

Investigating the mediating role of early maladaptive schemas in the relationship between anxious attachment and emotion regulation difficulties in young adults^{1,2}

Rabia Çoban³, Hatice Deveci Şirin⁴

³ Ministry of National Education, Ahmet Haşhaş Imam Hatip Secondary School, Konya, Türkiye; ⁴ Selçuk University, Faculty of Education, Department of Educational Sciences, Türkiye.

ABSTRACT

This study aims to examine the mediating role of early maladaptive schemas in the relationship between anxious attachment orientation and difficulties in emotion regulation. The sample of the study consists of 501 university students selected through random sampling. Data were collected face-to-face using the "The Experiences in Close Relationships-Relationship Structures Mother Form", "Difficulties in Emotion Regulation Scale-Short Form", "Young Schema Scale-Short Form 3", and "Personal Information Form". In the study, mean, standard deviation, kurtosis, skewness, and internal consistency coefficients were calculated within the scope of descriptive analyses. The causal relationships between the study variables were tested using two-step structural equation modeling. In addition, the mediating role between variables was examined through bootstrapping analysis. According to the findings of the study, the structural model in which early maladaptive schemas partially mediated showed a good fit ($\chi^2/df = 3.186$, $p < .001$; CFI = .95; NFI = .93; TLI = .94; SRMR = .047; RMSEA = .066; AIC = 296.579; ECVI = 0.59). The findings showed that anxious attachment significantly predicted difficulties in emotion regulation and maladaptive schemas, while maladaptive schemas significantly predicted difficulties in emotion regulation. Early maladaptive schemas were found to have a partial mediating role in the relationship between anxious attachment and difficulties in emotion regulation. The results of the study indicated that as anxious attachment orientation increased, early maladaptive schema scores also increased, and that individuals experienced difficulties in emotion regulation as a result of these maladaptive schemas.

KEYWORDS

Anxious attachment, insecure attachment, early maladaptive schemas, difficulties in emotion regulation, mediating effect.

Genç yetişkinlerde kaygılı bağlanma ile duygu düzenleme güçlüğü arasındaki ilişkide erken dönem uyum bozucu şemaların aracı rolünün incelenmesi

ÖZET

Bu araştırmanın amacı kaygılı bağlanma yönelimi ve duygu düzenleme güçlüğü arasındaki ilişkide erken dönem uyum bozucu şemaların aracı rolünü incelemektir. Araştırmanın örneklemini seçkisiz örnekleme yöntemi ile belirlenen 501 üniversite öğrencisi oluşturmaktadır. Araştırma verileri "Yakın İlişkilerde Yaşantılar Envanteri- İlişki

¹ This study is derived from the master's thesis titled "An Investigation of the Relationship Between Attachment Dimensions, Emotion Regulation, Early Maladaptive Schemas, and Autobiographical Memory Characteristics in Young Adults", completed in the Department of Family Counselling and Education, Institute of Social Sciences, Selçuk University.

² Ethical approval for this study was obtained from the Ethics Committee of the Faculty of Letters at Selçuk University with the decision dated 24.10.2024 and numbered 2024/176.

Yapıları Anne formu", "Duygu Düzenleme Güçlüğü Ölçeği-Kısa Form", "Young Şema Ölçeği-Kısa Form 3", "kişisel bilgi formu" aracılığı ile yüzyüze toplanmıştır. Araştırmada betimsel analizler kapsamında ortalama, standart sapma, basıklık, çarpıklık ve iç tutarlık katsayıları hesaplanmıştır. Araştırma değişkenleri arasındaki nedensel ilişkiler iki adımlı Yapısal eşitlik modellemesi ile test edilmiştir. Ayrıca değişkenler arasındaki aracılık ilişkisi bootstrapping işlemi ile incelenmiştir. Araştırma bulgularına göre; erken dönem uyum bozucu şemaların kısmi aracı olduğu yapısal model iyi uyum göstermiştir ($\chi^2 / df = 3.186$, $p < .001$; CFI = .95; NFI = .93; TLI = .94; SRMR = .047; RMSEA = .066; AIC = 296.579; ECVI = 0.59). Araştırmada elde edilen bulgulara göre kaygılı bağlanma, duygu düzenleme güçlüğü ve uyum bozucu şemaları, uyum bozucu şemalar ise duygu düzenleme güçlüğü anlamlı düzeyde yordamaktadır. Kaygılı bağlanma ve duygu düzenleme güçlüğü arasındaki ilişkide erken dönem uyum bozucu şemaların kısmi aracılık rolü olduğu tespit edilmiştir. Araştırmanın sonuçlarına göre kaygılı bağlanma yönelimi arttıkça erken dönem uyum bozucu şema puanları artmakta, uyum bozucu şemaların etkisiyle bireyler duygu düzenleme güçlüğü yaşamaktadır.

ANAHTAR KELİMELER

Kaygılı bağlanma, güvensiz bağlanma, erken dönem uyum bozucu şemalar, duygu düzenleme güçlüğü, aracılık etkisi.

Introduction

Emotions are an integral part of being human. Emotions, in the broadest sense, are cognitive, psychological, and physiological responses that emerge when individuals relate stimuli encountered in the flow of life to their current goals. Emotions and emotion regulation, closely related to an individual's well-being, play a significant role in the development of psychopathology (Aldao et al., 2010). This impact of emotions and emotion regulation on mental health demonstrates that healthy emotions can occur alongside unhealthy emotions.

When assessing whether an emotion is healthy or unhealthy, factors such as the intensity, frequency, duration of the emotion, and whether it poses a threat or negatively impacts well-being within a given context are considered (Gross & Jazaieri, 2014). In this regard, two variables, the type of emotion and how the emotion is regulated, can be said to determine healthy and unhealthy affect. Individuals routinely use emotion regulation to maintain emotional balance after experiencing an emotion, whether positive or negative. This prevents unhealthy emotions from dominating behavior. Otherwise, the emotion significantly influences an individual's behavior. Unhealthy affect occurs when emotion regulation fails to effectively prevent the formation of maladaptive emotions and worsens the situation by shifting affect in a negative direction (Gross et al., 2019). For example, a moderate level of anxiety may encourage precautionary behavior and prompt action, thereby allowing individuals to focus, stay motivated, and use their resources effectively while preparing for a challenging task. On the other hand, unregulated and uncontrolled anxiety may lead to excessive focus on potential threats, failure, and the negative emotions that may result from failure, ultimately causing self-sabotage. Therefore, it is necessary to focus not only on the emotions being experienced but also on how emotions are regulated. Emotion regulation is a conscious or unconscious process through which individuals use regulatory strategies to modify the intensity and nature of emotional experiences in order to respond appropriately to environmental demands (Aldao et al., 2010). The lack of adaptability of the strategies employed in this process contributes to difficulties in emotion regulation.

