Journal of Clinical Psychology Research · *Advance online publication (2026)*
Doi: 10.57127/kpd.26024438.1681669

ORIGINAL PAPER

The vulnerable attachment style as a predictor of depression and stress: The mediating role of emotion regulation and coping strategies

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Abstract
The study aimed to examine the role of emotion regulation and coping strategies on the relationship between vulnerable attachment, depression and stress. A total of 282 university students participated in the study through convenience sampling method. The data were collected via self-report using Vulnerable Attachment Style Questionnaire, Experiences in Close Relationships Inventory-II, Emotion Regulation Questionnaire, Ways of Coping Inventory, Perceived Stress Questionnaire, Beck Depression Inventory. The Vulnerable Attachment Style Questionnaire was adapted to Turkish culture for the first time within the scope of this study. Subsequently, the mediating role of emotion regulation and coping strategies in the relationship between vulnerable attachment, depression and stress was tested. According to the findings of the confirmatory factor analysis, four factor attachment patterns which were subcategory of proximity seeking (lack of autonomy, anxious-dependent) and insecurity (ambivalent and avoidant-dismissive) dimensions were confirmed. Based on the structural equation model analysis, emotion regulation and coping strategies mediated the relationship of vulnerable attachment style with depression and stress. Results indicated that both ambivalent and anxious-dependent attachment styles increased the symptoms of depression and stress. In addition, ineffective and effective coping strategies were shown to play a mediating role in the relationship of ambivalent attachment style with depression and stress. Specifically, individuals with ambivalent attachment style tended to experience depression and stress more since they used ineffective coping strategies more and effective coping strategies less. Furthermore, ambivalent attachment style indirectly influenced depression and stress through the reduction of reappraisal. Given these findings, it is believed that revealing the mechanism behind the relationship of vulnerable attachment style with depression and stress would significantly contribute to both the theoretical framework and the psychotherapeutic intervention process.

Keywords: vulnerable attachment style, emotion regulation, coping strategies, depression, stress

Depresyon ve stresin yordayıcısı olarak kırılgan bağlanma stili: Duygu düzenleme ve baş etme stratejilerinin aracı rolü

Öz
Bu çalışma, kırılgan bağlanma, depresyon ve stres arasındaki ilişkide duygu düzenleme ve baş etme stratejilerinin rolünü incelemeyi amaçlamaktadır. Araştırmaya uygunluk örnekleme yöntemi kullanılarak 282 üniversite öğrencisi katılmıştır. Veriler öz-bildirim yöntemiyle Kırılgan Bağlanma Stili Ölçeği, Yakın İlişkilerde Yaşantılar Envanteri-II, Duygu Düzenleme Ölçeği, Başa Çıkma Yolları Envanteri, Algılanan Stres Ölçeği, Beck Depresyon Envanteri aracılığıyla toplanmıştır. Bu çalışma kapsamında, Kırılgan Bağlanma Stili Ölçeği ilk kez Türk kültürüne uyarlanmıştır. Ardından, kırılgan bağlanma, depresyon ve stres arasındaki ilişkide duygu düzenleme ve baş etme stratejilerinin aracı rolü test edilmiştir. Doğrulayıcı faktör analizi bulgularına göre, yakınlık arayışı (özerklik eksikliği, kaygılı-bağımlı) ve güvensizlik (kararsız ve kaçınan-kayıtsız) boyutlarının alt kategorileri olan dört faktörlü bağlanma örüntüsü doğrulanmıştır. Yapısal eşitlik modeli analizine göre, duygu düzenleme ve baş etme stratejileri, kırılgan bağlanma stilinin depresyon ve stresle ilişkisine aracılık etmektedir. Bulgular hem kararsız hem de kaygılı-bağımlı bağlanma stilinin depresyon ve stres belirtilerini artırdığını göstermiştir. Ek olarak, etkili ve etkisiz baş etme stratejilerinin, kararsız bağlanma stilinin depresyon ve stresle ilişkisinde aracı bir rol oynadığı ortaya konulmuştur. Özellikle, kararsız bağlanma stiline sahip bireylerin, etkisiz baş etme stratejilerini daha fazla ve etkili baş etme stratejilerini daha az kullandıkları için daha fazla depresyon ve stres yaşama eğiliminde oldukları bulunmuştur. Ayrıca, kararsız bağlanma stili, yeniden değerlendirmenin azalması yoluyla depresyon ve stresi dolaylı olarak etkilemektedir. Bu bulgular doğrultusunda, kırılgan bağlanma stilinin depresyon ve stresle ilişkisinin ardındaki mekanizmanın ortaya konmasının hem kuramsal çerçeveye hem de psikoterapötik müdahale sürecine önemli katkılar sağlayacağı düşünülmektedir.

Anahtar Kelimeler: kırılgan bağlanma stili, duygu düzenleme, baş etme stratejileri, depresyon, stres

INTRODUCTION

Attachment has long been a topic of great interest across various fields of psychology since it has biopsychosocial effects on human life (Ravitz et al., 2010). The effects of attachment on individuals may vary depending on whether the person has a secure or insecure attachment style. These different attachment styles, particularly those characterized as insecure, may lead to certain vulnerabilities in various aspects of human life. Studies over the past two decades have provided that individuals with insecure attachment tend to experience various problems including stress, anxiety, depression, somatoform disorders, eating disorders, physiological diseases, immune system diseases (Blake et al., 2024a; Ditzen et al., 2008; Hao, 2024; Kidd et al., 2011; Kupeli et al., 2015; Maunder & Hunter, 2001; Maunder et al., 2006; Waller et al., 2004). Specifically, over 350 million people in the world suffer from depressive disorders and depression is estimated to be the first illness among global diseases (World Health Organization

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Received: Apr 22, 2025 · **Revised:** Jul 28, 2025 · **Accepted:** Aug 18, 2025 · **Published Online:** Jan 4, 2026
Author Note: This study was presented as two distinct parts at the Humanities and Social Sciences Conference, and the International Society for the Study of Individual Differences Conference.

[WHO], 2012). Furthermore, extensive research has shown that depression and stress can be evaluated as a disease of modernity which deteriorates physical health and immune system functions (Hidaka, 2012; Moussavi et al., 2007; Raison & Miller, 2001; Wienand et al., 2024). The evidence presented here shows that that there is an urgent need to address the antecedents of depression and stress in order to enhance physical and psychological health. Correspondingly, understanding the nature of the relationship between attachment and depression is essential for structuring attachment-based intervention (Dagan et al., 2018).

It is now well established that attachment is associated with increased risk of depression; however, the nature of the attachment concept remains unclear. Recently investigators have questioned whether attachment consists of different categories, or represents a continuum of security-insecurity dimension (Blake et al., 2024a; Hao, 2024). Further, previous studies evaluating the effects of attachment categories on depression observed inconsistent results (see Dagan et al., 2018). Additionally, the relationship of attachment with depression and stress have been measured by a variety of self-report scales that focus on individual differences, especially in the context of romantic relationships (see Bartholomew & Horowitz, 1991; Bifulco et al., 2003; Fraley et al., 2000; Hazan & Shaver, 1987). Such approaches have failed to address the direct and indirect effect of attachment on the risk of experiencing depression and stress (Metts et al., 2024). Consistent with this idea, Bifulco and colleagues (2003) have emphasized that existing attachment measures were not appropriate for assessing serious attachment-oriented psychopathology. From this point of view, researchers have developed the Vulnerable Attachment Style Questionnaire (VASQ) based on Attachment Style Interview to evaluate the risk of developing psychopathology (Bifulco et al., 2002a, 2002b). In this context, many studies have shown that insecure attachment styles are associated with experiencing depression (Bifulco et al., 2006; Murphy & Bates, 1997; Zheng et al. 2020). In addition, some studies have shown that both anxious and avoidant attachment styles predict an enhanced perceived stress (Maunder et al., 2006; Thompson et al., 2018). Furthermore, individuals with vulnerable attachment may experience heightened stress reactions as a result of elevated cortisol levels (Smyth et al., 2015). Lastly, it is reported that insecure attachment has a robust direct and indirect association with depression and stress (Hankin et al. 2005). Although some research reveals the link of attachment with depression and stress, studies addressing the issue in terms of vulnerable attachment are limited (Bifulco et al., 2006; Cortes-Garcia et al., 2020; Levy et al., 2018; Mickelson et al., 1997, Ravitz et al., 2010; Zheng et al., 2020). Furthermore, recent evidence suggests that the mechanism that affects the connection of attachment with depression and stress is not fully understood (Blake et al., 2024a; Dagan et al., 2018). From the above mentioned justifications, *depression-stress symptoms* are used to represent depression and stress level since there is a complex, dynamic and bidirectional relationship between these two constructs (Hammen, 2005, 2015). Thus, this is the first attempt to adapt the VASQ to Turkish culture, assess its reliability and validity, and examine the role of vulnerable attachment in the context of depression and stress by identifying the role of emotion regulation and coping strategies.

