

## ORIGINAL ARTICLE

# The Relations between Eating Behaviors, Body Appreciation, Problematic Internet Use, and Impulsivity: A Research on Testing Different Structural Models\*

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## Main Points

- In the hypothetical models, problematic internet use and body appreciation were tested as mediators between impulsivity and eating behaviors across five groups (general, female, male, high body mass index, and normal body mass index).
- The model fit was better in the female and normal body mass index groups compared to the male and high body mass index groups.
- In the alternative model, impulsivity mediated the relationship between body appreciation, problematic internet use, and eating behaviors in the general sample.
- The alternative model represented the general sample better than the hypothetical model.
- Impulsivity was a key variable, acting both as an independent and a mediating variable, highlighting its risk potential.

## Abstract

This study aims to examine the relationships between eating behaviors, body appreciation, problematic internet use, and impulsivity. The study included 828 university students, 583 females (70.4%) and 245 males (29.6%), aged between 18 and 35, with a mean age of 21.08 years (standard deviation = 3.51). Personal Information Form, Three-Factor Eating Behavior Scale, Body Appreciation Scale, Young Internet Addiction Scale Short Form, and Barratt Impulsivity Scale Short Form were used to collect data. Hypothetical and alternative models were developed for structural equation modeling analysis. For the hypothetical model, five models were created: general sample, female sample, male sample, sample group with high body mass index, and sample group with normal body mass index, and it was examined whether problematic internet use and body appreciation mediated the relationship between impulsivity and eating behaviors, and the sample group representing this mediation best was determined by comparing the models between the groups. In the alternative model, it was investigated whether impulsivity mediated the relationship between body appreciation and problematic internet use and eating behaviors in the general sample group, and finally, the model representing the general sample group best was determined by comparing the general sample group in the hypothetical model with the general sample group in the alternative model.

**Keywords:** Body appreciation, eating behaviors, impulsivity, problematic internet use, structural equation modeling

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## Introduction

Due to changes in life, many people experience eating problems and struggle with obesity or eating disorders, which can lead them to develop negative health conditions. It is known that it is difficult to fully recover from impaired eating behavior (EB), causing various health problems, and that the disorder recurs at high rates (Eltan et al., 2021).

Problems in EBs negatively affect body mass index (BMI). In a similar study, BMI showed a significant positive relationship with cognitive restrictive eating and eating disorders symptoms (Mohorić et al., 2022). Being overweight in late adolescence and early adulthood may increase the risk of bulimia neurosis symptoms. Individuals at this risk are constantly preoccupied with their body shape and weight and are affected by the fear of gaining weight. They also restrict their calorie intake and completely avoid certain food groups (Mohajan & Mohajan, 2023).

Young adulthood is a developmental stage often characterized by concerns about weight and appearance, as well as changes in eating habits. Young adulthood is considered a risky period for developing eating disorders (Azzeh et al., 2022). A recent longitudinal study showed that preoccupation with body weight, body dissatisfaction, and bulimic behaviors increased from 11 seconds to 25 seconds (Slane et al., 2014).

There has been a recent increase in studies on EBs (Baudinet et al., 2020). The prevalence of eating disorders has been gradually increasing in both men and women over the years (Alici, 2021). In different studies conducted on university students, the prevalence of eating disorder risk was 40.5% among female students and 21.7% among male students (Tayhan, 2023).

The effect of problematic internet use (PIU) on eating disorders has been known for years. Various social networks on the internet are also increasingly used as an information source on beauty and ideal body forms. On these platforms, users tend to compare their own physical features with unrealistic and unattainable body ideals. On the internet, photos, videos, and advertisements aiming to inspire individuals to stay physically fit through strict exercise and diet, especially for achieving an ideal and attractive body, may cause individuals to develop restrictive EBs and excessive weight loss (Giorgetti et al., 2020). In a sample of 18- to 25-year-old women, researchers found that body shame and body image avoidance mediated the effect of weekly internet use on bulimic symptoms (Melioli et al., 2015). A positive significant relationship was observed between discussing body-related topics on social networking sites and restrictive eating, and it was found that the fear of negative appearance evaluation and body shame separately and serially mediated the relationship between discussing body-related topics on social networking sites and restrictive eating (Wang et al., 2023).

Impulsivity has also been effective on EBs in recent years. People classified as overweight and obese are reported to have deficits in food-specific impulse control (Flack et al., 2023). The hasty decision-making mechanism of impulsive individuals is considered a risk factor for EBs. Since impulsive behaviors lead to actions focused on instant rewards, individuals taking impulsive actions

are more sensitive to delicious foods containing sugar and fat (Bénard et al., 2019).

