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The Relationship Between Peritraumatic Dissociation and Anxiety Level, Perceived Stress, Anxiety Sensitivity and Coping with Earthquake Stress in Post-Earthquake Acute Stress Disorder Patients

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SUMMARY

Objective: The present study aims to determine the effects of anxiety sensitivity, anxiety level, perceived stress and coping strategies on peritraumatic dissociation in post-earthquake acute stress disorder (ASD) patients.

Method: Sociodemographic data form, Beck Anxiety Index (BAI), Perceived Stress Scale (PSS), Anxiety Sensitivity Index-3 (ASI-3), Coping with Earthquake Stress Scale, and Peritraumatic Dissociation Scale (PDEQ) were applied to 477 patients diagnosed with ASD.

Results: Anxiety sensitivity cognitive sub-dimension explained 31.5%, anxiety explained 7%, and perceived stress explained 1% of the variation in peritraumatic dissolution development. A moderate positive correlation was determined between peritraumatic dissolution and anxiety, a weak positive correlation was found between peritraumatic dissolution and perceived stress, a weak positive correlation was determined between peritraumatic dissolution and positive thinking, and a very weak negative correlation was determined between peritraumatic dissolution and seeking social support. A moderate positive correlation was determined between peritraumatic dissolution and physical, cognitive and social sub-dimensions of anxiety sensitivity.

Conclusion: The most important finding in the study was the fact that the highest contribution to the development of peritraumatic dissolution was by the cognitive sub-dimension of anxiety sensitivity. It could be suggested that individuals with high anxiety sensitivity may experience higher peritraumatic dissolution and these individuals could have a higher risk of PTSD later on.

Keywords: Acute stress disorder, earthquake, anxiety sensitivity, peritraumatic dissociation, coping, anxiety

INTRODUCTION

On January 24, 2020, at 08.55pm local time, an earthquake hit Turkey, with the epicenter at Elazig-Sivrice (latitude: 38.4470 and longitude: 39.3093), a magnitude of 6.8 Mw, and at a depth of 10 km. The earthquake affected a wide geographical area and was felt in several provinces. Malatya was one of the most affected provinces by the earthquake, where 41 individuals died, and 1466 individuals were injured in addition to financial losses (AFAD 2020).

After disasters such as earthquakes that are not predictable and controllable, psychiatric symptoms that usually resolve spontaneously within a few weeks may be observed (Matsakis 1996). Psychological symptoms associated with traumatic experiences vary from one individual to the other and trauma may lead to chronic psychiatric disorders in some individuals (Kidson et al. 1993, Işık 1996). The condition, which is characterized by a series of acute stress responses including anxiety, dissociative and other symptoms that occur within the first post-traumatic 30 days, was defined as Acute Stress Disorder (ASD) in the DSM-5 (American Psychiatric Association 2013). When signs and symptoms persist for more than a month, it is called Post-Traumatic Stress Disorder (PTSD) (American Psychiatric Association 2013). ASD was first introduced in DSM-4 to describe acute stress response and identify the trauma victims with high PTSD risk in the acute phase (Zincir 2015). In previous studies, it was demonstrated that 57-83% of ASD cases develop PTSD in later periods and ASD is a risk factor for PTSD (Brewin et al. 1999, Bryant

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et al. 2000). Thus, it is important to identify post-traumatic ASD patients (Uğuz 1998). However, the number of studies in literature where the factors that may predict the development of psychopathology in patients with ASD during the acute stress period after an earthquake is quite limited (Nobakth et al.2019).

Dissociative symptoms, which could be observed as temporary impairment in consciousness, memory and identity during or immediately after a trauma, are reported to be among the strong independent predictors of the development and permanence of PTSD (Cardefia and Spiegel 1993, Rosendal et al. 2011, Bryant et al. 2011, Duncan et al. 2013). In one study, it was demonstrated that individuals with post-traumatic dissociation symptoms were more predisposed to PTSD (Özaltın et al. 2004) In another study, dissociation symptoms in ASD were determined to be the strongest predictors of PTSD (Ursano et al.1999). Dissociation emerges as a mechanism to prevent the pain associated with the trauma. When the immediate danger is removed, dissociative symptoms disappear due to adaptive coping mechanisms (Gabbard 2000, Brunet et al. 2001). It was reported that the methods employed to cope with earthquake stress could lead to a change in the psychological impact of the earthquake trauma (Udomratn 2008).

