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## Bullying in schools and its relation with depressive symptoms, self-esteem, and suicidal ideation in adolescents

Selma TURAL HESAPÇIOĞLU,<sup>1</sup> Habibe YEŞİLOVA MERALER,<sup>2</sup> Filiz ERCAN<sup>3</sup>

### **ABSTRACT**

**Objective:** Bullying, which has negative effects on teaching and learning environment in schools, may be associated with some psychiatric disorders causatively or consequentially. The purpose of this study was to examine the suicidal ideation, depressive symptoms, and self-esteem in high school students with respect to their involvement in the cycle of bullying. **Methods:** The study was conducted in students of five secondary schools in a city in Turkey, who were selected with simple random sampling method. Peer Bullying Questionnaire, Beck Depression Inventory, Coopersmith Self-Esteem Scale were applied. **Results:** The data obtained from students in 1173, which were fully completed, were analyzed. Bullying victims, bullies, and people in the bullying cycle have higher depressive symptoms, lower self-esteem, and higher suicide tendencies than non-victims, non-bullies and people not involved in the bullying cycle, respectively. Being bullied increases the suicide ideation risk with an odds ratio of 1.447 and bullying increases the suicide ideation risk with an odds ratio of 1.663. Age, female sex, low self-esteem, victimization, and bullying are factors that increase the score of depressive symptoms. **Discussion:** The individuals who are not involved in the bullying cycle have a lower rate of depressive symptoms and suicidal ideation, and a higher self-esteem. Although no causal connection can be established, the bullying, being a victim of bullying and involvement in the cycle of bullying are all associated with depression, suicidal ideation, and low self-esteem, which may indicate an impaired mental health status of these students. Therefore, this study reveals that there is a possible relationship between psychiatric disorders, suicidal ideation and bullying behavior. (*Anatolian Journal of Psychiatry 2018; 19:210-216*)

**Keywords:** adolescent, bullying, depression, suicidal ideation, self-esteem

## **Okullardaki akran zorbalığının ergenlerde depresif belirtiler, benlik saygısı ve özkiyim düşüncesi ile ilişkisi**

### **ÖZ**

**Amaç:** Okullarda eğitim ve öğretim ortamını olumsuz etkilemesiyle gündeme gelen akran zorbalığı bazı psikiyatrik bozukluklarla nedensel veya sonuçosal olarak ilişkili olabilir. Bu araştırmanın amacı liselerde akran zorbalığının öğrencilerde depresif belirtiler, özkiyim düşüncesi ve benlik saygısını nasıl etkilediğinin incelenmesidir. **Yöntem:** Çalışma, Muş ili merkez ortaöğretim kurumlarında basit rastgele örneklemeye yöntemiyle seçilmiş öğrencilere Akran Zorbalığı Anketi, Beck Depresyon Ölçeği, Coopersmith Benlik Saygısı Ölçeği uygulanarak gerçekleştirilmiştir. Ölçekleri tam olarak dolduran 1173 öğrenciden elde edilen verilerle analizler yapılmıştır. **Bulgular:** Zorbalığa uğrayanların uğramayanlara göre, zorbalık yapanların yapmayanlara göre ve bir şekilde zorbalık döngüsüne girenlerin girmeyenlere göre depresif belirtileri daha fazla, benlik saygıları daha düşük, özkiyim düşünceleri daha fazladır.

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Zorbalığa uğramak, özkiyim düşüncesi riskini %45 artırırken, zorbalıkta bulunmak riski %66.3 artırmaktadır. Yaş, kız cinsiyet, düşük benlik saygısı, zorbalığa ugrama ve zorbalık yapma, depresif belirti puanını artıran etkenlerdir.