Individuals vary in both the emotions they experience and how they regulate emotions (Gross, 1999). One source of these differences is internal working models, which are constructed from the earliest years of life. According to attachment theory, internal working models are deeply rooted structures that contain an individual's beliefs and expectations about close relationships, automatically influencing feelings, thoughts, and behaviors, and forming the basis of attachment orientation (Hudson & Fraley, 2017). This structure is shaped from an early age through experiences with the caregiver's sensitivity and availability to the child's needs and, over time, develops into general beliefs and expectations about the self and others (Bowlby, 2014, 1982; Collins, 1996). Expectations regarding the availability and responsiveness of the

attachment figure form beliefs about the model of others, while expectations regarding one's own worthiness of attention and care form beliefs about the self-model (Cassidy, 2000), thereby determining an individual's attachment orientation.

According to attachment theory, attachment orientation encompasses a variety of emotional and behavioral strategies that can alter, inhibit, or suppress the generation, activation, and expression of emotions. These strategies guide emotion regulation, shaping an individual's appraisals, emotions, and behavioral tendencies (Shaver & Mikulincer, 2007).). In anxious attachment, one of the basic insecure attachment orientations, internal working models of others and the self are negatively constructed (Bartholomew & Horowitz, 1991), and anxiously attached individuals use hyperactivation strategies in emotion regulation. (Shaver & Mikulincer, 2005). These individuals worry that others do not love them sufficiently and they become easily frustrated or angry when their attachment needs are not met (Fraley & Shaver, 2021). Individuals with attachment anxiety are driven by an unfulfilled desire for increased attention and security from their attachment figures and tend to chronically activate the attachment system until they achieve a satisfactory sense of security. The individuals are over-alert to exaggerating threats and possible difficulties in reaching the attachment figure (Mikulincer & Shaver, 2003). As a result, they focus on attracting the attachment figure's attention by overemphasizing emotions such as weakness, neediness, helplessness, and vulnerability. Furthermore, they become trapped in a cycle of self-perpetuating distress by holding onto pessimistic emotions, attributing uncontrollable variables to their own personal inadequacies, and over-focusing on the physiological reactions generated by these emotions. They make choices that lead to failures in stress management and problem-solving, thus reinforcing their own frustration (Shaver & Mikulincer, 2002, 2007). On the other hand, problem-solving and stress management skills may not be preferred because they may cause the attachment figure to lose interest, as they eliminate the need for and weakness of the attachment figure (Shaver & Mikulincer, 2007). This is an interaction sequence that should not be overlooked.

An individual's appraisal of an event as threatening first activates the attachment-related nodes in the relational memory network and then the attachment system itself (Mikulincer & Shaver, 2003). The perception of uncertainty regarding the availability of the attachment figure leads individuals with anxious attachment to employ over-activating emotion regulation strategies. As can be understood from the aforementioned theoretical information, the process by which the attachment system is activated is closely linked to the relational memory network. This relationship suggests that attachment orientation has an effect on other mental variables in addition to emotion regulation, and the existing literature shows that attachment orientation also structures other variables that affect an individual's mental health (Atkinson et al., 2000; Widom et al., 2018). An important emotional and cognitive variable structured by the influence of attachment orientation is maladaptive schemas (Bosmans et al., 2010; Kaya & Aydin, 2021). Early maladaptive schemas, as defined in schema therapy conceptualizations by Young et al. (2003), are highly dysfunctional and lifelong emotional and cognitive patterns that emerge during childhood and adolescence as a result of toxic childhood experiences, involving memories, emotions, cognitions, and bodily sensations. A key characteristic of maladaptive schemas is that an individual's dysfunctional behaviors are not part of the schemas but rather a response to them. In this sense, early maladaptive schemas are considered "dysfunctional internal working models" by Young et al. (2003) as they encompass the individual's characteristic responses to attachment figures and their coping strategies.

When a maladaptive schema is activated, the painful emotions associated with it escalate, and coping strategies (such as surrender, avoidance, and overcompensation) are developed to cope with these intense emotions, reducing negative emotions but disrupting adaptive interpersonal and self-regulatory behavior (Fassbinder et al., 2016). These maladaptive coping strategies are associated with difficulties in emotion regulation and form the focus of schema therapy, which conceptualizes interventions related to maladaptive schemas (Dadomo et al., 2016). It is

noteworthy that maladaptive schemas and the internal working models that determine attachment orientation are quite closely related structures that explain emotion regulation.

It can be argued that jointly exploring the causal relationships between insecure attachment orientation, maladaptive schemas, and emotion regulation will yield important findings related to emotion regulation and contribute significantly to both theory and psychological interventions for individuals experiencing difficulties with emotion regulation. Therefore, the aim of this study is to investigate the mediating role of early maladaptive schemas in the relationship between anxious attachment and difficulties in emotion regulation. Within this scope, the following research hypotheses were tested:

- H1. Anxious attachment orientation significantly predicts difficulties in emotion regulation.
- H2. Anxious attachment orientation significantly predicts early maladaptive schemas.
- H3. Early maladaptive schemas significantly predict difficulties in emotion regulation.
- H4. Anxious attachment orientation significantly predicts difficulties in emotion regulation through the mediating role of maladaptive schemas.

Method

Research design

This study is a predictive research design within the framework of quantitative research methodology, aiming to examine the relationship between anxious attachment, difficulties in emotion regulation, and early maladaptive schemas. Correlation analysis was performed to observe the co-variation of variables, and Structural Equation Modeling (SEM) was employed to examine their causal relationships. The independent variable of the study was anxious attachment, and the dependent variable was difficulty with emotion regulation.

Sample

The sample of the study consisted of 501 university students selected using simple random sampling method. Of the individuals included in the sample, 73.5% were female ($n_f=368$), 26.5% were male ($n_m=133$), 83.6% were aged 18-22 ($n=419$), 15% were aged 23-27 ($n=75$), and 1.4% were aged 28 and over ($n=7$). University students with an associate degree ($n=5$) constituted 1% of the sample, undergraduate students ($n=493$) constituted 98.4%, and graduate students ($n=3$) constituted 0.6%.

Data collection tools

Personal information form: The personal information form, developed by the researchers, included demographic information such as age and gender. The form consisted of closed-ended questions participants were asked to respond.

