MCBU SBED
MANİSA CELAL BAYAR ÜNİVERSİTESİ SAĞLIK BİLİMLERİ ENSTİTÜSÜ DERGİSİ
MANISA CELAL BAYAR UNIVERSITY JOURNAL OF INSTITUTE OF HEALTH SCIENCE
ISSN: 2147-9607

ARAŞTIRMA MAKALESİ
RESEARCH ARTICLE
CBU-SBED, 2023, 10 (4): 365-371

Duygu Düzenleme Güçlükleri ve Güvensiz Bağlanma Panik Bozukluğunda Dissosiyatif Belirtilerin Şiddetini Artırır mı?

Do Emotion Regulation Difficulties and Insecure Attachment Increase the Severity of Dissociative Symptoms in Panic Disorder?

Nur Özge Akçam[1], Nazan Dolapoğlu[2*], Sebnem Pırıldar[3]

[1] Milas Devlet Hastanesi Psikiyatri Kliniği Muğla/Türkiye
[2] Balıkesir Üniversitesi Tıp Fakültesi Psikiyatri Anabilim Dalı Balıkesir /Türkiye
[3] Ege Üniversitesi Tıp Fakültesi Psikiyatri Anabilim Dalı İzmir /Türkiye

e-mail: nurozgeakcam@yahoo.com, nazandolapoglu@yahoo.com, sebnem.pirildar@ege.edu.tr
ORCID: 0000-0001-5221-9678
ORCID: 0000-0003-1400-7580
ORCID: 0000-0002-0513-4601

*Sorumlu Yazar / Corresponding Author: Nazan Dolapoğlu
Gönderim Tarihi / Received: 04.09.2023
Kabul Tarihi / Accepted: 07.11.2023
DOI: 10.34087/cbusbed.1355003

Öz

Giriş ve Amaç: Panik bozukluğu hastalarında kaygılı bağlanma örüntüsü yoğunlaştıkça duyguların düzenlenmesinde yaşanan zorluklar ve dissosiyatif belirtilerin şiddeti hastalık yükünü artırmaktadır. Bu çalışmanın amacı panik bozukluğu hastalarında duygu düzenleme, bağlanma örüntüleri ve dissosiyatif belirtiler arasındaki ilişkiyi aydınlatmaktır.

Gereç ve Yöntemler: Çalışmamıza kurumumuz psikiyatri polikliniğinde panik bozukluğu tanısıyla takip edilen, yaşları 18 – 65 arasında değişen 85 hasta dahil edildi. Araştırmaya dahil edilen hastalara DSM-IV Eksen Bozukluklarına Yönelik Yapılandırılmış Klinik Görüşme (SCID - I), sosyodemografik veri formu, Panik Bozukluğu Şiddet Ölçeği (PDSS), Duygu Düzenleme Güçlükleri Ölçeği (DERS), Dissosiyatif Deneyimler Ölçeği (DES), Yakın İlişki Deneyimleri Ölçeği (ECR – RS) uygulandı.

Bulgular: Panik bozukluğunun şiddeti ile dissosiyatif belirtilerin şiddeti arasında anlamlı bir ilişki bulundu (p=0,030). DERS toplam puanları ile DES puanları karşılaştırıldığında istatistiksel olarak anlamlı bir korelasyon bulundu (p=0,005). DES puanı ile DERS alt ölçekleri arasındaki ilişkinin değerlendirilmesinde ise DERS dürtüsellik (p<0,001), DERS netlik (p=0,006), DERS amaç (p<0,001) alt ölçekleri ile DES puanı arasında anlamlı bir ilişki bulunmuştur. ECR – RS kaygı alt ölçeği ile DERS toplam puanı arasındaki ilişki incelendiğinde, pozitif ve istatistiksel olarak anlamlı bir ilişki bulunmuştur (p<0,001). ECR – RS kaçınma alt ölçeği ile DERS netlik alt ölçeği arasında anlamlı bir korelasyon bulunurken (p=0,011), diğer alt ölçekler ve DERS toplam puanı ile anlamlı bir korelasyon saptanmadı.

