ORIGINAL ARTICLE

Peer bullying in adolescents and related factors





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Abstract

Objective: This study aims to determine the frequency of peer bullying and being exposed to bullying in adolescents and the factors associated with these behaviors.

Methods: This cross-sectional study was carried out in a high school between February 2016 and November 2017. The study population was 203students. The 2013-2014 version of the questionnaire form (HBSCQ) used in the Health Behavior in School-aged Children study of the World Health Organization was used as the measurement tool. Chi-square, Fisher's Exact Test, Mann-Whitney U test were used in univariate analyses. Logistic regression analysis was used to show the effect of social support to bullying.

Results: The frequency of being exposed to peer bullying was 19.8%, and performing bullying was 23.7%. Being exposed to peer bullying was observed with a higher rate in those who migrated from another city (p=0.031). The average peer support score (p=0.001), family support score (p=0.039), and family communication score (p=0.028) were significantly lower in those who were exposed to bullying. The behavior of bullying was observed with a significantly higher rate in those with fewer siblings (p=0.028), had negative opinions about the school (p=0.024) and involved in a physical fight (p=0.001). According to the logistic regression analysis results, family support score was found to be protective against exposure to bullying. The protective effect of family communication and peer support scores continued to be significant after the adjustment.

Conclusion: The results of this study highlight the efficiency of social support in addressing and mitigating the effects of bullying among adolescents. School health programs should involve collaboration between teachers, administrators, parents, and students to create a unified approach to tackling bullying.

Keywords: Adolescent, Peer Bullying, School Health, Social Support

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INTRODUCTION

Bullying is one of the common violent behaviors among school children. According to the data of the WHO Global Status Report on Preventing Violence Against Children in 2020, one in every three students in the age group of 11-15 is exposed to bullying.¹ Olweus proposed the most commonly used definition of bullying. According to this definition, bullying is referred to as situations in which an individual is exposed to repetitive negative actions by one or more people and cannot defend themselves due to the physical and psychological power imbalance.2 Bullying can occur in the school environment, social environment, or on the internet. It may cause physical, psychological, and social harm and it may also have adverse effects on education.³ The main types of bullying are; physical, verbal, relational, and property damage.3 Physical bullying is bullying with acts of violence such as hitting, kicking, punching, spitting, and pushing. In verbal bullying, there are acts such as mocking, nicknaming, delivering offensive written notes, hand gestures, swearing, sexual discourse, and threatening. In the type of bullying that targets the young person's relationships, there are behaviors such as isolating the person from their friends, preventing them from establishing relationships with others, spreading false and harmful statements, making derogatory comments, spreading embarrassing images without the permission of the person. The type of bullying by damaging property includes stealing, damaging, seizing, refusing to return one's property, and deleting personal electronic information.³ Children exposed to bullying face a wide variety of risks, including psychiatric problems such

as depression, anxiety, suicide attempts, social weakness, school failure, dropout, low school attendance, substance abuse, and other violent behaviors. Most of these effects are acute; however, some may persist into late adolescence or even adulthood. Physical fighting and bullying are also associated with other risky behaviors such as smoking, alcohol abuse, and getting involved in crime.⁴ This study aims to determine the frequency of peer bullying and exposure in adolescents and the factors associated with these behaviors.