Anxiety sensitivity, which is a structural trait, was conceptualized as an extreme fear about the potential physical and/or social harms of anxiety sensations and symptoms (Reiss and McNally 1985, Mantar et al. 2011). It was reported that anxiety sensitivity could exacerbate dissociation and anxiety sensitivity was prevalent in PTSD patients (Taylor et al. 1992, Hinton et al. 2008). It was reported that the severity of dissociation varies regardless of the severity of the earthquake trauma among the population who were exposed to earthquakes, and especially anxiety sensitivity was a predictor of dissociation and anxiety (Kadak et al. 2013). Especially the cognitive sub-dimension of anxiety sensitivity was associated with PTSD (Baek et al. 2019).

The present study aims to investigate the correlation between peritraumatic dissociation and anxiety sensitivity, anxiety, perceived stress, and strategies to cope with earthquake stress in ASD patients after an earthquake. It is important to diagnose ASD as it is a risk factor for further psychopathologies, especially PTSD after an earthquake (Bryant et al. 2000). However, the literature review revealed that the majority of the studies conducted after an earthquake were conducted a long time after the trauma. However, it was emphasized that evaluation during the acute period is important to identify the psychopathology and the impact of therapeutic approaches (Hacıoğlu et al. 2002). Thus, we considered that the analysis of the factors that could be predictors of peritraumatic dissociation symptoms in ASD patients in the acute period would contribute to the literature.

METHOD

The study sample included 18-65 years old residents in Malatya Province, Turkey, who were exposed to the 6.8 Mw Elazig-Sivrice earthquake that occurred on January 24, 2020. Due to the high number of patients presented with psychological symptoms after the earthquake, an Earthquake Outpatient Clinic was established in the Psychological Health and Disorders Outpatient Clinic at the Malatya Training and Research Hospital between 27.01.2020 and 28.02.2020 in addition to general outpatient clinics. Social awareness was raised by involving local press, brochures distributed throughout the city and on social media. Two physicians were assigned to treat the patients in the earthquake outpatient clinic. Patients who applied to the psychiatry outpatient clinic and suffered from psychological problems associated with the earthquake were referred to the Earthquake Outpatient Clinic. The study included patients who applied to the Earthquake Outpatient Clinic between 27.01.2020 and 25.02.2020 with post-earthquake acute stress symptoms. The patients were evaluated by a psychiatrist and those who met the diagnosis parameters for ASD based on the DSM-5 (American Psychiatric Association 2013) diagnostic criteria were included in the study. None of the participants suffered a physical injury during the earthquake. Fifty-two patients with neurological or mental disorders that met the diagnosis of a psychological disorder other than ASD during the evaluation based on DSM-5 or those with impediments to read and comprehend the scales applied in the study were excluded. The patients in the diagnostic group that were excluded from the study included Bipolar Affective Disorder, Psychotic Disorder, Alcohol and Substance Use Disorder patients or those who met the diagnosis criteria for Anxiety disorders, Depression Disorder, Obsessive Compulsive Disorder in their current state based on DSM-5. Furthermore, patients who experienced any life-threatening traumatic experience other than the Elazig-Sivrice earthquake and were subsequently diagnosed with PTSD were also excluded. However, the anxiety disorder, major depressive disorder and obsessive-compulsive disorder patients who experienced a man-made or natural life-threatening event except for the Elazig-Sivrice earthquake and without any active complaints after 2 months of treatment were included in the study. Patients with a history of psychiatric disorders were not on any psychotropic medication during the evaluation. Socio-demographic data form, Peritraumatic Dissociation Scale (PDEQ), Beck Anxiety Inventory (BAI), Anxiety

Sensitivity Index-3 (ASI-3), Perceived Stress Scale (PSS), and Coping with the Earthquake Stress Scale were applied to 500 ASD patients. Twenty patients were excluded due to incomplete forms or scales and the data collected from 477 participants were analyzed.

Ethics committee approval for the study was obtained from Malatya Clinical Research Ethics Committee (Research Protocol No: 2020/103). The study was conducted in accordance with the Helsinki Declaration. All candidate patients were informed in detail about the aim and nature of the study by a psychiatrist and all participants volunteered to participate. The informed consent form was signed by all participants.

Procedure

Two psychiatrists conducted interviews with all patients that lasted about 20-30 minutes for diagnostic purposes. The psychiatrists asked the questions in the socio-demographic data to the patients and the scale forms were given to the patients since all were self-report scales, and they were allowed 30-60 minutes to fill out the scales under the supervision of a psychologist in the clinic. Items that the participants did not comprehend were explained by the interviewer or the psychologist.

