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EXAMINING THE RELATIONSHIPS BETWEEN EATING DISORDER SYMPTOMS, SELF-ESTEEM, AND PSYCHOLOGICAL WELL-BEING IN EMERGING ADULTS

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Abstract

This study aimed to examine the mediating role of self-esteem between eating disorder symptoms and psychological well-being in emerging adults. The study group consists of 272 individuals, aged 18–29, 183 [67.3%] females and 89 [32.7%] males. Socio-demographic data form, anthropometric measurements, Eating Disorder Examination Questionnaire (EDE-Q-13)-Short Form, Psychological Well-Being Scale and Self-Liking/Self-Competence Scale were used as data collection tools. The proposed model was tested using bootstrapping and structural equation modeling. The results showed a significant and positive relationship between self-esteem and psychological well-being ($r=.76, p<.001$), a significant and negative relationship between eating disorder symptoms and psychological well-being ($r=-.18, p<.001$) and a significant and negative relationship ($r=-.34, p<.001$) between eating disorder symptoms and self-esteem. Additionally, self-esteem mediates the path between the eating disorder symptoms and psychological well-being. The research findings were discussed in the context of existing literature and research. Addressing eating disorders through a multidisciplinary collaboration involving dietitians, psychological counselors, and psychiatrists is thought to enhance self-esteem and improve psychological well-being.

Keywords: *Eating disorder symptoms, Psychological well-being, Self-esteem, Emerging adulthood.*

BELİREN YETİŞKİNLERDE YEME BOZUKLUĞU BELİRTİLERİ, BENLİK SAYGISI VE PSİKOLOJİK İYİ OLUŞ ARASINDAKİ İLİŞKİLERİN İNCELENMESİ

Öz

Bu çalışma, beliren yetişkinlerde yeme bozukluğu belirtileri ile psikolojik iyi oluş arasında benlik saygısının aracı rolünü incelemeyi amaçlamıştır. Çalışma grubu 18-29 yaşlarında 183'ü (%67,3) kadın ve 89'u (%32,7) erkek olmak üzere 272 kişiden oluşmaktadır. Veri toplama aracı olarak sosyo-demografik veri formu, antropometrik ölçümler, Yeme Bozukluğu Değerlendirme Ölçeği (EDE-Q-13)-Kısa Form, Psikolojik İyi Oluş Ölçeği ve Kendini Sevme/Öz-Yeterlik Ölçeği kullanılmıştır. Önerilen model bootstrapping ve yapısal eşitlik modelleri kullanılarak test edilmiştir. Sonuçlar benlik saygısı ile psikolojik iyi oluş arasında anlamlı ve pozitif yönde ($r=.76, p<.001$), yeme bozukluğu belirtileri ile psikolojik iyi oluş arasında anlamlı ve negatif yönde ($r=-.18, p<.001$) ve yeme bozukluğu belirtileri ile benlik saygısı arasında ise anlamlı ve negatif yönde ($r=-.34, p<.001$) ilişki olduğunu göstermiştir. Ayrıca benlik saygısının, yeme bozukluğu belirtileri ile psikolojik iyi oluş arasında aracılık etkisi olduğu görülmüştür. Araştırma bulguları mevcut literatür ve araştırmalar bağlamında tartışılmıştır. Diyetisyenlerin, psikolojik danışmanların ve psikiyatristlerin yer aldığı multidisipliner bir işbirliği yoluyla yeme bozukluklarının ele alınmasının, benlik saygısını artıracak ve psikolojik refahı iyileştireceği düşünülmektedir.

Anahtar Kelimeler: *Yeme bozukluğu belirtileri, Psikolojik iyi oluş, Benlik saygısı, Beliren yetişkinlik.*

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1. INTRODUCTION

Emerging adulthood, described as a transition period between adolescence and adulthood (Arnett, 2007), encompasses pivotal discoveries and choices for individuals. Initially defined as ages 18 to 25, the scope of emerging adulthood has broadened to include people up to the age of 29 due to cultural shifts such as a rise in the age of marriage and parenthood as well as longer educational durations (Arnett et al., 2014). During this stage, individuals engage in a quest for identity and scrutinize their life goals. As individuals embark on the journey of identity discovery, they may experience changes in their eating habits and show signs of eating disorders. For instance, they may exhibit impulsive eating behaviors or display reluctance towards eating as a coping mechanism to navigate the challenges (Simone et al., 2021). Such unhealthy eating behaviors resulting from this obsession are termed as eating disorders (Kenny et al., 2022; Kermen et al., 2019).