**Tartışma:** Zorbalık döngüsüne girmeyen bireylerde depresif belirtilerin, özkiyim düşüncesinin azlığı ve benlik saygısının yüksekliği ruh sağlığı iyi olan bireylerin sorun çözümde zorbalığı kullanmadıklarını göstermektedir. Nedensellik ilişkisi kurulamasa da, zorbalık yapma, zorbalık kurbanı olma, zorbalık döngüsüne girme ile depresyonun, özkiyim düşüncesinin yaygınlığı ve düşük benlik saygısı da bu öğrencilerde yetersiz bir ruhsal sağlık durumunun göstergesi olabilir. Bu çalışma hem zorba olma, hem de kurban olma ile psikiyatrik bozukluklar arasında ilişki olabileceğini göstermiştir. (*Anadolu Psikiyatri Derg 2018; 19(2):210-216*)

**Anahtar sözcükler:** Zorbalık, depresyon, özkiyim düşüncesi, benlik saygı, ergen

## INTRODUCTION

Peer bullying in schools is a common form of violence among youths.<sup>1,2</sup> Bullying victimization reported approximately 30% of adolescents in 79 countries.<sup>3</sup> While there are many reasons why young people are pushing violence<sup>4,5</sup> psychiatric disorders are causally or eventually related to bullying.<sup>6</sup> On the other hand, it is inevitable that some psychiatric symptoms may be seen in the individuals who have exposed to bullying.<sup>7</sup>

Studies about peer bullying in the school showed many mental problems seem to be related to bullying or victimization such as depression, anxiety, psychosomatic complaints, night wetting,<sup>7,8</sup> stuttering,<sup>9</sup> encopresis,<sup>10</sup> suicide ideas,<sup>11</sup> conduct disorder, bipolar disorder, alcohol and substance use disorders,<sup>6</sup> attention deficit hyperactivity disorder.<sup>12,13</sup>

One of the most interested psychopathologies in bullying literature is depression. Cross-sectional studies have shown that being a bully or a victim is associated with depression, suicide attempts, and thoughts.<sup>11,14-16</sup> Kaltiala-Heino, Fröjt, and Marttunen<sup>17</sup> conducted a two-year follow-up study in order to investigate whether depression led to involving in the bullying cycle, or whether involving in the bullying cycle led to depression.<sup>21</sup> They found that both being a bully or a victim were predictors of later depression in boys, and the former depression predicted latter victimization in girls.

Exposure to stress in adolescents has been associated with severe emotional and psychological problems;<sup>18</sup> one well-known of these problems is suicide.<sup>19</sup> The path to suicide, one of the leading causes of death in many countries,<sup>20</sup> begins with the idea of suicide in the mind of the individual, followed by attempts and completed suicide.<sup>21</sup> After the idea of suicide has been spotted on the way to suicide, the researchers have begun to worry more about the idea of suicide.<sup>19</sup> Klomek et al.<sup>22</sup> observed behaviors associated with suicide in the two-year follow-up

study of students who were involved in and were not involved in bullying and found bully students had more suicidal thoughts and functional impairment after two years. On the other hand, both bullying and suicide can also occur as a consequence of conduct disorder, a known risk factor for suicidal behavior.<sup>23</sup>

Another negative effect of stressful life events is on self-esteem.<sup>24,25</sup> Self-esteem, which is shaped by evaluating how individuals are perceived by the others in their lives, can be considered as a powerful source of struggle with the stress and suicide idea.<sup>26</sup> It is thought that exposure to the bullying and low self-esteem is related to each other.<sup>27</sup>

It is important to be aware of how bullying or victimization affects the children and adolescents in the nonclinical sample because they do not refer for treatment. A study showed that the vast majority of high school students are disturbed by peer bullying in their schools, but few share it with school administrators or other adults.<sup>28</sup>

The purpose of this study is to examine the suicidal thoughts, depressive symptoms, and self-esteem in the students who are in and out of the bullying cycle in high schools. In this study, predictors of suicidal ideation and high depressive symptom severity will be determined and the results could help mental health workers and educators at the point of finding the problem. Due to the nonclinical sampling, it is thought to be able to give an idea about general adolescent populations in or out of the bullying cycle.