Sonuç: Panik bozukluğu hastalarının dissosiyatif deneyimleri, duygularını düzenleyememelerinden kaynaklanan telafi edici bir mekanizma olabilir. Bu bulgular ışığında dissosiyatif belirtiler yaşayan panik bozukluğu hastalarında duygu düzenleme becerilerinin yeniden şekillendirilmesi dissosiyatif belirtilerin ve hastalık yükünün azalması açısından faydalı olabilir.

Anahtar kelimeler: Panik bozukluk, Duygu düzenleme, Bağlanma, Dissosiyasyon, Anksiyete

Abstract

Aim; As the anxious attachment pattern intensifies in patients with panic disorder, difficulties in regulating emotions and the severity of dissociative symptoms increase the burden of disease. The aim of this study was to

elucidate the relationship between emotion regulation, attachment patterns and dissociative symptoms in patients with panic disorder.
Method; A total of 85 individuals aged between 18 – 65 years, who were followed up in the psychiatry outpatient clinic of our institution with the diagnosis of panic disorder were enrolled in our study. Structured Clinical Interview for the DSM- IV Axis Disorders *(SCID - I),* sociodemographic data form, Panic Disorder Severity Scale *(PDSS)*, Difficulties in Emotion Regulation Scale (DERS), Dissociative Experiences Scale *(DES),* Experiences in Close Relationships – Relationship Structures Scale *(ECR – RS)* have been applied to patients thay have been included in this research.
Results; A significant correlation was found between the severity of panic disorder and the severity of dissociative symptoms *(p=0.030)*. A statistically significant correlation was found between DERS total scores and DES scores *(p=0.005)*. In the evaluation of the relationship between DES score and DERS subscales, a significant relationship was found between DERS impulsivity *(p<0.001)*, DERS clarity *(p=0.006)*, DERS purpose *(p<0.001)* subscales and DES score. A positive and statistically significant relationship was found between the ECR – RS anxiety and DERS total score *(p<0.001)*. A significant correlation was found between the ECR – RS avoidance subscale and the DERS clarity subscale *(p=0.011)*, but no significant correlation was found with the other subscales and the DERS total score.
Conclusion; The dissociative experiences of panic disorder patients may be a compensatory mechanism caused by the inability to regulate their emotions. In light of these findings, reshaping emotion regulation skills in panic disorder patients experiencing dissociative symptoms may be beneficial in reducing dissociative symptoms and disease burden.

Keywords: Panic disorder, Emotion regulation, Attachment, Dissociation, Anxiety

1. Introduction

Panic disorder is characterized by recurrent and unexpected occurrence of panic attacks accompanied by at least four of 13 somatic or cognitive symptoms. Panic disorder is of unknown etiology, characterized by sudden onset of severe, paroxysmal anxiety attacks. Anticipatory anxiety and agoraphobia, are often added to the clinical picture, significantly impair the quality of life and functionality of patients. In addition, panic disorder is common in the society and causes significant disability [1].

Dissociation is characterized by alteration or deterioration in the normally integrative functions of memory, identity, and consciousness. The phenomenon of dissociation prevents the feeling of pain, horror, sadness, and the possibility of death during the trauma in addition to the distress it gives to the person. Dissociation contribute to the resolution of certain conflicts and provides some benefits and gains in isolating catastrophic experiences. However, the disadvantage of this process is that, this mechanism comes into play automatically, instead of adaptations that will affect the functionality of the person much less, even when the person's life is not in real danger [2].

Considering the relationship between the etiology of dissociation and anxiety, another striking point is the studies on cognitive processes. The cognitive inhibitory processes have a number of functions such as reducing the level of increased anxiety and keeping it constant, especially in dissociative identity disorder. In the emergence of dissociation, the effect of the deterioration in these processes is kept in the foreground. Accordingly, the weakening of these processes regulating anxiety can be caused by intrusive effects such as flashback and alter change. It is thought that it may trigger the onset of dissociative symptoms. The weakening in inhibition appears to be the cognitive consequences of increased anxiety in dissociative identities [3].