Data Collection Instruments

Peritraumatic Dissociation Scale (PDEQ)

PDEQ is a self-report scale that includes 10 questions that measure the dissociation during or immediately after the trauma retrospectively. Developed by Marmar et al. (1997), the scale is widely employed to determine the degree of peritraumatic dissociation. The validity and reliability of the Turkish language version of scale was conducted by Geyran et al. (2005) It is a five-point Likert-type scale where each item is scored between 0 and 4 (0= never, 4= always). It analyzed dissociation symptoms including 'confusion,''depersonalization,''disruption of the perception of reality,' 'impairment in temporal perception' and 'out-of-body affection.' The Cronbach α internal consistency coefficient of the scale was calculated as 0.853. High scale score reflects a high peritraumatic dissociation level.

Beck Anxiety Inventory (BAI)

The scale was developed by Beck et al. in 1988. The Turkish validity and reliability study was conducted in 1998 by Ulusoy et al. The Cronbach α internal consistency coefficient of the Turkish language version was 0.93. It is a self-report scale that measures the frequency of anxiety symptoms in an individual. Each item is scored between 0 and 3 points. It includes 21 items and the total score indicates the anxiety level.

Anxiety Sensitivity Index-3 (ASI-3)

It is a 5-point Likert-type self-report scale with 18 items that evaluate anxiety sensitivity based on the physical, social and cognitive sub-dimensions of 6 items scored between 'very rarely' and 'very frequently' in each sub-dimension. Each response is based on the views of the participant based on prior experience or future estimate about a certain situation (Reiss et al. 1986). Anxiety due to somatic complaints is analyzed in the physical symptoms dimension; attentive, ideation, cognitive anxieties are analyzed in the cognitive sub-dimension, and anxiety induced by the social environment is scrutinized in the social sub-dimension. A high scale score indicates high anxiety sensitivity (Taylor et al. 2007). Cronbach α internal consistency coefficient was 0.88 for cognitive symptoms, 0.82 for social symptoms, 0.89 for physical symptoms, and 0.93 for the entire scale in the Turkish language validity (Mantar et al. 2010).

Perceived Stress Scale (PSS)

It is a 5-point Likert type self-report scale developed by Cohen et al. (1983) to determine the individual perception of stress under certain situations in life. The scale includes 14 items scored between 0 (never) and 4 (usually). In the scale, items 4-5-6-7-9-10 and 13 are reverse scored. The lowest scale score is 0, the highest scale score is 56. A higher score indicates high level of stress perception. The scale was adapted to Turkish language by Eskin et al. (2013).

Strategies to Cope with Earthquake Stress Scale

The Turkish language validity and reliability of the scale, developed by Yöndem et al. (2016), was determined in the same study. The scale sub-dimensions include religious coping, positive re-evaluation and seeking social support which are the common demands due to earthquake stress. Each item is scored between 1 and 4 points. Total scale score is not calculated. Instead, sub-dimension scores are calculated. The items 2-8-9-10-11 (5-20 points) that evaluate religious coping, the items 5-12-13-14-15-16 (6-20 points) that evaluate positive re-evaluation, the items 1-3-4-6-7 (items 3 and 7 are reverse scored) (5-20 points) that evaluate seeking social support are totaled separately. Higher scores reflect the preference of that particular coping strategy. In the validity and reliability study, the Cronbach α internal consistency coefficient was found as 0.85 for religious coping, 0.69 for positive re-evaluation, and 0.74 for seeking social support (Yöndem et al. 2016).

Statistical Analysis

The study data were analyzed with the SPSS 22 software. Kolmogrov Smirnow test was employed to analyze the data with normal distribution. Non-parametric tests were employed for the data without normal distribution,

and parametric tests were used for the data with normal distribution. The minimum and maximum, and median values and arithmetic means are presented. In data analysis, multilinear regression (stepwise) analysis, Spearman correlation analysis, and Pearson correlation analysis were employed. In the stepwise method, variables with a significant contribution to the model were included in the model sequentially, and three models were obtained. Other variables and sub-dimensions without a significant contribution to the model were excluded. The contribution of each independent variable to the variation in the dependent variable, the explanatory coefficient (R2) and the variation in the explanatory coefficient were calculated. Spearman test was employed for the analysis of the data without normal distribution, and Pearson correlation analysis was used for the data with normal distribution. $p < 0.05$ was considered significant.

