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RESEARCH

Post-Traumatic Stress Symptoms and Related Factors in High School Student Adolescents

Lise Öğrencisi Ergenlerde Travma Sonrası Stres Belirtileri ve İlişkili Faktörler

Ömer Faruk Baştuğ [1], Hülya Arslantaş [2]

Abstract

This study was conducted to determine post-traumatic stress symptoms and related factors in high school student adolescents living in a county in Southeast Anatolia. The study used a cross-sectional design. The population of the study consisted of 9522 students, and the sample included 459 students from 10 high schools. A Descriptive Information Form, Post-Traumatic Stress Diagnostic Scale, Beck Depression Scale, and Ways of Coping Questionnaire were used to collect the study data. The findings indicated that that 57.7% (n=202) of the participants were at the age of 15 or younger and that 64.2% (n=251) were female. According to the study, 87.2% (n=341) of the students had symptoms of post traumatic stress disorder (PTSD). There was a statistically significant difference between the students' depression symptoms and PTSD symptoms. A significant difference was found between students' ways of coping with stress and symptoms of PTSD only in terms of the helplessness approach style. It was determined that nine out of ten students experienced symptoms of PTSD, depression symptoms increased as the symptoms of PTSD increased, and that the students used the helplessness approach to cope with stress. These results are important in terms of planning preventive mental health services to be offered in the region.

Keywords: Adolescence, post traumatic stress disorder, depression, coping with stress

Öz

Bu araştırma Türkiye'nin Doğusunda yer alan Güneydoğu Anadolu'daki bir ilçede lise öğrencisi ergenlerde travma sonrası stres belirtileri ve ilişkili faktörleri belirlemek amacı ile yapılmıştır. Kesitsel olarak yapılan araştırmanın evrenini 10 lisede eğitim gören 9522, örneklemini ise 459 öğrenci oluşturmuştur. Veri toplama amaçlı olarak çalışmada Kişisel Bilgi Formu, Travma Sonrası Stres Tanı Ölçeği, Beck Depresyon Ölçeği ve Stresle Başa Çıkma Tarzları Ölçeği kullanılmıştır. Araştırmaya katılan öğrencilerinin %51.7'sinin (n=202) 15 yaş ve altı ve %64.2'sinin (n=251) kadın olduğu tespit edilmiştir. Araştırmaya katılan öğrencilerin %87.2'sinde (n=341) Travma Sonrası Stres Bozukluğu (TSSB) belirtileri olduğu belirlenmiştir. Öğrencilerin depresyon belirtileri ile TSSB belirtileri arasında istatistiksel olarak anlamlılık bulunmuştur. Öğrencilerin stresle başa çıkma tarzları ile TSSB belirtileri arasında sadece çaresiz yaklaşım tarzı ile ilgili anlamlı fark vardır. Yaklaşık on öğrenciden dokuzunun TSSB belirtisi yaşadığı, TSSB belirtileri arttıkça depresif belirtilerinde arttığı ve öğrencilerin stresle baş etmek için çaresiz yaklaşımı kullandıkları belirlenmiştir. Bu sonuçlar bölgede sunulacak olan koruyucu ruh sağlığı hizmetlerine yönelik yapılabilecek müdahaleleri planlayabilmek için önemlidir.

Anahtar sözcükler: Ergenlik, travma sonrası stres bozukluğu, depresyon, stresle baş etme

[1] Istanbul University-Cerrahpaşa, Istanbul, Turkey
[2] Aydın Adnan Menderes University, Aydın, Turkey

✉ Hülya Arslantaş, Adnan Menderes University, Faculty of Nursing, Department of Mental Health and Diseases Nursing, Aydın, Turkey
hulyaars@yahoo.com | 0000-0002-3018-2314

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THE CONCEPT of mental trauma is used for events that shake and hurt the emotional, behavioral, and physical integrity of the person in various ways and which are difficult to cope with (Öztürk 2008, Kardaş and Tanhan 2018). Due to traumatic events, individuals' feelings and thoughts, such as feeling valuable and safe, seeing the world as a fair and safe place, finding other people good and helpful, and being unbreakable and invulnerable, may be under threat. Due to the traumatic events, individuals may be overstimulated and may have to cope with thoughts that they cannot stop despite frequently avoiding traumatic stimuli (Aker 2012, Qi et al. 2016).