Dissociative symptoms such as depersonalization and derealization are among the characteristic symptoms frequently experienced during panic attacks in panic disorder patients. For this reason, the definition of "phobic-anxiety-depersonalization syndrome" has been used in the previous literature, especially for panic disorder in which dissociative symptoms and agoraphobia are prominent. In recent years, attacks accompanied by dissociative symptoms have been described as a separate type of panic disorder. Published studies stated that up to 69% of patients with panic disorder experience depersonalization and derealization during panic attacks. Patients with panic disorder accompanied by depersonalization have more agoraphobia and avoidance behaviors, a higher probability of comorbidity with another psychiatric disorder, and an earlier age of onset of illness. It has been reported that dissociative experiences are more common in patients with panic disorder compared to normal controls and that dissociative symptoms negatively affect treatment outcome and drug response in patients with panic disorder [4].

Attachment theory is generally regarded as a complex psychological construct referring to a deep and lasting emotional relationship that binds a person to another in time and space. It states that human beings build mental representations or “internal working models” of the self and others, based on early interactions with significant caregivers. Given the key role of attachment in the development of emotion regulation and the link

between dysfunctional affect regulation and anxiety, factors such as dysfunctional parenting and insecure attachment may confer risk for the development of anxiety-related psychopathology. As affect regulation strategies are mainly acquired in the interpersonal context of early attachment relationships and persist into adulthood, they are relevant for the understanding of the nature and development of anxiety disorders [5].
In this research, we aimed to elucidate the relationship between emotion regulation, attachment patterns and dissociative symptoms in patients with panic disorder. Our hypothesis could be elaborated as that the dissociative symptoms in panic disorder were associated with emotional dysregulation and the severity of dissociative symptoms was related to attachment patterns.

2. Materials and methods

A total of 100 individuals aged between 18 – 65 years, who were followed up in the psychiatry outpatient clinic of our institution with the diagnosis of panic disorder were enrolled in our study.
Patients with psychotic disorders, bipolar disorder, dementia, substance and alcohol abuse, neurologic disease or any disease that could affect general health condition were excluded from the study. Illeterate individuals were also not included. Since 3 of the patients included in the study were diagnosed with psychotic disorders, 1 with depression with panic attack, 2 with clinical mental retardation, and 1 with conversion disorder, they were excluded. Additionally, 8 patients were not included in the study because they could not fill the scales properly. Structured Clinical Interview for the DSM- IV Axis Disorders (SCID - I), sociodemographic data form, Panic Disorder Severity Scale (PDSS), Difficulties in Emotion Regulation Scale (DERS), Dissociative Experiences Scale (DES), Experiences in Close Relationships – Relationship Structures Scale (ECR – RS) have been applied to 85 patients thay have been included in this research. The study complied with the Declaration of Helsinki and informed consent has been obtained from all participants.The ethics committee approval has been granted with protocol number: 14 – 9/25.

2.1. Data Collection Tools

Panic Disorder Severity Scale (PDSS): It was developed by Shear et al [6]. It was adapted into Turkish by Monkul et al [7]. It provides ratings of seven-item frequency of panic, anticipatory anxiety, avoidance of physical sensations, and impairment in work and social functioning. Each of these symptoms is rated by the interviewer on a scale of 0–4. Total score range is 0-28.

Dissociative Experiences Scale (DES): It is a self-report scale developed by Bernstein and Putnam to evaluate for dissociative experiences [8]. The scale consists of 28 items. It scores between 0-100, and the result is obtained by calculating the average of the total scores received. The level of dissociation is determined by the total score obtained from the scale. The validity and reliability study in Turkey was conducted by Şar et al [9].

Difficulties in Emotion Regulation Scale (DERS): It was developed by Gratz and Roemer in 2004 to evaluate difficulties in emotion regulation [10]. The scale consists of 36 items and six subscales named as, difficulties engaging in goal directed behavior (goals), limited access to emotion regulation strategies (strategıes), nonacceptance of emotional responses (non-acceptance), difficulty to control impulsive behaviors under negative emotions (ımpulse), lack of emotional clarity (clarıty), and lack of emotional awareness (awareness). The items of the scale are rated on a 5-point Likert type scale from 1 "almost never" to 5 "almost always". Adaptation of the scale into Turkish was carried out by Ruganci and Gençöz in 2010 [11].