Categorization of Attachment

Historically, the term attachment has been used to describe the emotional bond that enables the infant to feel secure (Bowlby, 1969, 1973, 1980). In many attachment studies, researchers examined the emotional reactions of the infant when the availability of the caregiver was endangered. Based on these reactions, Bowlby classified the style of attachment as *protest*, *despair*, and *detachment,* whereas Ainsworth et al., (1978) have classified attachment styles as *secure, anxious-ambivalent* or *anxious-resistant,* and *avoidant.* Along similar lines, the four-category model indicates that attachment styles can be regarded as *secure, fearful*, *preoccupied,* and *dismissing* (Bartholomew & Horowitz, 1991). Following these studies, Bifulco and colleagues (2002a, 2002b) have conducted an Attachment Style Interview, and they have found that vulnerable attachment has two forms that were *insecurity* and *proximity-seeking dimensions.* Insecurity dimension emphasizes the feelings of discomfort with closeness, whereas proximity-seeking dimension emphasizes dependence on others. After that, Kupeli and colleagues (2015) have shown that vulnerable attachment is composed of four factors which were *anxious-dependent, lack of autonomy*, *avoidant-dismissive,* and *ambivalent.* Anxious-dependent and lack of autonomy styles are the subcategory of proximity seeking dimension, whereas avoidant-dismissive and ambivalent styles are the subcategory of insecurity dimension. Lack of autonomy has been observed in people who have a high level of reliance on the attachment figure. People who are overly dependent on the attachment figure have an anxious-dependent attachment style. Avoidant-dismissive style is associated with mistrust of the attachment figure, whereas ambivalent attachment style is related to inconsistencies regarding the attachment figure (Kupeli et al., 2015).

Linking Attachment to Depression and Stress

Attachment is a mental representation that is formed based on interaction with others in the early periods of life. The nature of interaction with others shapes an individual's mental representation and enables them to make positive or negative evaluations of both others and themselves. Attachment is an important concept since these negative evaluations may generate certain vulnerabilities in human life. Researchers agreed upon the idea that there are two major forms of attachment: Secure versus Insecure (Ainsworth et al., 1978; Bartholomew & Horowitz, 1991; Bowlby, 1969, 1973, 1980; Collins & Read, 1990; Fraley et al., 2000; Hazan & Shaver, 1987). Individuals with secure attachment have a positive internal working model, and they are better at seeking or providing social support, and stress regulation (Bowlby, 1973; Chen et al., 2021; Ditzen et al., 2008; Mikulincer & Shaver, 2009; Mikulincer et al., 2003; Shaver & Mikulincer 2007). In contrast to secure attachment, individuals with insecure

attachment adopt a negative internal working model, which results in dysfunctional reactions (Shaver & Mikulincer 2007). For example, the anxious and avoidant attachment styles lead to the use of hyperactivating strategies in social relationships such as proximity seeking and distancing, respectively (Malik et al., 2015; Mikulincer et al., 2003). According to a meta-analysis study, patients with anxious-ambivalent attachment styles are more prone to experience psychopathological problems (Dozier, 1990; Levy et al., 2018). The existing body of research on attachment suggests that people with insecure attachment styles are at a higher risk of developing stress and depression (Blake et al., 2024a; Ditzen et al., 2008; Fang & Wang, 2024; Hao, 2024; Bifulco et al., 2006; Kidd et al., 2011; Maunder et al., 2006; Murphy & Bates, 1997; Patrick et al, 1994; Zheng et al. 2020). Subsequent to Bifulco and colleagues' work, only a limited number of studies on vulnerable attachment have addressed its relationship with drug abuse and psychopathology (Potik et al., 2014), physiological stress reactivity (Smyth et al., 2015), and post-traumatic stress disorder (Jittayuthd & Karl, 2022). Thus, this study is thought to be the first in the literature to explore the role of emotion regulation and coping strategies on the relationship of vulnerable attachment with depression and stress.

Attachment in Relation to Emotion Regulation

According to the process model of emotion regulation, individuals regulate their emotions by reappraising or suppressing any event (Gross, 1998a, 1998b, 2001). In reappraisal, individuals cognitively alter their emotions; however, in suppression individuals inhibit their emotions (Gross et al., 2006). It has proved that suppression is positively associated with depression and stress whereas reappraisal is negatively associated with depression and stress (Schäfer et al., 2017). Despite these findings, the role of emotion regulation on the relationship of vulnerable attachment with depression and stress has not yet been studied. Previous research has established that insecure attachment has a negative effect on emotion regulation of individuals (Malik et al., 2015; Marganska et al., 2013). Specifically, both anxious and avoidant attachment styles are associated with suppression (Shaver & Mikulincer, 2007; Shaver & Mikulincer, 2014). According to the meta-analysis and review studies, hyperactivating emotion regulation plays a mediating role in the relationship between anxious attachment style and depressive symptomatology (Cortes-Garcia et al., 2020; Malik et al., 2015). Considering all this evidence, it seems that suppression and reappraisal may mediate the relationship of vulnerable attachment with depression and stress.

Associations between Attachment and Coping Strategies

Coping is defined as a cognitive and behavioral process rooted in the controllability of a stressful event and the individual's appraisal of it (Folkman, 1984; Folkman et al., 1986). According to Folkman's (1984) investigations related to the coping strategies of the people, an uncontrollable event may result in helplessness, and depression. However, when controllability is present, challenge appraisal enhances effective problem-focused coping, whereas threat appraisal may interfere with it (Folkman, 1984). The empirical evidence suggests that problem-focused coping includes active, rational, and effective coping behaviors whereas emotion-focused coping includes passive, avoidant, and ineffective coping behaviors (Billings & Moos, 1981; Folkman et al., 1986; Sahin & Durak, 1995). In more detail, effective coping strategies consist of self-confidence and optimism strategies. On the other hand, ineffective coping strategies include submissiveness, helplessness, seeking social support (Folkman et al., 1986; Sahin & Durak, 1995). Recent study has also indicated that coping can be reactive, suppressive, and reflective, and is closely related to perceived problem-solving ability (Lopez et al., 2001; Wei et al., 2003). However, no research has been found that investigated attachment in terms of effective or ineffective coping strategies. Although the connection of coping strategies with depression and stress is well established (Davila et al., 1996; D'zurilla & Goldfried, 1971; Heppner et al., 2004; Maunder et al., 2006), studies which focus on the influence of vulnerable attachment on coping have been limited. Previous research has shown that insecure attachment has a negative effect on the coping strategies of individuals (Cortes-Garcia et al., 2020; Wei et al., 2003). It is shown in a study that secure individuals perceive social support more; however, preoccupied individuals seek more social support, while dismissing, and fearful individuals seek social support less avoidance (Ognibene & Collins, 1998). Similarly, anxious attachment is related to rumination, helplessness, stress, and depression (Davila et al., 1996; Maunder et al., 2006; Mikulincer et al., 2003; Shaver et al., 2005; Turan et al., 2016). It has also been shown that emotion-focused coping is associated with an increased risk of depression (Flett et al., 1996). Other studies have indicated that coping style plays a mediating role in the relationship between insecure attachment and psychological distress (Davila et al., 1996; Lopez et al., 2001; Wei et al., 2003). The evidence reviewed here seems to suggest that vulnerable attachment styles may have a positive effect on the symptoms of depression and stress through effective or ineffective coping strategies. Drawing upon the empirical evidence discussed above, the hypotheses of the present study are formulated as follows: **H1)** The two higher-order factors structure of vulnerable attachment style that are proximity seeking (lack of autonomy, anxious-dependent) and insecurity dimension (ambivalent, and avoidant-dismissive) will be confirmed; **H2)** Lack of autonomy, anxious-dependent, ambivalent, and avoidant-dismissive attachment styles positively predict depression-stress symptoms. These relationships are hypothesized to be mediated by emotion regulation strategies, such that these attachment styles are positively associated with suppression and negatively associated with reappraisal; and **H3)** Lack of autonomy, anxious-dependent, ambivalent, and avoidant-dismissive attachment styles positively predict depression-stress symptoms. These relationships are hypothesized to

be mediated by coping strategies, such that these attachment styles are positively associated with ineffective coping strategies (submissiveness, helplessness, social support seeking) and negatively associated with effective coping strategies (self-confidence and optimism).

The current study addresses the research gaps in two ways. First, a novel assessment tool called the shortened VASQ is adapted to the Turkish culture after examining its psychometric qualities. To establish construct validity, we hypothesized that the VASQ will preserve its original factor structure in the Turkish sample as demonstrated through confirmatory factor analysis, show acceptable internal consistency, and correlate positively with anxiety and avoidance subscale of Experiences in Close Relationships Inventory-II for the concurrent validity. Second, the underlying mechanism linking vulnerable attachment to depression and stress has been examined. In other words, understanding the role of emotion regulation and coping strategies in the relationship of vulnerable attachment with depression and stress makes a valuable contribution to the literature.

METHODS

Participants

In this study, two hundred and eighty-two (N = 282) male and female university students from Ankara Yıldırım Beyazıt University participated. There were 223 female students (79%) and 59 male students (21%). The age range was between 18 and 25. The mean age of the participants was 20.29 (SD = 1.26). There were 93% of the participants who reported that their parents were married, 5% of the participants reported that their parents were divorced, 1% of the participants reported that their parents lived separately. There were 88% of the participants who reported that their caregiver in their childhood period was their mother and father. In addition, 6% of the participants reported that their caregiver was only their mother, 3% reported others. Lastly, 95% of the participants indicated that they had siblings while 5% of them indicated that they had no siblings.

