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The Effect of Dissociative Symptoms on Anxiety, Depression and Functionality in Patients Diagnosed with Adjustment Disorder

Uyum Bozukluğu Tanısı Almış Hastalarda Disosiyatif Semptomların Anksiyete, Depresyon ve İşlevsellik Üzerindeki Etkisi

D Uğur Takım¹, D Hasan Belli²

¹University of Health Sciences Turkey, Erzurum City Hospital, Department of Psychiatry, Erzurum, Turkey ²University of Health Sciences Turkey, İstanbul Bağcılar Training and Research Hospital, Department of Psychiatry, İstanbul, Turkey

Abstract

Objective: The current study aimed to examine the impact of dissociative symptoms on anxiety, depression, and general functioning in individuals diagnosed with adjustment disorder.

Method: This cross-sectional study was conducted on 58 patients diagnosed with adjustment disorder according to the diagnostic and statistical manual of mental disorders criteria. The patients voluntarily participated in the study and provided written informed consent. Sociodemographic and clinical data were collected through a customized data form. The dissociative experiences scale, Beck anxiety inventory (BAI), Beck depression inventory (BDI), and functioning assessment short test (FAST) were used.

Results: Participants with dissociative experiences had significantly higher BAI, BDI, and FAST scores. Dissociative experiences were also positively correlated with depression (r=0.536, p<0.01) and anxiety (r=0.740, p<0.01), indicating increased levels of anxiety, depression, and functional impairment, and highlighting the negative impact of these symptoms on emotional health and daily functioning.

Conclusion: Dissociative symptoms can significantly aggravate anxiety, depression, and functional impairment in individuals with adjustment disorder. Early detection and targeted treatment of dissociative symptoms are essential for improving both mental health and overall quality of life in these patients.

Keywords: Adjustment disorder, anxiety, depression, dissociative symptoms, functional impairment

Öz

Amaç: Bu çalışma, uyum bozukluğu tanısı konmuş bireylerde disosiyatif semptomların anksiyete, depresyon ve genel işlevsellik üzerindeki etkisini incelemeyi amaçlamaktadır.

Yöntem: Bu kesitsel çalışma, ruhsal bozuklukların tanı ve istatistik el kitabı kriterlerine göre uyum bozukluğu tanısı almış, gönüllü olarak katılım gösterip yazılı onam veren 58 hasta üzerinde gerçekleştirilmiştir. Sosyo-demografik ve klinik veriler, özel olarak hazırlanmış bir veri formu aracılığıyla toplanmıştır. Çalışmada disosiyatif yaşantılar ölçeği, Beck anksiyete ölçeği (BAI), Beck depresyon ölçeği (BDI) ve işlevsellik değerlendirme kısa testi (FAST) kullanılmıştır.

Bulgular: Disosiyatif yaşantıları olan katılımcılar, BAI, BDI ve FAST skorlarında anlamlı olarak daha yüksek puanlar almışlardır; bu durum artmış anksiyete, depresyon ve işlevsellikte bozulmayı göstermektedir. Disosiyatif yaşantılar, depresyon (r=0,536, p<0,01) ve anksiyete (r=0,740, p<0,01) ile pozitif korelasyon göstermiştir; bu da bu semptomların duygusal sağlık ve günlük işlevsellik üzerinde olumsuz etkisini vurgulamaktadır.

Sonuç: Disosiyatif semptomlar, uyum bozukluğu olan bireylerde anksiyete, depresyon ve işlevsellik bozulmasını önemli ölçüde artırmaktadır. Bu semptomların erken tespiti ve hedefe yönelik tedavisi, bu hastaların hem ruh sağlığını hem de yaşam kalitesini iyileştirmek için önemlidir.

Anahtar kelimeler: Anksiyete, depresyon, disosiyatif semptomlar, işlevsellikte bozulma, uyum bozukluğu



Address for Correspondence: Uğur Takım, University of Health Sciences Turkey, Erzurum City Hospital, Department of Psychiatry, Erzurum, Turkey E-mail: ugurtakim@gmail.com ORCID: orcid.org/0000-0003-1108-9437

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Introduction

Adjustment disorder, as outlined by the the diagnostic and statistical manual of mental disorders-5 (DSM-5) diagnostic criteria, may develop in response to a stressful life event and typically resolves within six months once the stressor is removed (1). Although there is no specific standard for the stressor that can lead to the development of adjustment disorder, the literature frequently highlights precipitating events such as financial difficulties, health problems, or issues related to social relationships. The prevalence of adjustment disorder in the general population has been reported to range from 7% to 35% (2,3). A large-scale study conducted with patients diagnosed with adjustment disorder identified common co-occurring symptoms such as depressed mood, low self-esteem, suicidal thoughts, and behaviors, increased motor activity, hypervigilance, impulsivity, and substance use (2).