The experiences in close relationships-relationship structures questionnaire (ECR-RS) was developed by Fraley et al. (2011) and adapted for Turkish culture by Deveci Şirin and Şen Doğan (2021). The ECR-RS is a 9-item, 7-point Likert-type self-report scale measuring two dimensions of attachment: attachment-related anxiety and attachment-related avoidance. It aims to assess insecure attachment characteristics in individuals across different relationship structures, including mother, father, romantic partner, close friend, and general. Each form is scored independently. High scores on the scale indicate insecure attachment characteristics. The mother form of the ECR-RS was used in this study. The Cronbach's alpha values were .88 for the Avoidance dimension and .92 for the Anxiety dimension.

The difficulties in emotion regulation scale-short form (DERS-16), developed by Bjureberg et al. (2016) and adapted to Turkish by Yiğit & Güzey Yiğit (2017), was used to assess difficulties in emotion regulation. The scale consists of 16 items and five subscales: nonacceptance, goals,

impulse, strategies, and clarity. Questions are scored on a 5-point Likert-type scale from 0 to 4. High scores on the scale indicate high levels of difficulties in emotion regulation. The internal consistency coefficient for the entire scale was .92, and for its subscales ranged from .78 to .87.

The young schema scale-short form 3, developed by Young et al. (2003) and adapted into Turkish by Soygüt et al. (2009), consists of 90 items and 14 schemas in 5 schema domains. The five schema domains are: (I) disconnection (emotional deprivation, social isolation/mistrust, emotional suppression, defectiveness); (II) impaired autonomy (enmeshment/dependency, abandonment, failure, pessimism, vulnerability to threats); (III) impaired limits (entitlement/inadequate self-control); (IV) other-directedness (self-sacrifice, subjugation), and (V) high standards (high standards, approval-seeking). Questions in the scale were scored from 1 to 6 on a 6-point Likert-type scale. While the internal consistency coefficient for the entire scale was .95, Cronbach's alpha internal consistency coefficients for schema dimensions ranged from .63 to .80, and for schema domains, from .53 to .81. The four schema domains identified as impaired autonomy, disconnection, impaired limits, and high standards, obtained through second-order factor analysis by Karaosmanoğlu et al. (2024) of the scale adapted by Soygüt et al. (2009), were used in the study.

Data collection and analysis

Ethical approval was obtained from the Selçuk University Faculty of Letters Ethics Committee, pursuant to decision dated 24.10.2024 and numbered 2024/176. Necessary permissions were obtained for the data collection tools used in the study, and they were used in accordance with ethical principles.

Participants were informed about the study, the voluntary basis of participation, and their right to withdraw from the study at any stage. They read and signed the consent form. Data were collected face-to-face during the 2024-2025 academic year using scale forms.

IBM SPSS Statistics 21 and AMOS Graphics data analysis software were used for statistical analyses. As part of the descriptive analyses, total scores, means, standard deviations, kurtosis, and skewness values were calculated. Following descriptive statistics and correlation analyses, structural equation modeling (SEM) analyses were conducted to examine the mediating role of early maladaptive schemas in the relationship between anxious attachment and emotion regulation. In the study, the item parceling method, which is recommended to improve measurement reliability and normality, was employed (Little et al., 2002, Nasser & Wisenbaker, 2003). Theoretical constructs related to the variables were taken into account when constructing the parcels. For early maladaptive schemas, four parcels were created from four schema domains, namely impaired autonomy, disconnection, impaired limits, and high standards (Karaosmanoğlu et al., 2024), and for difficulties in emotion regulation, five parcels were created based on the five sub-dimensions: clarity, goals, impulse, strategies, and non-acceptance (Yiğit & Güzey Yiğit, 2017).

SEM was conducted using a two-step process: measurement model testing and structural model testing (Anderson & Gerbing, 1988). Chi-square (χ^2), Comparative Fit Index (CFI), Normed Fit Index (NFI), Tucker-Lewis Index (TLI), Standardized Root Mean Square Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA) fit indices were used to assess model fit. The chi-square difference test ($\Delta\chi^2$), Akaike Information Criterion (AIC; Akaike, 1987), and expected cross-validation index (ECVI; Browne & Cudeck, 1992) calculations were examined to determine between full and partial mediation models. Models with lower values were considered to provide better model fit. When assessing the model fit, cutoff points of CFI, NFI, and TLI $>.90$, and SRMR and RMSEA $<.08$ were adopted as acceptable criteria (Hu & Bentler, 1999; MacCallum et al., 1996; Tabachnick & Fidell, 2001). In addition to these calculations, bootstrapping was used as recommended by Preacher and Hayes (2008) to obtain additional evidence regarding the significance of the role of the mediating variable between the dependent and independent variables. 95% confidence intervals (CIs) were generated using the bootstrap value obtained by

increasing the sample size to 10,000. The absence of zero between the confidence intervals of the bootstrap values was taken as evidence indicating that the mediation was statistically significant.

Findings

To examine the mediating role of early maladaptive schemas in the relationship between anxious attachment and difficulties in emotion regulation, the research data were analyzed using correlation analysis, Structural Equation Modeling (SEM), and bootstrapping. The results obtained from these analyses are presented below.

Correlation and descriptive statistics

In the study, pairwise relationships between the variables were tested using Pearson Correlation analysis. Kurtosis, skewness, arithmetic mean, standard deviation, and internal consistency coefficient values for each variable are presented in Table 1.

Table 1 Correlations between variables and descriptive statistics

Variables	1	2	3
1. Anxiety	-		
2. Emotion regulation	.275**	-	
3. Maladaptive schemas	.313**	.589**	-
Mean	6.16	44.08	244.74
Standard deviation	4.55	14.60	65.66
Skewness	1.56	.41	.29
Kurtosis	1.64	-.59	-.34
Cronbach's α	.80	.93	.96

Note. ** $p < .001$

When Table 1 was examined, it was observed that the skewness values of the variables ranged between 1.56 and .29, while the kurtosis values ranged between 1.64 and $-.34$. These values meet the normality criteria, which are ± 2 for skewness and ± 7 for kurtosis (Finney & DiStefano, 2006). When the relationships in Table 1 were examined, it was seen that anxiety, one of the insecure attachment dimensions, had a positive and significant relationship with emotion regulation ($r(501) = .28, p < .001$) and maladaptive schemas ($r(501) = .31, p < .001$). A similar positive and significant relationship was observed between difficulties in emotion regulation and maladaptive schemas ($r(501) = .58, p < .001$).