Measures

Vulnerable Attachment Style Questionnaire It is a 22-item scale that measures vulnerabilities of adult attachment style in the context of depression (Bifulco et al., 2003). Following the reexamination of the VASQ, researchers have generated a short form of the scale (Kupeli et al., 2015). The 14-item shortened form of the VASQ (see Appendix) includes four factor attachment patterns which are *lack of autonomy*, *anxious-dependent*, *ambivalent*, *avoidant-dismissive*. Participants were asked to respond using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). One item (item 10) is recoded on the scale. An increase in the total score obtained from an attachment pattern means that the individual has that attachment style. In the current study, Cronbach's alpha coefficients were .70 for avoidant-dismissive, .60 for ambivalent, .62 for anxious-dependent, and .64 for lack of autonomy.

Experiences in Close Relationships Inventory-II (ECRI-II) It is a 36-item and 7-point Likert scale ranging from 1 (almost disagree) to 7 (almost agree) that is used for measuring the attachment style of adults (Fraley et al., 2000). ***The*** ECRI-II was composed of two factors which were *avoidance* and *anxiety*. In this scale, which was adapted into Turkish by Selcuk and colleagues (2005), 14 items (4, 8, 16, 17, 18, 20, 21, 22, 24, 26, 30, 32, 34, and 36) were recoded. In the current study, Cronbach's alpha coefficients were a = .86 for avoidance, and a = .88 for anxiety.

Emotion Regulation Questionnaire (ERQ) The ERQ, consisting of 10 items, is used to examine emotion regulation strategies (Gross & John, 2003). The scale is composed of two strategies which were *reappraisal* and *suppression*. Reappraisal means cognitively altering the emotional impact of the situation whereas suppression means inhibiting emotion-expressive behavior. Participants respond on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Yurtsever (2008) has adapted the scale into Turkish form. Cronbach's alpha coefficients for reappraisal and suppression in the current study were a = .84, and a = .77, respectively.

Ways of Coping Inventory (WCI) The WCI is a 68-item scale which measures the kinds of coping mechanisms that individuals use (Folkman & Lazarus, 1980). Sahin and Durak (1995) adapted the scale into Turkish form and identified five factors which are named as *self-confident coping, optimistic coping, submissive coping, helplessness coping,* and *social support seeking* in the scale. The Turkish version consists of 30 items rated on a 4-point Likert scale ranging from 0 (not used at all) to 3 (used a great deal). In the current study, Cronbach's alpha coefficients for self-confident coping, optimistic coping, submissive coping, helplessness coping, and social support seeking were a = .81, a = .72, a = .64, a = .74, and a = .24, respectively. These five factors can be represented by two latent constructs; *effective coping strategies* (self-confidence and optimism) and *ineffective coping strategies* (submissiveness, helplessness, and social support seeking) (Folkman et al., 1986; Sahin & Durak, 1995). In this study, these two constructs were used for clarity and Cronbach's alpha coefficients for effective coping strategies and ineffective coping strategies were computed as a = .86 and a = .75, respectively.

Perceived Stress Questionnaire (PSQ) The PSQ is a 14-item scale that measures individuals' appraisal of stress in life events (Cohen et al., 1983). The scale is composed of 14 items with a 5-point Likert scale ranging from 0 (never) to 4 (very frequent). In this scale, which was adapted into Turkish by Eskin and colleagues (2013), 7 items (4, 5, 6, 7, 9, 10, and 13) were recoded. The increase in total scores indicates an increase in the perceived stress level. Cronbach's alpha coefficient for the Perceived Stress Questionnaire was a = .82 in the current study.

Beck Depression Inventory (BDI) The BDI is a 21-item

scale which measures cognitive, emotional and motivational symptoms of depression (Beck et al., 1961). High scores from the scale, in which the total score ranges from 0 to 63, indicate more depression symptoms. The scale is a self-report scale which includes four options that range "from *0* to *3*." Hisli (1988) has adapted the scale into Turkish form. In the current study, Cronbach's alpha coefficient for the BDI was *a*=.89.

Demographics Questionnaire It includes age, sex and some information about participants' family life which were related to their attachment process.

Procedure

Researchers get permission from the author of the scale for the adaptation of the VASQ. After getting permission, ethical approval was obtained from Ankara Yıldırım Beyazıt University Ethics Committee (Date: 11.11.2015; Decision Number: 173). In the first place, the items of the VASQ were translated from English to Turkish by three psychologists. Following this, the best alternative among three translations was chosen by the examination of five researchers. The pilot study was conducted by the participation of 10 individuals who rated the clarity of the items with a 5-point Likert scale. Based on these ratings, researchers made some small changes in the sentences to increase the clarity. After providing informed consent, participants completed a set of questionnaires which took approximately 15-20 minutes to complete. The questionnaires were administered to sample of male and female volunteers from Ankara Yıldırım Beyazıt University Psychology department using convenience sampling. The students have taken 5-point bonus for their participation in the study. Participants expressed gratitude for their time and effort.

Data Analysis

For construct validity, a confirmatory factor analysis was conducted. To reveal the structure of the VASQ, the second-order multiple-factor confirmatory factor analysis was performed. In the current study, χ^2 statistic, the chi square-to-degrees-of-freedom ratio (χ^2/df), the comparative fit index (CFI), and the root-mean-square error of approximation (RMSEA) were reported. It was specified that the *good fit* requires non-significant χ^2 statistic, values lesser than or equal to 2 for the ratio between the chi square and degrees-of-freedom, values greater than or equal to .95 for GFI and CFI, and values lesser than or equal to .06 for RMSEA (Hooper et al., 2008; Hu & Bentler, 1999; Schermelleh Engel et al., 2003; Tabachnick & Fidell, 2012). Afterwards, in order to assess concurrent validity, correlations with Experiences in Close Relationships Inventory-II, an established measure, were assessed. To identify the reliability of the VASQ, Cronbach's alpha internal consistency coefficient was computed. Lastly, correlation analysis was conducted to compute the strength and the direction of the linear relationships between study variables.

The role of emotion regulation and coping strategies on the relationship of vulnerable attachment styles with depression and stress were analyzed separately by mediation analysis with structural equation modeling. Firstly, *depression-stress symptoms* were created as a latent construct with two bidirectional indicators– perceived stress and depression (Hammen, 2005, 2015). Secondly, consistent with the theoretical background, two latent constructs that were *effective coping strategies* (self-confidence and optimism) and *ineffective coping strategies* (submissiveness, helplessness, and social support seeking) were created to enhance the clarity of the analyses (Folkman et al., 1986; Sahin & Durak, 1995). In the first model, all paths from lack of autonomy, anxious-dependent, ambivalent, and avoidant-dismissive attachment styles to the depression-stress symptoms via the reappraisal and suppression were tested. In the second model, all paths from lack of autonomy, anxious-dependent, ambivalent, and avoidant-dismissive attachment styles to the depression-stress symptoms via the effective and ineffective coping strategies were tested. The mediation effects which were calculated by 2000 bootstrapping with 95% confidence intervals (CI) were evaluated as significant when the confidence intervals do not contain zero (Cheung, 2007; Greenland et al., 2016). Data management and analysis were performed using SPSS 22 and AMOS 23.

RESULTS

First Part of the Study: The Adaptation Process

The Second-Order Multiple-Factor Confirmatory Factor Analysis

A two-factor solution, which was composed of four subfactor solutions of vulnerable attachment style, was analyzed by the second-order multiple-factor confirmatory factor analysis. In more detail, the two factors were proximity-seeking and insecurity. Proximity-seeking construct had two sub-factors, which were lack of autonomy and anxious-dependent. Similarly, insecurity construct had two sub-factors which were ambivalent and avoidant-dismissive. The initial second-order multiple-factor confirmatory factor analysis showed acceptable fit to the data (χ^2 = 154.02, χ^2/df = 2.14, p = .00, GFI = .93, CFI = .86, RMSEA = .06). Since the coefficient of the item nine was low (.28), it was deleted from the scale (Kline, 1994). After its deletion, the model fit was good (χ^2 = 113.97, χ^2/df = 1.90, p = .00, GFI = .94, CFI = .90, RMSEA = .06). Lastly, the modification indices were examined to improve the model fit. A correlated error among items 11 and 14 was added. This association was reasonable since these two items belonged to the same factor, which was designed to measure the same construct. Consequently, the modified second-order multiple-factor confirmatory factor analysis showed good fit to the data (χ^2 = 94.25, χ^2/df = 1.54, p = .00, GFI = .95, CFI = .94, RMSEA = .04). Figure 1 shows the standardized path estimates of the VASQ with the two-factor solution.

The second-order multiple-factor confirmatory factor analysis indicated that the construct that was composed of two factors with four sub-factors with thirteen items was

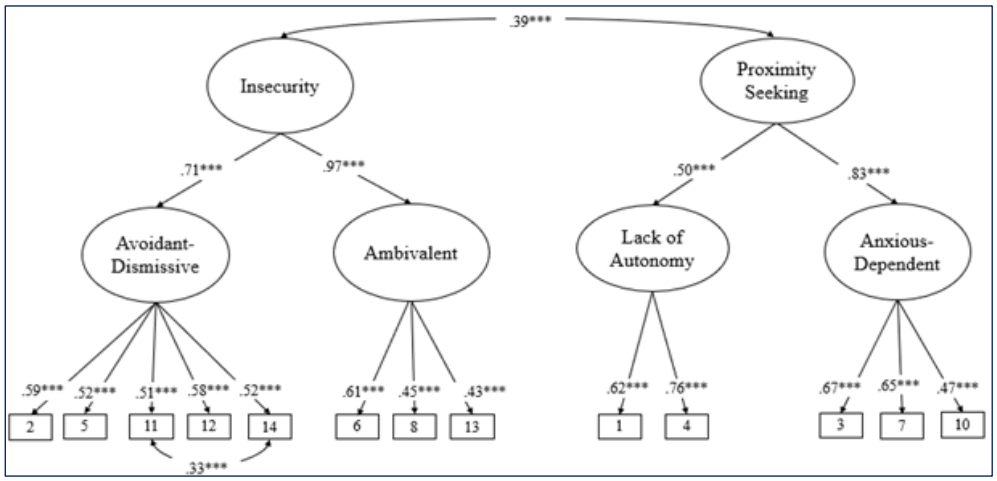

Figure 1. Standardized Estimates in the Second-Order Multiple-Factor Confirmatory Factor Analysis. ***Note***. ***p < .001.