Although traumatic events affect all stages of life, adolescence is the most affected stage (Kessler et al. 2005, Avcı 2010 Adana and Arslantaş 2011). Not all adolescents who have gone through traumatic events develop symptoms of Post Traumatic Stress Disorder (PTSD). While some do not exhibit any psychiatric symptoms, others may have mental disorders. This has led many researchers to investigate the risk factors of PTSD. In the literature, there are prevalence differences in terms of PTSD symptoms among those who have experienced traumatic events. Many factors, such as duration of exposure to trauma, type of trauma, severity of trauma, and previous life events, have been reported as the cause of prevalence differences (Reeves 2007, Trickey et al. 2012, Xue et al. 2015). In addition, female gender, low self-esteem, poor family relationships, low socioeconomic status, severity of trauma, pre-traumatic mental disorder, susceptibility to trauma, minority race, psychiatric illness in parents, media coverage of the event, and fear of death during the event have been specified as some of the risk factors of PTSD (Hollandar and Simeon 2002, Reeves 2007, Trickey et al. 2012, Xue et al. 2015).

Traumatic life events can change individuals' perception of themselves and the world and negatively affect their expectations from the future. Some studies in the literature report that the most common psychiatric diagnosis accompanying PTSD is depression (Tural et al. 2001, Karakaya et al. 2004).

It has been reported that the variability of PTSD from person to person is related to people's capacity to cope with stress. The nature of stress, how stress is handled, previous coping skills, and the ability to use existing resources are among the most important factors that determine a person's capacity to cope with stress (Erol and Önel 1999).

In our country, people can be exposed to many traumatic events due to both man-made and natural events. In the "Children and Youth Growing Up in an Environment of Political Violence in Turkey" section of the 2012 study of UNICEF, it was stated that children and adolescents were affected most by terror, social events, and chaos in Eastern and Southeastern Anatolia regions of Turkey and that children faced some special risks and disadvantages. In the same study, it was reported that children and youth in the region were exposed to various physical, mental, and social risks in urban and rural areas (UNICEF 2012).

The approaches of mental health professionals are very important in terms of recognizing and treating psychological symptoms in individuals affected by trauma and setting positive goals for the future. In order for mental health professionals to protect individual, family, and community mental health, they should be actively involved in post-traumatic services for risk groups and in the treatment and recovery process of individuals (Oflaz 2008, Çam et al. 2016).

A review of the literature has indicated that PTSD has not been studied on adolescents growing up in the Southeastern Anatolia region. It is thought that how

adolescents living in this region, where traumatic events are common and frequent, are affected by the events in the region and the description of related factors is important in terms of prevention and early diagnosis of mental disorders and interventional studies. In line with this information, this study was conducted to determine post-traumatic stress symptoms and related factors in high school student adolescents living in Southeastern Anatolia. For this purpose, we sought answers to the questions of whether there was a difference between the distribution of post-traumatic stress disorder symptoms of the students participating in the study; the levels by which the students with or with no post-traumatic stress symptoms, their families, and relatives were affected by the events in the region; the risks of depression; and the methods of coping with stress.

Method

Sample

The population of this cross-sectional study consisted of 9522 students from high schools in a county in Southeastern Anatolia. The sample size was calculated as 459 subjects based on α=.05, p=.50, and 20% extra subjects. The study was completed with 391 students because some of them filled out the data collection tools incompletely (n=41) and some of them quit the study during the application (n=27). Multi-stage [stratified (selection of class categories) and simple random (selection of branches)] sampling methods were used to determine the students, and students who were aged between 14 and 19 and volunteered to participate in the study were included in the study.