Measurement model

The measurement model consisted of three latent variables: anxious attachment, early maladaptive schemas, and difficulties in emotion regulation. A total of 12 observed variables were constructed: three for anxious attachment, four for early maladaptive schemas, and five for difficulties in emotion regulation. The latent variables, early maladaptive schemas and difficulties in emotion regulation, were included in the model by item parceling. Accordingly, in accordance with the theoretical framework, four parcels were created for early maladaptive schemas: impaired autonomy, disconnection, impaired limits, and high standards. Five parcels were created for difficulties in emotion regulation: clarity, goals, impulse, strategies, and non-acceptance. The results indicated that the measurement model provided a good fit, $\chi^2/df = 4.044, p < .001$; CFI = .96; NFI = .94; TLI = .94; SRMR = .048; RMSEA = .078. In addition, factor loadings ranged from .59 to .93. According to these fit indices, the observed variables significantly represent the latent variables.

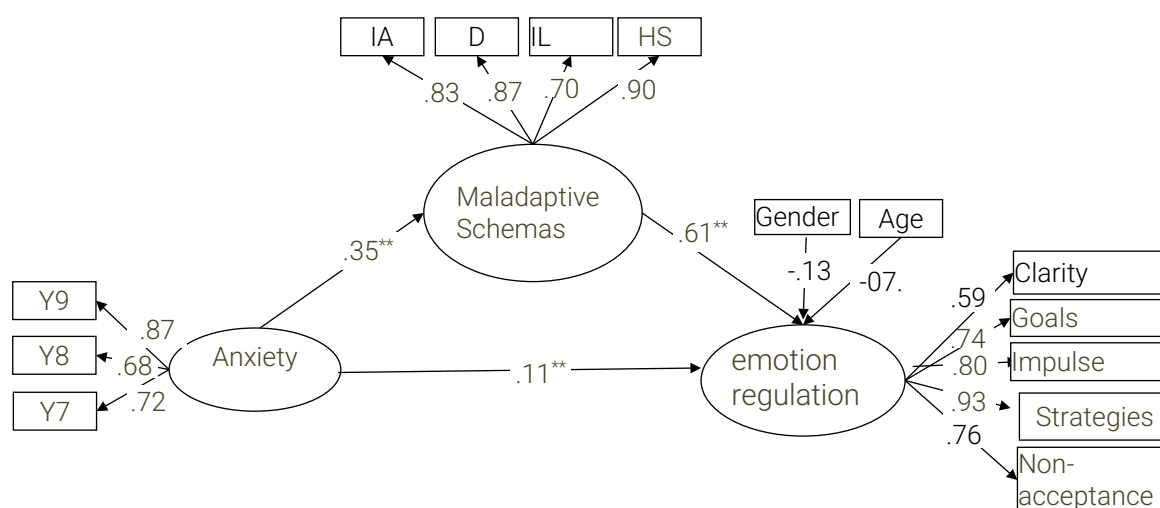
Structural model

In structural model tests, gender and age were included in the model as control variables. First, a model in which early maladaptive schemas fully mediated the relationship between young adults' anxious attachment and difficulties in emotion regulation was tested. When examining

the model fit indices of the model in which maladaptive schemas fully mediated, all values were found to be at acceptable levels; $\chi^2 / df = 3.230$, $p < .001$; CFI = .95; NFI = .93; TLI = .94; SRMR = .051; RMSEA = .067; AIC = 301.016; ECVI = 0.6.

To determine the best model, a partial mediation model in which maladaptive schemas partially mediated was also examined. The analysis findings testing the partial mediation model indicated that model fit indices of the model in which maladaptive schemas were partial mediators were at an acceptable level ($\chi^2 / df = 3.186$, $p < .001$; CFI = .95; NFI = .93; TLI = .94; SRMR = .047; RMSEA = .066; AIC = 296.579; ECVI = 0.59). The analysis findings revealed that all path coefficients of both the full mediation and partial mediation models were significant.

To determine which model to use, the $\Delta\chi^2$ value was calculated using the chi-square difference test. The chi-square difference test results indicate that the added direct path between anxious attachment and difficulties in emotion regulation significantly contributed to the model ($\Delta\chi^2 = 6.44$, $SD = 1$, $p < 0.05$). When the $\Delta\chi^2$, AIC, and ECVI findings were evaluated, the model in which early maladaptive schemas had a partial mediating role between anxious attachment and difficulties in emotion regulation was preferred. The path coefficients for this model are presented in Figure 1.



Note; ** $p < .01$; IA: Impaired Autonomy, D: Disconnection, IL: Impaired Limits, HS: High Standards

Figure 1 Standardized factor loadings for the structural model

As shown in Figure 1, when gender and age are controlled, it is seen that as anxiety scores increase, difficulties in emotion regulation scores increase ($\beta = 0.11$, $p < 0.01$). On the other hand, as anxiety scores increase, maladaptive schema scores also increase ($\beta = 0.35$, $p < 0.01$), leading to an increase in difficulties in emotion regulation scores through the partial mediating effect of maladaptive schemas ($\beta = 0.61$, $p < 0.01$). In other words, as anxious attachment scores increase, maladaptive schema scores, which are partial mediators, increase, which results in an increase in difficulties in emotion regulation.

Bootstrapping process

To deepen the research findings and provide additional evidence for partial mediation, the dependent, independent, and mediating variables were subjected to bootstrapping. The bootstrapping coefficients and confidence intervals for the direct and indirect paths resulting from the bootstrapping process are presented in Table 2.

Table 2 Bootstrapping process for the partial model

Model Paths	Coefficient	95 % CI Lower	Upper
<i>Direct Paths</i>			
Anxious Attachment → Difficulties in Emotion Regulation	.11	.008	.210
Anxious Attachment → Maladaptive Schemas	.35	.242	.457
Maladaptive Schemas → Difficulties in Emotion Regulation	.68	.526	.684
<i>Indirect Path</i>			
Anxious Attachment → Maladaptive Schemas → Difficulties in Emotion Regulation	.32	.148	.319

According to the findings of the bootstrapping process presented in Table 2, both the direct and indirect path coefficients were found to be statistically significant (bootstrap coefficient = .32, 95% CI = .15, .32). Taken together, these results suggest that early maladaptive schemas play a partial mediating role in the relationship between anxious attachment and difficulties in emotion regulation.

Discussion

The findings of the study indicate that maladaptive schemas mediate the relationship between anxious attachment and difficulties in emotion regulation.

The first hypothesis (H1) of the current study was determined as "*anxious attachment orientation significantly predicts difficulties in emotion regulation*." Based on the findings obtained through the analyses, H1 was accepted. The relationship between attachment orientation and emotion regulation has been supported by findings in previous studies (Cooper et al., 1998; Shaver & Mikulincer, 2007). These findings suggest that just as the attachment relationship with parents during infancy explains difficulties in emotion regulation in adulthood (Girme et al., 2021), these two variables also explain the behaviors an individual exhibits in daily life (Tammilehto et al., 2022). It has been reported that imbalances between anxious and avoidant attachment orientations, which are insecure attachment orientations, also lead to imbalances in emotion regulation (Messina et al., 2024), and that not only the attachment figure but also the attachment object influences emotion regulation (Ko et al., 2024). Past findings suggest that an individual's attachment structure is one of the most important factors determining how he/she regulates his/her emotions.