Table 1. Correlations, Means, and Standard Deviations between Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1	5.81 (1.80)												
2	.27**	9.86 (2.47)											
3	.22**	.16**	11.32 (3.10)										
4	.03	.17**	.25**	14.25 (3.77)									
5	.03	.08	.19**	.35**	14.32 (5.48)								
6	-.06	-.02	-.18**	-.01	-.13*	30.79 (6.43)							
7	-.15*	-.07	-.29**	-.13*	-.18**	.44**	13.50 (3.73)						
8	-.07	-.14*	-.28**	-.22**	-.09	.42**	.64**	8.33 (2.64)					
9	.22**	.14*	.20**	-.01	.19**	-.13*	-.22**	- .06	6.00 (2.99)				
10	.31**	.26**	.37**	.14*	.19**	-.25**	-.39**	-.28**	.45**	10.19 (4.23)			
11	.09	.22**	-.05	.14*	.26**	.12*	.28**	.28**	.14*	.18**	6.42 (1.81)		
12	.18**	.26**	.31**	.16**	.12*	-.34**	-.46**	-.46**	.17**	.46**	-.02	27.49 (6.68)	
13	.14*	.17**	.34**	.23**	.19**	-.38**	-.48**	-.48**	.19**	.51**	-.02	.62**	10.38 (8.30)

Note. *p < .05. **p < .01. The mean values and standard deviations (in parentheses) were shown on the diagonal of the Table. 1 = Lack of autonomy, 2 = Anxious-dependent, 3 = Ambivalent, 4 = Avoidant-dismissive, 5 = Suppression, 6 = Reappraisal, 7 = Self-confident, 8 = Optimistic, 9 = Submissive, 10 = Helplessness, 11 = Social support seeking, 12 = Perceived stress, 13 = Depression.

supported. As can be seen from Figure 1, insecurity construct was composed of avoidant-dismissive and ambivalent styles whereas proximity-seeking construct was composed of lack of autonomy and anxious-dependent styles.

The Validity and Reliability Analyses

ECRI-II was used for revealing concurrent validity. There was a positive relationship between the anxiety subscale of ECRI-II and lack of autonomy (r = .29, p <.01), and anxious-dependent attachment style (r = .33, p <.01). Along similar lines, there was a positive relationship between the avoidance subscale of ECRI-II and avoidant-dismissive attachment style (r = .42, p <.01). However, the correlation between the avoidance subscale of ECRI-II and ambivalent attachment style was not significant (r = .11, p > .05). To assess the reliability of the VASQ, Cronbach's alpha internal consistency coefficients were calculated. Cronbach's alpha values were as follows: avoidant-dismissive (α = .70), ambivalent (α = .60), anxious-dependent (α = .62), and lack of autonomy (α = .64).

Descriptive Statistics and the Correlations

The descriptive statistics and the correlations between the variables were presented in Table 1. The correlation coefficients among many subscales of the VASQ were significant and positive. For example, lack of autonomy was positively correlated with both anxious dependent and ambivalent attachment style, respectively (r = .27, p < .01

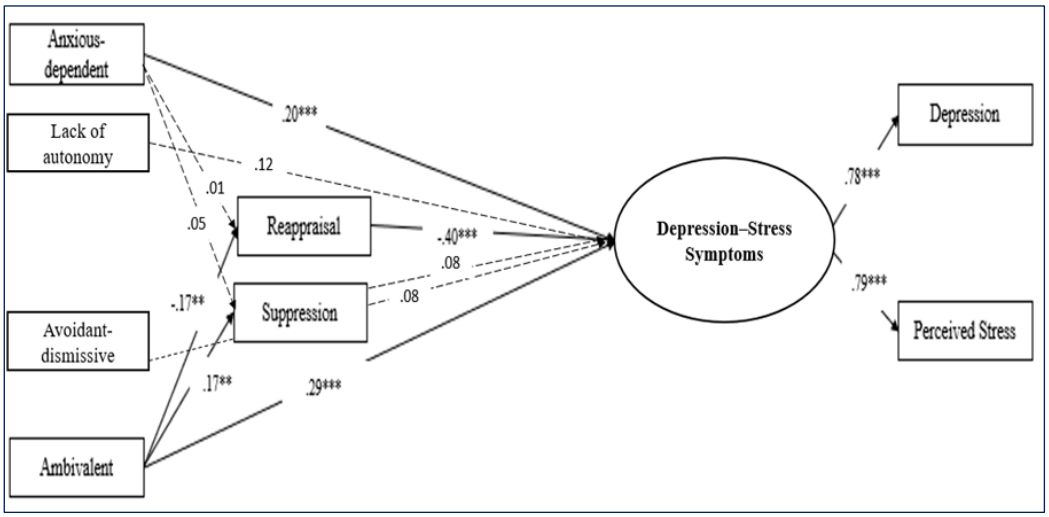

Figure 2. Standardized Path Estimates in the Structural Equation Model: Mediation Testing for Emotion Regulation. ***Note.*** $^{**}p < .01$, $^{***}p < .001$. The covariance among exogenous variables ($r = .19$, $p < .01$) and error terms of endogenous variables were not drawn for simplicity. Significant paths were presented as solid lines and insignificant paths were presented with dashed lines.

Table 2. Unstandardized Estimates (B), Standard Errors (SE), Critical Ratios (CR), and p-values for Structural Model Paths

			B	SE	CR	p
Ambivalent	→	Reappraisal	-.52	.18	-2.88	.004
Anxious-dependent	→	Depression-stress symptoms	.54	.16	3.40	.000
Ambivalent	→	Depression-stress symptoms	.92	.19	4.71	.000
Reappraisal	→	Depression-stress symptoms	-.40	.06	-6.28	.000
Ambivalent	→	Suppression	.46	.15	2.98	.003
Depression-stress symptoms	→	Depression	1.23	.14	9.02	.000
Depression-stress symptoms	→	Perceived Stress	.81	.09	9.02	.000

and $r = .22$, $p < .01$). Anxious dependent was positively correlated with both avoidant-dismissive and ambivalent attachment style, respectively ($r = .17$, $p < .01$ and $r = .16$, $p < .01$). Ambivalent attachment style was positively correlated with avoidant-dismissive attachment style ($r = .25$, $p < .01$).

Some subscales of the VASQ were also significantly correlated with emotion regulation strategies. Specifically, both ambivalent and avoidant-dismissive attachment style were positively correlated with suppression, respectively ($r = .19$, $p < .01$ and $r = .35$, $p < .01$ for avoidant-dismissive). However, only ambivalent attachment style was negatively correlated with reappraisal ($r = -.18$, $p < .01$). The correlation between suppression and reappraisal was negative ($r = -.13$, $p < .05$).

Significant correlations were also found between some subscales of the VASQ and coping strategies. In particular, self-confident coping was negatively correlated with lack of autonomy ($r = -.15$, $p < .05$), ambivalent ($r = -.29$, $p < .01$), and avoidant-dismissive attachment style ($r = -.13$, $p < .05$). Optimistic coping was negatively correlated with anxious dependent ($r = -.14$, $p < .05$), ambivalent ($r = -.28$, $p < .01$), and avoidant-dismissive attachment style ($r = -.22$, $p < .01$). Submissive coping was positively correlated with lack of autonomy ($r = .22$, $p < .01$), anxious dependent ($r = .14$, $p < .05$), and ambivalent attachment style ($r = .20$, $p < .01$). Helplessness coping was positively correlated with lack of autonomy ($r = .31$, $p < .01$), anxious dependent ($r = .26$, $p < .01$), ambivalent ($r = .37$, $p < .01$), and avoidant-dismissive attachment style ($r = .14$, $p < .05$). Social support seeking coping was positively correlated with anxious dependent ($r = .22$, $p < .01$), and avoidant-dismissive attachment style ($r = .14$, $p < .05$).

All subscales of the VASQ have significant correlations with perceived stress and depression. Perceived stress was positively correlated with lack of autonomy ($r = .18$, $p < .01$), anxious dependent ($r = .26$, $p < .01$), ambivalent ($r = .31$, $p < .01$), and avoidant-dismissive attachment style ($r = .16$, $p < .01$). Depression was positively correlated with lack of autonomy ($r = .14$, $p < .05$), anxious dependent ($r = .17$, $p < .01$), ambivalent ($r = .34$, $p < .01$), and avoidant-dismissive attachment style ($r = .23$, $p < .01$). The significant correlations between all subscales of the VASQ and the other variables were reported; for those of the other variables, see Table 1.