RESULTS

The sociodemographic properties and disease information about the 477 earthquake victims with ASD are presented in Table 1. Among the ASD patient earthquake victims, 40.5% were male and 59.5% were female. The average age was 32.2 ± 10.9 and 52.4% of the participants were married and 52.8% were college graduates, 12.78% of the patients had a prior psychiatric disorder. Of the 61 patients with a history of psychiatric disorder, 32 suffered from anxiety disorder, 23 from major depressive disorder, and 6 patients suffered from obsessive compulsive disorder.

The mean scale scores of all participants are presented in Table 2. The mean BAI score was 17.36±14.80 and mean PDEQ score was 11.05±9.23, and mean ASI-3 cognitive sub-dimension score was 9.94±6.44.

In the multilinear regression (stepwise) analysis, modeled to investigate the factors that affected peritraumatic dissociation, it was determined that the independent variables included BAI, PSI, religious coping, positive re-evaluation, seeking social support subdimensions of the strategies to cope with earthquake stress scale, and the cognitive, physical, social sub-dimensions and total ASI-3 scale scores. Dependent variable was peritraumatic dissociation. The model determined in the multilinear regression analysis was significant. The model summary is presented in Table 3. It was determined that perceived stress, anxiety level, and thecognitive sub-dimension of perceived stress to significantly contributed to the model. ASI-3 cognitive sub-dimension exhibited the highest

Table 1. Sociodemographic data and disorders

Gender (Male/Female (n/[%])	193(40.5) / 284(59.5)
Age (A.M. ± S.D. (min-max.)	32.2±10.9 (18-63)
Marital Status (Married/Unmarried n/[%])	250(52.4) / 227(47.6)
Education (Primary / secondary / tertiary n/[%])	69(14.5) / 156(32.7)/252(52.8)
Employment (Yes/no n/[%])	222(46.5) / 255(53.5)
Residence (Urban/rural n/[%])	457(95.8) / 20(4.2)
Psychiatric disorder history (Yes/No n/[%])	61(12.8) / 416(87.2)
Family history (Yes/no n/[%])	459(96.2)/18(3.8)
Smoking (Yes/no n/[%])	140(29.4) / 337/(70.6)

Frequency analysis, $\bar{x}$: Arithmetic mean, S.D: standard deviation, Min: Minimum, Max: Maximum

Table 2. The mean participant scores in the scale

	Min.	Max.	Mean	S.D.	Median
BAI	0.00	69.00	17.36	14.80	14.00
PSS	5.00	69.00	27.09	7.52	27.00
PDEQ	0.00	40.00	11.05	9.23	9.00
ASI-3	0.00	72.00	25.47	16.53	23.00
ASI-3 Physical	0.00	24.00	8.75	6.48	8.00
ASI-3 Cognitive	0.00	28.00	9.94	6.44	9.00
ASI-3 Social	0.00	20.00	6.76	5.31	6.00
Religious coping	5.00	28.00	16.22	3.43	17.00
Positive re-evaluation	6.00	25.00	18.40	3.71	19.00
Seeking social support	5.00	24.00	13.74	3.01	14.00

Min: Minimum, Max: Maximum, $\bar{x}$: Arithmetic mean, S.D.: Standard deviation, BAI: Beck Anxiety Inventory, PSS: Perceived Stress Scale, ASI-3: Anxiety Sensitivity Index -3.

Table 3. Peritraumatic dissociation multiple regression results

	Model 1		Model 2		Model 3	
	B	P	B	P	B	p
ASI-3 Cognitive	0.805	<0.001	0.517	<0.001	0.476	<0.001
BAI			0.208	<0.001	0.181	<0.001
PSS					0.146	0.006
Constant	3.045	<0.001	2.299	<0.001	-0.773	0.541
R^2	0.315		0.386		0.396	
Adjusted R^2	0.314		0.383		0.392	
ΔR^2	0.315		0.071		0.010	
F	208.070	<0.001	148.932	<0.001	103.291	<0.001

Multiple regression with stepwise model, R^2: Multiple explanatory coefficient, ΔR^2: Variation in multiple explanatory coefficient, B: Beta coefficient, p: Probability, BAI: Beck Anxiety Inventory, PSS: Perceived Stress Scale, ASI-3: Anxiety Sensitivity Index -3.

contribution to peritraumatic dissociation. ASI-3 scale cognitive sub-dimension explained 31.5% of the variation in peritraumatic dissociation, 7% was explained by anxiety, and 1% was explained by perceived stress. It was determined that religious coping, positive re-evaluation and seeking social support sub-dimensions of the strategies to cope with earthquake stress scale did not have an effect on peritraumatic dissociation.