Body appreciation (BA) may also be affected by the negative consequences of impulsivity. In the literature, it is stated that individuals with high impulsivity have high body dissatisfaction, which may cause eating disorders (Scherr et al., 2010). Viewing idealized body images on social media causes increased body dissatisfaction among young women and men (Fioravanti et al., 2022). Targeting BA may support improvement in impaired EBs.

This study examines the relationships between EBs, BA, PIU, and impulsivity, drawing on dual-process decision-making theory (Hollander & Eyers, 2001) and reward sensitivity theory (Gullo & Dawe, 2008). These perspectives suggest that impulsivity plays a central role in decision-making and reward-driven behaviors. Based on this, two rival structural equation models (SEM) were developed to explore the mechanisms underlying EBs. In the hypothetical model, impulsivity is treated as an independent variable, while PIU and BA serve as mediators. This structure reflects the view of impulsivity as a relatively stable trait that predisposes individuals to maladaptive behaviors. In contrast, the alternative model positions impulsivity as a mediating variable, shaped by PIU and low BA. This model aligns with perspectives emphasizing the role of contextual and environmental factors in shaping impulsivity (Dickman, 1990). Comparing these two models enables a deeper understanding of the directionality and strength of these relationships. The hypothetical model was selected as the primary one due to its stronger theoretical foundation in personality and decision-making frameworks, while the alternative model offers a contrasting viewpoint to test the robustness of findings. Ultimately, this comparison offers insight into the mechanisms through which impulsivity influences EBs and enhances the empirical understanding of the interplay between trait-based and context-dependent theoretical frameworks.

## Material and Methods

The study group consisted of 1003 young adults aged 18 – 35 who continued their education in the 2022 – 2023 academic year. Convenient sampling, one of the non-random sampling methods, was used to form the study group. In the convenience sampling method, researchers create a sample starting from the most accessible respondents until they reach the size needed (Büyüköztürk et al., 2016). Those with any diagnosed psychiatric disorder and those with a metabolic disorder that may affect any EB were not included in the analysis. With the outlier analysis, 51 participants were not included in the study group due to outlier values. The final sample set consisted of 828 participants. 70.4% of the participants were female, 29.6% were male, the average age was 21.08, the average body weight (kg) was 62.18, and the average height (cm) was 167.84. 14.6% of the participants were “underweight,” 68.4% had normal BMI, and 17% had high BMI.

Individuals were informed in writing about the purpose of the research and expectations before the data collection process, and after their consent was obtained through the informed consent form, they started to answer the measurement tools. This study has been approved by the Necmettin Erbakan University Social Sciences and Humanities Research Ethics Committee (decision no: 2022/143 dated 08/04/2022).

### Personal Information Form

The Personal Information Form included demographic questions such as gender, age, anthropometric measurements (height and weight), educational background, marital status, and residential area.

### Three-Factor Eating Questionnaire

The TFEQ-R21 (Karlson et al., 2000) is a 21-item scale assessing cognitive restraint, emotional eating, and uncontrolled eating. Items are rated on a 4-point Likert scale. Higher scores indicate greater tendencies in each domain. The Turkish version by Karakuş et al. (2016) preserved the original structure. In this study, Cronbach's alpha values were .84, .92, and .86 for the three subscales, respectively. The structural model established for CFA showed fit indices between excellent and acceptable:  $\chi^2/df = 4.03$ , CFI = .93, TLI = .92, RMSEA = .061 (Barret, 2007; Jöreskog, 2004; Kline, 2011; Tabachnick & Fidell, 2007).

### Body Appreciation Scale

Developed by Avalos et al. (2005) and adapted into Turkish by Bakalın and Taşdelen-Karçkay (2016), the BAS includes 13 items rated on a 5-point Likert scale ("Never" to "Always"), measuring general BA and body image investment. Higher scores reflect greater appreciation. In this study, Cronbach's alpha was .92. The structural model established for CFA showed fit indices between excellent and acceptable:  $\chi^2/df = 4.00$ , CFI = .97, TLI = .95, RMSEA = .075 (Barret, 2007; Jöreskog, 2004; Kline, 2011; Tabachnick & Fidell, 2007).

### Young Internet Addiction Test-Short Form

Developed by Pawlikowski et al. (2013) based on Young's (1998) original scale, the YIAT-SF includes 12 items rated on a 5-point Likert scale ("Never" to "Always") assessing PIU. Higher scores indicate greater risk. The Turkish version showed good reliability ( $\alpha = .91$ ; Kutlu et al., 2016). In this study, Cronbach's alpha was .88. The structural model established for CFA showed fit indices between excellent and acceptable:  $\chi^2/df = 4.57$ , CFI = .93, TLI = .91, RMSEA = .074 (Barret, 2007; Jöreskog, 2004; Kline, 2011; Tabachnick & Fidell, 2007).