Experiences in Close Relationships Relationship Structures Scale (ECR – RS): It was developed by Fraley et al. to measure attachment dimensions in 2000 [12]. The validity and reliability study in Turkey of the scale was conducted by Selçuk et al. in 2005 [13]. The Turkish scale, like the original, consists of two independent dimensions: anxiety (18 items) and avoidance (18 items). It is a 7-point likert type.

2.2 Statistical Analysis

The data have been analyzed via SPSS 20 (Statistics for Social Sciences) computer program. Before the statistical analyzes were performed the conformity of the data to the normal distribution was evaluated and the analysis was performed with parametric/non-parametric tests accordingly. While the mean and standard deviation values were given for the data conforming to the normal distribution, the median and inter quartile range (IQR) results were given if it did not. T – test or ANOVA (analysis of variance) have been utilized for parametric variables, Mann Whitney U or Kruskal-Wallis tests were used for non-parametric variables. The χ^2 (Chi-Square) test was performed to determine the differences between categorical data. The relationships of numerical variables with each other were evaluated with Pearson (parametric variable) or Spearman (non-parametric variable) correlation analysis. A p value of <0.05 values was considered significant

3. Results and Discussions

3.1 Results

In terms of gender difference 69.4% (n=59) of 85 cases participating in the study were female and 30.6% (n=26) were male. The mean age of the patients was 38.03±11.47 years old (39.22±11.45 years old for females and 35.34±11.29 years old for males).

The medication status of the study population could be elaborated as: 81.2% of the patients were currently using at least one drug, 57.6% of the patients were using antidepressants, 12.9% were using antidepressants and benzodiazepines, 5.9% were using antidepressants and antipsychotics, 4.7% were using antidepressants + antipsychotics + benzodiazepines. On the contrary 18.8% of the patients were not on any medication.

The psychiatric family history of the patients were as follows: 58.8% (n=50) had a history of mental illness in at least one family member and 31.8% of these patients (n=27) had at least one first or second degree relative with a family history of panic disorder.

A significant correlation was found between the severity of panic disorder and the severity of dissociative symptoms (p=0.030). A statistically significant correlation was found between DERS total scores and DES scores (p=0.005).

In the evaluation of the relationship between DES score and DERS subscales, a significant relationship was found between DERS impulsivity (p<0.001), DERS clarity (p=0.006), DERS purpose (p<0.001) subscales and DES score. There was no significant relationship between DES score and the other DERS subscales (Table 1).

Table 1. Relationship Between Dissociative Experiences Scale (DES) and Difficulties in Emotion Regulation Subscales (DERS)

		DERS Purpose	**DERS Strategy**	**DERS Impulsivity**	**DERS Awareness**	**DERS Clarity**	**DERS Rejection**
DES Score	**r**	0.378	0.211	0.482	-0.106	0.293	0.148
	p	**<0.001**	0.052	**<0.001**	0.335	**0.006**	0.178
	n	85	85	85	85	85	85

r: pearson correlation coefficient n: number DES: Dissociative Experiences Scale DERS: Difficulties in Emotion Regulation Scale

However, a positive correlation was obtained between DES and ECR – RS anxiety and this relationship was found to be statistically significant (p<0.001) (Table 2).

Table 2. Relationship Between Dissociative Experiences Scale (DES) and The Experiences in Close Relationships-Relationship Structures Scale **(**ECR – RS)

		ECR – RS Anxiety	**ECR – RS Avoidance**
DES total score	**r**	0.381	0.175
	p	**<0.001**	0.110

r: pearson correlation coefficient n: number DES: Dissociative Experiences Scale ECR – RS: The Experiences in Close Relationships – Relationship Structures Scale

A positive and statistically significant relationship was found between the ECR – RS anxiety and DERS total score (p<0.001). As the ECR – RS anxiety score increased, the DERS total score increased. This relationship was also significant in DERS purpose (p =0.000), DERS strategy (p<0.001), DERS impulsivity (p<0.001), DERS clarity (p =0.000), DERS rejection (p=0.008) subscales (Table 3).