The correlations between the participant scores in the scales employed are presented in Table 4.

There was a moderate positive correlation between peritraumatic dissociation and the anxiety level, a weak positive correlation between peritraumatic dissociation and perceived stress, a weak negative correlation between peritraumatic dissociation and positive thinking, and a very weak negative correlation between peritraumatic dissociation and seeking social support. A moderate significant positive correlation was determined between peritraumatic dissociation and physical, cognitive and social sub-dimensions of anxiety sensitivity.

Table 4. Inter-scale correlations

		BAI	Religious coping	Positive revaluation	Seeking social support	PSS	PDEQ	ASI-3	ASI-3 Physical	ASI-3 Cognitive	ASI-3 Social
BAI	r	1.000	0.006	-0.389	-0.175	0.511	0.544	0.597	0.582	0.578	0.449
	p	.	0.892	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001
Religious coping	r		1.000	0.278	-0.037	-0.034	0.017	0.056	0.074	0.033	0.027
	p		.	<0.001	0.417	0.463	0.719	0.226	0.105	0.468	0.563
Positive re-evaluation	r			1.000	0.193	-0.361	-0.206	-0.276	-0.257	-0.285	-0.198
	p			.	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001
Seeking social support	r				1.000	-.177	-.176	-0.178	-0.122	-0.208	-0.159
	p				.	.000	0.001	0.001	0.008	0.001	0.001
PSS	r					1.000	.384	0.426	0.376	0.440	0.333
	p					.	0.001	0.001	0.001	0.001	0.001
PDEQ	r						1.000	0.526	0.460	0.524	0.428
	p						.	0.001	0.001	0.001	0.001
ASI-3	r							1.000	0.910	0.923	0.882
	p							.	0.001	0.001	0.001
ASI-3 Physical	r								1.000	0.757	0.711
	p								.	0.001	0.001
ASI-3 Cognitive	r									1.000	0.744
	p									.	0.001
ASI-3 Social	r										1.000
	p										.

Pearson correlation analysis, Spearman correlation analysis, r: Correlation coefficient, BAI: Beck Anxiety Inventory, PSS: Perceived Stress Scale, ASI-3: Anxiety Sensitivity Index -3, PDEQ: Peritraumatic Dissociation Scale

DISCUSSION

The most significant finding in the present study was the determination that ASI-3 cognitive sub-dimension exhibited the highest impact on peritraumatic dissociation in patients with post-earthquake ASD. It was also determined that anxiety and perceived stress during the acute stress period after an earthquake affected the development of peritraumatic dissociation, while religious coping, positive re-evaluation and seeking social support coping mechanisms did not have an impact. It was reported that peritraumatic dissociation was one of the most important precursors of PTSD, and it was emphasized that it should be evaluated during the early post-traumatic stages (Nobakth et al. 2019). Although literature on the effect of anxiety sensitivity on disassociation is limited, it was suggested that anxiety sensitivity increased disassociation in adults (Hinton et al. 2008). Furthermore, the cognitive sub-dimension of anxiety sensitivity was significantly associated with PTSD (Baek et al. 2019). In the study, it was found that the cognitive sub-dimension of anxiety sensitivity significantly contributed to peritraumatic dissociation. This suggested that peritraumatic dissociation, which is known to be a predictor for PTSD, was associated with anxiety sensitivity in the post-earthquake acute stress period. These findings suggested that individuals with high anxiety sensitivity may experience higher peritraumatic dissociation levels and these individuals could have a higher predisposition for PTSD in the future. It was reported that intense emotions such as psychological distress, fear, and helplessness were experienced during and immediately after the earthquake, and intense post-earthquake distress and anxiety is one of the significant factors behind PTSD (Xu and Song 2011, Yuan et al. 2013). Furthermore, it was reported that high anxiety levels were important in the development of dissociation, and dissociation symptoms negatively affected the prognosis (Tekin and Tekin 2014). Consistent with the literature, it was determined in our study that the high anxiety levels identified during the acute trauma phase were associated with peritraumatic dissociation. In the present study, it was determined that the perceived stress level also contributed to the development of peritraumatic dissociation. An earthquake is a natural phenomenon that cannot be escaped from, or prevented or stopped by individual intervention. Thus, it was suggested that the control of the earthquake victims to cope with the incident was low (Cankardaş and Sofuoğlu 2019). This indicated that when the stimulus is perceived as uncontrollable, the emotional response to the traumatic stress was stronger (Wood et al. 2015, Amat et al. 2008). Therefore, the feeling of lack of behavioral, cognitive and emotional control during a sudden natural disaster leads to intensified stress and significant distress. Considering that high-level emotional distress experienced during trauma could also lead to traumatic stress symptoms, the finding that perceived stress contributed to peritraumatic dissociation was consistent with the findings of previous study (Başoğlu 2011). The fact that individuals with high anxiety and perceived stress levels in the post-traumatic acute period exhibited high peritraumatic dissociation may indicate that these individuals may be at PTSD risk in the future. In none of the models constructed in the present study, strategies to cope with earthquake sub-dimensions did not affect the development of peritraumatic dissociation. The perception of personal invulnerability is broken in a post-traumatic individual because individuals believe that accidents and disasters happen to other people only, and an actual trauma damages these beliefs, as well as other beliefs. Individuals could effectively cope with the incident only if they can replace the old beliefs that are suffered due to the incident with new beliefs (Özkan 2007). Thus, rather than the investigation of the effects of the peritraumatic coping mechanisms, whether the employment of novel and adaptive coping mechanisms would have a healing effect on disassociation could be investigated.