The DSM-5 stipulates that the symptoms of adjustment disorder must be manifested within three months of exposure to a stressor (1). These symptoms must either be clinically significant, presenting a reaction beyond what would typically be expected, or cause significant impairment in social or occupational functioning. The duration of exposure to the stressor, whether the event is reversible, and the individual's characteristics can all influence the clinical presentation (4). An individual may struggle to fulfill their daily responsibilities, leading to a notable decline in their quality of life. Furthermore, impairments in interpersonal relationships may be exacerbated during this disorder, further weakening the individual's social support networks.

Dissociation is a defense mechanism that helps an individual to cope with distressing situations (5). Dissociative disorders, historically referred to as hysteria, are among the most prevalent mental health conditions globally. According to the DSM-5, these disorders involve disruptions in consciousness, memory, identity, emotion, perception, body representation, motor control, and behavior. Dissociative disorders are characterized by symptoms affecting voluntary motor or sensory function, leading to distress or functional impairment, without any underlying medical or mental condition that may explain the symptoms (APA, 2013). This mechanism develops as a cognitive and emotional protective response to challenging life events. Studies have demonstrated a positive association between stressful life events and adjustment difficulties, along with the subsequent development of dissociative symptoms (6,7).

Dissociative symptoms can alter the clinical presentation of depression by aggravating depressive symptoms and deepening the severity of the condition. Sar et al. (8) emphasized that dissociative symptoms are a critical factor in the worsening of depression, potentially complicating the treatment process. Dissociative symptoms can cause significant impairment in both social and occupational functioning, severely limiting an individual's capacity to maintain their daily life. Moreover, dissociative symptoms may weaken an individual's capacity to cope with stress, intensifying both anxiety and depression symptoms (9).

The presence of dissociative symptoms therefore can profoundly affect the individuals emotional health and overall functioning, making the diagnosis and treatment processes more challenging in such patients. Furthermore, the course of dissociative disorder (AD) itself is a critical issue. A study conducted on Danish soldiers reported that approximately 25% of individuals initially diagnosed with adjustment disorder continued to experience adjustment disorder or another mental health disorder ten years later (10). O'Donnell et al. (11) reported that 56% of participants diagnosed with adjustment disorder within three months of a stressful event received a mental health diagnosis nine months later.

The current study was based on the hypothesis that dissociative symptoms can exacerbate anxiety and depression in individuals diagnosed with adjustment disorder, thereby contributing to further impairment in overall functioning. Accordingly, the primary objective of the current research was to assess the specific impact of dissociative symptoms on anxiety, depression, and general functioning in patients' with adjustment disorder. A comprehensive analysis of the severity and effect of these symptoms on psychosocial adaptation may provide valuable insights for clinical practice. The findings are expected to guide the development of more targeted therapeutic interventions for this patient population.

Materials and Methods

Procedures and Materials

The current study was designed as a cross-sectional investigation to evaluate the effects of dissociative symptoms on anxiety, depression, and functionality in individuals diagnosed with adjustment disorder according to DSM-5 criteria (1). The study included 58 outpatients who volunteered to participate, provided informed verbal and written consent, and met the inclusion and exclusion

criteria. The inclusion criteria of the study were as follows: Signing the informed consent form; meeting the diagnostic criteria for AD according to DSM-5; age between 18 and 65 years; lack of any neurological disease; history of head trauma; substance or alcohol abuse or dependence in the past six months; in addition to the absence of any illness that could affect the course of psychiatric symptoms.

The study was conducted at University of Health Sciences Turkey, Erzurum City Hospital, and the relevant scales and forms were completed or administered during interviews with the patients who presented to the hospital and agreed to participate in the study. Socio-demographic and clinical data were collected via a data form specifically designed for the study. The patients were administered the dissociative experiences scale (DES), Beck anxiety inventory (BAI), Beck depression inventory (BDI), and short form of the functioning assessment scale.