Eating disorders (ED) are a complex issue characterized by abnormal eating practices that are often accompanied by fluctuations in body weight and/or social impairments, negatively influencing an individual's quality of life and social functioning. In the DSM-5 classification, eating disorders encompass eight distinct subgroups: Bulimia nervosa, avoidant/restrictive food intake disorder, binge-eating disorder, anorexia nervosa, pica, rumination disorder, other specified feeding and eating disorders, and other unspecified feeding and eating disorders (American Psychiatric Association, 2013). Though the exact prevalence is unclear, studies suggest increased rates of Bulimia Nervosa (BN) and Binge-Eating Disorder (BED). Moreover, eating disorders are more common among women and younger individuals (Hay, 2020).

According to studies by de Vos et al. (2018) and Tomba et al. (2017), individuals with eating disorders have lower psychological well-being than the general population. The capacity of an individual to deal with existential obstacles that arise during life, such as pursuing meaningful goals, developing personally, and building strong relationships with others, is known as psychological well-being (Keyes et al., 2002; Telef, 2013). It is based on the idea that a person strives to realize potential and achieve positive functionality (Ryff, 2014). Ryff's (1989) psychological well-being model comprises six dimensions: self-acceptance, positive relationships with others, autonomy, environmental mastery, purpose in life and personal growth. Psychological well-being encompasses the revealing of the individual's potential to lead a meaningful life, self-actualize by overcoming encountered problems, nurturing authentic relationships, and being aware of personal limitations (Ryff & Singer, 2008). This construct also encompasses an individual's capacity for self-awareness, research, defense of personal values and beliefs, making congruent choices, pursuing goals, and self-esteem (Karababa et al., 2018).

Positive and negative attitudes toward oneself constitute one's self-esteem. Levinson (1986) believes that as individuals step into adulthood, taking responsibility adds a different dimension to self-esteem. According to Tafarodi and Swann (1995), self-esteem is composed of two dimensions: self-competence and self-liking. In addition, self-esteem allows individuals to develop self-awareness, define themselves positively, pay attention to the present moment, and focus on positive experiences instead of dwelling on negative ones (Dhandra, 2020). Individuals with high self-esteem are happy, productive, assertive, socially adaptable, strive longer to be successful and overcome difficulties, evaluate themselves positively, set realistic goals, protect themselves in stressful and challenging life events. They are individuals who can achieve things easily, focus on their strengths and positive characteristics, have a positive perspective, and believe they are loved, respected and admired by others (Tatoğlu, 2006). Researchers believe that self-esteem has a significant relationship with the behavioral and psychological characteristics of the eating disorders (Peck & Lightsey, 2008). Additionally, low self-esteem is a common symptom in eating disorder patients (Fairburn, 2008; Mann et al., 2004). It is linked to impairments in psychosocial functionality and quality of life (Halvorsen & Heyerdahl, 2006). In this context, it is important to conduct further research and develop intervention plans to help individuals with eating disorders improve their quality of life and enhance their self-esteem.

1.1. Eating Disorders and Self-Esteem

Low self-esteem is an important predictor in all eating disorders for both genders (Voica et al., 2021). Voica et al. (2021) found a moderate correlation between lower levels of disordered eating and self-esteem, regardless of gender. According to Mora et al. (2017), teenagers who have low self-esteem are more likely to develop eating disorders. Mendelson et al. (2002) indicated that women with eating disorders have lower levels of self-esteem than those who do not. Another study found that self-esteem decreases as the severity of eating disorders

increases in female university students (Peck & Lightsey, 2008). Studies also show a relationship between high BMI and low self-esteem (Brown et al., 1998; Strauss, 2000). Remarkably, this correlation has been observed even among young children. In a meta-analysis investigating the self-esteem levels of individuals with eating disorders post-psychotherapy, findings revealed that patients undergoing treatment for BN and BED experienced a significant increase in their self-esteem levels (Linardon et al., 2019). Williams et al. (1993) found lower self-esteem in individuals with eating disorders compared to healthy individuals. Silverstone (1990) observed that individuals with eating disorders, even those not experiencing depression had low self-esteem, independent of depressive symptoms (Erol et al., 2000). These studies indicate that eating disorders and body dissatisfaction can affect the individual's self-esteem, and low self-esteem may also contribute to the development of eating disorders.