Second Part of the Study: Structural Equation Modeling and Mediation Testing

Mediational Role of Emotion Regulation

The role of emotion regulation on the relationship between vulnerable attachment styles and depression-stress symptoms was analyzed by the mediation analysis with structural equation modeling. In the model, lack of autonomy, anxious-dependent, ambivalent, and avoidant-dismissive attachment styles were the exogenous variable whereas depression-stress symptoms were endogenous variable. The two types of emotion regulation strategies that were reappraisal and suppression were the mediator

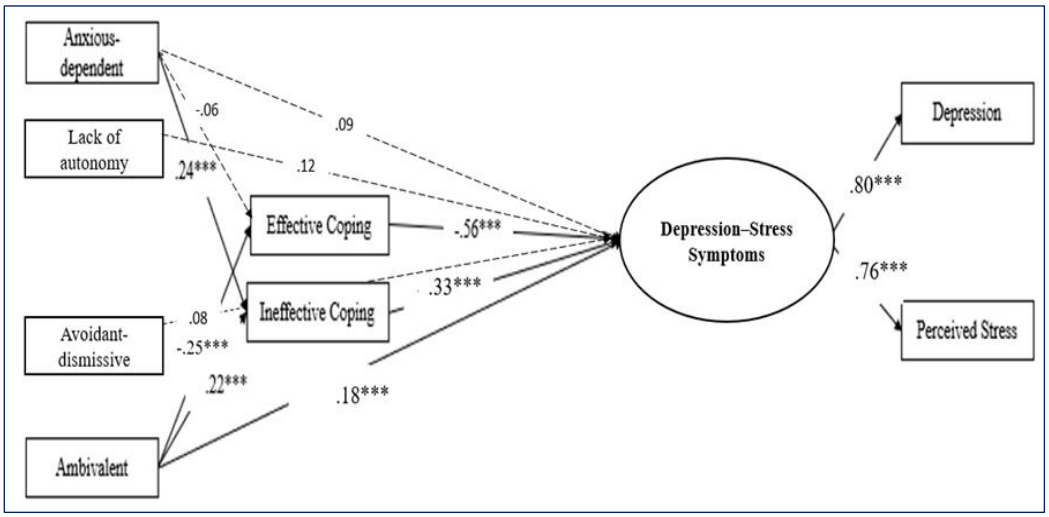

Figure 3. Standardized Path Estimates in the Structural Equation Model: Mediation Testing for Coping Strategies. ***Note.*** $^{**}p < .01$, $^{***}p < .001$. The covariance among exogenous variables ($r = .19$, $p < .01$) and error terms of endogenous variables were not drawn for simplicity. Significant paths were presented as solid lines and insignificant paths were presented with dashed lines.

Table 3. Unstandardized Estimates (B), Standard Errors (SE), Critical Ratios (CR), and p-values for Structural Model Paths

			B	SE	CR	p
Anxious-dependent	→	Ineffective coping	.66	.16	4.24	.000
Ambivalent	→	Effective coping	-.69	.16	-4.29	.000
Ambivalent	→	Ineffective coping	.70	.18	3.79	.000
Effective coping	→	Depression-stress symptoms	-.64	.07	-9.76	.000
Ineffective coping	→	Depression-stress symptoms	.32	.05	5.95	.000
Ambivalent	→	Depression-stress symptoms	.58	.17	3.31	.000
Depression-stress symptoms	→	Depression	1.31	.12	11.10	.000
Depression-stress symptoms	→	Perceived stress	.76	.07	11.10	.000

variables. After deleting the insignificant paths, the mediation analysis model showed good fit to the data (χ^2 = 11.10, χ^2/df = 1.59, p = .13, GFI = .99, CFI = .98, RMSEA = .05). Figure 2 presented significant and insignificant standardized path estimates in the mediation analysis with structural equation model.

Unstandardized estimates, standard errors, critical ratios, and p-values for structural model paths were presented in Table 2. As can be seen, the effects of anxious-dependent attachment style and ambivalent attachment style on depression-stress symptoms were significant (B = .54, *CI* [.24, .82]; B = .92, *CI* [.51, 1.32]), respectively. The effects of ambivalent attachment style on reappraisal (B = -.52, *CI* [-.93, -.10]), and suppression (B = .46, *CI* [.15, .74]) were also significant. Lastly, the effect of reappraisal on depression-stress symptoms was significant (B = -.40, *CI* [-.55, -.26]).

Anxious-dependent, ambivalent attachment styles, along with reappraisal explain 35% of the variance in depression-stress symptoms. The standardized indirect effect of ambivalent attachment on depression-stress symptoms through reappraisal was also significant (β = .07, *CI* [.01, .13]). This indicated that the mediatory role of reappraisal on the relationship between ambivalent attachment style and depression-stress symptoms was significant. Specifically, ambivalent attachment style positively affects depression-stress symptoms not only directly, but also indirectly by reducing reappraisal.

Mediational Role of Coping Strategies

The role of coping strategies on the relationship between vulnerable attachment styles and depression-stress symptoms was analyzed by mediation analysis with structural equation modeling. In the model, lack of autonomy, anxious-dependent, ambivalent, and avoidant-dismissive attachment styles were the exogenous variable whereas depression-stress symptoms were the endogenous variable. Effective coping strategies (self-confidence, optimism) and ineffective coping strategies (submissiveness, helplessness, social support seeking) were the mediator variables. After deleting the insignificant paths, the mediation analysis model showed acceptable fit to the data (χ^2 = 14.01, χ^2/df = 2.34, p = .03, GFI = .98, CFI =.98, RMSEA = .07). Figure 3 presented the significant and insignificant standardized path estimates in the mediation analysis with structural equation model.

Unstandardized estimates, standard errors, critical ratios, and p-values for structural model paths were presented in Table 3. As can be seen, the effects of ambivalent attachment style on effective coping strategies (B = -.69, *CI* [-1.03, -.30]), and on ineffective coping strategies (B = .70, *CI* [.32, 1.07]) were significant. The effect of anxious-dependent attachment style on ineffective coping strategies (B = .66, *CI* [.36, .98]) was also significant. Lastly, the effects of effective coping strategies (B = -.64, *CI* [-.77, -.49]), and ineffective coping strategies (B = .32,

CI [.22, .43]) to depression-stress symptoms were significant. The effect of ambivalent attachment style on depression-stress symptoms was significant (*B* = .58, *CI* [.21, .94]).

Anxious-dependent, ambivalent attachment styles along with effective and ineffective coping strategies explain 57% of the variance in depression-stress symptoms. The standardized indirect effect of ambivalent attachment style on depression-stress symptoms through effective and ineffective coping strategies was significant (β = .21, *CI* [.12, .30]). This indicated that the mediatory role of effective and ineffective coping strategies on the relationship between ambivalent attachment style and depression-stress symptoms was significant. Specifically, ambivalent attachment style increases depression-stress symptoms directly, and indirectly by reducing effective coping strategies and by increasing ineffective coping strategies.

DISCUSSION

To the best of our knowledge, this is the first study on vulnerable attachment that examines psychometric properties of the VASQ and to make its adaptation to the Turkish culture. Furthermore, this study appears to be the first study to extend our knowledge of vulnerable attachment by unearthing the mediating effect of emotion regulation and coping strategies on depression-stress symptomatology. The findings of the study provide support for the hypothesis that vulnerable attachment style is composed of four factors, each of which depends on two higher-order factors. Based on the factor structure and psychometric evaluation of the scale, it can be concluded that the VASQ consists of proximity seeking (lack of autonomy, anxious-dependent) and insecurity (ambivalent, and avoidant-dismissive) dimensions. In other words, the second-order multiple-factor structure of the VASQ are consistent with previous findings (Kupeli et al., 2015). Although there is a fact that the small number of items leads to the moderate level of Cronbach's alpha coefficients (Cortina, 1993; Panayides, 2013; Schmitt, 1996), based on the other statistical analyses, it can be concluded that the VASQ is a reliable and valid measurement tool.

In line with existent studies, there are positive associations between lack of autonomy, anxious-dependent, ambivalent, avoidant-dismissive attachment style, and both stress and depression (Bifulco et al., 2003; Bifulco et al., 2006; Carr et al., 2013; Gerlsma & Luteijn, 2000; Marganska et al., 2013; Mickelson et al., 1997; Moran et al., 2001). Moreover, the results of the structural equation modeling partially support the hypothesis that there is a positive effect between lack of autonomy, anxious-dependent, ambivalent, avoidant-dismissive attachment style, and the risk of experiencing depression and stress. In more detail, although anxious-dependent and ambivalent styles have a significant effect, lack of autonomy and avoidant-dismissive attachment style do not have a significant effect on depression-stress symptoms. Previous studies observed inconsistent results on whether all of the insecure attachment styles increase the risk of experiencing depression and stress. For example, there is evidence that fearful attachment and avoidant attachment are found to be the positive correlates of experiencing stress and depression (Ditzen et al., 2008; Kidd et al., 2011) whereas no significant correlation was also found between insecure-dismissing styles and depression (Dagan et al., 2018). Furthermore, some of the individuals with secure and dismissing attachment styles are reported to have greater well-being since they are better at reappraisal (Karreman & Vingerhoets, 2012). An underlying cause for the nonsignificant effects of the lack of autonomy and avoidant-dismissive attachment style might be related with the effort to align with the cultural expectations. For example, avoidant attachment is found to be associated with less psychological distress since individuals in collectivist culture are motivated to conform social norms (Wang & Mallinckrodt, 2006). Consistent with the findings of the current study, individuals with anxious and preoccupied attachment styles experience lower well-being, along with greater symptomatic distress and depression (Bartholomew & Horowitz, 1991; Blake et al., 2024b; Bifulco et al., 2006; Karreman & Vingerhoets, 2012; Murphy & Bates, 1997; Turan et al., 2016; Zheng et al. 2020). A possible explanation for this might be that the connection between anxious-dependent and ambivalent attachment style with depression and stress is more robust than avoidant-dismissive attachment style (Dozier, 1990; Dagan et al., 2018). It is also possible that the mental representations of the individuals with anxious and ambivalent attachment include the fear of abandonment, seeking reassurance of others, or experiencing inconsistencies, which make them vulnerable to experience depression and stress (Kupeli et al., 2015). It may also be that the existing negative experiences that people with insecure attachment may deteriorate their self-evaluation and increase the risk of experiencing depression-stress (Roberts et al., 1996).