METHODS

This cross-sectional study was carried out in İzmir Güzelbahçe İMKB Vocational and Technical Anatolian High School between February 2016 and November 2017. Sample size was not calculated. All the ninth and tenth-grade students who attended the school in November 2016 were included in the study. The study group was 251 ninth and tenth-grade students enrolled in this high school in the 2016-2017 academic year. Eleven and twelfth-grades were excluded from the assessment because they were trained in workshops outside of the school or were out of the school due to their internships. The 2013-2014 version of the questionnaire form (HBSCQ) used in the Health Behavior in School-aged Children study of the World Health Organization was used as the measurement tool. The specific population targeted for sampling is young people attending school aged 11-15 years in the HBSC study. There are 74 questions under 14 subtitles in the HBSC questionnaire. 5 The subheadings used in this study; demographic characteristics, risky behaviors, violence and injury, family relations, peer relations, health and well-being, school life, and social inequalities. The study protocol was used for all measurements. 5 The students filled the questionnaire themselves in their classrooms. The dependent variables are exposure to peer bullying, performing peer bullying; whereas independent variables are gender, age, parental education status, parental employment status, income perception, family welfare score (0-3 point low, 4-5 points average, 6-7 points high family welfare as the HBSC study protocol), family structure, the number of people living in the family, the number of siblings, the place of residence, immigration from one city to another, subjective health index, tobacco use, physical fight, school life-related variables (opinions about school, the pressure created by the coursework, opinions about school success), and variables related to social support (peer support, family support, communication with family). The variables were investigated using visual (histograms, probability plots) and analytical methods (Kolmogorov-Smirnov) to determine whether or not they are normally distributed. Descriptive findings presented using percentage distributions for categorical variables; medians (1.-3. quartiles) for non-normally distributed variables and mean ± standard deviation (minmax) for normally distributed continuous variables. Chi-square, Fisher's Exact Test, Mann-Whitney U test were used in univariate analyses and logistic regression analysis was used in multivariate analyses. In the logistic regression analysis, how the dependent variables are affected by social support scores is presented both with the unadjusted model and adjusted for sociodemographic variables. The significance level was accepted as p<0.05. Ethics committee approval was obtained from Dokuz Eylul University Clinical Research

Ethics Committee on 05.05.2016 with the decision number of 2016/08-07. Informed consent was obtained from both parents and participants. To apply the questionnaires to the students, institutional permission was obtained from the Provincial Directorate of National Education of the Governorship of Izmir, on 28.09.2016 with the permission number 12018877-604.01.02-E.10432745.

RESULTS

203 students participated in the study (response rate: 80.9%). The average age was 15.5 ± 0.8 (14-17), 86.9% of the students were males and 13.1% were females. The class distribution was as following: 54.5% were ninth-graders and 45.5% were tenth-graders. 65.2% of the mothers and 64.4% of the fathers had secondary school level or lower education level. 68.5% of mothers and 6.3% of fathers either did not working at all or were worked in daily jobs with irregular incomes. It was determined that 6.0% of the students evaluated their economic situation as very bad/bad. 11.9% of the students did not have a private room belonged to them, 17.4% did not have a laptop/computer, 41.3% did not have a family-owned car, etc., and 19.0% did not have a dishwasher in the household. 22.5% of the students stated that they did not have a vacation over the past year. The average family welfare score, which was calculated using these variables in determining the family's economic status, was 4.7 ± 1.7 (0-7). Accordingly, 23.6% of the students had low family welfare. While 93.8% of the students had a nuclear family structure consisting of mothers, fathers and siblings, 6.2% had an extended family structure. The median total number of persons living in the family was 4.0 (4-5). The median number of siblings,

excluding the students themselves, was 1.0 (1-2). The distribution of students according to their place of residence was as follows:

21.8% of students lived in rural areas while 19.9% had moved from another city in the last five years.

When examining some health complaints that the students stated that they had experienced in the last six months, 25.5% had back pain, 23.6% had headaches, 22.0% had difficulties while falling asleep, 14.9% had stomach pain, 13.8% suffered from dizziness once a week or more frequently. 33.4% of the students reported feeling sad, while 48.3% felt angry once a week or more. The average subjective health index score calculated according to the frequency of these complaints was 28.9 ± 5.7 (12.0-35.0).

29.5% of the students in the research samples had a negative opinion of the school. The proportion of the students who felt more or less pressured by courses and assignments was 83.4%. 46.5% of the students responded medium/low when asked to rate their success at school compared to their classmates.

14.6% of the students used tobacco and tobacco products at least once every day. The average age of students' first exposure to tobacco products such as cigarettes and hookahs was 13.0 ± 1.8 (7-17). The frequency of students getting involved in a physical fight in the last 1 year was found to be 58.9%.

