis Results

Variables	X	SS	Kurtosis	Skewness	1	2	3
Excessive Food Craving (1)	111,44	42,66	-,34	,50	1		
Anxiety (2)	19,83	19,63	-,43	,57	,25**	1	
Impulsiveness (3)	70,76	5,57	,29	-,20	,28**	,28**	1

Note. ** $p < ,01$; $k = 1000$ (Boostrapping sample)

4.2. Findings Related to Intermediation Analysis

In the current study, the mediating model of impulsivity in the relationship between anxiety and excessive food craving was examined; therefore, Hayes' Process Model 4 (Hayes, 2022) was used.

The mediating model was tested using the Process Macro plugin in SPSS 24.0, and the resulting model is presented in Figure 1.

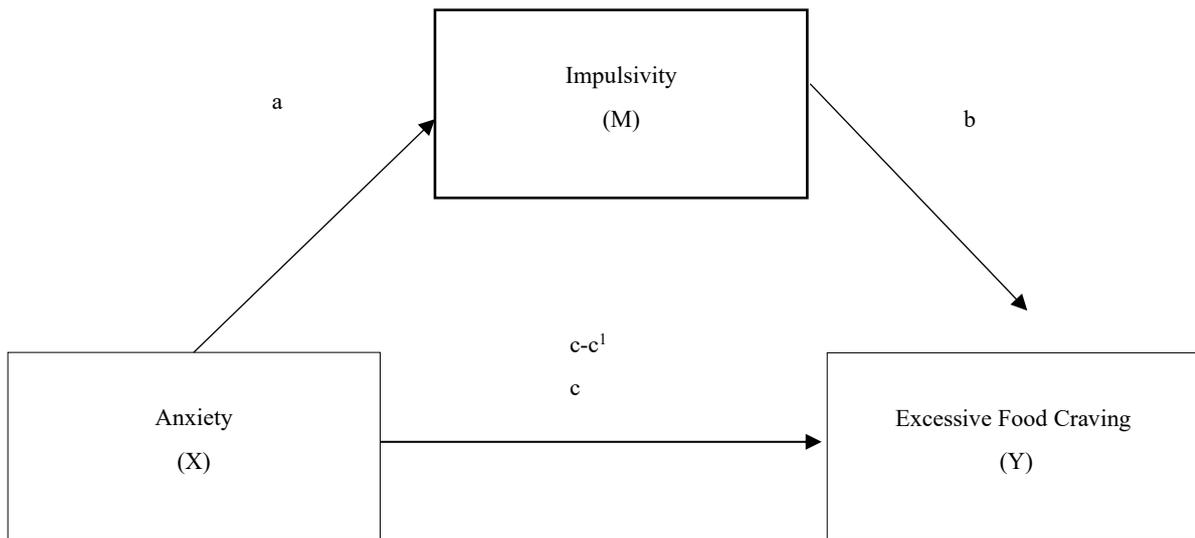


Figure 1: The Mediating Model of Impulsivity in the Relationship Between Anxiety and Excessive Food Craving

To analyze the mediating role of impulsivity in predicting excessive food craving scores from anxiety scores obtained from the study, a mediation analysis was

conducted to calculate the paths a, b, and c-c1 shown in Figure 1. The mediation analysis results are presented in Table 3.

Table 3. The Mediating Role of Impulsivity in the Effect of Anxiety Scores on Craving for Excessive Food

	Outcome Variable Impulsivity			Excessive Food Craving		
	<i>B</i>	<i>SH</i>	<i>p</i>	<i>B</i>	<i>SH</i>	<i>P</i>
Anxiety (path c)				,025	,134	,000
R2				,063		,000
Anxiety (path a)	,114	,018	,000			
R2	,078		,000			
Anxiety (path c')				,186	,141	,000
Impulsivity (path b)				,232	,344	,000
R2				,113		,000
Indirect Effect				,203 (Lower= ,108 Upper: ,313)		<,01

Note, *B*: Standardized Regression Coefficient

In Table 3, the mediating role of impulsivity in the association between anxiety scores and excessive food craving scores was examined. The analyses showed that anxiety scores positively and significantly predicted excessive food craving scores (c path) ($B = .025, p < .001$). Similarly, anxiety scores also significantly and positively predicted impulsivity scores (a path) ($B = .114, p < .001$). These findings indicate that anxiety can influence excessive food craving both directly and indirectly.