1.2. Eating Disorders and Psychological Well-Being

Several studies have shed light on the relationship between eating disorders and psychological well-being. A study involving women revealed that as women's satisfaction with their physical appearance increases, their psychological well-being also increases (Altinel, 2018). This finding concluded that women content with their body shape, regardless of external appearance, have a positive perception of themselves and are more likely to accept themselves as they are. Another study focusing on the psychological well-being of patients following eating disorder treatment concluded that cognitive behavioral therapy-based interventions led to a decrease in eating disorder symptoms and a simultaneous increase in patients' levels of psychological well-being (Tomba et al., 2017). Research investigating psychological well-being across various eating disorders revealed that there was a deterioration in the level of psychological well-being in patients with eating disorders (Tomba et al., 2014). Lower scores were observed in all categories of psychological well-being among those with BN in comparison to those who are healthy. Similarly, BED patients scored worse on the autonomy, environmental control, and self-acceptance subscales in particular than their healthy counterparts. Across all eating disorder groups, the study's findings demonstrated a substantial negative association between most psychological well-being dimensions and eating disorder scales. Additionally, Bardone-Cone et al. (2010) found that the self-esteem, self-directedness, and self-efficacy levels of the fully recovered group were higher than those of the partially recovered or active eating disorder groups. In another study, it was concluded that participants in the full recovery process had a higher level of psychological well-being in most dimensions compared to participants with ongoing eating disorders (Romano & Ebener, 2018). Data further revealed that people with eating disorders have lower psychological well-being than those without eating disorders, and even after meeting all post-treatment recovery criteria, their psychological well-being levels remain lower than those of individuals without eating disorders (Tomba et al., 2017).

1.3. Self-Esteem and Psychological Well-Being

A person's high or low self-esteem may lead them to evaluate themselves positively or negatively. While self-esteem impacts an individual's psychological well-being, it can be argued that coping skills in response to events can also affect the level of well-being (Çelenk & Peker, 2020). Individuals with eating disorders who exhibit lower levels of body satisfaction, optimism, and self-esteem tend to have lower well-being (Brannan & Petrie, 2011). Okcu (2020) found a positive correlation between psychological well-being and self-esteem, as well as the dimensions of self-liking and self-competence. Similarly, Singhal and Prakash (2020) revealed a positive relationship between psychological well-being and self-esteem among university students, unaffected by gender. Further affirming this connection, Moksnes and Espnes (2013) concluded that self-esteem positively relates to psychological well-being, regardless of gender or age. Lyubomirsky et al. (2006) expanded on the multifaceted impact of self-esteem on psychological well-being, highlighting its positive influence on various aspects such as mood, temperament, life satisfaction, and social connectedness. Additionally, research by Birkeland et al. (2012) and Orth et al. (2009) suggests that adolescents with high self-esteem demonstrate enhanced coping mechanisms in the face of life's challenges, effectively maintaining their overall well-being.

1. 4. Present Study

The current study aims to investigate the relationships between eating disorders, self-esteem, and psychological well-being in emerging adults. Considering the relationships between these variables, self-esteem could function as a mediating variable within this relationship. Stated differently, the diminished psychological

well-being observed in individuals exhibiting symptoms of eating disorders could potentially be linked to their lower levels of self-esteem.

A review of the literature pertaining to the relationships between psychological well-being, eating disorders, and self-esteem underscores a notable gap; none of the current studies have simultaneously investigated these variables and explored their potential roles as mediators. This study is significant given the rising prevalence of eating disorders today. It offers an opportunity to gain awareness of the underlying causes behind eating disorder behaviors in emerging adults. The findings are important not only to mental health professionals but also to dietitians, highlighting the importance of interdisciplinary studies. Furthermore, studies on eating disorders within the context of positive mental health primarily focus on aspects related to subjective well-being and quality of life (Jenkins et al., 2011; Tomba et al., 2014). Hence, one of the distinctive features of this research is the examination of these three variables within the context of a structural model, which is believed to significantly advance our understanding of the relationships between eating disorders and psychological structures. In this regard, the following hypotheses were proposed in the present study:

Hypothesis 1: Eating disorder is negatively associated with self-esteem.