Measures

Personal information form

This form, which questions the sociodemographic information of the students, consists of 11 questions about their grade, age, gender, field of study, number of siblings, educational status of the father and mother, socioeconomic status, family type, the coexistence of the parents, and the status of using harmful substances (Oflaz 2008, UNICEF 2012, Çam et al. 2016).

Post-Traumatic Stress Diagnostic Scale (PDS)

This scale was developed by Foa et al. (1997) to determine the symptoms of post-traumatic stress. The scale, which was developed based on DSM IV diagnostic criteria, also shows the severity of PTSD symptoms in the person. It consists of 4 parts. In the first part, there is a list of traumatic experiences and the person is asked to indicate the traumatic experiences (disasters, accidents, etc.) that he/she has experienced so far. Participants who have not experienced any of the traumatic experiences mentioned in the list, that is, who did not mark any items in the first part, are told not to continue with the scale. In the second part, if the person has gone through more than one traumatic experience, he/she is asked to indicate which one he/she has been most affected by. The severity of the event and the time that has elapsed since the occurrence of the event are determined with 6 yes-no type questions. The increase in "yes" answers shows the severity of the event. In the third part, the frequency of post-traumatic stress symptoms in the last month is measured using 17 four-point Likert-type items (0=never

or only once, 3= five times a week or more/almost every day). In this way, the level of post-traumatic stress symptoms in the person is determined. The lowest score that can be obtained is 0, the highest score is 51, and high scores show increased severity of post-traumatic stress symptoms. This section consists of three subscales (re-experiencing, avoidance, and hyperarousal) divided according to DSM IV diagnostic criteria. In the current study, the level of post-traumatic stress symptoms was measured with these subscales. In the last part, the daily functionality of the person is measured with 9 yes-no type questions, and increased number of "yes" answers shows increased deterioration of the functionality of the person. It was stated that the internal consistency coefficient of the 17 items in the third part of the original form of the scale was 0.92, and the test-retest reliability coefficient was 0.83 (Foa et al. 1997). The Turkish adaptation of the scale was conducted by Işıklı (2006) and the internal consistency coefficient of the 17 items was found as 0.93. In addition, the re-experiencing, avoidance, and hyperarousal factors of the scale explained 59% of the variance. In our study, Cronbach's alpha coefficient of these 17 items, which measured post-traumatic stress symptoms, was found to be 0.89.

Beck Depression Inventory (BDI)

This is a 4-point Likert-type self-assessment scale. It was developed by Beck (1961) and adapted into Turkish by Hisli (1988). The total score that can be obtained from the scale varies between 0 and 63. In the Turkish validity and reliability study of the scale, the cut-off point was reported as 17. Cronbach's alpha coefficient is 0.80. In our study, Cronbach's alpha value of the scale was found to be 0.91.

Ways of Coping Questionnaire (WCQ)

This scale was developed by Şahin and Durak (1995) based on Lazarus and Folkman's Coping Inventory. It includes 30 items and 5 sub-dimensions. The sub-dimensions of the scale are the self-confidence approach, the helplessness approach, the submissiveness approach, the optimistic approach, and the seeking social support approach. The scale uses a 4-point Likert-type measurement structure and the scores that can be obtained from the scale range from 30 to 120. Higher scores indicate that the person uses that style more often. In our study, Cronbach's alpha internal consistency coefficients were found to be 0.75 for the self-confidence approach, 0.67 for the helplessness approach, 0.54 for the submissiveness approach, and 0.63 for the seeking social support approach.