In the model that includes both anxiety and impulsivity variables, approximately 11% of the variance in excessive food craving scores ($R^2 = .113$) is explained, with a significant effect ($F(2, N-3) = 24.91, p < .001$). In this model, the effect of anxiety scores on excessive food craving scores (path c1) was found to be positive and significant ($B = .186, p < .001$). This value indicates that even when impulsivity is controlled in the model, the effect of anxiety on excessive food craving continues.

The effect of impulsivity scores on excessive food craving scores (path b) is also positive and statistically significant ($B = .232, p < .001$). When examining the confidence intervals of the regression coefficients, it was found to be 95% CI [.061, .167] for path a, 95% CI [.142, .322] for path b, and 95% CI [.124, .248] for path c1, and since none of these intervals include zero, all relevant paths are considered statistically significant. The standard error values were calculated as 0.027 (path a), 0.046 (path b), and 0.031 (path c1). Regarding the indirect effect (path a \times b), it was determined that the indirect influence of

anxiety scores on excessive food craving scores through impulsivity is positive ($B = .203$) and statistically significant ($p < .01$). The 95% confidence interval obtained via bootstrap method ($k = 1000$) is [.108, .313], which does not include zero. This result indicates that the indirect effect is significant.

When examining the total effect of modeling (path c), it was determined that the overall effect of anxiety on excessive food craving is $B = .389$. This effect consists of both direct (path c1) and indirect (a \times b) components. Since the direct effect of anxiety (c1) remains significant in the model, it was concluded that the contribution of the impulsivity variable to the indirect effect is partial. This indicates that the effect of anxiety on excessive food craving is maintained not only through impulsivity but also via a direct pathway.

In conclusion, the mediation analysis conducted revealed that all paths (a, b, c, c1) are positive and statistically significant. It was determined that anxiety has a positive effect on impulsivity, and impulsivity significantly predicts excessive food craving. The total and direct effects of anxiety on excessive food craving remained significant, and the significance of the indirect effect confirmed that the model is a partial mediation model. The bootstrap method used in the analyses provided reliable estimates of the indirect effects, and since the confidence intervals did not include zero, all relationships are supported at the 0.05 significance level.

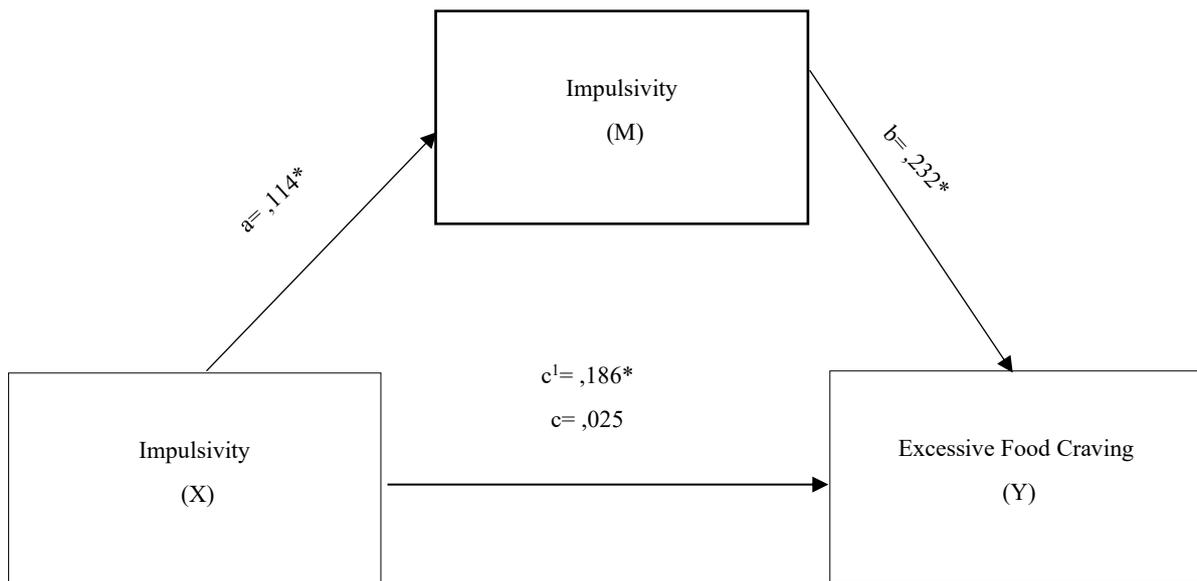


Figure 2: Summary of Findings of the Anxiety Model

Comparison of Excessive Food Craving Scores in Terms of Demographic Variables

This section of the research presents a comparison of excessive food craving scores by demographic variables in Table 4.