Individuals with high levels of attachment anxiety are more prone to engage in mental rumination, such as pessimistic thinking that increases stress, and anxious or gloomy thoughts about threatening events, and pay more attention to stress-inducing stimuli. In part because signs of weakness and neediness sometimes elicit attention and concern from attachment figures, they tend to exaggerate the severity of threats and overemphasize feelings of helplessness and vulnerability (Cassidy & Berlin, 1994). In other words, anxious attachment influences how individuals regulate their emotions (Mikulincer & Shaver, 2019). The findings of the present study regarding the pathway between anxious attachment and difficulties in emotion regulation are consistent with both the theoretical framework and findings in the relevant literature.

The second hypothesis (H2) of the present study was determined as follows: *anxious attachment orientation significantly predicts early maladaptive schemas*. Based on the findings obtained through the analyses, hypothesis H2 was accepted. The relationship between attachment and maladaptive schemas has been tested in numerous studies, and the strong relationships between the two variables have been repeatedly supported by the findings (Karantzas et al., 2023). The relationship between attachment and maladaptive schemas has been demonstrated in various samples such as university students (McLean et al., 2014;

Stanojevic & Nedeljkovic, 2012), young adults (Ivana et al., 2008), individuals diagnosed with depression (Özaslan et al., 2025), and clinical populations (Mason et al., 2005).

Stressful situations cause individuals with anxious attachment to their attachment figures to focus on that figure and sometimes turn to them in an exaggerated manner. When the anticipated needs for attention, support, security, and protection from the attachment figure are not adequately met, an insecure attachment orientation develops (Cassidy & Berlin, 1994). The relationship sequences that give rise to insecure attachment between the individual and the caregiver lead to the construction of maladaptive schemas. Insecure attachment plays a central role in shaping these schemas (Langhinrichsen-Rohling et al., 2017; Simard et al., 2011). The findings of the present study regarding the pathway between anxious attachment and maladaptive schemas are consistent with both the theoretical framework and findings in the relevant literature.

The third hypothesis (H3) of the present study was determined as "*early maladaptive schemas significantly predict difficulties in emotion regulation*." Based on the findings obtained through the analyses, H3 was accepted. The relationship between early maladaptive schemas and difficulties in emotion regulation has been supported by findings in previous studies (Pilkington et al., 2024). These findings have reported that maladaptive schemas and emotion regulation are related and affect variables such as the regulation of psychological needs (Faustino & Vasco, 2020), grief reactions (Kaya-Demir & Çırakoğlu, 2022), addiction (Mc Donnell et al., 2018), suicidal ideation (Sajadi et al., 2015), aggression (Şenkal Ertürk et al., 2020), relationship satisfaction (Muezzin et al., 2024), psychological well-being (Yakın et al., 2019), borderline personality (Tetir & Sarı, 2023), and disordered eating attitudes (Yurtsever & Sütcü, 2017). Early maladaptive schemas are the fundamental concept of schema therapy. According to theoretical explanations of schema therapy, emotions take precedence over cognitions when early maladaptive schemas are activated. Therefore, individuals tend to exhibit maladaptive behaviors in order to cope with the negative emotions embedded within these schemas (Young et al., 2003). The findings in the current study regarding the pathway between maladaptive schemas and difficulties in emotion regulation are consistent with both the theoretical framework and the findings of previous research.

The fourth hypothesis (H4) of the present study was determined as follows: Anxious attachment orientation significantly predicts difficulties in emotion regulation through the mediating role of early maladaptive schemas. Based on the findings obtained through the analyses, hypothesis H4 was accepted. Comprehensive meta-analysis studies have reported that attachment is an important variable affecting maladaptive schemas and emotion regulation due to unmet security needs (Pilkington et al., 2024). In past research findings, the role of early maladaptive schemas in the relationship between some variables associated with difficulties in emotion regulation and attachment characteristics was examined. These studies have reported that maladaptive schemas play a mediating role in the relationship between attachment characteristics and variables such as impulsivity (Estévez et al., 2021), self-harming behavior (Shahmoradi et al., 2021), psychopathological symptoms (Bosmans et al., 2010), depression (Roelofs et al., 2011), loneliness (Jalilian et al., 2023), suicidal tendencies (Langhinrichsen-Rohling et al., 2017), and aggression (Şenkal Ertürk et al., 2020).

The concept of early maladaptive schemas is the central focus and foundational element of schema therapy. The connection between emotion regulation and schemas is more comprehensively explained by the concept of schema modes, which was later integrated into schema therapy. According to ST, difficulties in emotion regulation is a consequence of childhood experiences such as insecure attachment, neglect, and abuse that structure maladaptive schemas. Early maladaptive schemas typically form during childhood or adolescence as a result of traumatic experiences and interactions with caregivers, and are maintained by individuals exhibiting behaviors that confirm their schemas (Butler et al., 2002). These behaviors are essentially an individual's coping strategy for maladaptive schemas.

However, coping strategies make the maladaptive schema more persistent. Another concept related to these strategies is schema modes. Schema modes are defined as schema activities currently active within the individual (Young et al., 2003). When early maladaptive schemas are triggered by exposure to a stressful stimulus, coping strategies and their associated modes are activated. As a result of this interaction, modes related to maladaptive schemas and coping strategies shape emotion and behavior. Unprocessed or dysfunctionally processed emotions cause difficulties in emotion regulation, leading to dysfunctional behaviors (Fassbinder et al., 2016). Similar to theoretical explanations, the findings of the current study suggest that anxious attachment leads to difficulties in emotion regulation through the mediating role of early maladaptive schemas. This predictive and mediating relationship between anxious attachment, maladaptive schemas, and emotion regulation is consistent with both the theoretical framework and the findings of previous research in this area.

Conclusions, limitations, and recommendations

Based on the findings of this study, it can be concluded that anxious attachment explains difficulties in emotion regulation through the mediating role of early maladaptive schemas. In other words, as individuals' anxious attachment scores increase, their maladaptive schema scores also increase, and this increase, in turn, leads to difficulties regulating their emotions.