17.9% of the students stated that it was difficult/very difficult to talk to their mothers, and 26.9% stated that it was difficult/very difficult to talk to their fathers. Approximately 80% of the students stated a positive opinion about their communication with their families. The average family communication score

calculated using those propositions was 4.3 ± 0.8 (1-5). Approximately 80% of the students expressed a positive opinion regarding the propositions about the support they received from their families. The mean family support score calculated using these items was 4.3 ± 0.9 (1-5). Approximately 70% of the students stated positive opinions regarding the propositions about their friends. The mean peer support score calculated using these items was 4.1 ± 0.9 (1-5).

The frequency of being exposed to peer bullying at least once in the last two months was 19.8%, and the frequency of performing bullying was 23.7%. Characteristics of the study group by bullying was presented in Table 1. In the past five years, 32.4% of those who migrated from another city to their current settlement and 16.7% of the locals stated that they were exposed to peer bullying at least once in the last two months. The difference between immigrants and natives was statistically significant (p=0.031). Gender, age, parental education status, parental employment status, number of siblings, number of family members, place of residence, income perception, family welfare score did not affect exposure to bullying (Table 1).

28.9% of those with one sibling or less and 15.1% of those with two or more siblings had bullied a peer in the previous two months. The prevalence of bullying behavior was significantly higher among those with fewer siblings (p=0.028). Performing bullying was observed more often in those with a family of four or less than those with a larger family (p=0.004). Gender, age, parental education status, parental employment status, place of residence, immigration, income perception, family welfare score did not affect bullying (Table 1).

Table 1. Being exposed to bullying and performing bullying according to the sociodemographic characteristics

Characteristics	В	eing Ex	posed	l to Bul	llying	Performing Bullying				
		Yes	No		р	Y	Yes		No	
	n	%	n	%		n	%	n	%	
Gender										
Male	35	21.0	132	79.0	0.374*	43	24.3	134	75.7	0.788*
Female	2	10.0	18	90.0		4	19.0	17	81.0	
Education level of mother										
Middle school and below	17	14.8	98	85.2	0.066	29	23.4	95	76.6	0.852
High school and above	18	25.7	52	74.3		16	22.2	56	77.8	
Education level of father										
Middle school and below	25	21.6	91	78.4	0.656	27	21.8	97	78.2	0.573
High school and above	12	18.8	52	81.3		17	25.4	50	74.6	
Employment status of mot	her									
Working	14	24.6	43	75.4	0.325	15	25.4	44	74.6	0.627
Not working	23	18.3	103	81.7		30	22.2	105	77.8	
Employment status of fath	er							·		
Working	34	20.6	131	79.4	1.000*	39	22.4	135	77.6	1.000*
Not working	2	15.4	11	84.6		3	23.1	10	76.9	
Number of siblings								·		
At most 1	26	22.6	89	77.4	0.179	35	28.9	86	71.1	0.028
2 and above	10	14.5	59	85.5		11	15.1	62	84.9	
Number of the people in th	e fami	ly			'					
At most 4	24	21.6	87	78.4	0.327	36	30.8	81	69.2	0.004
5 and above	11	15.7	59	84.3		9	12.50	63	87.5	
The present place of reside	ence									
Urban	31	21.7	112	78.3	0.321	34	22.5	117	77.5	0.297
Rural	6	14.6	35	85.4		13	30.2	30	69.8	
Migration										
Yes	12	32.4	25	67.6	0.031	12	30.8	27	69.2	0.249
No	25	16.7	125	83.3		35	22.0	124	78.0	
Perception of income										
Very good-Good-Average	32	18.5	141	81.5	0.701*	42	22.8	142	77.2	0.481*
Bad-Very bad	3	25.6	9	27.0)	· .	4	33.3	8	66.7	
Family welfare score										
High	7	21.2	26	78.8	0.937	9	25.0	27	75.0	0.985
Average	22	20.4	86	79.6		27	23.9	86	76.1	•
Low	8	18.2	36	81.8		11	23.4	36	76.6	•

^{*}Fisher's Exact Test

No significant relationship was found between views about school, the pressure of coursework, perception of school success, everyday tobacco use, and involvement in physical fighting in the last year and being bullied (Table 2).