Table 4. Analysis Results of Demographic Variables and Excessive Food Craving

Variables	Group	n	Mean Rank	Sd.	χ^2	p
Age	18-25	358	363,99			
	36-35	225	339,69			
	36-45	95	320,07	4	7,704	,103
	45-55	16	312,72			
	55 and over	5	500,20			
Marital Status	Married	254	337,24			
	Single	423	359,26	2	2,414	,299
	Divorced	22	319,30			
Education Level	Primary School	3	422,00			
	Middle School	9	342,94			
	High School	66	335,98	5	6,491	,261
	University	552	351,04			
	Master's Degree	46	394,11			
	Doctorate	23	270,46			
Occupation	Student ^a	326	353,66			
	Unemployed	15	324,80			
	Housewife ^b	56	266,17			
	Civil Servant ^a	157	388,24			
	Worker	8	347,06	8	27,068	,001**
	Self-Employed	10	326,15			
	Private Sector Employee ^a	73	379,91			
	Retired	5	404,60			
Place of Residence	Other ^b	49	261,88			
	With family	441	343,58			
	Alone	31	393,74			
	With friends	9	438,00	4	3,685	,450
	Dormitory	197	352,47			
Economic Status	Other	21	359,33			
	Group	n	\bar{X}	SS	F	p
	Income less than expenses ^b	338	126,10	52,77		
Income equal to expenses ^a	244	138,16	56,92	3,647	,027*	
Income greater than expenses ^b	117	127,94	53,84			
Psychiatric Diagnosis	Group	n	\bar{X}	SS	t	p
	Yes ^a	95	165,52	56,89	6,918	,000***
	No ^b	604	125,13	52,24		

a>b, ***p<.001, **p<.01, *p<.05, $X^2_{(KW)}$: Kruskal Wallis-H, F: One-Way Anova, t: Independent Samples t Test

Table 4 compares excessive food craving scores by demographic variables. Accordingly, no significant differences in mean scores of excessive food craving were found by age, marital status, education level, or place of residence ($p > 0.05$). Significant differences in mean scores for excessive food craving were observed by occupation ($\chi^2 = 27.068$, $p < 0.05$). Specifically, students, civil servants, and private-sector employees have significantly higher scores on the excessive food craving scale than housewives and individuals in other occupational groups.

According to economic status, mean scores on excessive food craving differ significantly ($F(2,696)=3.647$, $p<0.05$). Since the variances are homogeneous, the Scheffe test indicates that individuals with income equal to their expenses have higher excessive food craving scores than those with income less than or greater than their expenses.

According to the psychiatric diagnosis variable, the mean scores for excessive food craving differ significantly ($t(697)=6.918, p<.001$). The scores for excessive food craving are significantly higher in those with a psychiatric diagnosis compared to those without a psychiatric diagnosis.

Discussion

In this study, it was found that as women's anxiety levels increase, their excessive food cravings also increase, and it was demonstrated that anxiety is an important psychological factor affecting excessive food cravings in women. A strong desire for a particular food can be a common behavior observed in healthy individuals. However, pathological excessive food craving (Hill, 2007) is considered a significant risk factor for eating disorders (Ng and Davis, 2013). At this point, it is stated that excessive food craving is influenced by individuals' emotional states (Cardi, Leppanen, and Treasure, 2015; Reents, Seidel, Wiesner, and Pedersen, 2020), and it is also noted that emotional states can trigger appetite-stimulating responses (Bongers et al., 2015b). While the preference for sweet and fatty foods during excessive food craving does not reflect the individual's hunger sensation (Pelchat and Schaefer, 2000), it has been emphasized that this condition may reflect a desire for certain sensory experiences (Tiggemann and Kemp, 2005). Studies have also shown that anxiety increases individuals' food desire (Hussenoeder et al., 2022; Legget et al., 2023; Mróz, Gross, and Brytek-Matera, 2022). At this point, it is expressed that, in order to cope with negative emotions such as anxiety, individuals tend to turn to eating (Annesi, 2021; Dingemans, Danner, and Parks, 2017). Although food craving is a natural phenomenon that can be observed in healthy individuals, when it reaches excessive levels, it can pose a risk for eating disorders. Especially, the desire for high-energy and low-fiber foods occurring independently of hunger indicates that this situation is more shaped by emotional and sensory factors. The anxiety-induced increase in food craving suggests that individuals may be inclined toward unhealthy foods.