Table 3. Relationship Between Difficulties in Emotion Regulation Subscales (DERS) and The Experiences in Close Relationships-Relationship Structures Anxiety Subscale (ECR – RS)

ECR–RS Anxiety	DERS Total	DERS Purpose	DERS Strategy	DERS Impulsivity	DERS Awareness	DERS Clarity	DERS Rejection
r	0.573	0.493	0.489	0.514	-0.022	0.414	0.285
p	**<0.001**	**<0.001**	**<0.001**	**<0.001**	0.840	**<0.001**	0.008

r: pearson correlation coefficient n: number ECR – RS: The Experiences in Close Relationships DERS: Difficulties in Emotion Regulation Scale

A significant correlation was found between the ECR – RS avoidance subscale and the DERS clarity subscale (p=0.011), but no significant correlation was found with the other subscales and the DERS total score (Table 4).

Table 4. Relationship Between Difficulties in Emotion Regulation Subscales(DERS) and The Experiences in Close Relationships-Relationship Structures Avoidance Subscale (ECR – RS)

ECR – RS Avoidance	DERS Total Score	DERS Purpose	DERS Strategy	DERS Impulsivity	DERS Awareness	DERS Clarity	DERS Rejection
r	0.171	0.196	0.074	0.189	0.041	0.274	-0.076
P	0.118	0.072	0.503	0.083	0.711	**0.011**	0.490

r: pearson correlation coefficient n: number ECR – RS: The Experiences in Close Relationships DERS: Difficulties in Emotion Regulation Scale

3.2 Discussion

In our study, a significant relationship was found between the severity of panic disorder and the severity of dissociative symptoms (p = 0.030). A statistically significant correlation was found between DERS total scores and DES scores (p=0.005). In evaluating the relationship between DES score and DERS subscales, a significant relationship was found between DERS impulsivity (p<0.001), DERS clarity (p=0.006), DERS purpose (p<0.001) subscales and DES score. A positive and statistically significant relationship was found between the ECR – RS anxiety subscale and the DERS total score (p<0.001). While there was a significant correlation between the ECR – RS avoidance subscale and the DERS clarity subscale (p=0.011), no significant correlation was found with the other subscales and the DERS total score.

Dissociation may cause functional impairment in memory and cognitive abilities and may adversely affect the clinical course of accompanying psychiatric disorders. As a matter of fact, several clinical studies have shown the negative effects of dissociation on the clinical course in anxiety disorders. When panic disorder patients who experience depersonalization were compared with those who do not, it was seen that these patients experience more panic attacks. Patients might face depersonalization as tremor, sweating, cold or hot flashes, and fear of going crazy. In addition, it was observed that the level of functionality was at a lower level and the comorbidity rates were higher. Considering the treatment success, it is striking that these patients respond less to treatment and are more resistant [14].

In terms of the studies related to emotion regulation in panic disorder, Tull et al., reported that, in panic disorder cases avoidance of emotions and difficulty in accepting emotions (non-acceptance) were higher; emotional clarity was found to be lower. In addition, the difficulty in regulating emotions was found to be related to the severity of panic attacks [15]. In a study conducted in patients with generalized anxiety disorder (GAD), difficulties in awareness and clarity of emotions, goal-directed behavior during stress, and control of impulsive behaviors were associated with difficulty in using emotion regulation strategies. It has been found that patients with generalized anxiety disorder are less capable to process emotions, and use suppression of emotion and rumination [16].

In other studies, it was determined that although emotional clarity decreased in panic disorder, emotional awareness was higher and it was reported

that limited expression and difficulty in suppressing and naming negative emotions were highly found in panic disorder cases. Difficulties in emotion regulation (non-acceptance, experiential avoidance, and decreased clarity) can ultimately lead to the perception of unpredictable and uncontrollable fear and anxiety [17]. In this study, a significant relationship was found between difficulties in regulating emotions and the severity of dissociation. This relationship was observed in the DERS impulsivity, DERS clarity, and DERS purpose subscales. In other words, severe dissociative symptoms were associated with increased impulsivity, decreased emotional clarity, and difficulty in initiating goal-directed behaviors in negative mood.