Procedure

At the data collection stage, the researcher accepted the classes as strata and the branches as clusters with the multi-stage sampling method to determine the number of students to be included from each class. After the number of students to represent each stratum was determined, the students were included in the study by using the simple random sampling method. The school counselor gathered all the students in the meeting hall of the schools, and they were informed about the study and the scales to be administered by the first author of the research. In accordance with scientific principles, the students were informed that the findings of the research would not be shared with anyone. The students filled out the questionnaire in 40-60 minutes.

To conduct the study, the approval of the Ethics Committee of Aydın Adnan Menderes University Faculty of Medicine (issue: 2016/980), the necessary permissions of the Governorship of Şırnak and the Directorate of National Education of the district where the research would be conducted, and written consent of the students' parents and students were obtained.

Statistical analysis

Descriptive statistical analyses were used in the evaluation of the data. The chi-square test was used to determine the relationships between sociodemographic characteristics of the students and the BDI and PDS, and the student's t-test was employed to determine the difference between PDS and WCQ. Type 1 error level was accepted as 0.05.

Results

It was determined that 51.7% (n=202) of the high school students in the study were 15 years old or younger and that 64.2% (n=251) were female. Some sociodemographic characteristics of the students in the study are given in Table 1.

Table 1: Distribution of sociodemographic characteristics of the students

Characteristics		n	%
Grade	9th grade	111	28.4
	10th grade	128	32.7
	11th grade	90	23.0
	12th grade	62	15.9
Age	≤15	202	51.7
	≥16	189	48.3
Gender	Female	251	64.2
	Male	140	35.8
Field of study	Quantitative	275	70.3
	Verbal	20	5.1
	Equally-weighted	132	32.8
Number of siblings	1	7	1.8
	2-3	70	17.9
	≥4	314	80.3
Father's education	Not literate	74	18.9
	Primary school education	207	52.9
	High school and above	110	28.1
Mother's education	Not literate	223	57
	Primary school education	138	35.3
	High school and above	30	7.7
Socioeconomic status	Income<expenses	251	64.2
	Income=expenses	240	61.4
	Income>expenses	19	4.9
Family type	Core family	226	57.8
	Extended family	165	42.2
Parents' coexistence	Living together	365	93.4
	Separated	26	6.6
Use of harmful substances	Yes	15	3.8
	No	376	96.2

It was determined that 87.2% (n= 341) of the high school students whose opinions were taken within the scope of the study had symptoms of PTSD according to the Post Traumatic Stress Diagnostic Scale. The symptoms of PTSD were found to be higher in high school students in the study who were aged 16 or over ($\chi 2$ =4.084; p=.043), were female ($\chi 2$ =9.190; p=.002), and had low income ($\chi 2$ =10.528; p=.005). The comparison of how the students were affected by the events they encountered in their environment and the incidence of PTSD is given in Table 2. Accordingly, the symptoms of PTSD were found to be higher in students who stated that their home/workplace was damaged ($\chi 2$ =7.265; p=.006) (Table 2).

Table 2. Comparison of students with and with no post-traumatic stress symptoms according to the effect of the events in the region on them

Effect of the events in the region on the students		**PTSDS**				**Test**
		PTSD – Yes		PTSD – No		χ^2/P
Physical violence	Yes	17	100.0	0	.0	2.606/.106
	No	324	86.6	50	13.4	
Injury	Yes	14	100.0	0	0.0	2.129/.145
	No	327	86.7	50	13.3	
Arrest	Yes	5	100.0	0	.0	.743/.389
	No	336	87.0	50	13.0	
Imprisonment	Yes	5	100.0	0	.0	.743/.389
	No	336	87.0	50	13.0	
Damage to the home/workplace	Yes	191	91.8	17	8.2	7.265/.006
	No	150	82.0	33	18.0	

*Percentage of the line. PTSDS: Post Traumatic Stress Diagnostic Scale; PTSD: Post Traumatic Stress Disorder

The examination of the relationship between how the students' families or relatives were affected by the events occurring in the region and the symptoms of PTSD indicated that the symptoms of PTSD were higher in students whose family or relatives were exposed to physical violence ($\chi 2$ =8.229; p=.004), were injured ($\chi 2$ =8.265; p=.004), were arrested ($\chi 2$ =6.355; p=.012), were imprisoned ($\chi 2$ =4.925; p=.026), or died ($\chi 2$ =7.265; p=.006) (Table 3).