According to the research results, a positive correlation was found between impulsivity in women and excessive food cravings. Additionally, it was understood that impulsivity in women significantly predicts excessive food cravings. Impulsivity drives excessive eating without physiological hunger and leads to loss of control over high-calorie, sugary, and fatty foods (Melby et al., 2016). Studies have shown that impulsivity increases unhealthy food intake in individuals (Awad et al., 2021; Maxwell, Gardiner, and Loxton, 2020; Meule and Blechert, 2017). Atalayer (2018) reported that impulsivity plays an active role in the initiation and maintenance of overeating behavior. It has been stated that high levels of impulsivity hinder the control mechanism in individuals, triggering emotional eating, and this situation can explain excessive food cravings. Furthermore, when individuals perceive food as a reward, reward mechanisms are activated, and, in this process, the motivations of craving and liking come into play (Morales and Berridge, 2020). This can activate impulsivity, a core aspect of impulsivity, leading to unplanned actions (Carr, Wiedemann, Macdonald-Gagnon, and Potenza, 2021) and excessive food cravings (Loxton, 2018). Impulsivity can lead to overeating behaviors by increasing emotional hunger and the tendency to satisfy sudden urges. Especially because

impulsive individuals seek immediate pleasure and satisfaction, they may tend to eat more to achieve emotional and physical fulfillment. Additionally, impulsivity increases the tendency to satisfy emotional hunger and sudden urges, leading to overeating.

As a result of the mediation analysis conducted, it was determined that impulsivity partially mediates the effect of anxiety scores on excessive food craving scores. In previous studies, anxiety (Hussenoeder et al., 2022; Legget et al., 2023) and impulsivity (Awad et al., 2021; Maxwell et al., 2020) have been reported to increase the risk of excessive food craving. To cope with negative emotions, individuals tend to over-rely on sugary and fatty foods (Bongers et al., 2015b; Reents et al., 2020). At this point, with impulsivity involved, behaviors such as distractibility, inappropriate reactions, and acting without thinking, along with a tendency to seek immediate rewards, are noted as factors that increase the risk of excessive food craving (Bénard et al., 2018). This suggests that impulsivity plays a partial mediating role, contributing to the relationship between anxiety and excessive food craving, but it does not fully explain this relationship. In other words, impulsivity alone is not sufficient to explain the link between anxiety and excessive food craving, and other factors may also come into play. In conclusion, although impulsivity cannot fully explain the relationship between anxiety and excessive food craving, it appears as an important component of this dynamic.

The study group for this research, conducted on women, is limited to 699 women. Additionally, the findings are restricted to the characteristics measured by the data collection tools used in the study. The fact that a large portion of the sample group is students (%46.6) may make the results more closely related to the characteristics of young individuals in terms of impulsivity and eating behaviors. This situation may limit the generalizability of the findings to the broader population and affect the results. Therefore, future research could include women from other age groups at similar levels, as well as the young population. Programs that address the relationship between anxiety, impulsivity, and excessive food cravings in women could play a critical role in improving their quality of life. In this context, psychoeducational programs for women can clearly demonstrate how these psychological factors influence eating behaviors and help establish healthy eating habits. With emotional intelligence and psychological resilience training, women's stress management skills can be strengthened, and they can gain better control over their impulsivity. Additionally, interactive workshops can be organized to balance women's physical and emotional health, promote healthy lifestyles, and encourage the adoption of healthy habits. Such programs that improve both the psychological and physical health of women can enhance overall societal well-being and contribute to the development of healthy individuals.

Declarations

Ethical Approval and Permission to Participate

Approval has been obtained from the Iğdır University Non-Invasive Ethics Committee for the implementation of the study (Meeting No: 2025/02, Date: 01/08/2025). Informed consent has been obtained from voluntary participants who agreed to participate in the study.

Publication Permission

Not applicable.

Availability of Data and Materials

Not applicable.

Conflict of Interest

The author declares no conflict of interest.

Funding

Not applicable.

Author Contributions

DM prepared the entire manuscript.

Acknowledgments

I sincerely thank all the participants who took part in the study and completed the forms, taking their time.

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