## METHODS

### Participants

The study began with taking the necessary permissions from the Provincial Directorate of National Education. The list of high school students and students in the province center is taken from the Provincial Directorate of National Education. The study universe was 10405 High

School students in the provincial center. Based on previous studies, the prevalence of peer bullying was accepted as 40%, it was planned to reach 1121 students in the 97% confidence interval, 3% margin of error, and a design effect of 1%. Schools and classes were selected using the simple random sampling method. Questionnaires and scales were applied to 1203 students in the selected classes. However, those who did not respond adequately to questions on all three scales (three or more who were left empty) were not included in this study. Statistical analyses were carried out on the data obtained from 1173 students in the study.

#### Data collection tools

**The Peer Bully Questionnaire:** Developed by Pişkin,<sup>29</sup> the questionnaire can be applied to the fourth grade and above. This survey divides the students into four groups: bully, the victim, bully-victim and not involved in bullying cycle. At the beginning of the questionnaire definitions of bullies and bullying are explained to the students. After class, age and sex related questions the questionnaire consists of three parts including questions about victimization, bullying, and bullying in the school.

**Beck Depression Inventory (BDI):** This scale, developed by Beck,<sup>30</sup> is a 21-item self-report scale that evaluates depressive symptoms quantitatively. The score of each question ranges from 0 to 4, and the total score of the scale can range from 0 to 63. Twenty-one and above points indicate the presence of moderate or severe depression.<sup>31</sup> The validity and reliability studies of university students in our country were made by Hisli.<sup>31</sup> The Cronbach's alpha coefficient of the scale for this study is 0.867.

**Evaluation of the Suicide Idea:** Taking 1, 2 or 3 points from the question about suicide in BDI was considered as the existence of suicide ideation.

**Coopersmith Self-Esteem Inventory (CSE):** It is a self-assessment scale consisting of twenty-five items with two options, developed by

Coopersmith.<sup>32</sup> The lowest score that can be taken from this scale is '0', the highest score is '100', and the higher the scores, the higher the self-esteem. The validity and reliability study in Turkey was carried out by Turan and Tufan.<sup>33</sup> The Cronbach's alpha coefficient of the scale for this study is 0.779.

#### Statistical evaluation

Statistical evaluations were performed using the IBM SPSS Statistics 20.0 package program. The level of significance in the evaluations was accepted as  $p<0.05$ . Comparisons of the ratios of the two groups were made using the z test. When comparing the mean values of the two groups, it was first tested by the Levene's test whether the variances of the values were homogeneous and if it is suitable, Student t test was performed. Seven students' information on suicide ideation are missing Data of 1166 students were taken into account when assessing suicide. Logistic regression analysis was conducted to determine predictors of suicidal ideation. Variables are included in the model with forward selection technique. Linear regression analysis was applied to examine the variables that predict the depressive symptom score.

#### RESULTS

Of the 1173 students, 23.4% were victims of bullying, 28.5% were bullies and 13.4% were both bully and victims. The mean BDI score was  $15.51\pm9.90$  and the median score was 14.00. There was a suicide thought in the 30.4% of the students' mind.

#### The relation of bullying and depression

To investigate the relationship between depression and victimization, the students were divided into two groups: those who were bullied and those who did not. Student t-test used to compare the mean BDI scores in two groups. It was found that there was a significant difference in terms of BDI scores ( $p<0.001$ , degrees of freedom (df)=399) (Table 1).