The findings of the study provide partial support for the hypothesis that reappraisal and suppression play a mediating role in the link of vulnerable attachment with depression and stress. That is, the direct effects of anxious-dependent and ambivalent attachment styles on depression and stress are found to be significant and positive. In addition, there is a positive direct effect between ambivalent attachment style and suppression, whereas it is negative for reappraisal. For the indirect effects, mediation analysis has revealed that not all types of the VASQ, but only ambivalent attachment style has a positive indirect effect to depression and stress through reducing reappraisal. Consistent with these findings, existent studies have reported that the link of adaptive emotion regulation strategies (e.g. reappraisal) with depression and stress is negative (Metts et al., 2024; Schäfer et al., 2017). Supporting the current findings, earlier research has shown that emotion regulation strategies work as a mediator in the relationship of insecure attachment style with depression and stress (Malik et al., 2015; Metts et al., 2024; Shaver & Mikulincer, 2014). Specifically, individuals with preoccupied attachment style tend to experience lower well-being since they show lower level of reappraisal (Karreman & Vingerhoets, 2012). However, individuals with ambivalent attachment style may not be capable of making reappraisal, even though they may engage in more suppression since their internal working model is inconsistent (Gross

& John, 2003; Kupeli et al., 2015). Similarly, Marganska and colleagues (2013) reported a link between insecure attachment and depression, emphasizing the perceived inability of emotion regulation process. This work contributes to existing knowledge by providing the findings that ambivalent attachment style results in an increase in depression and stress since it may reduce reappraisal. Findings have indicated that reappraisal, an adaptive emotion regulation strategy, seems to be deteriorated among individuals with ambivalent attachment style (Gross, 1998a; Gross et al., 2006). It can therefore be assumed that individuals with an ambivalent attachment style have difficulty cognitively altering the emotional impact of the situation, which makes them vulnerable to experiencing depression and stress.

The current study found partial support for the hypothesis that the mediating role of coping strategies on the link of vulnerable attachment with depression and stress. That is, the direct effects of ambivalent attachment style on depression and stress are found to be significant and positive. Additionally, there are positive direct effects of both anxious-dependent and ambivalent attachment style on ineffective coping. Also, the effect of ambivalent attachment style on effective coping is found to be negative. According to the mediation analysis, not all types of the VASQ, but only ambivalent attachment style has a positive indirect effect to depression and stress through reducing effective coping and exacerbating ineffective coping. These findings broadly support the work of other studies in this area that people with insecure attachment styles use ineffective coping strategies, which results in developing depression (Cooley et al., 2010; Cortes-Garcia et al., 2020; Pielage et al., 2000). However, previous studies have dealt with perceived coping or maladaptive problem coping strategies are inadequate for revealing the role of vulnerable attachment (Lopez et al., 2001; Wei et al., 2003). This study contributes to our understanding that individuals with ambivalent attachment use effective coping strategies less and ineffective coping strategies more, which makes them prone to experience depression and stress. It has also revealed the underlying mechanism concerning how ambivalent attachment may indirectly influence depression and stress. It may be that ambivalently attached individuals are more prone to use ineffective coping strategies since they are clingy and indecisive about their interactions (Kupeli et al., 2015; Schmidt et al., 2002). Another possible explanation for this is that people with ambivalent attachment style are more vulnerable to experience depression and stress since they ruminate the existing negative experiences (Cortes-Garcia et al., 2020; Gerlsma & Luteijn, 2000; Pielage et al., 2000; Shaver & Mikulincer 2007; Turan et al., 2016), which may result in an attenuated self-worth, depression and stress (Davila et al., 1996; Maunder et al., 2006; Shaver et al., 2005). Therefore, we can infer that the risk of experiencing depression and stress is high especially for individuals with ambivalent attachment style who are inclined to use ineffective coping strategies more.

The major limitation of this study is the cross-sectional design, so causal or priming studies are needed for a better understanding of the relationship of vulnerable attachment with depression and stress. Additionally, the use of self-report measures constitutes a limitation of the study, since it may lead to response biases. Another limitation of the current study is that the sample consisted of emerging adults aged between 18 and 25. In addition, the unequal gender distribution within the sample results in limitations regarding generalizability. Therefore, it is important to highlight that the generalizability of these results is limited to the emerging adults, especially women. Another limitation is the use of non-clinical sample; therefore, additional studies using clinical population will be needed to strengthen the generalizability of findings (Kupeli et al., 2015). Given the low internal consistency observed for social support seeking measurement of coping strategies, well-validated instrument for coping strategies should be used in subsequent studies. In spite of its limitations, the VASQ is an objective, brief, and economical measurement tool that effectively distinguishes high-risk individuals based on their attachment patterns, thereby facilitating early intervention of depression and stress. Overall, this is the first study that highlights the predictive value of vulnerable attachment in depression and stress through the mediating role of emotion regulation and coping strategies.

Conclusions

The findings of the current study suggest several important implications for both clinical practice and future research. First, therapists should be aware of their clients' attachment organization, particularly in those exhibiting anxious or ambivalent attachment styles (Levy et al., 2018). Individuals with ambivalent attachment, in particular, tend to experience difficulties in emotion regulation, especially in using reappraisal strategies, and are more likely to use suppression which makes them vulnerable to experiencing depression and stress. Moreover, they have a higher risk of experiencing depression and stress since they are inclined to use ineffective coping strategies more, and effective coping strategies less. These patterns underline the importance of focusing on cognitive-emotional constructs, such as emotion regulation and coping strategies within therapeutic interventions (Cortes-Garcia et al., 2020; Mikulincer et al., 2003). Strengthening clients' capacity for self-regulation may contribute to the restoration of impaired attachment security within the psychotherapy process (Mikulincer et al., 2003). In light of these insights, future therapeutic models should integrate attachment-based frameworks, particularly for the prevention and intervention of depression and stress (Bifulco et al., 2003; Carnelley et al., 1994; Cyranowski et al., 2002; Gerlsma & Luteijn, 2000; Levy et al., 2018; Pielage et al., 2000; Shaver et al., 2005; Shorey & Snyder, 2006).

DECLARATIONS

Ethics Committee Approval: This study was approved by the Ethics Committee of Ankara Yildirim Beyazit University, under approval number 173, dated 11/11/2015.

Conflict of Interest: The authors declare that they have no competing interests.

Informed Consent: Informed consent was obtained from all individual participants included in the study.

Project/Funding: The funding agency had no role in the study design, data collection, analysis, interpretation, or writing of the manuscript.

Data Sharing/Availability: The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Authors' Contributions: [TKO] and [OYA] contributed to the conceptualization and design of the study, performed the methodology, gathered data, and conducted data analysis, writing of the introduction and conclusion sections of the study. All authors reviewed and approved the final manuscript.

Use of Artificial Intelligence: The authors declare that no generative artificial intelligence tools were used in the design, data analysis, or writing of this study. The manuscript was prepared entirely by the authors in compliance with scientific and ethical standards.

REFERENCES

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.

Bartholomew, K., & Horowitz, L. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*, 226-244.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, *4*(6), 561-571.

Bifulco, A., Kwon, J., Jacobs, C., Moran, P. M., Bunn, A., & Beer, N. (2006). Adult attachment style as a mediator between childhood neglect/abuse and adult depression and anxiety. *Social Psychiatry and Psychiatric Epidemiology, 41*, 796-805.

Bifulco, A., Mahon, J., Kwon, J. H., Moran, P. M., & Jacobs, C. (2003). The vulnerable attachment style questionnaire (VASQ): An interview-based measure of attachment styles that predict depressive disorder. *Psychological Medicine, 33,* 1099–1110.

Bifulco, A., Moran, P. M., Ball, C., & Bernazzani, O. (2002a). Adult attachment style. I: Its relationship to clinical depression. *Social Psychiatry and Psychiatric Epidemiology, 37*, 50–59.

Bifulco, A., Moran, P. M., Ball, C., & Lillie, A. (2002b). Adult attachment style. II: Its relationship to psychosocial depressive vulnerability. *Social Psychiatry and Psychiatric Epidemiology, 37*, 60–67.

Billings, A. G., & Moos, R. H. (1981). The role of coping responses and social resources in attenuating the stress of life events. *Journal of Behavioral Medicine, 4*(2), 139-157.