Those who had negative opinions about the school performed more bullying than those who did not have negative opinions about the school (p = 0.024). Those involved in a physical fight in the last year performed more bullying than those who did not involve in a physical fight in the last year (p=0.001). No significant relationship was found between the pressure of coursework, perception of school achievement, daily tobacco use and bullying (Table 2).

Table 2. Being exposed to bullying and performing bullying according to views about school life, tobacco use and physical fighting.

Being Exposed to Bullying					Performing Bullying				
Yes		No		р	Yes		No		р
n	%	n	%		n	%	n	%	
23	17.0	112	83.0	0.112	27	19.4	112	80.6	0.024
14	27.5	37	72.5	-	20	34.5	38	65.5	
1									
27	20.0	108	80.0	1.000	29	20.4	113	79.6	0.059
10	20.0	40	80.0		18	33.3	36	66.7	
17	17.2	82	82.8	0.337	21	20.2	83	79.8	0.285
14	20.0	56	80.0		19	25.3	56	74.7	
5	33.3	10	66.7		6	37.5	10	62.5	
6	21.4	22	78.6	0.763	11	37.9	18	62.1	0.059
30	19.0	128	81.0	_	36	21.7	130	8.3	
26	24.3	81	75.7	0.095	37	33.3	74	66.7	0.001
11	14.3	66	85.7	_	10	12.7	69	87.3	
	n 23 14 27 10 17 14 5 6 30 26	Yes n % 23 17.0 14 27.5 27 20.0 10 20.0 17 17.2 14 20.0 5 33.3 6 21.4 30 19.0 26 24.3	Yes N n % n 23 17.0 112 14 27.5 37 27 20.0 108 10 20.0 40 17 17.2 82 14 20.0 56 5 33.3 10 6 21.4 22 30 19.0 128 26 24.3 81	Yes No n % n % 23 17.0 112 83.0 14 27.5 37 72.5 27 20.0 108 80.0 10 20.0 40 80.0 17 17.2 82 82.8 14 20.0 56 80.0 5 33.3 10 66.7 6 21.4 22 78.6 30 19.0 128 81.0 26 24.3 81 75.7	Yes No p n % n % 23 17.0 112 83.0 0.112 14 27.5 37 72.5 - 27 20.0 108 80.0 1.000 10 20.0 40 80.0 0.337 14 20.0 56 80.0 0.337 4 20.0 56 80.0 0.763 30 19.0 128 81.0 0.763 26 24.3 81 75.7 0.095	Yes No p Yes n % n % n 23 17.0 112 83.0 0.112 27 14 27.5 37 72.5 - 20 27 20.0 108 80.0 1.000 29 10 20.0 40 80.0 18 17 17.2 82 82.8 0.337 21 14 20.0 56 80.0 19 5 33.3 10 66.7 6 6 21.4 22 78.6 0.763 11 30 19.0 128 81.0 36 26 24.3 81 75.7 0.095 37	Yes No p Yes n % n % n % 23 17.0 112 83.0 0.112 27 19.4 14 27.5 37 72.5 - 20 34.5 27 20.0 108 80.0 1.000 29 20.4 10 20.0 40 80.0 18 33.3 17 17.2 82 82.8 0.337 21 20.2 14 20.0 56 80.0 19 25.3 5 33.3 10 66.7 6 37.5 6 21.4 22 78.6 0.763 11 37.9 30 19.0 128 81.0 36 21.7 26 24.3 81 75.7 0.095 37 33.3	Yes No p Yes No 17.0 112 83.0 0.112 27 19.4 112 14 27.5 37 72.5 - 20 34.5 38 27 20.0 108 80.0 1.000 29 20.4 113 10 20.0 40 80.0 18 33.3 36 17 17.2 82 82.8 0.337 21 20.2 83 14 20.0 56 80.0 19 25.3 56 5 33.3 10 66.7 6 37.5 10 6 21.4 22 78.6 0.763 11 37.9 18 30 19.0 128 81.0 36 21.7 130 26 24.3 81 75.7 0.095 37 33.3 74	Yes No p Yes No 23 17.0 112 83.0 0.112 27 19.4 112 80.6 14 27.5 37 72.5 - 20 34.5 38 65.5 27 20.0 108 80.0 1.000 29 20.4 113 79.6 10 20.0 40 80.0 18 33.3 36 66.7 17 17.2 82 82.8 0.337 21 20.2 83 79.8 14 20.0 56 80.0 19 25.3 56 74.7 5 33.3 10 66.7 6 37.5 10 62.5 6 21.4 22 78.6 0.763 11 37.9 18 62.1 30 19.0 128 81.0 36 21.7 130 8.3 26 24.3 81 75.7 0.095 37 <