Hypothesis 2: Self-esteem is positively associated with psychological well-being.

Hypothesis 3: Eating disorder is negatively associated with psychological well-being.

Hypothesis 4: Self-esteem fully mediates the link between eating disorder and psychological well-being.

2. METHOD

2. 1. Participants and Procedure

The sample consisted of 272 Turkish individuals, aged 18–29 ($M = 21.45$, $SD = 2.04$), 183 [67.3%] girls and 89 [32.7%] males. The literature on determining the sample size for studies using structural equation modeling noted that a range of 200-500 participants is considered sufficient (Kline, 2019; Tabachnick & Fidell, 2013). The minimum sample size is determined by the ratio $N:q$, where N indicates the sample size and q indicates the number of parameters in the model. For the minimum sample size, a ratio of 10 is considered adequate (Kline, 2019). The model proposed in this study involves 11 parameters. Therefore, the minimum sample size (N) required for this research is calculated as $11 \times 10 = 110$. With 272 participants included in this study, it was determined that the sample size was appropriate. Through an online questionnaire, participants were asked to voluntarily respond to measures assessing eating disorders, psychological well-being, and self-esteem in addition to basic information about their age, gender, and anthropometric measurements. The online questionnaire was distributed via various social communication channels. They were informed about the research's purpose beforehand. Data collection took place between February and April 2023. The sample's characteristics and anthropometric measurements are shown in Table 1.

Table 1. Demographic Characteristics and Anthropometric Measurements of Participants

Features		
Gender	N	%
Female	183	67,3
Male	89	32,7
BMI Classifications (kg/m ²)	N	%
Underweight	22	8,1
Normal	199	73
Overweight	39	14,3
Obese	10	3,7
Morbid Obese	2	0,7
Body Weight Perceptions	N	%
I'm too skinny	4	1,5
I'm skinny	26	9,6
I am at normal weight	178	65,4
I'm overweight	56	20,6
I'm too overweight	8	2,9

2.2. Measures

2.2.1. Eating Disorder Examination Questionnaire (EDE-Q-13)-Short Form:

The EDE-Q (Fairburn & Beglin, 1994) assesses eating behaviors over 28 days with 28 items. Its shorter version, EDE-Q-13 (Lev-Ari et al., 2021), contains 13 items. In this study, the Turkish short form (Esin & Ayyıldız, 2022) was used. The EDE-Q-13 is a 7-point Likert scale (0=never, 1=1–5 days, 2=6–12 days, 3=13–15 days, 4=16–22 days, 5=23–27 days, 6=everyday) measuring Shape and Weight Over-Evaluation (SWO), Purging, Bingeing, Body Dissatisfaction (BD), and Eating Restraint (ER). Higher scores indicate more eating-related issues. The confirmatory factor analysis provided support for the five-factor structure of the scale, as indicated by the following fit indices: GFI= .95, CFI= .97, NFI= .96, TLI= .96, AGFI= .93, RMSEA= .06. The Cronbach's alpha values were .92 for ER, .94 for SWO, .93 for BD, .84 for Bingeing, .75 for Purging, and .89 for the total scale. In this study, Cronbach's alpha for EDE-Q-13 measured .91 for ER, .91 for SWO, .90 for BD, .75 for Bingeing, .62 for Purging, and .89 for the total scale.

2.2.2. Psychological Well-Being Scale (PWBS):

The PWBS, developed by Diener et al. (2010), is a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), encompassing 8 items. Higher scores on this scale indicate elevated levels of psychological well-being. The Turkish version of PWBS was adapted by Telef (2013). According to confirmatory factor analysis, all goodness-of-fit indices for the PWBS supported its single-component structure. The obtained indices were as follows: GFI= .96, NFI= .94, RFI= .92, CFI= .95, IFI= .95, RMSEA= .08, and SRMR= .04. Reliability analysis indicated a Cronbach's alpha coefficient of .80 for the scale, demonstrating satisfactory internal consistency. In the context of the present study, the Cronbach's alpha coefficient for PWBS was measured as .88, further affirming the reliability of the scale in this specific sample.