Table 3. Comparison of family and relatives of the students with and with no post-traumatic stress symptoms according to the effect of the events in the region on them

Effect of the events in the region on family and relatives		**PTSDS**				**Test**
		PTSD – Yes		PTSD – No		χ^2/P
Physical violence	Yes	56	100.0	0	.0	8.229/.004
	No	285	85.1	50	14.9	
Injury	Yes	67	98.5	1	1.5	8.265/.004
	No	274	84.8	49	15.2	
Arrest	Yes	57	98.3	1	1.7	6.355/.012
	No	284	85.3	49	14.7	
Imprisonment	Yes	49	98,0	1	2,0	4.925/.026
	No	292	85.6	49	14.4	
Death	Yes	58	95.1	3	4.9	7.265/.006
	No	283	85.8	47	14.2	

*Percentage of the line. PTSDS: Post Traumatic Stress Diagnostic Scale; PTSD: Post Traumatic Stress Disorder

While depression symptoms were observed in 96.7% of the students with symptoms of PTSD, only 3.3% of the students with no symptoms of PTSD were found to have depression symptoms (χ2=13.410; p=.000) (Table 4).

Table 4. Comparison of students with and with no post-traumatic stress symptoms according to the risk for depression

		PTSDS				Test
		TSSB Var		TSSB Yok		χ^2/P
		n	%	n	%	
Risk for depression	Yes	119	96.7	4	3.3	13.410/.000
	No	222	82.8	46	17.2	

*Percentage of the line. PTSDS: Post Traumatic Stress Diagnostic Scale; PTSD: Post Traumatic Stress Disorder

When the difference between the students' ways of coping with stress and symptoms of PTSD was examined, it was determined that the score of the students with PTSD from the helplessness approach style was higher (t=-2.648; p=.008)(Table 5).

Table 5. Comparison of students with and with no post-traumatic stress symptoms according to their mean scores from the ways of coping questionnaire

Adolescents' symptoms of PTSD	Adolescents' ways of coping with stress				
	Self-confidence	Helplessness	Submissiveness	Optimistic	Seeking social support
	Ort. ± SS	Ort. ± SS	Ort. ± SS	Ort. ± SS	Ort. ± SS
PTSD Symptoms (+)	11.58±4.64	11.34±4.63	7.08±3.48	8.02±3.18	6.66±2.65
PTSD Symptoms (-)	12.48±5.13	9.48±4.79	6.66±3.50	8,64±3.31	7.26±5.42
t	1.262	-2.648	-0,811	1.271	1.251
p	.208	.008	.418	.204	.12

PTSD: Post Traumatic Stress Disorder

Discussion

In this study, which was conducted to investigate the symptoms of post-traumatic stress disorder and related factors of the students from high schools in a county of Southeastern Anatolia, it was determined that 87.2% of the students had symptoms of PTSD. Studies on PTSD with children and adolescents have shown that the rates of PTSD range from 3% to 77.6% (Thabet et al. 2002, Gölge 2005, Khamis 2005, Eksi et al. 2007, Wickrama and Kaspar 2007, Dell'Osso et al. 2011, Ma et al. 2011, Sağartıcı 2013, Ghazali et al. 2014, Taymur et al. 2014). For example, Ghazali et al. (2014) reported that the rate of individuals in similar age groups in Malaysia who stated that they had been exposed to a traumatic event at least once in a lifetime was 77.6%, while Nooner et al. (2012) reported that this rate ranged between 3% and 57%. In a study conducted in our country after an industrial explosion in Ankara city in 2011, resulting in injury and loss of life, the rate of PTSD was found to be 13.7% (Taymur et al. 2014). Gölge (2005) stated that the incidence of PTSD varied between 9.1% and 14.7% in people who had not gone through any life-threatening experience or been injured but that this rate was between 34.5% and 38.6% in people who had had life-threatening experiences and increased to 42.9% in people who had been injured before. In the same study, this rate was reported to range from 59.2% to 65.9% in people who had gone through both life-threatening experiences and been injured before. A review of the