The average peer support score, family support score, and family communication score were significantly lower in those who were exposed to bullying (p=0.001, p=0.039, p=0.028, respectively). No significant relationship was found between subjective health index and exposure to bullying (Table 3).

No significant relationship was found between subjective health index, peer support score, family support score, family communication score and bullying in the last two months (Table 3).

Table 3. Subjective health index and social support scores according to exposure to bullying and performing bullying (Median (1.-3. quartiles).

	Being Exposed to	Bullying	p *	Performing Bully	<i>p</i> *	
	Yes	No		Yes	No	
	Median	Median	_	Median	Median	_
	(13. quartiles)	(13. quartiles)		(13. quartiles)	(13. quartiles)	
Subjective health index	28.0 (27.0-31.0)	31.0 (25.0-34.5)	0.064	29.0 (25.0-32.0)	31 (25.8-34.0)	0.133
Peer support score	4.0 (3.0-4.3)	4.3 (3.8-5.0)	0.001	4.3 (3.8-5.0)	4.0 (3.6-4.8)	0.567
Family support score	4.5 (3.4-4.9)	4.8 (4.0-5.0)	0.039	4.5 (3.7-5.0)	4.8 (4.0-5.0)	0.593
Family communication	4.3 (3.3-4.8)	4.8 (4.0-5.0)	0.028	4.5 (3.8-5.0)	4.5 (4.0-5.0)	0.693
score						

^{*} Mann-Whitney U test

The logistic regression analysis results, which show the effect of peer support score, family support score, and family communication score by correcting the effect of sociodemographic variables, are presented in Table 4.

Family support score was found to be protective against exposure to bullying after being adjusted for sociodemographic variables (OR: 0.60, 95% CI: 0.363-0.974). The protective effect of family communication and peer support scores continued to be significant after the adjustment (Table 4).

Family communication score, family support score, peer support score did not significantly affect performing bullying in the last two months, neither in corrected nor in unadjusted models as demonstrated in Table 4.

Table 4. Association between social support scores and being exposed to bullying and performing bullying, OR, 95% CI

Characteristics	Bei	ed to Bullying	Performing Bullying					
	Crude OR	Crude OR P Adj. OR*		р	Crude OR p (95% CI)		Adj. OR* (95% CI)	р
	(95 %CI)		(95% CI)		(93% CI)		(93% CI)	
Family	0.66	0.047	0.44	0.004	0.93	0.738	0.94	0.935
Communication Score	(0.432-0.994)		(0.246-0.771)		(0.627-1.392)		(0.534-1.638)	
Family Support	0.77	0.151	0.60	0.039	0.90	0.563	0.90	0.677
Score	(0.532-1.102)		(0.363-0.974)		(0.640-1.275)		(0.547-1.479)	
Peer Support	0.54	0.002	0.50	0.003	1.20	0.355	0.71	0.201
Score	(0.363-0.789)		(0.314-0.787)		(0.814-1.777)		(0.174-2.882)	

^{*} Adjusted according to age, gender, parental education status, employment status of parents, number of siblings, number of people living in the family, place of residence, migration, family welfare score.

DISCUSSION

In this study, 19.8% of the students have been exposed to bullying in the last two months. According to HSBC Türkiye's results in 2006, 65.2% of students stated they were bullied in the last two months. In a study conducted with middle school students in Izmir, exposure

to bullying was 42.3%.⁷ In the present study, exposure to bullying is very low compared to other studies. This may be because the study group was older than other studies and the study was conducted in only one school.