Socio-demographic Data Form

This form included questions that addressed the descriptive characteristics of the patient population. Questions regarding the participants' age, income status, place of residence, medication use, presence of additional psychiatric disorders, and history of psychiatric disorders in first-degree relatives were answered.

Structured Clinical Interview for DSM-5 Disorders, Clinician Version (SCID-5-CV)

The SCID-5-CV is a structured clinical interview scale that was developed as a tool for clinical diagnosis and is administered by the interviewer. It investigates disorders according to the diagnostic criteria outlined in DSM-5. The Turkish adaptation, as well as the validity and reliability studies of the scale, have been conducted (12). The SCID-5-CV was used to confirm the diagnoses of patients participating in the research and to investigate the presence of comorbid psychiatric disorders.

DES

The DES is a self-report instrument that was developed to measure the frequency and severity of dissociative symptoms in individuals. The scale was created by Bernstein and Putnam (13) in 1986 and consists of a global scale with 28 items. Each item is scored using a visual analog scale ranging from 0 to 100, and it assesses how frequently the individual experiences dissociative symptoms (e.g., memory loss, depersonalization, identity confusion). The DES is widely used, particularly in the diagnosis and assessment of post-traumatic stress disorder and other dissociative disorders. It has been validated in multiple languages, and its reliability has been confirmed, making the DES an important tool for the clinical assessment of and research on dissociative symptoms (14).

BAI

The BAI was developed by Beck et al. (15) in 1988 to measure anxiety symptoms in individuals. The BAI is a 21-item selfreport scale where each item is scored in a range from 0 (not at all) to 3 (severely). The scale assesses both somatic anxiety symptoms (e.g., heart palpitations, trembling) and subjective anxiety symptoms (e.g., fear, worry). The BAI is widely used in various clinical and research settings and is considered to be an effective tool in the diagnosis and treatment of anxiety disorders. Researchers have reported the validity and reliability of the scale to be high across different cultural and demographic groups (16).

BDI

The BDI is a self-report scale that was developed by Beck et al. (17) in 1961 to assess the severity of depression. The scale consists of 21 items, each evaluating a different symptom of depression, and is scored from 0 to 3. The BDI covers the cognitive, emotional, and somatic symptoms of depression, and therefore effectively measures both general and specific symptoms of depression. It is widely used in clinical practice and research, with numerous validation and reliability studies conducted in various languages (18).

Short Functioning Assessment Scale

This clinical assessment tool measures an individual's level of functionality in various domains of daily life (e.g., autonomy, occupational functioning, cognitive functioning, financial management, interpersonal relationships, and leisure activities). Each item is scored from 0 to 3, providing a quantitative assessment of the individual's functional difficulties in specific areas. The scale is commonly used in clinical practice and measures parameters that may help identify the areas that require support during the treatment process (19,20).

Ethical Approval

The research protocol was approved by the Scientific Research Ethics Committee of the University of Health Sciences Turkey, Erzurum City Hospital (decision no: 2024/09-177, date: 11.09.2024), and strictly adhered to the principles outlined in the Helsinki Declaration.

Statistical Analysis

The clinical characteristics and demographic data were analyzed using descriptive statistics, with frequencies and percentages (n, %) for categorical variables and means and standard deviations for continuous variables. The Pearson correlation test was used to evaluate the relationship between variables that met parametric assumptions. Comparisons of parametric variables were conducted using the Student's t-test, while comparisons of non-parametric binary groups were carried out using the chi-square test. All analyses were carried out with IBM SPSS software, version 25.0. The significance level for all statistical tests was set as p<0.05.

Results

The participants were divided into two groups based on the presence or absence of dissociative experiences: Absence of dissociative experiences (n=20) and presence of dissociative experiences (n=38). Table 1 summarizes the socio-demographic and clinical characteristics of the two groups. The mean age of participants in both groups was comparable, with no significant difference (p=0.856). All participants were male, ensuring no variability due to sex (p=1.0). An evaluation of the education levels revealed that a larger proportion of participants with dissociative experiences received only middle school education (78.9% vs. 60.0%) compared to those without, although the difference did not reach statistical significance (p=0.087). Employment status was predominantly regular in both groups, with 97.4% of those with dissociative experiences being regularly employed compared to 90.0% in the group without dissociative experiences (p=0.228).