2.2.3. Self-Liking/Self-Competence Scale (SLCS-R):

The Self-Liking/Self-Competence Scale (SLCS-R) is self-esteem measurement tool designed by Tafarodi and Swann (2001). It assesses self-esteem across two dimensions: self-liking and self-competence. Utilizing a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), the scale comprises 16 items distributed into 2 subscales. In the current study, the Turkish version of the SLCS-R, adapted by Doğan (2011), was used. Confirmatory factor analysis results indicate robust support for the two-component structure of the scale, as evidenced by goodness-of-fit indices such as GFI= .94, CFI= .97, NFI= .95, AGFI= .91, and RMSEA= .049. Reliability analysis further confirms the internal consistency of the scale, with Cronbach's alpha values of .83 for the self-liking dimension and .74 for the self-competence dimension. Within the context of this study, the Cronbach's alpha coefficient for SLCS-R was measured as .88 for self-liking and .78 for self-competence.

2.3. Data Analysis

Two-step structural equation modeling was used to analyze the data. In the first phase, the measuring model was put to the test. Once the measurement model was deemed satisfactory, the structural model was tested by maximum likelihood estimation. The AMOS 21 computer program was utilized for structural equation modeling. Additionally, correlation and descriptive analyses were performed using IBM SPSS 21. Descriptive statistics and correlation coefficients were examined to evaluate the suitability of the data for structural equation analysis. For model fit values, the following standards were applied: $\chi^2: (\chi^2/df) < 3$, $RMSEA \leq .08$, $GFI, NFI, CFI, AGFI \geq .90$ (Byrne, 2013; Hu & Bentler, 1998; Tabachnick & Fidell, 2013).

Baron and Kenny's approach (1986) was used to test the mediation effect of self-esteem in the relationship between eating disorder and psychological well-being. There are four basic assumptions in this method. First, (a) the independent variable influences the dependent variable; (b) the independent variable influences the mediator variable; (c) the mediator variable influences the dependent variable; (d) Finally, when the mediator variable is included in the analysis together with the independent variable, the effect of the independent variable on the dependent variable decreases or becomes insignificant. Simultaneously, the mediator variable demonstrates a significant effect on the dependent variable. A full mediation occurs when the relationship

between the dependent and independent variables vanishes with the mediator controlled. Conversely, a partial mediation is observed when the relationship between the two variables weakens (Pardo & Roman, 2013).

The mediation effect was further examined by the bootstrapping method. This method generates a statistical significance interval by gathering a specified number of samples from the sample within the area of the research using the software (Shrout & Bolger, 2002). The bootstrap coefficient and confidence intervals were calculated using 1000 bootstraps in this study. For the indirect effect to be considered significant, the confidence intervals should not include zero (Hayes, 2013).

3. RESULTS

3. 1. Preliminary Analyses

Descriptive statistics and correlation analysis results for the observed variables of eating disorder, self-esteem and psychological well-being are presented in Table 2. To assess normality, skewness and kurtosis values were examined. Skewness values ranged from -1.05 to 1.58, and kurtosis values fell within the range of 1.09 to 1.74. These values adhere to the normality criteria of ± 2 for skewness and ± 7 for kurtosis, as recommended by Finney and DiStefano (2006), indicating that the data exhibit a normal distribution.

Table 2. Descriptive Statistics and Correlation Coefficients

Variable	M	SD	Skew	Ku	1	2	3	4	5	6	7	8
1. Eating Restraint	3.45	4.95	1.58	1.61								
2. Shape and Weight Over-Evaluation	3.72	4.25	.94	-.55	.57**							
3. Body Dissatisfaction	4.34	4.51	.67	-1.09	.50**	.66**						
4. Binge Eating	2.80	3.61	1.54	1.74	.32**	.45**	.46**					
5. Self-Competence	26.02	4.66	.26	.54	-.10	-.12*	-.18**	-.16**				
6. Self-Liking	28.88	6.19	-.39	.00	.16**	-.30**	-.22**	-.20**	.63**			
7. Psychological Well-Being PAR 1	20.47	4.92	-.93	.83	-.10	-.12*	-.10	-.18**	.50**	.61**		
8. Psychological Well-Being PAR 2	21.01	4.63	-1.05	1.24	-.15*	-.13*	-.11	-.14*	.52**	.54**	.77**	

Note: * $p < .05$; ** $p < .01$.