**Table 1.** The relationship of bullying with depression, suicidal thoughts and, self-esteem

	Bullying victimization			p	Bullying			Involving in the bullying cycle		
	Victims	Non-victims			Bullies	Non-bullies	p	In the cycle	Out of the cycle	p
BDI score	18.8±10.9	14.5 ±9.3	<0.001		17.6±10.5	14.7±9.5	<0.001	18.0±10.8	13.9±8.9	<0.001
Suicidal thought	%46.5	%25.6	<0.001		%42.9	%25.5	<0.001	%43.0	%22.7	<0.001
Self-esteem	55.2±18.7	63.4±18.2	<0.001		58.2±17.6	62.8±18.9	<0.001	57.6±18.2	63.9±18.6	<0.001

*BDI: Beck Depression Inventory*

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The mean BDI scores of the bullies and non-bully students were compared with the Student t-test, and there was a significant difference between the groups ( $p<0.001$ ,  $df=559$ ) (Table 1).

There was a statistically significant difference in terms of mean BDI scores between the ones who entered the bullying cycle and those who did not ( $p<0.001$ ;  $df=822$ ) (Table 1).

#### Variables that predict depression score

Linear Regression Analysis was applied to determine the variables that predict the increase in BDI score. Age, female gender, low self-esteem, exposure to bullying and bullying others were factors that increase the BDI score (Table 2).

**Table 2.** The predictors of Beck Depression Inventory score

	B	CI (95%)	p
Grade	-0.682	(-1.403)-(-0.039)	0.064
Age	1.221	0.665-1.777	<0.001
Gender	-2.210	(-3.202)-(-1.219)	<0.001
Bullying victimization	1.515	0.364-2.665	<0.001
Bullying	1.209	0.146-2.272	0.026
CSI total score	-0.294	(-0.318)-(-0.269)	<0.001

CSI: Coopersmith Self Esteem Inventory; CI: Confidence Interval

#### Bullying and suicide thought

For the purpose of determining the relationship between suicide thoughts and victimization, the students were divided into two groups: those who were bullied and those who did not. Student ratios with suicidal ideation between the two groups were compared with z-test and statis-

tically, a significant difference was observed ( $z=6.55$ ,  $p<0.001$ ).

When we look at the relationship between bullying and suicidal ideation, it is seen that there is a statistically significant difference between the groups in terms of students with suicidal thoughts ( $z=5.82$ ,  $p<0.001$ ) (Table 3).

**Table 3.** Predictive factors of suicidal thoughts

	B	Exp(B)	CI (95%)	p
Grade	-0.174	0.840	0.72-0.98	0.027
Bullying victimization	0.369	1.447	1.00-2.08	0.046
Bullying	0.508	1.663	1.18-2.33	0.003
BDI Total Score	0.117	1.124	1.10-1.14	<0.001
CSE Total Score	-0.021	0.979	0.97-0.99	<0.001

CI: Confidence Interval; BDI: Beck Depression Inventory; CSE: Coopersmith Self-Esteem Inventory

When the relationship between involving in the bullying cycle and suicide thought was examined, the ratio of students with suicidal thoughts between the students in and out of the bullying cycle was compared by z-test and it was found that there was a statistically significant difference between them ( $z=7.32$ ,  $p<0.001$ ).

#### Factors affecting suicide ideation

A logistic regression analysis was conducted to

investigate the predictors of suicidal ideation. Class, age, gender, victimization, bullying, CSE score, BDI score were independent variables in the model, and the dependent variable was having a suicide ideation. While there was no significant difference with age and gender variables, statistical significance was observed for other variables (Table 3).

Accordingly, each unit increase in the class

reduces the risk of having a suicide ideation by 16% (odds ratio (OR)=0.840). Each unit increase in the BDI score increases the risk of having suicidal ideation by 12.4% (OR=1.124). Each unit increase in the self-esteem score reduces the risk of having a suicidal ideation by 2.1% (OR=0.979). Being a bully increases the risk by 66.3 percent (OR=1.663) while victimization increases the risk by 45% (OR=1.447).