### Barratt Impulsiveness Scale Short Form

The BIS-11-SF (Spinella, 2007) includes 15 items rated on a 4-point scale ("Rarely/Never" to "Almost Always/Always"), measuring Inability to Plan, Motor Impulsivity, and Attentional Impulsivity, with a total score calculated. Higher scores reflect greater impulsivity. The Turkish version showed good reliability ( $\alpha = .82$ ; Tamam, Güleç, & Karataş, 2013). In this study,

Cronbach's alphas were .80, .77, .70, and .79 (total). CFA showed fit indices between excellent and acceptable:  $\chi^2/df = 3.89$ , CFI = .92, TLI = .90, RMSEA = .059 (Barret, 2007; Jöreskog, 2004; Kline, 2011; Tabachnick & Fidell, 2007).

### Statistical Analysis

This study was conducted in accordance with the relational survey model methods to explain the relationships between EBs, BA, PIU and impulsivity. The relational survey model aims to determine whether there is a co-variation between two or more variables and, if so, its degree (Büyüköztürk et al., 2016). Structural equation modeling (SEM) was created to be tested in the study. Structural equation modeling is the general name of multivariate statistical analysis, which is a combination of factor analysis and regression analysis and is generally used to test models containing observed and latent variables (Tabachnick & Fidell, 2007). Structural equation modeling analysis was conducted with the AMOS 24 program. The statistical analyses were conducted using AMOS version 24.0 (IBM Corp., Armonk, NY, USA). The bootstrapping technique was used to test the mediation models. The bootstrapping technique is used in various fields, including finance, economics, and social sciences (Wang & Preacher, 2015).

## Results

### Testing Structural Models

In this section, in the hypothetical model, the effect of impulsivity on EBs through PIU and BA was tested in the general sample, in the male and female sample, in the high BMI sample, and in the normal BMI sample, respectively. This model was compared with the male and female groups, and normal BMI and high BMI groups, to reveal which study group best represented this model. Then, an alternative model was tested to test the effect of PIU and BA on EB through impulsivity in the general sample. Finally, these two different models were compared. On the path from PIU and BA to EB, solid lines indicate full mediation and dashed lines indicate partial mediation.

### Hypothetical Model

#### General Sample

Figure 1 shows the structural model created in the general sample. According to the path parameters of the model, the path from Impulsivity to BA was statistically significant and negative ( $\beta = -0.251$ ,  $p < .001$ ). Impulsivity explained 6% of BM ( $R^2 = 0.063$ ). The path from Impulsivity to PIU was statistically significant

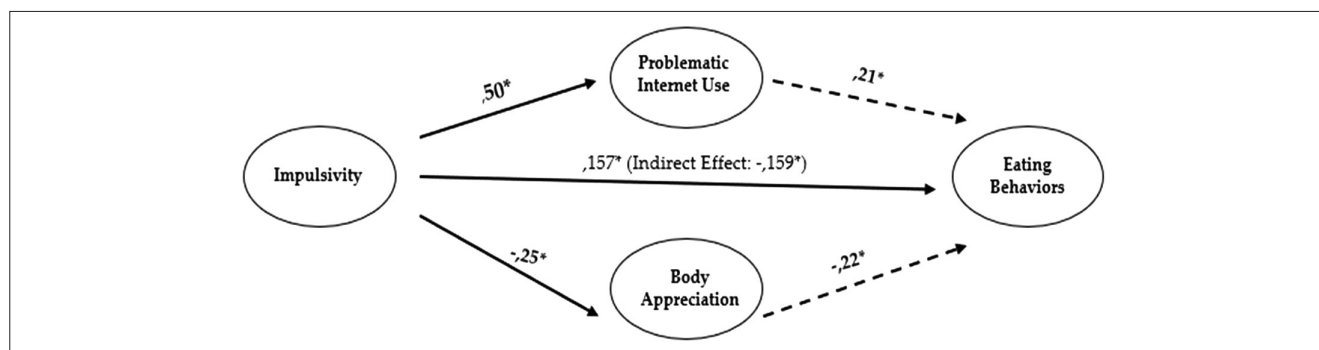


Figure 1. Structural Model of the General Sample, \* $p < .05$ .