3. 2. Measurement Model

The measurement model consists of three latent variables (eating disorder, psychological well-being, and self-esteem) and 8 observed variables. Measurement model testing showed good model fit: $\chi^2/df = 2.036$, $p < .05$; CFI = .98; AGFI = .93; GFI = .97; NFI = .96; RMSEA = .062 and SRMR = .032. Factor loadings of all observed variables are significant (between .55 and .92, $p < .001$). The model obtained from the analysis is shown in Figure 1.

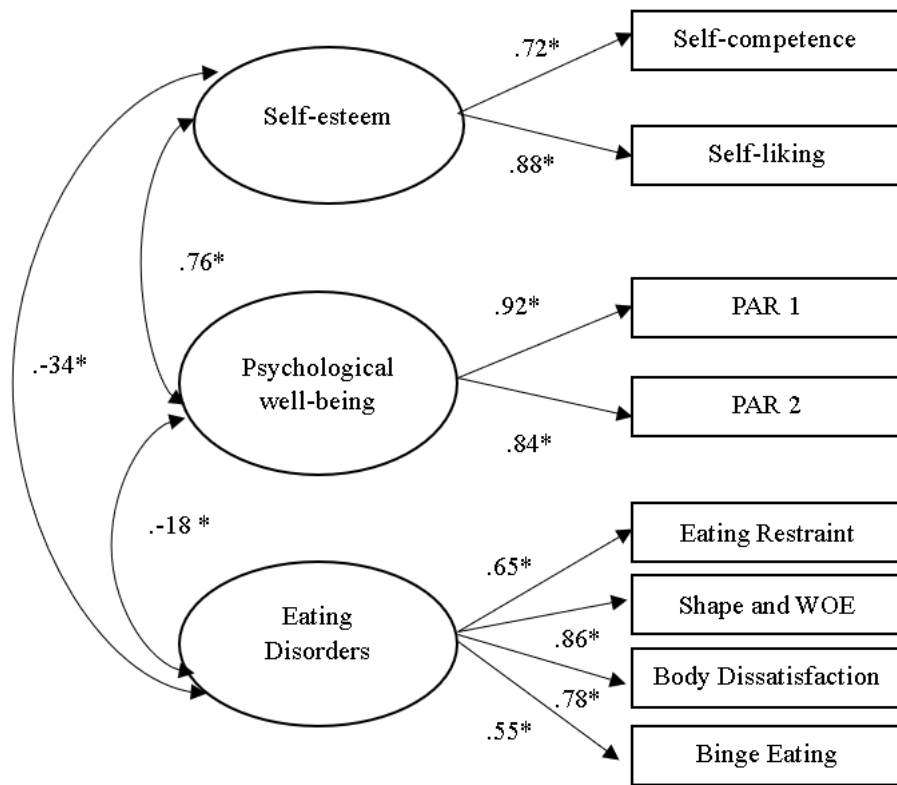


Figure 1. Standardized factor loading for the measurement model

Note: * $p < .001$

As a result of the measurement model test, correlations for latent variables were obtained and these correlation values are presented in Table 3.

Table 3. Correlation Coefficients for Latent Variables

Variable	1	2	3
1. Eating Disorder			
2. Self-Esteem	-.34*		
3. Psychological Well-being	-.18*	.76	

Note. * $p < .001$.

As expected, eating disorder was negatively associated with self-esteem ($r = -.34, p < .001$) and psychological well-being ($r = -.18, p < .001$). Self-esteem was positively associated with psychological well-being ($r = .76, p < .001$). These findings support the validity of Hypothesis 1, 2, and 3.

3. 3. Structural Model

The relationship between eating disorders and psychological well-being that is mediated by self-esteem was tested in the structural model. The goodness of fit indices of the structural model were at a good level: $\chi^2/df = 2.36, p < .05$; GFI = .97; CFI = .93; NFI = .96; AGFI = .98; RMSEA = .062 and SRMR = .032.

As seen in Figure 2, the path from eating disorder to psychological well-being was not found to be significant ($p > .05$). It was found that self-esteem had a full mediating effect between eating disorders and psychological well-being. The direct effect of an eating disorder on psychological well-being is $-.18 (p < .001)$. As a result of

including self-esteem in the model as a mediator variable, this effect is .09, and the p-value becomes insignificant ($p > .05$). According to these results, Hypothesis 4 was confirmed.