### Bullying and self-esteem

Student t-test was used to examine the relationship between victimization and the mean (CSE) scores. It was seen that there was a significant difference in terms of self-esteem scores among those who was victimized and was not ( $t=6.54$ ,  $df=1171$ ,  $p<0.001$ ) (Table 1). There was a significant difference between those who bullied others and those who did not, in terms of CSE scores ( $t=3.98$ ,  $df=652.57$ ,  $p=0.001$ ) (Table 1). There was a significant difference in the mean scores of CSE between those who involved in the bullying cycle and those who did not ( $t=5.74$ ,  $df=1171$ ,  $p<0.001$ ) (Table 1).

## DISCUSSION

Adults can see bullying between peers sometimes as 'child play' or 'joking' and cannot imagine that traumatic events that could lead to a catastrophe as a result of bullying. In this study, the relation between involving in the bullying cycle and suicidal thoughts, depression and self-esteem scores were examined. The predictors of suicidal thoughts and BDI scores were also examined in this study.

The first finding of our study is that depression symptom scores of victims, bullies and the students in bullying cycle are higher than respectively non-victims, non-bullies and the students that did not involve in bullying cycle. While Çetinkaya et al.<sup>27</sup> found that depressive scores were higher in subjects who were exposed to bullying in their study, Kaltiala-Heino et al. found a higher prevalence of depression in both bullies and victims.<sup>17</sup> However, in a study from Finland, the prevalence of depression was higher in boys who frequently bully others, but it was lower in bullying victims.<sup>15</sup> It is suggested that the bully-victims have the higher risk of deterioration and they are the most damaged group.<sup>15</sup> Linear regression analysis applied in our research also showed that the severity of depressive symptoms in high school students increased with bullying and victimization. Therefore, in adolescents with depressive symptoms, it is necessary

to ask about the experience of peer bullying in school.

The second finding of our study is that the self-esteem of bullying victims, bullies, and the bully-victims are lower than respectively non-victims, non-bullies and the students that did not involve in the bullying cycle. In the literature, the victims of bullying are described as anxious, not confident and, not initiating children.<sup>34</sup> Non-attendance to school and some chronic diseases are not rare in students who are bullied.<sup>35</sup> The academic achievement of students may fall as a consequence of bullying, and they may feel the effects of bullying even during adulthood.<sup>35,36</sup>

Our third finding is that victims, bullies, and bully-victims have more suicidal thoughts than respectively non-victims, non-bullies and the students that did not involve in bullying cycle. In an eleven-month follow-up study, both bullies and victims were at a higher risk of suicide and self-harm behaviors.<sup>37</sup> When the predictors of suicidal ideation are examined in our study, the increase in class and an increase in self-esteem score decreases the risk of suicidal ideation; increase in BDI score, victimization and bullying are increasing the risk of suicide ideation.

The remarkable finding in our study is that bullies also have higher depressive symptom scores, lower self-esteem and more suicidal thoughts like the bullying victims. The bullies are enjoying to torment and to harm the victims. These people tend to not to obey school rules. Bullying can be a sign of impaired mental health. Interpreting the bullying behavior and making the necessary intervention in time can lead to the evaluation of the mental health of the offender while at the same time can prevent the emergence of new victims<sup>38</sup>. These findings support the studies that externalizing behaviors may be related to depression and suicidal behavior.<sup>22,23</sup>

Findings in this study suggest that the aggression of young people towards each other may be related to serious psychiatric disorders and that if necessary intervention is not done on time and correctly, the individual may go on to end his/her life. In fact, it seems that both those who are bullied and those who are bullies need closer attention and follow-up.

In conclusion, it appears that one component of the prevention and intervention of suicide,<sup>39</sup> one of the leading causes of death, is preventing bullying in school.<sup>38</sup> All these findings point to the need for more effective precautions to prevent peer violence in school.

## Limitations

The sampling of this research is sufficient and the data collection tools that are used are reliable

and valid scales. However, the self-report design of the data collection tools is a limitation of this study.