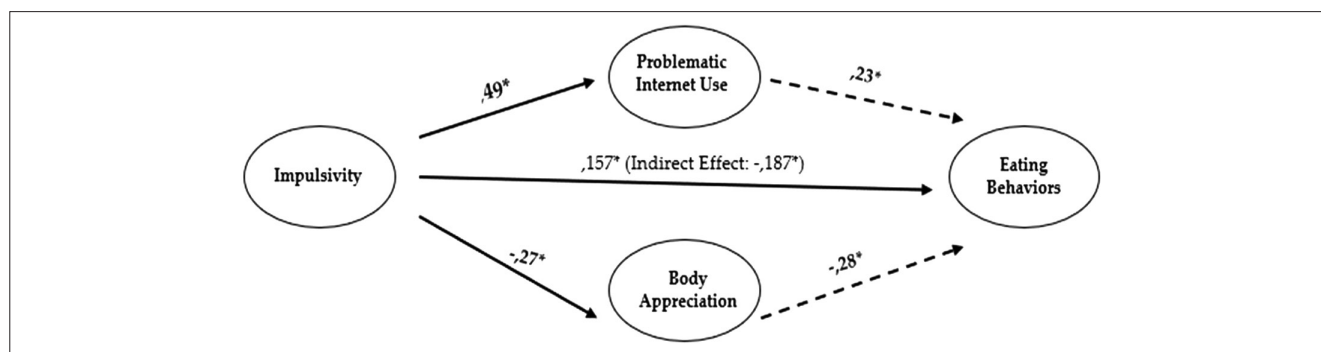


Figure 2. Structural Model of the Female Sample, \*p < .05.

and positive ( $\beta = 0.498, p < .001$ ). Impulsivity explained 25% of the PIU ( $R^2 = 0.248$ ). The paths from BA ( $\beta = -0.219$ ), PIU ( $\beta = 0.210$ ), and impulsivity ( $\beta = 0.157$ ) to EB were statistically significant ( $p < .05$ ). The ratio of the three variables to explain EB was 18% ( $R^2 = 0.178$ ). PIU and BA together had a partial mediation effect on the effect of Impulsivity on EB [95% CI (LB: 0.076, UB: 0.240)].

**Female Sample**

Figure 2 shows the structural model created for the female sample. According to the path parameters of the model, the path from Impulsivity to BA was statistically significant and negative ( $\beta = -0.267, p < .001$ ). Impulsivity explained 7% of BA ( $R^2 = 0.071$ ). The path from Impulsivity to PIU was statistically significant and positive ( $\beta = 0.487, p < .001$ ). Impulsivity explained 24% of the PIU ( $R^2 = 0.237$ ). The paths from BA ( $\beta = -0.280$ ), PIU ( $\beta = 0.230$ ), and impulsivity ( $\beta = 0.135$ ) to EB were statistically significant ( $p < .05$ ). The ratio of the three variables to explain EB was 22% ( $R^2 = 0.217$ ). Problematic internet use and BA together had a partial mediation effect on the effect of Impulsivity on EB [95% CI (LB: 0.100, UB: 0.271)].

**Male Sample**

Dashed lines on the path from PIU and BA to EB indicate the absence of mediation.

Figure 3 shows the structural model created for the male sample. According to the path parameters of the model, the path from Impulsivity to PIU was statistically significant and positive ( $\beta = 0.527, p < .001$ ). Impulsivity explained 28% of the PIU ( $R^2 = 0.278$ ). Examining the paths from BA ( $\beta = -0.20$ ), PIU ( $\beta = 0.19$ ) and Impulsivity ( $\beta = 0.250$ ) to EB, it was determined that only the path between Impulsivity and EB was statistically significant ( $p < .05$ ). Problematic internet use and BA did not have a mediation effect together [95% CI (LB: -0.024, UB: 0.319)].

In Figures 2 and 3, the possible model for the indirect effects of Impulsivity on EB through PIU and BA was tested in the male and female samples. As seen in Table 1, in terms of AIC (Akaike Information Criterion) and ECVI (Expected Cross-Validation Index) values and goodness of fit indices as a result of the models (Barret, 2007; Jöreskog, 2004; Kline, 2011; Tabachnick & Fidell, 2007), it is understood that the \*female sample group is the most