Panic disorder, social phobia, obsessive compulsive disorder, post-traumatic stress disorder (PTSD) and chronic pain have been shown to be associated with insecure attachment style in various studies. Insecure attachment styles and personality pathology in adolescents and adults such as anxious/ambivalent attachment with withdrawal and introverted pathologies and avoidant attachment was associated with various personality disorders reflecting a mixture of introverted and extrinsic pathologies. Anxious/ambivalent attachment styles, which are insecure attachment styles, have been associated with panic disorder, anxiety disorders and depressive disorders [18]. Another finding of our study is that there is a significant relationship between anxious attachment, which is one of the insecure attachment patterns, and the severity of dissociation. A significant correlation was found between DES and ECR–RS (anxiety) scale scores. According to this finding as the dissociation score increases, the anxious attachment pattern becomes more pronounced in panic disorder cases.

In early studies, it was shown that individuals experiencing depersonalization and derealization tend to display more safety behaviors during situations that cause social anxiety, and these individuals filter events more ruminatively than other participants. According to Hoyer et al., security-seeking behaviors were found to be higher in social anxiety disorder patients with depersonalization and derealization [19]. In this study, a significant correlation was found between anxious attachment and difficulty in regulating emotions. Difficulty in initiating goal-directed behaviors (goal), difficulty in using an effective strategy in emotion regulation (strategy), increase in impulsivity (impulsivity), decrease in emotional clarity and difficulty in accepting negative emotions (non-acceptance) were found to be associated with anxious attachment pattern and these result were in parallel with the previous literature. This relationship was not found with avoidant attachment (excluding the clarity subscale).

In addition, there are studies indicating that avoidant attachment was associated with an inability to accept emotional awareness, clarity, and difficulty in understanding emotions. Consistent with these results, in another study it was reported that anxious attachment to neglecting object was associated with decreased emotional awareness, limited acceptance and decreased impulse control. It can be said that dissociation, which has been shown to be associated with increased anxiety and arousal, negatively affects the clinical course in line with the available data. Patients with accompanying dissociative symptoms may also need to be thoroughly investigated in order not to overlook their potential trauma. In studies conducted in this area, generalized anxiety disorder, social anxiety disorder, panic disorder and obsessive compulsive disorder have been found to show high comorbidity with dissociative disorders [20].

In this study it was found that there was a significant relationship between difficulty in regulating emotions and anxious attachment. The relationship between ECR – RS (anxiety) subscale and DERS total score was statistically significant. This relationship was also present in DERS purpose, DERS strategy, DERS impulsivity, DERS clarity, DERS rejection subscales. There was a positive relationship between ECR – RS avoidance and DERS total score but this relationship was not statistically significant. In other words, ECR – RS avoidance score and DERS total score are independent of each other.

The main limitiation of this study could be attributed to lack of a control group. In conclusion a significant correlation was found between the severity of panic disorder and dissociation. As the severity of dissociation increased, panic disorder patients were unable to regulate their emotions and especially increased impulsivity. They presented decreased emotional clarity, had difficulty initiating goal-directed behaviors in negative moods and had a more anxious attachment pattern. As the anxious attachment pattern intensifies, the inability to regulate emotions is more common. Experiencing dissociative experiences as a result of not being able to regulate their emotions may be a compensatory mechanism to overcome this situation. This might be elaborated as the strength and the most important finding of this study.

4. Conclusion

The dissociative experiences of panic disorder patients may be a compensatory mechanism caused by the inability to regulate their emotions. In light of these findings, reshaping emotion regulation skills in panic disorder patients experiencing dissociative symptoms may be beneficial in reducing dissociative symptoms and disease burden.

5. Acknowledgement and Disclosures

The authors have no conflicts of interest to declare.
There was no funding relevant to this study.