While this study offers significant contributions to the literature by presenting findings that suggest that anxious attachment orientation explains difficulties in emotion regulation through early maladaptive schemas, it also has several limitations. The first limitation is that attachment orientation to the mother was included in the measurement of attachment orientation. Measuring attachment orientation to the mother was chosen because mother is generally represented as the most important attachment figure in childhood and adolescence, the mother-child attachment relationship lasts longer than other types of relationships, and it aligns with the literature on the development of maladaptive schemas. However, the fact that attachment characteristics may vary depending on the type of relationship (Deveci Şirin & Şen Doğan, 2021; Fraley et al., 2011) should be considered when generalizing the findings of the study. It is recommended that future studies also consider attachment orientation to the father, a component of the parenting domain, as a predictive variable. Another limitation of the study is that the mediating effect was examined by taking the total scores of the maladaptive schema measurement. In future studies, it is recommended that individual schema domains (Karaosmanoğlu et al., 2024) be separately investigated in terms of their mediating roles in the relationship between attachment and difficulties in emotion regulation.

Based on the findings of this study, several recommendations can be made for practitioners working with individuals experiencing difficulties in emotion regulation, as well as for researchers in the relevant field. In the literature, it has been reported that not only the development of functional skills for regulating emotions but also the restructuring and transformation of maladaptive schemas into more adaptive ones can enhance the effectiveness of interventions (Dadomo et al., 2016; Fassbinder et al., 2016). Therefore, it is believed that the combined use of cognitive behavioral interventions and schema therapy in psychological interventions for treating emotion regulation difficulties may positively impact clients' emotion regulation skills.

As revealed by the findings of this study, emotion regulation difficulties in individuals can be explained by their early experiences with attachment figures during childhood and the resulting development of early maladaptive schemas. Therefore, the use of attachment-focused therapy, in addition to schema therapy, is recommended in the treatment of emotion regulation difficulties, due to its emphasis on fostering secure attachment, resolving negative interpersonal and intrapersonal interaction patterns, and developing effective emotion regulation strategies (Brubacher, 2017). Furthermore, psychoeducation programs for parents on topics such as safe

parenting, secure attachment, and healthy family communication are recommended as part of preventive interventions in schools and educational settings where the target audience can be reached.

Based on the findings of this study, it is recommended that future studies by researchers in the field examine which maladaptive schemas are structured by the anxious attachment dimension and how attachment, maladaptive schemas, and emotion regulation difficulties strategies are related to behaviors such as submission, aggression, emotional isolation, social isolation, and personality disorders. In addition, experimental studies demonstrating the effectiveness of intervention methods recommended by researchers, such as CBT, schema therapy, and attachment-focused therapies, on emotional regulation difficulties will contribute significantly to the relevant literature.

Author contribution rates

1st Author: %60, 2nd Author: %40, contributed to the study.

Conflict of interest declaration

Our article titled "Investigating the mediating role of early maladaptive schemas in the relationship between anxious attachment and emotion regulation difficulties in young adults" has no financial conflict of interest with any institution, organization or person. There is also no conflict of interest between the authors.

References

- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, 30(2), 217-237. <https://doi.org/10.1016/j.cpr.2009.11.004>
- Akaike, H. (1987). Factor analysis and AIC. *Psychometrika*, 52(3), 317-332.
- Atkinson, L., Paglia, A., Coolbear, J., Niccols, A., Parker, K. C. H., & Guger, S. (2000). Attachment security: A meta-analysis of maternal mental health correlates. *Clinical Psychology Review*, 20(8), 1019-1040. [https://doi.org/10.1016/S0272-7358\(99\)00023-9](https://doi.org/10.1016/S0272-7358(99)00023-9)
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61(2), 226-244. <https://doi.org/10.1037/0022-3514.61.2.226>
- Bjureberg, J., Ljótsson, B., Tull, M. T., Hedman, E., Sahlin, H., Lundh, L. G., Bjärehed, J., DiLillo, D., i Messman-Moore, T., Gumpert, C.H. & Gratz, K. L. (2016). Development and validation of a brief version of the difficulties in emotion regulation scale: the DERS-16. *Journal of Psychopathology and Behavioral Assessment*, 38(2), 284-296. <https://doi.org/10.1007/s10862-015-9514-x>
- Bosmans, G., Braet, C., & Van Vlierberghe, L. (2010). Attachment and symptoms of psychopathology: Early maladaptive schemas as a cognitive link? *Clinical Psychology & Psychotherapy*, 17(5), 374-385. <https://doi.org/10.1002/cpp.667>
- Bowlby, J. (2014). *Bağlanma ve Kaybetme*: Ayrılma. Pinhan.
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21(2), 230-258. <https://doi.org/10.1177/0049124192021002005>
- Brubacher, L. (2017). Emotionally focused individual therapy: An attachment-based experiential/systemic perspective. *Person-Centered & Experiential Psychotherapies*, 16(1), 50-67. <https://doi.org/10.1080/14779757.2017.1297250>