Significant differences were observed in marital status, with a higher percentage of the patients lacking dissociative experiences being married (30.0% vs. 7.9%, p=0.027). The history of self-harm was also significantly more frequent in the group that lacked dissociative experiences (90.0% vs. 65.8%, p=0.045). Differences in variables such as smoking status, history of alcohol or substance use, or family history of mental disorders did not reach statistical significance (p>0.05).

Table 2 compares the BAI, BDI, and FAST scores between the participants with and without dissociative experiences.

	Dissociative experiences			
Variables	Absence (n=20)	Presence (n=38)		
	Mean ± SD n (%)	Mean ± SD n (%)	р	
Age (years)	22.5±2.98	22.3±2.40	856.0	
Sex (male)	20 (100.0)	38 (100.0)	1.0	
Education levels			0.087	
Viddle school	12 (60.0)	30 (78.9)		
High school	8 (40)	6 (15.8)		
Jniversity	0 (0.0)	2 (5.3)		
Employment			0.228	
No/irregular	2 (10.0)	1 (2.6)		
legular	18 (90.0)	37 (97.4)		
Iarital status			0.027	
Not married	14 (70.0)	35 (92.1)		
Лarried	6 (30.0)	3 (7.9)		
Smoker (yes)	20 (100.0)	35 (89.5)	0.133	
lifetime history of alcohol use (yes)	2 (10.0)	8 (21.1)	0.503	
lifetime history of substance use (yes)	2 (10.0)	8 (21.1)	0.368	
Medical history (yes)	0 (0.0)	0 (0.0)		
amily history of mental disorders (yes)	4 (20.0)	13 (34.2)	0.258	
listory of self-harm (yes)	18 (90.0)	25 (65.8)	0.045	
listory of suicide attempt (yes)	4 (20.0)	10 (26.3)	0.593	

Student's t-test and chi-squared test were used for statistical analyses. p<0.05 statistically significant (bold values) SD: Standard deviation

The group that underwent dissociative experiences had significantly higher scores on the FAST scale (34.86 ± 12.91 vs. 26.05 ± 12.49 , p=0.015), indicating greater functional impairment. Similarly, the dissociative experiences group also displayed higher BAI (40.57 ± 15.74 vs. 25.00 ± 19.40 , p=0.002) and BDI (40.65 ± 9.63 vs. 23.50 ± 15.35 , p<0.001) scores, reflecting higher levels of anxiety and depression. The DES score was also significantly higher in patients with dissociative experiences (60.19 ± 14.44 vs. 20.12 ± 6.08 , p<0.001).

Table 3 presents the correlation analysis between the BAI, BDI, FAST, and DES scores. Significant positive correlations were found between the BAI and both the BDI (r=0.740, p<0.01) and the FAST (r=0.401, p<0.01) scores. The BDI score also showed significant positive correlations with the DES (r=0.536, p<0.01) and the FAST (r=0.514, p<0.01) scores. However, the correlation between the FAST and the DES scores was not statistically significant (r=0.115, p>0.05).

Discussion

To the best of our knowledge, the current study is the first to examine the effects of dissociative symptoms on anxiety, depression, and overall functioning in individuals diagnosed with adjustment disorder. The findings of our study suggest that dissociative symptoms not only aggravate anxiety and depressive symptoms but also negatively affect the overall level of functioning of an individual. Adjustment disorder develops in response to stressful life events and can lead to a significant decline in social and occupational functioning. Various studies suggest that adjustment disorder can progress over time into more severe psychiatric disorders such as depression and anxiety (10,11). Our data suggest that dissociative symptoms may accelerate this process and further impair function of the individual.

Cases with adjustment disorder comorbid with depression and anxiety disorders were reported to carry a higher risk of functional impairment (21); moreover, treatment processes in the presence of such co-morbidities were reported to be longer and more complex (22,23). We report in the current study, that dissociative symptoms may further aggravate depression. Additionally, depression was reported to become more severe and resistant to treatment in individuals experiencing dissociative symptoms, indicating that such symptoms may exacerbate depression (8). Thus, the negative impact of dissociative symptoms on the treatment process highlights the need for careful planning of treatment strategies in individuals with such symptoms.