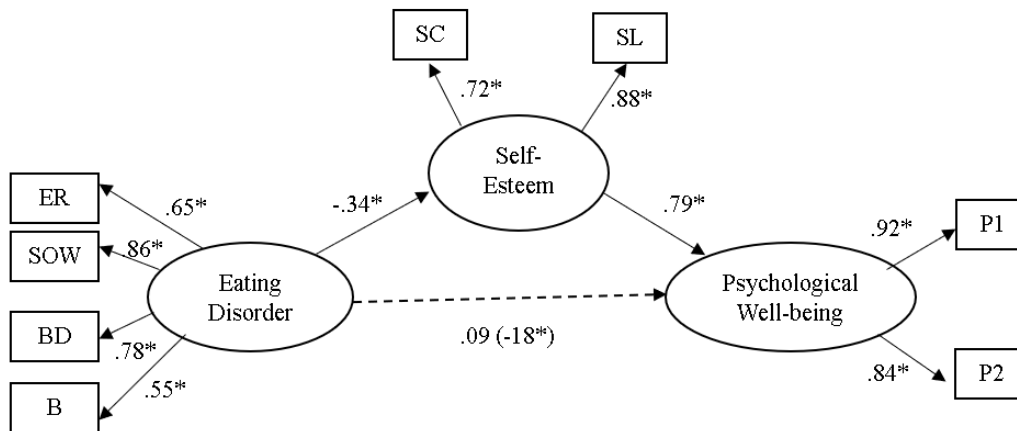


Figure 2. Standardized factor loading for the structural model

Note: * $p < .001$, ER= Eating Restraint, SOW= Shape and Weight Over-Evaluation, BD= Body Dissatisfaction, B= Binging, SC= Self-Competence, SL= Self-Liking, P1 ve P2= Psychological well-being parcels

3. 4. Bootstrapping

In this research, 1000 bootstraps (resampling) were made to determine the significance of the indirect effects in the structural model, and confidence intervals with lower and upper limits and bootstrap coefficients were created. The bootstrapping process's indirect path coefficient confidence intervals [BC = -.27, 95% C.I. = -.41, -.17] reveal that the indirect influence of eating disorder on predicting psychological well-being through self-esteem is significant. According to the findings of all analyses, self-esteem has a full mediating role between eating disorders and psychological well-being in emerging adults aged 18-29.

4. DISCUSSION

In this study, the relationships between eating disorders, psychological well-being, and self-esteem in emerging adults were examined, and it was concluded that self-esteem is a full mediator in the relationship between eating disorders and psychological well-being. In other words, statistical analysis confirms that individuals with eating disorders experience a decline in their self-esteem, consequently leading to a decrease in their levels of psychological well-being.

Firstly, the current study indicated a negative relationship between eating disorders and self-esteem, in line with the previous studies. Thus, hypothesis 1 was confirmed. Individuals suffering from eating disorders frequently may have concerns about their appearance, cultivating unfavorable ideas of their bodies and feeling inadequate in achieving modern beauty standards. These negative ruminations can significantly lower an individual's self-esteem. In a study with adolescents, it was observed that those with eating disorders had lower social and physical self-esteem compared to those without eating disorders (Gila et al., 2005). Another study concluded that women with eating disorders had lower self-esteem levels than women without eating disorders (Mendelson et al., 2002). Research by Krauss and colleagues indicated that low self-esteem is considered a risk factor for developing eating disorders, highlighting a mutual interaction between self-esteem and eating disorders (Krauss et al., 2023).

The results of the present study also supported the positive relationship between self-esteem and psychological well-being. Hence, hypothesis 2 was validated. This result was in line with the previous research (Nwankwo et al., 2015; Okcu, 2020; Singhal & Prakash, 2020). A study with university students found a positive relationship between self-esteem and psychological well-being (Singhal & Prakash, 2020). In research with high school students, a significant relationship was observed between self-esteem and eating disorder symptoms

(Tanriverdi et al., 2011). A study conducted with athlete university students found a relationship between perceived self-esteem and psychological well-being, indicating that students with high self-esteem exhibit high levels of psychological well-being. Another study among university students found that self-esteem positively influences psychological well-being (Ayaz & Doğan, 2023). Okcu (2020) concluded from their study that high self-esteem positively impacts psychological well-being. These results show that people with a strong and high level of self-esteem serve as a foundation for effective functioning across different areas of life. Conversely, fragile self-esteem might impede one's ability to function effectively. It might disrupt interpersonal connections and hinder individuals from finding meaning and purpose in their lives.