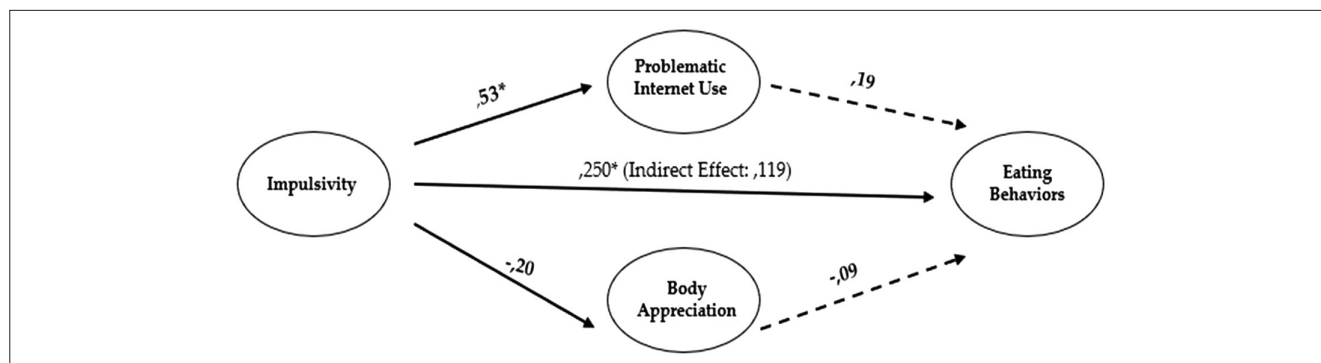


Figure 3. Structural Model of the Male Sample, \*p < .05.

**Table 1.**  
Goodness of Fit Values of Structural Models for Female and Male Samples

	( $\chi^2$ /SD)	GFI	CFI	NFI	TLI	RMSEA	AIC	ECVI
*Female sample	2.064	0.853	0.895	0.865	0.901	0.043	2404.163	5.849
Male sample	1.586	0.850	0.863	0.852	0.856	0.049	2657.173	10.964

SD, Standard deviation; GFI, Goodness of Fit Index; CFI, Comparative Fit Index; NFI, Normed Fit Index; TLI, Tucker-Lewis Index, RMSEA, Root Mean Square Error of Approximation.

\*The female sample model demonstrated the most preferable fit based on lower AIC and ECVI values and comparatively higher fit indices.

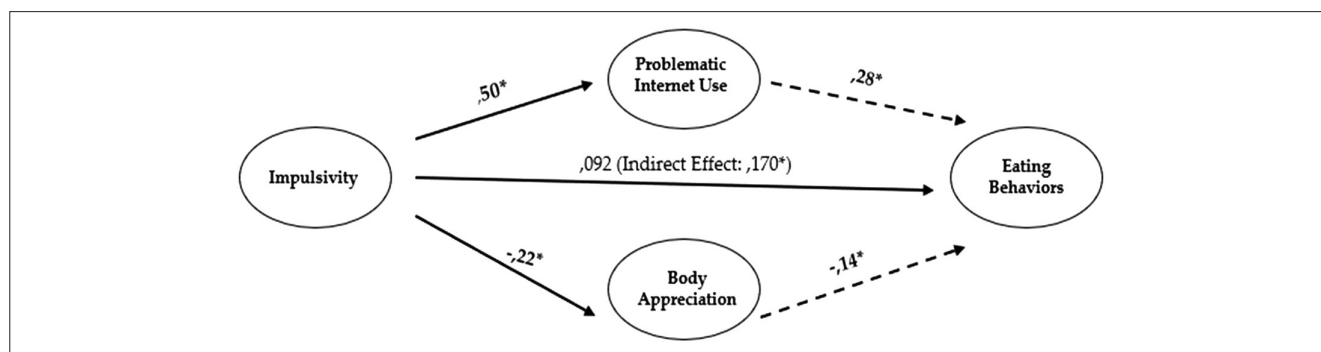


Figure 4. Structural Model of the BMI-Normal Sample, \* $p < .05$ . Solid lines from PIU and BA to EB indicate full mediation.

preferable model formed for the effect of Impulsivity on EB through PIU and BA.

#### Body Mass Index-Normal Sample

Figure 4 shows the structural model created in the BMI-normal sample. According to the path parameters of the model the path from Impulsivity to BA was statistically significant and negative ( $\beta = -0.221, p < .05$ ). Impulsivity explained 5% of BA ( $R^2 = 0.049$ ). The path from Impulsivity to PIU was statistically significant and positive ( $\beta = 0.496, p < .001$ ). Impulsivity explained 25% of the PIU ( $R^2 = 0.246$ ). Problematic internet use and BA together had a full mediation effect on the effect of Impulsivity on EB [95% CI (LB: 0.056, UB: 0.265)].