6. References

1. Rudaz, M, Craske, MG, Becker, ES, Ledermann, T, Margraf, J, Health anxiety and fear of fear in panic disorder and agoraphobia vs. social phobia: A prospective longitudinal study, Depress Anxiety, 2010, 27, 404–11.
2. Loewenstein, RJ, Frewen, P, Lewis-Fernandez, R, Dissociative Disorders, In: Sadock, BJ, Sadock, VA, Ruiz, P, eds, Kaplan & Sadock's Comprehensive Textbook of Psychiatry (50th Anniversary Edition), 10th ed, Philedelphia: Wolters Kluwer, 2017, 1866-93.
3. Dorahy, MJ, McCusker, CG, Loewenstein, RJ, Colbert, K, Mulholland, C, Cognitive inhibition and interference in dissociative identity disorder: The effects of anxiety on specific executive functions, Behav Res Ther, 2006, 44, 749-764.
4. Ray, S, Ray, R, Singh, N, Paul, I, Dissociative experiences and health anxiety in panic disorder, Indian journal of psychiatry, 2021, 63(1), 70–73.
5. Nolte, T, Guiney, J, Fonagy, P, Mayes, LC, Luyten, P, Interpersonal stress regulation and the development of anxiety disorders: an attachment-based developmental framework, Front Behav Neurosci, 2011, 5, 55.
6. Shear, MK, Brown, TA, Barlow, DH et al, Multicenter collaborative panic disorder severity scale, Am J Psychiatry, 1997, 154, 1571-1575.
7. Monkul, ES, Tural, U, Onur, E et al, Panic disorder severity scale: reliability and validity of the Turkish version, Depress Anxiety, 2004, 20, 8-16.
8. Bernstein, EM, Putnam, FW, Development, reliability and validity of a dissociation scale, J Nerv Ment Disord, 1986, 47, 285-293.
9. Şar, V, Kundakçı, T, Kızıltan, E, et al, Dissociative Validity and reliability of the Experiences Scale (DES-II), 33. National Psychiatry Congress, Full Text Book of Proceedings, 1997, 55-64.
10. Gratz KL, Roemer L, Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale, J Psychopathol Behav Assess, 2004, 26, 41-54.
11. Rugancı, RN, Gençöz T, Psychometric properties of a Turkish version of the Difficulties in Emotion Regulation Scale, J Clin Psychol, 2010, 66, 442-455.
12. Fraley, RC, Waller, NG, Brennan, KA, An item response theory analysis of self-report measures of adult attachment, J Pers Soc Psychol, 2000, 78, 350.
13. Selçuk, E, Günaydın, G, Sümer, N, et al, A new measurement for adult attachment dimensions: Psychometric evaluation of the Experiences in Close Relationships Inventory-II in a Turkish sample, Turkish Psychology Writings, 2005, 8, 1-11
14. Mendoza, L, Navinés, R, Crippa, JA, Fagundo, AB, Gutierrez, F, Nardi, AE et al, Depersonalization and personality in panic disorder, Compr Psychiatry, 2011, 52, 413–419.
15. Tull, MT, Roemer, L, Emotion Regulation Difficulties Associated with the Experience of Uncued Panic Attacks: Evidence of Experiential Avoidance, Emotional Nonacceptance and Decreased Emotional Clarity, Behav Ther, 2007, 38(4), 378-391.
16. Lynch, TR, Robins, CJ, Morse, JQ, Krause, ED, A Mediational Model Relating Affect Intensity Emotion Inhibitionand Psychological Distress, Behav Ther, 2001, 32(3), 519-536.
17. Bouton, ME, Mineka, S, Barlow, DH, A modern learning theory perspective on the etiology of panic disorder, Psychol Rev, 2001, 108(1), 4-32.
18. Myhr, G, Sookman, D, Pinard, G, Attachment security and parental bonding in adults with obsessive-compulsive disorder: a comparison with depressed out-patients and healthy controls, Acta Psychiatr Scand, 2004, 109, 447-456.
19. Hoyer, J, Braeuer, D, Crawcour, S, Klumbies, E, Kirscbaum, C, Depersonalization/derealization during acute social stres in social phobia, J Anxiety Disord, 2013, 27, 178-187.
20. Kulacaoglu, F, Solmaz, M, Ardic, FC, Akin, E, Kose, S, The relationship between childhood traumas, dissociation, and impulsivity in patients with borderline personality disorder comorbid with ADHD, Psychiatry and Clin Psychopharmacol, 2017, 27(4), 393-402.