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## REFERENCES

1. Olweus D. *Bullying at Schools: What We Know and What We can do?* Cambridge, MA: Blackwell Publishers; 1993, p.19.
2. Due P, Holstein BE, Soc MS. Bullying victimization among 13 to 15-year-old school children: results from two comparative studies in 66 countries and regions. *Int J Adolesc Med Health* 2008; 20:209-221.
3. Elgar FJ, McKinnon B, Walsh SD, Freeman J, D Donnelly P, de Matos MG, et al. Structural determinants of youth bullying and fighting in 79 countries. *J Adolesc Health* 2015; 57:643-650.
4. Bellmore A, Chen WT, Rischall E. The reasons behind early adolescents' responses to peer victimization. *J Youth Adolesc* 2013; 42:275-284.
5. Jackson V, Chou S, Browne K. Protective factors against child victimization in the school and community: an exploratory systematic review of longitudinal predictors and interacting variables. *Trauma Violence Abuse* 2015; 22. pii: 1524838015611675
6. Vaughn MG, Fu Q, Bender K, DeLisi M, Beaver KM, Perron BE, et al. Psychiatric correlates of bullying in the United States: findings from a national sample. *Psychiatr Q* 2010; 81:183-195.
7. Tural Hesapçıoğlu S, Ercan F. Traditional and cyberbullying co-occurrence and its relationship to psychiatric symptoms. *Pediatrics International* 2017; 59:16-22.
8. Fekkes M, Pijpers FI, Fredriks AM, Vogels T, Verloove-Vanhorick SP. Do bullied children get ill, or do ill children get bullied? A prospective cohort study on the relationship between bullying and health-related symptoms. *Pediatrics* 2006; 117:1568-1574.
9. Blood GW, Blood IM, Tramontana GM, Sylvia AJ, Boyle MP, Motzko GR. Self-reported experience of bullying of students who stutter: Relations with life satisfaction, life orientation, and self-esteem. *Perceptual and Motor Skills* 2011; 113:353-364.
10. Joinson C, Heron J, Butler U, von Gontard A, Avon Longitudinal Study of Parents and Children Study Team. Psychological differences between children with and without soiling problems. *Pediatrics* 2006; 117:1575-1584.
11. Barzilay S, Brunstein Klomek A, Aptekar A, Carli V, Wasserman C, Hadlaczky G, et al. Bullying victimization and suicide ideation and behavior among adolescents in Europe: A 10-Country Study. *J Adolesc Health* 2017; 5. pii: S1054-139X(17)30068-X.
12. Keder R, Sege R, Raffalli PC, Augustyn M. Bullying and ADHD: Which came first and does it matter? *J Dev Behav Pediatr* 2017; 38(Suppl.)1:S6-S8.
13. Peasgood T, Bhardwaj A, Biggs K, Brazier JE, Coghill D, Cooper CL, et al. The impact of ADHD on the health and well-being of ADHD children and their siblings. *Eur Child Adolesc Psychiatry* 2016; 25:1217-1231.
14. Hepburn L, Azrael D, Molnar B, Miller M. Bullying and suicidal behaviors among urban high school youth. *J Adolesc Health* 2012; 51:93-95.
15. Klomek AB, Sourander A, Kumpulainen K, Piha J, Tamminen T, Moilanen I, et al. Childhood bullying as a risk for later depression and suicidal ideation among Finnish males. *J Affect Disord* 2008; 109:47-55.
16. Hinduja S, Patchin JW. Bullying, cyberbullying, and suicide. *Arch Suicide Res* 2010; 14:206-221.
17. Kaltiala-Heino R, Fröjd S, Marttunen M. Involvement in bullying and depression in a 2-year follow-up in middle adolescence. *Eur Child Adolesc Psychiatry* 2010; 19:45.
18. Gradus JL. Prevalence and prognosis of stress disorders: a review of the epidemiologic literature. *Clin Epidemiol* 2017; 9:251-260.
19. Wilburn VR, Smith DE. Stress, self-esteem, and suicidal ideation in late adolescents. *Adolescence* 2005; 40:33.
20. Bridge JA, Goldstein TR, Brent DA. Adolescent suicide and suicidal behavior. *J Child Psychol Psychiatry* 2006; 47:372-394.