#### Body Mass Index-High Sample

Figure 5 shows the structural model created in the BMI-high sample. When the path parameters of the model are analyzed, there are 141 participants in the BMI-high sample group. In mediation models using bootstrap, the minimum sample sizes required in terms of statistical power vary between 40 and 1210 (Sim et al., 2022). Since the sample was sufficient in terms of statistical power, it was included in the model and analyzed.

According to the path parameters of the model created with the BMI-high sample, the path from Impulsivity to BA was statistically significant and negative ( $\beta = -0.466, p < .05$ ). Impulsivity explained 22% of BA ( $R^2 = 0.217$ ). The path from Impulsivity to PIU was statistically significant and positive ( $\beta = 0.569, p < .05$ ). Impulsivity explained 32% of the PIU ( $R^2 = 0.323$ ). Examining the paths from BA ( $\beta = 0.296$ ), PIU ( $\beta = -0.364$ ), and impulsivity ( $\beta = -0.123$ ) to EB, the paths of the three relevant variables were not statistically significant ( $p > .05$ ).

In Figures 4 and 5, the possible model for the indirect effects of Impulsivity on EB through PIU and BA in the BMI-normal and BMI-high samples was tested. As seen in Table 2, in terms of AIC and ECVI values and goodness of fit indices as a result of the models, (Barret, 2007; Jöreskog, 2004; Kline, 2011; Tabachnick & Fidell, 2007), it is understood that the \*BMI-normal sample group is the most preferable model formed for the effect of Impulsivity on EB through PIU and BA.

#### Alternative Model

##### General Sample

In Figure 6, the alternative structural model created in the general sample shows the mediation role of Impulsivity in the effect of PIU and BA on EB. Figure 6 shows that the path from BA to Impulsivity was statistically significant and negative ( $\beta = -0.156, p < .001$ ), while the path from PIU to Impulsivity was statistically significant and positive ( $\beta = 0.447, p < .001$ ). The ratio of two variables together explaining I was 25% ( $R^2 = 0.251$ ). The path from Impulsivity ( $\beta = 0.145$ ), PIU ( $\beta = 0.222$ ), and BA ( $\beta = -0.228$ ) to EB was statistically significant. Impulsivity partially mediated the effect of PIU on EB [95% CI (LB: 0.019, UB: 0.124)]. Impulsivity partially mediated the effect of BA on EB [95% CI (LB: -0.048, UB: -0.005)].

Figure 1 and Figure 6 show the hypothetical and alternative models in the general sample. As seen in Table 3, in terms of AIC and ECVI values and goodness of fit indices as a result of the models, (Barret, 2007; Jöreskog, 2004; Kline, 2011; Tabachnick & Fidell, 2007), it is understood that the \*alternative model that PIU and BA affect EB through impulsivity is the most preferable model.

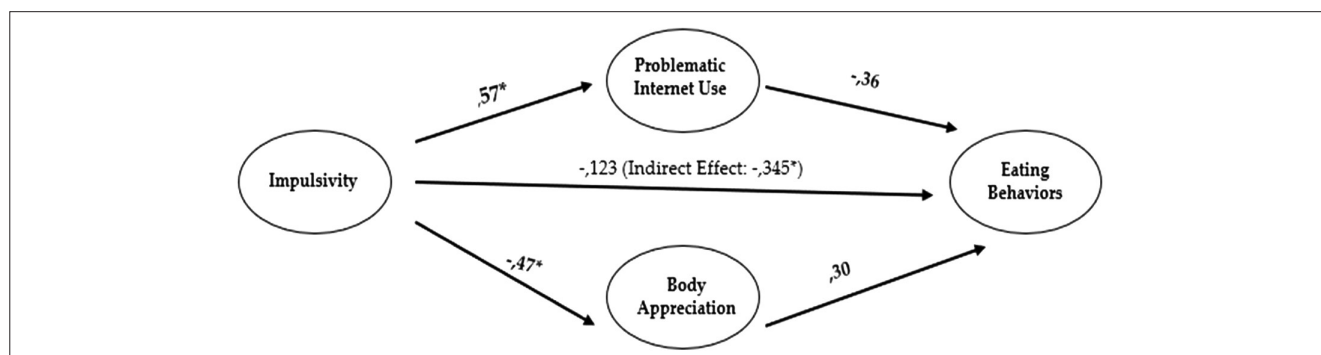


Figure 5. Structural Model of the BMI-High Sample, \* $p < .05$ .

**Table 2.**  
Goodness of Fit Values of Structural Models for BMI-Normal and BMI-High Sample Groups

	( $\chi^2$ /SD)	GFI	CFI	NFI	TLI	RMSEA	AIC	ECVI
*BMI-normal sample	1.992	0.866	0.896	0.851	0.891	0.042	3293.187	5.829
BMI-high sample	1.523	0.852	0.806	0.593	0.796	0.061	2579.952	18.428

Note: SD = Standard deviation.