- Butler, A. C., Brown, G. K., Beck, A. T., & Grisham, J. R. (2002). Assessment of dysfunctional beliefs in borderline personality disorder. *Behaviour Research and Therapy*, 40(10), 1231-1240. [https://doi.org/10.1016/S0005-7967\(02\)00031-1](https://doi.org/10.1016/S0005-7967(02)00031-1)
- Cassidy, J. (2000). Adult romantic attachments: A developmental perspective on individual differences. *Review of General Psychology*, 4(2), 111-131. <https://doi.org/10.1037/1089-2680.4.2.111>
- Cassidy, J., & Berlin, L. J. (1994). The insecure/ambivalent pattern of attachment: Theory and research. *Child Development*, 65(4), 971-991. <https://doi.org/10.1111/j.1467-8624.1994.tb00796.x>
- Collins, N. L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology*, 71(4), 810-832. <https://doi.org/http://dx.doi.org/10.1037/0022-3514.71.4.810>
- Cooper, M. L., Shaver, P. R., & Collins, N. L. (1998). Attachment styles, emotion regulation, and adjustment in adolescence. *Journal of Personality and Social Psychology*, 74(5), 1380-1397.
- Dadomo, H., Grecucci, A., Giardini, I., Ugolini, E., Carmelita, A., & Panzeri, M. (2016). Schema therapy for emotional dysregulation: Theoretical implication and clinical applications. *Frontiers in Psychology*, 7, 1987. <https://doi.org/10.3389/fpsyg.2016.01987>
- Deveci Şirin, H., & Şen Doğan, R. (2021). *Psychometric Properties of the Turkish Version of the Experiences in Close Relationships–Relationship Structures Questionnaire (ECR-RS)*. SageOpen. <https://doi.org/https://doi.org/10.1177/21582440211006056>
- Estévez, A., Chávez-Vera, M. D., Momeñe, J., Olave, L., & Iruarrizaga, I. (2021). Role of attachment and early maladaptive schemas in the impulsive behaviour of adolescents. *Revista Latinoamericana De Psicología*, 53, 143-153. <https://doi.org/10.14349/rlp.2021.v53.16>
- Faustino, B., & Vasco, A. B. (2020). Relationships between emotional processing difficulties and early maladaptive schemas on the regulation of psychological needs. *Clinical Psychology & Psychotherapy*, 27(6), 804-813. <https://doi.org/https://doi.org/10.1002/cpp.2464>
- Fassbinder, E., Schweiger, U., Martius, D., Brand-de Wilde, O., & Arntz, A. (2016). Emotion regulation in schema therapy and dialectical behavior therapy. *Frontiers in Psychology*, 7, 1373. <https://doi.org/10.3389/fpsyg.2016.01373>
- Finney S.J. & Distefano, C. (2006). *Non-normal and categorical data in structural equation modeling*. Hancock, G. ve Muelle, R.(Ed.) Structural Equation Modeling: A Second Course içinde (pp.269-313). Information Age Publishing.
- Fraley, R.C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships–Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, 23(3), 615-625. <https://doi.org/10.1037/a0022898>
- Fraley, R. C., & Shaver, P. R. (2021). *Attachment theory and its place in contemporary personality theory and research*. O. P. John & R. W. Robins (Ed), Handbook of personality: Theory and research içinde (4th ed., pp. 642–666). The Guilford Press.
- Girme, Y. U., Jones, R. E., Fleck, C., Simpson, J. A., & Overall, N. C. (2021). Infants' attachment insecurity predicts attachment-relevant emotion regulation strategies in adulthood. *Emotion*, 21(2), 260. <https://doi.org/10.1037/emo0000721>
- Gross, J. J. (1999). Emotion Regulation: Past, Present, Future. *Cognition and Emotion*, 13(5), 551-573. <https://doi.org/10.1080/026999399379186>
- Gross, J. J., & Jazaieri, H. (2014). Emotion, Emotion Regulation, and Psychopathology: An Affective Science Perspective. *Clinical Psychological Science*, 2(4), 387-401. <https://doi.org/10.1177/2167702614536164>
- Gross, J. J., Uusberg, H., & Uusberg, A. (2019). Mental illness and well-being: an affect regulation perspective. *World Psychiatry*, 18(2), 130-139. <https://doi.org/https://doi.org/10.1002/wps.20618>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- Hudson, N. W., & Fraley, R. C. (2017). Adult attachment and perceptions of closeness. *Personal Relationships*, 24(1), 17-26. <https://doi.org/https://doi.org/10.1111/pere.12166>

- Ivana, M., Marija, Z., & Jelica, P. (2008). Early maladaptive schemas: relations to attachment in early adulthood. *Primenjena Psihologija*, 1(1-2), 57-76. <https://doi.org/10.19090/pp.2008.1-2.57-76>
- Jalilian, K., Momeni, K., & Jebraeili, H. (2023). The mediating role of early maladaptive schemas in the relationship between attachment styles and loneliness. *Bmc Psychology*, 11(1), 136. <https://doi.org/10.1186/s40359-023-01172-9>
- Karantzas, G. C., Younan, R., & Pilkington, P. D. (2023). The associations between early maladaptive schemas and adult attachment styles: A meta-analysis. *Clinical Psychology: Science and Practice*, 30(1), 1-20. <https://doi.org/10.1037/cps0000108>
- Karaosmanoğlu, H. A., Köse, B., Aytaç, M., & Armağan Küçükseymen, Z. C. (2024). A new model for basic needs: comparison of the second order factorial structures of young schema questionnaire and its relationship with symptoms of psychopathology. *Current Psychology*, 43(29), 24565-24580. <https://doi.org/10.1007/s12144-024-06157-4>
- Kaya-Demir, D., & Çırakoğlu, O. C. (2022). The role of sense of coherence and emotion regulation difficulties in the relationship between early maladaptive schemas and grief. *Death Studies*, 46(6), 1372-1380. <https://doi.org/10.1080/07481187.2021.1936295>
- Kaya, Y., & Aydin, A. (2021). The Mediating Role of Early Maladaptive Schemas in the Relationship Between Attachment and Mental Health Symptoms of University Students. *Journal of Adult Development*, 28(1), 15-24. <https://doi.org/10.1007/s10804-020-09352-2>
- Ko, C.-H., Liang, Y.-T., Liao, Y.-C., & Chen, H.-F. (2024). Exploring the Relationship Between Transitional Object Attachment and Emotion Regulation in College Students. *Healthcare*, 13(1), 39. <https://doi.org/10.3390/healthcare13010039>
- Langhinrichsen-Rohling, J., Thompson, K., Selwyn, C., Finnegan, H., & Misra, T. (2017). Maladaptive schemas mediate poor parental attachment and suicidality in college students. *Death Studies*, 41(6), 337-344. <https://doi.org/10.1080/07481187.2017.1280714>
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To Parcel or Not to Parcel: Exploring the Question, Weighing the Merits. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(2), 151-173. https://doi.org/10.1207/S15328007SEM0902_1
- Mason, O., Platts, H., & Tyson, M. (2005). Early maladaptive schemas and adult attachment in a UK clinical population. *Psychology and Psychotherapy-Theory Research and Practice*, 78, 549-564. <https://doi.org/10.1348/147608305x41371>
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130-149. <https://doi.org/10.1037/1082-989X.1.2.130>
- Mc Donnell, E., David, H., Mathew, M., & and Ducray, K. N. (2018). Exploration of Associations Between Early Maladaptive Schemas, Impaired Emotional Regulation, Coping Strategies and Resilience in Opioid Dependent Poly-Drug Users. *Substance Use and Misuse*, 53(14), 2320-2329. <https://doi.org/10.1080/10826084.2018.1473438>
- McLean, H. R., Bailey, H. N., & Lumley, M. N. (2014). The secure base script: Associated with early maladaptive schemas related to attachment. *Psychology and Psychotherapy-Theory Research and Practice*, 87(4), 425-446. <https://doi.org/10.1111/papt.12025>
- Messina, I., Calvo, V., & Grecucci, A. (2024). Attachment orientations and emotion regulation: new insights from the study of interpersonal emotion regulation strategies. *Research in Psychotherapy: Psychopathology, Process, and Outcome*, 26(3), 703. <https://doi.org/10.4081/ripppo.2023.703>
- Mikulincer, M., & Shaver, P. R. (2019). Attachment orientations and emotion regulation. *Current Opinion in Psychology*, 25, 6-10. <https://doi.org/10.1016/j.copsyc.2018.02.006>
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. M. P. Zanna (Ed.), *Advances in experimental social psychology* içinde (Vol. 35, pp. 53-152). Elsevier Academic Press. [https://doi.org/10.1016/S0065-2601\(03\)01002-5](https://doi.org/10.1016/S0065-2601(03)01002-5)
- Muezzin, E. E., Çetin, N., & Yüksel, M. M. (2024). Beliren Yetişkinlerde Erken Dönem Uyumsuz Şemalar ile Çocukluk Çağı Travmalarının Romantik İlişki Doyumu Üzerindeki Etkisi: Duygu Düzenleme Güçlüğü'nün Aracı Rolü. *Anemon Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, 12(1), 171-187. <https://doi.org/10.18506/anemon.1309089>