In 42 countries where the HBSC protocol in 2013-2014 was followed, the frequency

of being exposed to bullying in the last two months specific to the age of 15was found to be 23%. There were significant differences (49% -6%) between countries regarding the frequency of being exposed to bullying. The countries with the highest rate of being bullied were Lithuania (49%), Latvia (41%), Belgium (40%). The countries with the lowest rate of being bullied were Italy (8%), Iceland (8%), and Armenia (6%).8 In the 2017-2018 follow-up of the same study, the frequency of being bullied at least two times in the last two months was 8%, and it was stated that there was no significant change compared to the follow-up conducted four years ago.9 According to the 2019 results of the Youth Risk Behavior Survey (YRBS) in the USA, 19.5% of high school students had been exposed to peer bullying in the last twelve months. There was no significant change in that frequency in the last ten years. 10 Our study has similar findings to the studies in Europe and the ones in the USA.

In this study, those who immigrated from another city to their place of residence in the last five years were exposed to more bullying. The relationship between migration and health behaviors in ninth to twelfth graders was observed in five regions in the USA's YRBS cohort. No relationship was found between migrating to a place in the last six years and being bullied. In one of the five regions, migrating to a place more than six years ago increased the exposure to bullying 1.7 (1.2-2.6) times. 11 This finding may be due to cultural differences between countries. Detailed information such as where the immigrant students came from and the reason of their migration was not questioned in that study. Therefore, it was not possible to fully explain the relationship between migration Turk | Public Health 2024;22(1)

and bullying.

No relationship was found between other sociodemographic variables and exposure to bullying. Although there are studies in the literature with similar findings to the present study where there is no difference in terms of gender^{7, 12, 13}, there are also studies that report more exposure to bullying in men^{14, 15, 16}, besides the studies that report more exposure to bullying in women.¹⁷ In the international HBSC 2013-2014 study, in line with our study, no gender difference was found in most countries.8 In the literature, the rate of exposure to bullying usually decreases with age.^{6, 8, 18} Similar to our study, in a study conducted in Izmir, no significant relationship was found between age and exposure to bullying.12 In the studies of Açıkgöz and Başaran, no significant relationship was found between exposure to bullying and parental educational status, which is similar to our study. 16, 17 In the study of Mercan and Sarı, no significant relationship was found between being bullied and the father's educational status while the rate of being bullied was found higher in those with mothers who had a high level of education.¹² In some studies, exposure to bullying was observed more frequently in students with parents who had a lower level of education.^{7, 18} In the literature, generally, there was no difference in terms of income, in line with this study.^{7, 12, 17, 18} However, in Açıkgöz's study, those with low income were exposed to bullying lower than those with higher income. 16 This study is similar to the literature regarding the employment status of parents, family structure, and the number of people living at home. 12, 17 Although there was no significant relationship with the number of siblings in the present study, there are studies that suggest a higher rate of being bullied in

students with no siblings¹⁶ and those with a higher number of siblings.¹⁷ Since the study was conducted in a single school and the study group was homogenous, it may not have been able to reveal the relationship between bullying end sociodemographic variables.

School-related variables did not affect exposure to bullying in this study. Studies conducted in Izmir and Sakarya support our findings.^{7,16} In the Research with East London Adolescents: Community Health Survey (RELACHS) study conducted with 2790 adolescents aged between 11-14 in England, it was stated that being successful in school was protective against bullying.¹⁹ The difference in the measurement method may have caused this difference.

When the variables related to social support were examined, family communication, family support, and peer support scores were found to be protective against exposure to bullying when corrected according to sociodemographic variables in multivariate analysis. There are various results in the literature on this subject. In a school study conducted with 13,633 tenth-grade students in Norway, where the relationship between social support and exposure to bullying was examined, high family support was found to be protective against bullying while peer support did not significantly affect exposure to bullying.²⁰ In the Izmir study, similar to our study, exposure to bullying was found 1.8 times more in those with low peer support.⁷ Again, in Ünal's study, exposure to bullying was reported as high in people who had unhealthy communication within the family.²¹ According to the results of the RELACHS research, high peer support was protective against being bullied. No significant relationship was found between family support and being bullied.¹⁹ In line with all these findings, it can be concluded that social support affects bullying behavior in adolescents in various ways. This effect may have different dimensions in different research groups.