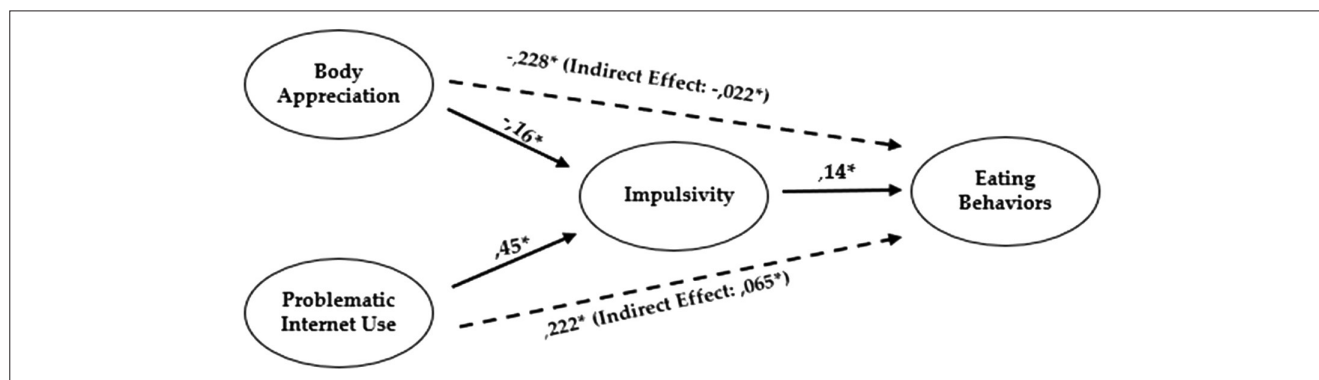


Figure 6. General Sample Alternative Structural Model, \*p < .05.

### Discussion

When the female and male sample groups were compared, the female sample group better represented the hypothetical model. Studies show that the frequency of EB disorder is higher in women than in men (Kartal & Aykut, 2019). This may be due to the fact that women, compared to men, are more preoccupied with behaviors such as maintaining body shape, body weight, and dieting, which support their attention, focus, and planning abilities. In a similar study, women were much more likely than men to report using an organized weight loss program to lose weight (Crane et al., 2017). In a longitudinal study on female college students, problematic Facebook use was associated with increased body dissatisfaction after 4 weeks, and decreases in BA and increases in EB were observed in its relationship with problematic Facebook use (Smith et al., 2013). More frequent use of pro-eating disorder websites by college women was associated with higher levels of body dissatisfaction, drive for thinness, and bulimic symptoms (Harper et al., 2008). Body appreciation is often problematic in women due to social pressures to be thin. In a similar study, negative body talk within the family was positively associated with emotional eating, and body dissatisfaction significantly mediated this relationship (Yang et al., 2023). Another study found that body shame was more common among women with higher BMI, but not among men. As women’s BMI increases, they may feel more shame, which is also associated with restrictive eating.

In the same study, impulsivity was associated with body shame, negative affect, and eating-related cognitions (Mason & Lewis, 2015). In women, negative mood and high emotional eating measures were associated with lower BA (Annesi, 2022). In a study on women with orthorexia tendency, a significant negative relationship was found between internet use and positive emotions associated with healthy eating habits (Waterman et al., 2022). In summary, the model in this study, created on young adult women, was generally supported in the relationship between similar studies in the literature.

When the BMI-normal and BMI-high samples were compared, the BMI-normal sample group better represented the hypothetical model. A study on young adults with normal BMI showed that social media addiction both directly and indirectly increased emotional eating, and that social media addiction was significantly associated with higher levels of body image anxiety, and body image anxiety was significantly associated with emotional eating (Mohsenpour et al, 2023). Another study revealed that there was a relationship between the frequency of comparing one’s own physical appearance with that of the people one follows on social media and body dissatisfaction and the drive to be thin, and that BMI did not have any effect on this process (Jiotsa et al., 2021). The term fat-negative body image can also be used to describe the excessive weight loss of young adults who think they are fat (negative body image) due to concern about

**Table 3.**  
Goodness of Fit Values of Hypothetical and Alternative Models in the General Sample

	( $\chi^2$ /SD)	GFI	CFI	NFI	TLI	RMSEA	AIC	ECVI
Hypothetical model	2.355	0.859	0.904	0.855	0.899	0.043	3846.064	4.651
*Alternative model	2.319	0.882	0.927	0.857	0.922	0.040	3790.774	4.584