The analysis of the correlations between the scales revealed that there was a moderate positive correlation between peritraumatic dissociation and anxiety level and cognitive, social, social sub-dimension and total anxiety sensitivity scores, and a low positive correlation between peritraumatic dissociation and perceived stress levels. This was consistent with the results of the regression model. A weak negative correlation was determined between peritraumatic dissociation and positive ideation and seeking social support strategies to cope, and there was no correlation between peritraumatic dissociation and religious coping strategy. Previous studies investigated the effectiveness of adaptive/positive coping strategies that protect psychological health after natural disasters (Udomratn 2008, Spurrell 1993). In cases where it is not possible to change the stress source, it was considered that cognitive distancing would lead to positive psychological consequences (Folkman and Lazarus 1980, Yamasaki 2006). Although it was reported that the weak post-traumatic social support was particularly associated with 'avoidance' and 'irritability' symptoms, it was suggested that post-traumatic social support was not an effective factor in resolving the individual psychological problems (Bedirli 2014). It was stated that in natural disasters such as earthquakes, individual tendencies towards religion may increase; however, the correlation between psychopathology and religion was limited (Yöndem 2016). The literature review conducted by the authors revealed that there was no strong correlation between coping mechanisms employed during the first month after the earthquake and peritraumatic dissociation; however,

further studies are required on the effect of compatible and incompatible coping mechanisms on the development and alteration of psychopathologies.

The present study has limitations as well as strengths. The fact that the present study was conducted with individuals who reside in a single district after the earthquake that took place on 24.01.2020 and affected a wide geographical area may limit the generalization of the findings of the present study. Another limitation of the study was the fact that it lacked a healthy control group since the Covid-19 pandemic affected the region after the earthquake and the earthquake itself affected a large area. The facts that 87.2% of the participants did not have a prior psychiatric disorder and the study only included ASD patients who applied only due to the psychological responses after exposure to the earthquake, and that the participants were included in the study immediately after the earthquake were among the strengths of the present study. The fact that the participants were never asked about their previous earthquake or natural disaster experiences could be considered as another limitation. The possibility of cognitive distortion as the present study data were collected after the trauma and retrospectively was among the limitations of the study. Furthermore, the use of anxiety sensitivity as an analysis instrument, the impact of which on PTSD and dissociation was not studied adequately, could be considered as a significant contribution to literature. It could be suggested that the present study findings could represent the population since the samples size was significant and included patients who applied to the psychiatry outpatient clinic due to post-earthquake psychological complaints and did not have high disorder load although the study sample included only individuals who applied to the clinic. This was one of the strengths of the present study. The study was conducted within the first month of the earthquake and investigated the acute psychological impact of the exposure; thus, the findings should be supported with long-term follow-up studies.

CONCLUSION

It was reported that peritraumatic dissociation is a predictor of PTSD onset. The most important data obtained in the present study was the potential predicting power of the cognitive sub-dimension of anxiety sensitivity on peritraumatic dissociation and the consequent development of PTSD. Furthermore, anxiety and perceived stress levels during the acute phase of the trauma may predict future psychological disorders. Thus, we suggest that patient's evaluation and early therapeutic interventions for the psychological consequences of trauma should be considered important.

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