literature indicated that there were no studies reporting a higher rate of PTSD than this study. The higher rates of PTSD in our study findings may have been due to exposure to traumatic experiences because of the long-standing negative events in the region, higher levels of perceived severity of trauma due to long-term exposure to trauma, the type of scales used in the study, and cultural factors.

Similar to the literature, gender and income level in our study were found to be correlated with PTSD. Young age (Carrion et al. 2002, Khamis 2005, Bryant et al. 2007, Aker et al. 2008), gender (Kilpatrick et al. 2003, Ozel et al. 2003, Trickey et al. 2012), and low socioeconomic status (Khamis 2005, Kar et al. 2007, Bilgiç 2011, Trickey et al. 2012) have been reported as risk factors of PTSD by many studies in the literature. It is expected that more vulnerable groups, including those with low economic status or females, will experience post-traumatic stress disorder. In our study, PTSD was found to be higher in the group with subjects who were older. This is because adolescents may interpret events as more traumatic experiences since their ability to make sense of events and their mental abilities develop as they grow up.

In our study, no significant difference was found between the symptoms of PTSD and the level of parents' education, use of harmful substances, being affected by the event personally, family type, number of siblings, the coexistence of parents, and domestic physical violence. While there are studies in the literature consistent with our study (Kılıç et al. 1999, Landolt et al. 2003, Bryant et al. 2007), there are also studies with different results (Giaconia et al. 2000, Eksi et al. 2007, Fang et al. 2008, Dell'Osso et al. 2011, Ma et al. 2011, Ayaz et al. 2012, Nooner et al. 2012, Zhang et al. 2012, Welsh et al. 2017). It was thought that the reason for these differences between studies might be due to the type of scales used in the studies, the profile of participants, the type of trauma, and cultural differences.

There was a statistically significant difference between the PTSD symptoms of the high school student adolescents participating in our study and the status of damage to the home/workplace during the events occurring in the region. There are many studies in the literature that are consistent with this finding of our study (Thabet and Vostanis 1999, Wickrama and Kaspar 2007, Liu et al. 2016). In a study conducted with 91 children whose houses were destroyed due to the war in Palestine and 89 others in a control group living in the war zone but with no material loss, it was reported that there was a relationship between the destruction of the participants' houses and their susceptibility to the symptoms of PTSD (Thabet and Vostanis, 1999). In a study conducted with adolescents and their parents living in a region where a tsunami disaster had occurred, the rate of PTSD was 40.9% in adolescents and 19.6% in mothers. In addition, in this study, the destruction of the participants' houses and the duration of separation from the living environment were reported as risk factors for PTSD (Wickrama and Kaspar 2007).

In our study, students whose families and relatives were subjected to physical violence, were injured, were imprisoned, or died during the events in the region had a tendency to PTSD. Many studies in the literature have investigated the tendency of adolescents to PTSD when someone they know is harmed due to a traumatic event (Kar et al. 2007, Wickrama and Kaspar 2007, Elklit and Petersen 2008, Jensen et al. 2009, Nickerson et al. 2011, Sağartıcı 2013, Liu et al. 2016). In a study conducted with refugees who came to Turkey from Syria, it was reported that the death or injury of a person among family or friends was a risk factor for PTSD (Sağartıcı 2013). In another

study conducted with adolescents and their parents living in the region after a tsunami in Sri Lanka, the death or injury of someone they knew (Wickrama and Kaspar 2007), and similarly, the death or injury of a family member in a study conducted with children and adolescents in Southeast Asia after a tsunami disaster (Jensen et al. 2009) was reported to be a risk factor for PTSD. In a study with a sample consisting of citizens of Lithuania, Denmark, Iceland, and the Faroe Islands, the death of a family member was shown to be among the most common traumatic events (Trickey et al. 2012).