Note: SD = Standard deviation.

their bodies, even if they are of normal weight ( $18 \leq \text{BMI} < 23.5$ ). People with a fat-negative body perception schema have attentional bias towards body size and food stimulation and show selective preferences at different stages of information processing, such as attention, interpretation, and memory (Ralph-Nearman et al., 2019). This may cause impulsivity to negatively affect BA in young adults. Therefore, young adults may have a normal BMI but have problems with body perception. In the study by Radvan et al. (2019), a high rate of body perception dissatisfaction was observed, although the prevalence of excessive weight and obesity was low. Among normal weight students, those who perceived themselves as underweight or overweight were more likely to vomit, fast, use laxatives, and diet pills (Silva et al., 2018). In a study, the effect of negative and positive affect on disordered eating symptoms was tested through its effect on intuitive eating and body image flexibility, while the effect of BMI was controlled and addressed with a path model. The model revealed that the effect of negative and positive affect on disordered eating symptoms depends on the level of intuitive eating and body image flexibility, even when the effect of BMI is controlled. It was also explained to be a protective factor against disordered EB by reducing reactivity and impulsive eating in response to negative and positive affect (Cardoso et al., 2020). In summary, risk factors such as PIU, which may cause a deterioration in the perception of BA, may negatively affect EBs even if the BMI of the individual is normal.

When the hypothetical and alternative models were compared, the alternative model explained this model better. Impulsivity supported both models when it was considered as an independent variable in the hypothetical model and as a mediating variable in the alternative model. This finding supports that impulsivity has a multifaceted effect rather than a fixed and linear effect. In his study, Dickman (1990) indicates that impulsivity is a multifaceted structure, a combination of various phenomena and not a single type of impulsive behavior. This shows that this study also emphasizes the importance of considering the potential risks of impulsivity. In this study, impulsivity suggests a better model in the mediating role. While impulsivity is considered a core symptom of many psychiatric disorders (Hollander & Eysers, 2001), PIU can be explained as a behavioral reflection of these disorders. Many studies explain that psychiatric disorders, such as eating disorders, manifest themselves with excessive internet use (Mahmid et al., 2021; Wang et al., 2023). The increase in the tendency towards EBs, which have a pleasurable role (Shipton, 2017), as a result of the directive effect of PIU on novelty-seeking and risk-taking behaviors (Karaca, 2019) and the over-sensitivity aspect of impulsivity to reward-seeking sensitivity (Gullo ve Dawe, 2008) shows that the literature supports the current model.

These findings reinforce the conceptualization of impulsivity as a transtheoretical construct that underlies a variety of psychological difficulties through its interaction with cognitive and affective mechanisms (Prochaska, 2008). From a transtheoretical perspective, impulsivity can be conceptualized as a psychological vulnerability factor that transcends diagnostic categories and plays a role in the emergence and maintenance of various maladaptive behaviors. Rather than being confined to a single diagnostic category, impulsivity functions as a transdiagnostic risk factor—closely linked to cognitive distortions, emotional regulation

deficits, and attentional biases (Belloch, Roncero, & Perpiñá, 2016; Pearlstein et al., 2024). Within this framework, impulsivity may contribute not only to the persistence of disordered eating but also to compulsive behaviors such as PIU and gaming disorder, where similar cognitive-affective processes are involved. Framing impulsivity as a shared psychological substrate across diagnostic boundaries provides a broader understanding of how self-regulatory breakdowns manifest in distinct yet overlapping behavioral domains.

### Limitations and Suggestions for Future Research

In conclusion, this study demonstrated that the hypothetical model better fit the general sample, female participants, and those with normal BMI, while the alternative model, in which impulsivity served as a mediating variable, offered a stronger overall explanation. These findings highlight impulsivity as a significant factor influencing both EB and PIU. Although the study sample consisted of university students, future research should include individuals from diverse age groups, educational levels, and clinical backgrounds to enhance external validity. Moreover, with the increasing prevalence of compulsive digital behaviors such as gaming disorder, it is essential to examine impulsivity within broader behavioral addiction frameworks. Addressing impulsivity as a transdiagnostic mechanism may improve early identification and intervention strategies in at-risk populations.

**Data Availability Statement:** The data that support the findings of this study are available on request from the corresponding author.

**Ethics Committee Approval:** Ethical committee approval was received from the Ethics Committee of Necmettin Erbakan University Social Sciences and Humanities (Approval No.: 2022/143 Date: 08/04/2022)

**Informed Consent:** Written informed consent was obtained from the participants who agreed to take part in the study.

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