21. Cole DE, Protinsky HO, Cross LH. An empirical investigation of adolescent suicidal ideation. *Adolescence* 1992; 27:813.
22. Klomek AB, Kleinman M, Altschuler E, Marrocco F, Amakawa L, Gould MS. Suicidal adolescents' experiences with bullying perpetration and victimization during high school as risk factors for later depression and suicidality. *J Adolesc Health* 2013; 53:37-S42.
23. Wei HT, Lan WH, Hsu JW, Bai YM, Huang KL, Su TP, et al. Risk of suicide attempt among adolescents with conduct disorder: a longitudinal follow-up study. *J Pediatr* 2016; 177:292-296.
24. Kliwer W, Sandler IN. Locus of control and self-esteem as moderators of stressor-symptom relations in children and adolescents. *J Abnorm Child Psychol* 1992; 20, 393-413.
25. Garber J, Robinson NS, Valentiner D. The relation between parenting and adolescent depression self-worth as a mediator. *J Adolesc Res* 1997; 12:12-33.
26. Wilburn VR, Smith DE. Stress, self-esteem, and suicidal ideation in late adolescents. *Adolescence* 2005; 40:33.
27. Çetinkaya S, Nur N, Ayvaz A, Özdemir D, Kavaklı Ö. Sosyoekonomik durumu farklı üç ilköğretim okulu öğrencilerinde akran zorbalığının depresyon ve benlik saygısı düzeyiyle ilişkisi. *Anadolu Psikiyatri Derg* 2009; 10:151-158.
28. Tural Hesapçıoğlu S, Yeşilova H. Feelings, thoughts, and attitudes of high school students toward school bullying and the bullies. *Anatolian Journal of Psychiatry* 2015; 16:284-293.
29. Piskin M. School bullying: definition, types, related factors, and strategies to prevent bullying problems. *Educational Sciences: Theory & Practice* 2002; 2:555-562.
30. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. *Arch Gen Psychiatry* 1961; 4:561-571.
31. Hisli N. Beck Depresyon Envanteri'nin geçerliği üzerine bir çalışma. *Psikoloji Dergisi* 1988; 6:118-122.
32. Coopersmith S. SEI, Self-Esteem Inventories. California: Consulting Psychologist Press, 1981.
33. Turan N, Tufan B. Coopersmith Benlik Saygısı Envanteri'nin (SEI) geçerlik-güvenirlilik çalışması.
23. National Congress of Psychiatry and Neurology, İstanbul, 1987.
34. Şirvanlı-Özen D. The relationship between the adolescent's exposure to peer bullying and their sex, age and internal problem behaviors. *Turkish Journal of Child and Adolescent Mental Health* 2010; 17:5-12.
35. Hillis SD, Mercy JA, Saul JR. The enduring impact of violence against children. *Psychol Health Med* 2017; 22:393-405.
36. Zarate-Garza PP, Biggs BK, Croarkin P, Morath B, Leffler J, Cuellar-Barboza A, et al. How well do we understand the long-term health implications of childhood bullying? *Harv Rev Psychiatry* 2017; 25:89-95.
37. Kim YS, Leventhal BL, Koh YJ, Boyce WT. Bullying increased suicide risk: prospective study of Korean adolescents. *Arch Suicide Res* 2009; 13:15-30.
38. Üneri ÖŞ. Çocuklarda akran zorbalığı. *Düşünen Adam* 2011; 24:352-353.
39. Shang L, Li J, Li Y, Wang T, Siegrist J. Stressful psychosocial school environment and suicidal ideation in Chinese adolescents. *Soc Psychiatry Psychiatr Epidemiol* 2014; 49:205-210.