In this study, the frequency of bullying is 23.7%. In the HBSC Türkiye study, the frequency of the bullying was found to be 40.7%.⁶ Accordingly, it can be affirmed that the rate of bullying in our sample is lower than Türkiye's overall rate. In a study conducted with middle school students in Izmir, the frequency of bullying was 20.3%, similar to our study.⁷

According to the results of International HBSC 2013-2014, the frequency of bullying was 26%. There were also significant differences between countries in terms of the frequency of bullying. The countries with the highest rates of bullying were Latvia (55%), Lithuania (52%), and Ukraine (45%). The countries with the lowest rates of bullying were Iceland (11%), Armenia (10%), and Sweden (8%).²⁷ In the HBSC 2017-2018 follow-up, the rates of bullying were reported to be at similar levels with the previous follow-up.⁹

In some studies, the act of bullying was more common in males than females.^{6, 8, 14, 15, 16, 21} Similar to our study, there was no difference in gender, as reported in Çelenk and Başaran.^{13, 17} Some studies suggested that bullying gradually decreased with age.^{6, 8} However, the studies of Mercan and Ünal were similar to the present study.^{12, 21} In the Izmir study, it was reported that bullying was more frequent among people whose mothers had low educational status.⁷ In Başaran's study, it was found that bullying was higher among those who had working mothers.¹⁷ In Açıkgöz's study, it was stated that those with higher

income exhibited more bullying behavior.¹⁶ Such differences were not observed in our study. Although bullying was observed more in those with a low number of siblings in the present study, there were studies in which bullying was observed more in individuals with a higher number of siblings.¹⁶ Unlike this study, in Başaran's study, the number of people in the family did not affect bullying.¹⁷ These differences may be since the study was conducted in only one school with a limited sample size.

Bullying was found more frequently among those who had negative views about the school. In another study conducted in Izmir, opinions about the school did not affect bullying.⁷ Results regarding the school success were similar to those in the literature.^{16, 21} Social support-related variables did not significantly affect bullying in this study. However, in the literature, there were studies in which bullying was more common in individuals with unhealthy family communication.²¹ These differences may be due to the differences in the methodology.

The strengths of this study lie in its examination of bullying behavior .Bullying is a fundamental problem in improving school health and adolescent health. The present study evaluates the impact of social support problems on bullying behavior, which is not frequently addressed in Türkiye. An apparent limitation of the study is that it was conducted in a single high school, a vocational high school. As a result of the education, examination, and the high school placement system in Türkiye, sociodemographically disadvantaged students generally receive education in vocational high schools. This situation makes it difficult to generalize the results to all high

school youth. Additionally, perceptions of risky behaviors may be measured higher or lower than they actually are in a homogeneous and at the same time disadvantaged study group. This homogeneous study group may have caused limitations in showing the relationships between dependent variables independent variables. Filling the questionnaire at school may have caused students anxiety when answering some questions. For this reason, different answers may have been given to some questions. In order to control this, it was explained to all participants that their identity information and all answers would be completely confidential, would not be shared with the school administration and that the data would be used only for research purposes. Since the bullying behavior was evaluated by asking for the past two months, some questions may be answered with less accuracy due to memory constraints. The results of the present study have shown that social support is effective in dealing with bullying and reducing bullying. The results of the present study can serve as a basis for further research and for the attempts to reduce bullying behavior in adolescents.

CONCLUSION

The findings of this research highlight the efficiency of social support in addressing and mitigating bullying, providing a foundation for future studies and interventions aimed at reducing bullying among adolescents. School health programs should involve collaboration between teachers, administrators, parents, and students to create a unified approach to tackling bullying.

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