- Nasser, F., & Wisenbaker, J. (2003). A Monte Carlo study investigating the impact of item parceling on measures of fit in confirmatory factor analysis. *Educational and Psychological Measurement*, 63(5), 729–757. <https://doi.org/10.1177/0013164403258228>
- Özaslan, E., Türkili, S., & Acar, S. (2025). Evaluation of Early Maladaptive Schemas and Adult Attachment Profiles in Patients Diagnosed with Major Depressive Disorder and Examination of Their Relationship with Disease Variables. *Journal of Clinical Medicine*, 14(1), 170. <https://doi.org/10.3390/jcm14010170>
- Pilkington, P. D., Karantzas, G. C., Faustino, B., & Pizarro-Campagna, E. (2024). Early maladaptive schemas, emotion regulation difficulties and alexithymia: A systematic review and meta-analysis. *Clinical Psychology & Psychotherapy*, 31(1), e2914. <https://doi.org/10.1002/cpp.2914>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891. <https://doi.org/10.3758/BRM.40.3.879>
- Roelofs, J., Lee, C., Ruijten, T., & Lobbestael, J. (2011). The Mediating Role of Early Maladaptive Schemas in the Relation between Quality of Attachment Relationships and Symptoms of Depression in Adolescents. *Behavioural and Cognitive Psychotherapy*, 39(4), 471-479. <https://doi.org/10.1017/s1352465811000117>
- Sajadi, S. F., Arshadi, N., Zargar, Y., Honarmand, M. M., & Hajjari, Z. (2015). Borderline personality features in students: The predicting role of schema, emotion regulation, dissociative experience and suicidal ideation. *International Journal of High Risk Behaviors & Addiction*, 4(2), e20021. <https://doi.org/10.5812/ijhrba.20021v2>
- Şenkal Ertürk, İ., Yasemin, K., & Gör, N. (2020). Childhood Emotional Maltreatment and Aggression: The Mediator Role of the Early Maladaptive Schema Domains and Difficulties in Emotion Regulation. *Journal of Aggression, Maltreatment & Trauma*, 29(1), 92-110. <https://doi.org/10.1080/10926771.2018.1541493>
- Shahmoradi, H., Masjedi-Arani, A., Bakhtiari, M., & Abasi, I. (2021). Predicting self-harming behaviors based on attachment styles and early maladaptive schemas among adolescents; mediating roles of trauma, emotion dysregulation, impulsivity and self-criticism. *Medical Science*, 25(115), 2181-2190. <https://doi.org/10.32598/jpcp.9.4.789.1>
- Shaver, P. R., & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment & Human Development*, 4(2), 133-161. <https://doi.org/10.1080/14616730210154171>
- Shaver, P. R., & Mikulincer, M. (2005). Attachment theory and research: Resurrection of the psychodynamic approach to personality. *Journal of Research in Personality*, 39(1), 22-45. <https://doi.org/10.1016/j.jrp.2004.09.002>
- Shaver, P. R., & Mikulincer, M. (2007). Adult attachment strategies and the regulation of emotion. J. J. Gross (Ed.), *Handbook of emotion regulation* içinde (pp. 446-465). Guilford Press.
- Simard, V., Moss, E., & Pascuzzo, K. (2011). Early maladaptive schemas and child and adult attachment: A 15-year longitudinal study. *Psychology and Psychotherapy: Theory, Research and Practice*, 84(4), 349–366. <https://doi.org/10.1111/j.2044-8341.2010.02009.x>
- Soygüt, G., Karaosmanoğlu, A., & Cakir, Z. (2009). Assessment of early maladaptive schemas: A psychometric study of the Turkish Young Schema Questionnaire-Short Form-3. *Turkish Journal of Psychiatry*, 20(1), 75-84.
- Stanojevic, T. S., & Nedeljkovic, J. (2012). Attachment patterns from the perspective of early maladaptive schemas. *Ljetopis Socijalnog Rada*, 19(1), 95-117.
- Tabachnick, B. G. & Fidell, L. S. (2001). *Using multivariate statistics*. Pearson Education.
- Tammilehto, J., Guy, B., Peter, K., Marjo, F., Kirsi, P., A., K. K., & and Lindblom, J. (2022). Dynamics of attachment and emotion regulation in daily life: uni- and bidirectional associations. *Cognition and Emotion*, 36(6), 1109-1131. <https://doi.org/10.1080/02699931.2022.2081534>
- Tetir, D., & Sarı, B. A. (2023). Ebeveynlik biçimleri ve sınırdaki kişilik arasındaki ilişkide şema alanları ve duygu düzenlemenin aracı rolü. *AYNA Klinik Psikoloji Dergisi*, 10(3), 517-541. <https://doi.org/10.31682/ayna.1288001>
- Widom, C. S., Czaja, S. J., Kozakowski, S. S., & Chauhan, P. (2018). Does adult attachment style mediate the relationship between childhood maltreatment and mental and physical health outcomes? *Child Abuse & Neglect*, 76, 533-545. <https://doi.org/10.1016/j.chiabu.2017.05.002>

- Yakin, D., Gençöz, T., Steenbergen, L., & Arntz, A. (2019). An integrative perspective on the interplay between early maladaptive schemas and mental health: The role of self-compassion and emotion regulation. *Journal of Clinical Psychology*, 75(6), 1098-1113. <https://doi.org/10.1002/jclp.22755>
- Yiğit, İ., & Güzey Yiğit, M. (2017). Psychometric properties of Turkish version of difficulties in emotion regulation scale-brief form (DERS-16). *Current Psychology*, 38, 1503-1511. <https://doi.org/10.1007/s12144-017-9712-7>
- Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). *Schema therapy: A practitioner's guide*. Guilford press.
- Yurtsever, S. S., & Sütçü, S. T. (2017). Algılanan ebeveynlik biçimleri ile bozulmuş yeme tutumu arasındaki ilişkide erken dönem uyumsuz şemaların ve duygu düzenleme güçlüğünün aracı rolü. *Türk Psikoloji Dergisi*, 32(80), 20-43.