In our study, a relationship was found between PTSD and the presence of depression symptoms. This relationship has been shown in many studies in the literature, too. In a study conducted three and a half years after the Marmara earthquake with 334 adolescents who experienced the earthquake, the potential PTSD was found as 22% and the potential depression as 30% (Karakaya et al. 2004). In a study conducted with 1004 immigrant children and adolescents aged between 8 and 15 in Los Angeles, the rate of PTSD was found as 32% and the rate of depression as 16% (Jaycox et al. 2002). It was observed that 38.2% of the 76 patients diagnosed with chronic post-traumatic stress disorder after the Marmara earthquake had another accompanying psychiatric diagnosis. It has been found that 75.9% of the diseases accompanying PTSD are depression (Tural et al. 2001). According to the results of our study, adolescents who experienced traumatic events had an increased tendency to depression as well as PTSD. Traumatic life events can negatively change individuals' perception of themselves and the world, and negatively affect their expectations from the future. The sense of hope, which is closely related to individuals' belief in themselves and the world, can be damaged due to traumatic experiences, and for this reason, the symptoms of depression can often accompany the symptoms of psychological trauma.

A relationship was found between the PTSD of the high school student adolescents in our study and their helplessness approach to stress. Positive coping styles with stress were thought to be a protective factor against PTSD. In the literature, the benefits of support to victims, especially after traumatic events, are frequently mentioned. Some studies have reported that receiving support is one of the most important protective factors against the development of PTSD in individuals who are exposed to trauma, especially support from relatives (Dirkzwager et al. 2005, Hitchcock et al. 2015). Studies have reported that the symptoms of post-traumatic stress do not appear in every person who experiences trauma. While some people do not have any psychiatric symptoms, some have short-term adjustment disorder, others have depression, dissociative disorders, or other mental disorders. This is because individual differences affect how people respond to stress (Hollandar and Simeon 2002). It is thought that adolescents' styles of coping with stress play an important role in the differences in PTSD symptoms they show after traumatic events. It was found that the high school student adolescents participating in our study used a helplessness approach to cope with stress, and this increased their symptoms of PTSD. In addition to defining both trauma and depression, DSM IV emphasizes that people also feel helpless (APA 1995). It is thought that studies to be conducted on the topic will contribute to its better understanding and protecting the mental health of adolescents in the pre-traumatic period.

This study has some limitations. The results of the study are limited to 10 high schools located in a county in Southeastern Anatolia, measurement tools, and statistical techniques used in the study. The high number of questions in the questionnaires and scales used in the study may have distracted the students while they were answering the

questions. Another limitation of the study is that due to the limited number of studies on this topic in our country, the study findings had to be discussed with the findings of the studies conducted after natural disasters.

Conclusion

The majority of students living in the region had a tendency to PTSD (87.2%). In our study, it was found that female gender, low socioeconomic status, increasing age, low-income level, negative experiences of a familiar person (physical injury, arrestment, imprisonment, death), and helplessness approach to stress posed a risk for the tendency to PTSD among students. While 96.7% of the students with symptoms of PTSD had depression symptoms, only 3.3% of students with no symptoms of PTSD had depression symptoms. A review of the literature indicated that very few studies about PTSD were conducted with the individuals living in this region. For this reason, it is important to identify those at risk for PTSD and to conduct preliminary diagnosis and treatment studies. It may be recommended to conduct new studies to determine the damage caused by the events in the Southeast Anatolia Region to the mental health of the victims and the risk factors and treatment methods.

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