Blake, J. A., Thomas, H. J., Hurst, C. P., Pelecanos, A. M., McGee, T. R., Najman, J. M., & Scott, J. G. (2024a). A two-generation study of attachment in mothers and their young adult offspring: Latent classes of attachment and associations with anxiety and depression. *Journal of Affective Disorders, 358,* 361-368.

Blake, J. A., Thomas, H. J., Pelecanos, A. M., Najman, J. M., & Scott, J. G. (2024b). Does attachment anxiety mediate the persistence of anxiety and depressive symptoms from adolescence to early adulthood? *Social Psychiatry and Psychiatric Epidemiology,* 1-9.

Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment.* New York: Basic Books.

Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York: Basic Books.

Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss: Sadness and depression.* New York: Basic Books.

Carnelley, K. B., Pietromonaco, P. R., & Jaffe, K. (1994). Depression, working models of others, and relationship functioning. *Journal of Personality and Social Psychology, 66*(1), 127-140.

Carr, S., Colthurst, K., Coyle, M., & Elliott, D. (2013). Attachment dimensions as predictors of mental health and psychosocial wellbeing in the transition to university. *European Journal of Psychology of Education, 28,* 157-172.

Chen, X., He, J., Fan, X., & Cai, Z. (2021). Attachments, dispositional mindfulness, and psychological distress: A mediation analysis. *Current Psychology, 40,* 1651-1659.

Cheung, M. W. (2007). Comparison of approaches to constructing confidence intervals for mediating effects using structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal, 14*(2), 227-246.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385-396.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*(4), 644-663.

Cooley, E. L., Van Buren, A., & Cole, S. P. (2010). Attachment styles, social skills, and depression in college women. *Journal of College Counseling, 13*(1), 50-62.

Cortes-Garcia, L., Takkouche, B., Rodriguez-Cano, R., & Senra, C. (2020). Mediational mechanisms involved in the relation between attachment insecurity and depression: A meta-analysis. *Journal of Affective Disorders, 277*, 706-726.

Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology, 78*(1), 98–104.

Cyranowski, J. M., Bookwala, J., Feske, U., Houck, P., Pilkonis, P., Kostelnik, B., & Frank, E. (2002). Adult attachment profiles, interpersonal difficulties, and response to interpersonal psychotherapy in women with recurrent major depression. *Journal of Social and Clinical Psychology, 21*(2), 191-217.

Dagan, O., Facompré, C. R., & Bernard, K. (2018). Adult attachment representations and depressive symptoms: A meta-analysis. *Journal of Affective Disorders, 236*, 274-290.

Davila, J., Hammen, C., Burge, D., Daley, S. E., & Paley, B. (1996). Cognitive/interpersonal correlates of adult interpersonal problem-solving strategies. *Cognitive Therapy and Research, 20*(5), 465-480.

Ditzen, B., Schmidt, S., Strauss, B., Nater, U. M., Ehlert, U., & Heinrichs, M. (2008). Adult attachment and social support interact to reduce psychological but not cortisol responses to stress. *Journal of Psychosomatic Research, 64*(5), 479-486.

Dozier, M. (1990). Attachment organization and treatment use for adults with serious psychopathological disorders. *Development and Psychopathology, 2*(1), 47-60.

D'zurilla, T. J., & Goldfried, M. R. (1971). Problem solving and behavior modification. *Journal of Abnormal Psychology, 78*(1), 107-126.

Eskin, M., Harlak, H., Demirkiran, F. ve Dereboy, C. (2013). Algılanan Stres Ölçeğinin Türkçeye Uyarlanması: Güvenirlik ve Geçerlik Analizi, *New Symposium Journal, 51*, 3, 132-140.

Fang, F., & Wang, J. (2024). The relationship between attachment and depression among college students: the mediating role of perfectionism. *Frontiers in Psychology, 15*, 1-8.

Flett, G. L., Blankstein, K. R., & Obertynski, M. (1996). Affect intensity, coping styles, mood regulation expectancies, and depressive symptoms. *Personality and Individual Differences, 20*(2), 221-228.

Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology, 46*(4), 839.

Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*, 219-239.

Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology, 50*(3), 571.

Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78*, 350-365.

Gerlsma, C., & Luteijn, F. (2000). Attachment style in the context of clinical and health psychology: A proposal for the assessment of valence, incongruence, and accessibility of attachment representations in various working models. *British Journal of Medical Psychology, 73,* 15–34.

Greenland, S., Senn, S. J., Rothman, K. J., Carlin, J. B., Poole, C., Goodman, S. N., & Altman, D. G. (2016). Statistical tests, P values, confidence intervals, and power: A guide to misinterpretations. *European Journal of Epidemiology, 31*(4), 337-350.

Gross, J. J. (1998a). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology*, *74*, 224–237.

Gross, J. J. (1998b). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, *2*, 271–299.

Gross, J. J. (2001). Emotion regulation in adulthood: Timing is everything. *Current Directions in Psychological Science*, *10*, 214-219.

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-Being. *Journal of Personality and Social Psychology, 85*(2), 348–362.

Gross, J. J., Richards, J. M., & John, O. P. (2006). Emotion regulation in everyday life. In D. K. Snyder, J. A. Simpson, & J. N. Hughes (Eds.), *Emotion regulation in couples and families: Pathways to dysfunction and health* (pp. 13–35). Washington, DC: American Psychological Association.

Hammen, C. (2005). Stress and depression. *Annual Review of Clinical Psychology, 1*(1), 293-319.

Hammen, C. L. (2015). Stress and depression: Old questions, new approaches. *Current Opinion in Psychology, 4*, 80-85.

Hankin, B. L., Kassel, J. D., & Abela, J. R. (2005). Adult attachment dimensions and specificity of emotional distress symptoms: Prospective investigations of cognitive risk and interpersonal stress generation as mediating mechanisms. *Personality and Social Psychology Bulletin, 31*(1), 136-151.

Hao, S. (2024). Parental attachment and depression in vocational college students: A moderated mediation model of resilience and subjective well-being. *Current Psychology, 43,* 25366–25376.

Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*, 511-524.

Heppner, P. P., Witty, T. E., & Dixon, W. A. (2004). Problem-solving appraisal and human adjustment: A review of 20 years of research using the Problem-Solving Inventory. *The Counseling Psychologist, 32*(3), 344-428.

Hidaka, B. H. (2012). Depression as a disease of modernity: Explanations for increasing prevalence. *Journal of Affective Disorders, 140*(3), 205-214.

Hisli, N. (1988). Beck Depresyon Envanteri'nin geçerliği üzerine bir çalışma. *Psikoloji Dergisi, 6*(22), 118-122.

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods, 6*, 53-60.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6,* 1-55.

Jittayuthd, S., & Karl, A. (2022). Rejection sensitivity and vulnerable attachment: Associations with social support and PTSD symptoms in trauma survivors. *European Journal of Psychotraumatology, 13*(1), 2027676.

Karreman, A., & Vingerhoets, A. J. J. M. (2012). Attachment and well-being: The mediating role of emotion regulation and resilience. *Personality and Individual Differences, 53*(7), 821-826.

Kidd, T., Hamer, M., & Steptoe, A. (2011). Examining the association between adult attachment style and cortisol responses to acute stress. *Psychoneuroendocrinology, 36*(6), 771-779.

Kline, P. (1994). *An easy guide to factor analysis*. Routledge.

Kupeli, N., Norton, S., Chilcot, J., Schmidt, U. H., Campbell, I. C., & Troop, N. A. (2015). A Confirmatory factor analysis and validation of the vulnerable attachment style questionnaire. *Journal of Psychopathology and Behavioral Assessment, 37*, 153–163.

Levy, K. N., Kivity, Y., Johnson, B. N., & Gooch, C. V. (2018). Adult attachment as a predictor and moderator of psychotherapy outcome: A meta-analysis. *Journal of Clinical Psychology, 74*(11).

Lopez, F. G., Mauricio, A. M., Gormley, B., Simko, T., & Berger, E. (2001). Adult attachment orientations and college student distress: The mediating role of problem coping styles. *Journal of Counseling & Development, 79*(4), 459-464.

Malik, S., Wells, A., & Wittkowski, A. (2015). Emotion regulation as a mediator in the relationship between attachment and depressive symptomatology: A systematic review. *Journal of Affective Disorders, 172*, 428-444.

Marganska, A., Gallagher, M., & Miranda, R. (2013). Adult attachment, emotion dysregulation, and symptoms of depression and generalized anxiety disorder. *American Journal of Orthopsychiatry, 83*(1), 131.

Maunder, R. G., & Hunter, J. J. (2001). Attachment and psychosomatic medicine: Developmental contributions to stress and disease. *Psychosomatic Medicine, 63*(4), 556-567.

Maunder, R. G., Lancee, W. J., Nolan, R. P., Hunter, J. J., & Tannenbaum, D. W. (2006). The relationship of attachment insecurity to subjective stress and autonomic function during standardized acute stress in healthy adults. *Journal of Psychosomatic Research, 60*(3), 283-290.

Metts, A. V., Zinbarg, R. E., Nusslock, R., Tabak, B. A., & Craske, M. G. (2024). Longitudinal associations among adult attachment orientations, emotion regulation tendencies, and transdiagnostic anxiety and depression symptoms in young adults. *Journal of Social and Personal Relationships, 41*(6), 1457–1480.