Previous studies examining the relationship between anxiety disorders and dissociation have shown that individuals with anxiety disorders experience higher rates of dissociation (24). In particular, individuals with panic disorder frequently exhibit dissociative symptoms such

	Dissociative experience	Dissociative experiences (n=58)					
	Absence (n=20)	Presence (n=38)					
	Mean ± SD	Mean ± SD	t	р			
Functioning assessment short test	26.05±12.49	34.86±12.91	-2.498	0.015			
Beck anxiety inventory	25.00±19.40	40.57±15.74	-3.303	0.002			
Beck depression inventory	23.50±15.35	40.65±9.63	-5.224	<0.001			
DES	20.12±6.08	60.19±14.44	-11.831	<0.001			

Table 2. Comparison of beck anxiety inventory, Beck depression inventory, and functioning assessment short tests in the

A Student's t-test was used for statistical analyses, p<0.05 statistically significant (bold values), SD: Standard deviation, DES: Dissociative experiences scale

Table 3. Correlation analysis of Beck anxiety inventory, Beck depression inventory, functioning assessment short test, and DES scores
Correlations

r	1	2	3	4
Functioning assessment short test	1			
Dissociative experiences scale	0.115	1		
Beck anxiety inventory	0.401**	0.384**	1	
Beck depression inventory	0.514**	0.536**	0.740**	1

r: Correlation coefficient, **: Correlation is significant at the 0.01 level (2-tailed), DES: Dissociative experiences scale, FAST: Functioning assessment short test

as depersonalization and de-realization (25). Dissociative symptoms can weaken the ability of individuals with high levels of anxiety to cope with stress, thereby exacerbating their anxiety levels (9). Studies investigating the relationship between generalized anxiety disorder and dissociative symptoms similarly demonstrate that dissociation can intensify anxiety responses, making individuals more vulnerable to stress (26,27). In this context, several authors have emphasized that the presence of dissociative symptoms in adjustment disorder can lead to challenges in managing anxiety and therefore can prolong the treatment process.

The impact of dissociative symptoms on the overall functionality of an individual is particularly striking. Dissociation significantly impairs social and occupational functioning, leading to a decreased quality of life and disruptions in social relationships. It can be argued that the loss of functionality becomes even more severe when considered in conjunction with depression and anxiety. The negative effects of dissociation increase the challenges that individuals face in their daily lives and pose a serious threat to their quality of life. This highlights the need for greater consideration of dissociative symptoms in treatment planning.

Considering the effects of dissociative symptoms in depression, anxiety, and functionality, it is clear that treatment processes should be approached more holistically. Dissociative symptoms are not merely a defense mechanism, but also a factor that is highly likely to negatively impact an individual's overall functionality in life. Therefore, it is important to develop a more comprehensive approach to treatment that takes into account the interaction of dissociation with depression and anxiety.

Study Limitations

The study limitations include its cross-sectional design, small sample size, and the use of self-report scales, all of which decrease the generalizability of the findings.

Conclusion

The current study examined the effects of dissociative symptoms on anxiety, depression, and functionality in individuals with adjustment disorder. Dissociative symptoms were found to play a significant role in both the worsening of anxiety and depression levels and the deterioration of functionality in individuals diagnosed with adjustment disorder. The negative impact of dissociation on treatment processes can lead to an increase in depressive and anxiety symptoms as well as pronounced functional impairment, which can additionally complicate the individual's response to treatment. In this context, the early diagnosis of dissociative symptoms and their targeted management during the treatment process are of great importance for improving both the psychological and functional health of individuals and supporting the recovery process.

Ethics

Ethics Committee Approval: The research protocol received approval from the Scientific Research Ethics Committee of the University of Health Sciences Turkey, Erzurum City Hospital (decision no: 2024/09-177, date: 11.09.2024), and strictly adhered to the principles outlined in the Helsinki Declaration.

Informed Consent: The patients voluntarily participated in the study and provided written informed consent.

Footnotes

Authorship Contributions

Concept: U.T., H.B., Design: U.T., Data Collection or Processing: U.T., Analysis or Interpretation: U.T., H.B., Literature Search: U.T., H.B., Writing: U.T., H.B.

Conflict of Interest: No conflict of interest was declared by the authors.

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