Moreover, hypothesis 3 stated that eating disorder is negatively associated with psychological well-being was confirmed. There are studies show a significant relationship between these variables (de Vos et al., 2018; Doll et al., 2005; Farello et al., 2023). A study found a moderate negative correlation between eating disorders and psychological well-being; however, this relationship was not observed in individuals with bulimia nervosa and binge eating disorder (de Vos et al., 2018). Farello et al. (2023) observed that individuals with binge eating disorder exhibited low levels of psychological well-being. In another study of individuals with eating disorders, Doll et al. (2005) reported significant deterioration in their psychological well-being. Physical self-liking makes individuals feel good psychologically (Altinel, 2018). When someone doesn't feel good about their body, it might lead to unhealthy eating habits and even an eating disorder, which can make them feel psychologically down and create a negative self-view. Sometimes, using unhealthy eating habits might seem like a way to cope with problems, making the person feel better temporarily, but in the long run, it leads to feeling worse.

Lastly, the study revealed that self-esteem mediates the relationship between eating disorder and psychological well-being. Thus, hypothesis 4 was confirmed. There are studies focused on the relationship between eating disorder and self-esteem (Gila et al., 2005; Krauss et al., 2023; Mendelson et al., 2002) and eating disorder and psychological well-being (de Vos et al., 2018; Doll et al., 2005; Farello et al., 2023). Nevertheless, no research that examines eating disorders, psychological well-being, and self-esteem simultaneously has been found. The development of unhealthy eating habits can lead to an eating disorder, triggering body dissatisfaction. This dissatisfaction often causes both psychological and physical distress, impacting a person's levels of self-liking and self-esteem. When someone becomes dissatisfied with their body, it can lead to psychological distress and negative shifts in self-perception. Individuals with eating disorders often experience concerns about their appearance, generally have a negative body image, and feel they do not conform to today's standards of beauty. These negative thoughts can erode self-respect. Conversely, higher self-esteem is thought to contribute positively to psychological well-being, as it enables individuals to align with their true selves and find greater life satisfaction.

As a result, it has been observed that eating disorders during emerging adulthood can significantly impact self-esteem and psychological well-being. Addressing these disorders through multidisciplinary collaboration involving dietitians, psychological counselors, and psychiatrists is thought to enhance self-esteem and improve psychological well-being. It is believed that developing projects aimed at promoting healthy nutrition, starting from the primary school level and monitoring their effects, will contribute to reducing the incidence of eating disorders. These projects should be supported with seminars and training sessions conducted by dietitians, psychological counselors, and psychiatrists in schools, aimed at promoting positive eating behaviors. It is believed that this approach will contribute to reducing the prevalence of eating disorders in society.

Limitations

There are some limitations to the study. First, results of this study may have limited generalizability. Respondents were mostly white female university students. Due to the large difference between the number of male and female participants, no comparison was made between genders. Future studies may include a broader range of participants, considering differences in education, ethnicity, socio-economic background. Due to self-report biases and directionality, the cross-sectional online design restricts how the results can be interpreted. Furthermore, it is necessary to replicate this model in clinical populations. Finally, future studies may examine the relationships between eating disorder symptoms, self-esteem, and psychological well-being in more detail by creating new models with subscales.

5. CONCLUSION

Findings from the present study indicate that eating disorders in emerging adulthood can impact self-esteem and psychological well-being. Individuals with eating disorders may experience a decline in their self-esteem, consequently leading to a decrease in their levels of psychological well-being. The treatment of eating disorders often necessitates a multidisciplinary approach involving the expertise of dietitians, psychological counselors, and psychiatrists. The results obtained may assist mental health professionals and dietitians in terms of the contributing or undermining factors of eating disorders.

Ethical statement

The current study was approved by Istanbul Medipol University Social Sciences Scientific Research Ethics Committee (Ethics Approval Code:38).

CRedit authorship contribution statement

Gökçe Nur Soyuk: Conceptualization, Investigation, Methodology, Writing – original draft.

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Sena Güme: Conceptualization, Formal analysis, Supervision, Writing – review & editing.

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