Mickelson, K. D., Kessler, R. C., & Shaver, P. R. (1997). Adult attachment in a nationally representative sample. *Journal of Personality and Social Psychology, 73*, 1092–1106.

Mikulincer, M., & Shaver, P. R. (2009). An attachment and behavioral systems perspective on social support. *Journal of Social and Personal Relationships, 26*(1), 7-19.

Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion, 27*(2), 77-102.

Moran, P. M., Bifulco, A., Ball, C., & Campbell, C. (2001). Predicting onset of depression: The vulnerability to depression questionnaire. *British Journal of Clinical Psychology, 40,* 411-427.

Moussavi, S., Chatterji, S., Verdes, E., Tandon, A., Patel, V., &

Ustun, B. (2007). Depression, chronic diseases, and decrements in health: Results from the World Health Surveys. *The Lancet, 370*(9590), 851-858.

Murphy, B., & Bates, G. W. (1997). Adult attachment style and vulnerability to depression. *Personality and Individual Differences, 22*(6), 835-844.

Ognibene, T. C., & Collins, N. L. (1998). Adult attachment styles, perceived social support and coping strategies. *Journal of Social and Personal Relationships, 15*(3), 323-345.

Panayides, P. (2013). Coefficient alpha: interpret with caution. *Europe's Journal of Psychology, 9*(4), 687–696.

Patrick, M., Hobson, R. P., Castle, D., Howard, R., & Maughan, B. (1994). Personality disorder and the mental representation of early social experience. *Development and Psychopathology, 6*(2), 375-388.

Pielage, S., Gerlsma, C., & Schaap, C. (2000). Insecure attachment as a risk factor for psychopathology: The role of stressful events. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice, 7*(4), 296-302.

Potik, D., Peles, E., Abramsohn, Y., Adelson, M., & Schreiber, S. (2014). The relationship between vulnerable attachment style, psychopathology, drug abuse, and retention in treatment among methadone maintenance treatment patients. *Journal of Psychoactive Drugs, 46*(4), 325-333.

Raison, C. L., & Miller, A. H. (2001). The neuroimmunology of stress and depression. *Seminars in Clinical Neuropsychiatry, 6*(4), 277-294.

Ravitz, P., Maunder, R., Hunter, J., Sthankiya, B., & Lancee, W. (2010). Adult attachment measures: A 25-year review. *Journal of Psychosomatic Research, 69*, 419–432.

Roberts, J. E., Gotlib, I. H., & Kassel, J. D. (1996). Adult attachment security and symptoms of depression: The mediating roles of dysfunctional attitudes and low self-esteem. *Journal of Personality and Social Psychology, 70*(2), 310.

Sahin, N. H., & Durak, A. (1995). Stresle basa çıkma tarzları ölçeği: Üniversite öğrencileri için uyarlanması. *Türk Psikoloji Dergisi, 10*(34), 56-73.

Schäfer, J. Ö., Naumann, E., Holmes, E. A., Tuschen-Caffier, B., & Samson, A. C. (2017). Emotion regulation strategies in depressive and anxiety symptoms in youth: A meta-analytic review. *Journal of Youth and Adolescence, 46*, 261-276.

Schermelleh Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, *8*(2), 23-74.

Schmidt, S., Nachtigall, C., Wuethrich-Martone, O., & Strauss, B. (2002). Attachment and coping with chronic disease. *Journal of Psychosomatic Research, 53*, 763-773.

Selcuk, E., Gunaydın, G., Sumer, N., & Uysal, A. (2005). Yetişkin bağlanma boyutları için yeni bir ölçüm: Yakın ilişkilerde yaşantılar envanteri-II'nin Türk örnekleminde psikometrik acıdan değerlendirilmesi. *Türk Psikoloji Yazıları, 8*(16), 1-11.

Shaver, P. R., & Mikulincer, M. (2007). Adult attachment strategies and the regulation of emotion. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 446-465). New York: Guilford.

Shaver, P. R., & Mikulincer, M. (2014). Adult attachment and emotion regulation. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 237-250). New York: Guilford.

Shaver, P. R., Schachner, D. A., & Mikulincer, M. (2005). Attachment style, excessive reassurance seeking, relationship processes, and depression. *Personality and Social Psychology Bulletin, 31*(3), 343-359.

Shorey, H. S., & Snyder, C. R. (2006). The role of adult attachment styles in psychopathology and psychotherapy outcomes. *Review of General Psychology, 10*(1), 1-20.

Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment, 8*(4), 350–353.

Smyth, N., Thorn, L., Oskis, A., Hucklebridge, F., Evans, P., & Clow, A. (2015). Anxious attachment style predicts an enhanced cortisol response to group psychosocial stress. *Stress*, *18*(2), 143-148.

Tabachnick, B. G., & Fidell, L. S. (2012). *Using multivariate statistics* (6th ed.). Pearson.

Thompson, G., Wrath, A., Trinder, K., & Adams, G. C. (2018). The roles of attachment and resilience in perceived stress in medical students. *Canadian Medical Education Journal, 9*(4), e69-e77.

Turan, N., Hoyt, W. T., & Erdur-Baker, Ö. (2016). Gender, attachment orientations, rumination, and symptomatic distress: Test of a moderated mediation model. *Personality and Individual Differences, 102,* 234-239.

Waller, E., Scheidt, C. E., & Hartmann, A. (2004). Attachment representation and illness behavior in somatoform disorders. *The Journal of Nervous and Mental Disease, 192*(3), 200-209.

Wang, C. C. D., & Mallinckrodt, B. (2006). Acculturation, attachment, and psychosocial adjustment of Chinese/Taiwanese international students. *Journal of Counseling Psychology, 53*(4), 422.

Wei, M., Heppner, P. P., & Mallinckrodt, B. (2003). Perceived coping as a mediator between attachment and psychological distress: A structural equation modeling approach. *Journal of Counseling Psychology, 50*, 438-447.

Wienand, D., Wijnen, L. I., Heilig, D., Wippel, C., Arango, C., Knudsen, G. M., ... & Simon, J. (2024). Comorbid physical health burden of serious mental health disorders in 32 European countries. BMJ Mental Health, 27(1-10).

World Health Organization. (2012). *Depression: A global crisis. World mental health day*. https://consaludmental.org/publicaciones/Depressionglobalcrisis.pdf

Yurtsever, G. (2008). Negotiators' profit predicted by cognitive reappraisal, suppression of emotions, misinterpretation of information, and tolerance of ambiguity. *Perceptual and Motor Skills*, *106*, 590-608.

Zheng, L., Luo, Y., & Chen, X. (2020). Different effects of attachment anxiety and attachment avoidance on depressive symptoms: A meta-analysis. *Journal of Social and Personal Relationships, 37*(12), 3028-3050.

APPENDICES

Appendix 1. *The Vulnerable Attachment Style Questionnaire (VASQ)*

Items	Strongly Disagree	Disagree	Indecisive	Agree	Strongly Agree
1-I rely on others to help me make decisions.					
2-It's best not to get too emotionally close to other people.					
3-I worry a lot if people I live with arrive back later than expected.					
4-I usually rely on advice from others when I've got a problem.					
5-I feel uncomfortable when people get too close to me.					
6-I feel people are against me.					
7-I worry about things happening to close family and friends.					
8-I often get into arguments.					
9-I like making decisions on my own. *					
10-I get anxious when people close to me are away.					
11-I find it hard to trust others.					
12-Having people around me can be a nuisance.					
13-I feel people haven't done enough for me.					
14-I find it difficult to confide in people.					
Note. *Deleted item. Items 1, 4, 9 belong to lack of autonomy, items 3, 7, 10 belong to anxious-dependent, items 6, 8, 13 belong to ambivalent, items 2, 5, 11, 12, 14 belong to avoidant-dismissive attachment style.					

Appendix 2. Kırılgan Bağlanma Stili Ölçeği (KBSÖ)

Items	Keisnlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
1-Kararlarımı verirken başkalarının yardımına ihtiyaç duyarım.					
2-Duygusal olarak diğer insanlara çok yakın olmamak en iyisidir.					
3-Birlikte yaşadığım insanlar beklenenden daha geç saatte (eve, yurda) dönerlerse aşırı derecede endişelenirim.					
4-Bir problemim olduğunda genellikle başkalarının nasihatlerine ihtiyaç duyarım.					
5-İnsanlar bana çok fazla yakınlaştıklarında rahatsız hissederim.					
6-Herkes bana karşıymış gibi hissederim.					
7-Yakın akrabalarım ve arkadaşlarımın başına gelebilecek şeylere aşırı derecede endişelenirim.					
8-İnsanlarla sık sık tartışmaya girerim. .					
9-Kararlarımı kendim almayı severim .*					
10-Bana yakın olan insanlar benden uzakta olduğunda kaygılanırım.					
11-Başkalarına güvenmek bana zor gelir.					
12-Etrafımda insanların olması can sıkıcı olabilir.					
13-İnsanların benim için yeterince bir şeyler yapmadığını hissederim.					
14-Başkalarına güvenip sırrımı açmak bana zor gelir.					
Not. *Silinen maddeler. 1, 4, 9. maddeler özerklik eksikliği, 3, 7, 10. maddeler kaygılı-bağımlı, 6, 8, 13, maddeler kararsız, 2, 5, 11, 12, 14. maddeler kaçınan-kayıtsız bağlanma stiline aittir.					