

EFFECT OF HIGH SCHOOL STUDENTS' SELF-CONCEPT AND FAMILY RELATIONSHIPS ON PEER BULLYING

Efeito do auto-conceito de alunos do ensino médio e das relações familiares no bullying entre pares

Original Article

RESUMO

Objetivo: Determinar o papel de estudantes do ensino médio no ciclo de bullying, seu auto-conceito e o efeito de características associadas com a família no bullying. **Métodos:** Foi realizado um estudo descritivo, comparativo e correlacional. Os dados da pesquisa foram coletados na maior província da Turquia, Istambul, com 1670 estudantes nas nona e décima séries em seis (2 regulares, 2 ocupacionais e 2 privadas) escolas de ensino médio, escolhidas para representar os tipos de escolas afiliadas ao Ministério da Educação. Os dados foram coletados por meio de quatro diferentes ferramentas de coleta de dados: Escala Multidimensional da Vitimização por pares, Escala de Auto-Conceito de Piers-Harris para a Infância, Dispositivo de Avaliação Familiar e um formulário de informação pessoal. **Resultados:** De acordo com a Escala de Vitimização, 17% dos alunos estavam no ciclo de bullying (5,3% de agressores, 5,9% de vítimas, 5,8% tanto de agressores como de vítimas). O bullying foi significativamente mais comum no grupo mãe-pai separado, no grupo que tinha testemunhado a violência entre membros da família e nos que tinham sido tratados violentamente por membros da família. Bullying foi significativamente menor nos alunos com famílias saudáveis em comparação com aqueles que não têm famílias sãs e em estudantes com alta pontuação média no auto-conceito, em comparação com aqueles com baixa pontuação média. **Conclusões:** Esta pesquisa apresenta a necessidade de implementação de medidas efetivas para prevenir o bullying nas escolas. Com base nos resultados obtidos do estudo, deve-se enfatizar que a educação pode ser direcionado às famílias, através de programas de prevenção do bullying. O foco da implementação pode ser concentrado sobre o efeito das relações familiares sobre os comportamentos dos alunos. Os programas existentes de prevenção do bullying podem ser direcionados para aumentar o nível de auto-estima dos alunos com baixa auto-estima, pelo fato de eles serem mais prováveis a se verem envolvidos em incidentes de bullying.

Descritores: Bullying; Vítimas de Crime; Auto-Imagem; Relações Familiares; Ensino Fundamental e Médio.

ABSTRACT

Objective: To determine the role of high school students in the cycle of bullying, their self-concept and the effect of family characteristics associated with the bullying. **Methods:** We conducted a descriptive, comparative and correlational study. The survey data were collected in the largest province of Turkey, Istanbul, with 1670 students in ninth and tenth grades in six (2 regular, 2 occupational and 2 private) high schools, chosen to represent the types of schools affiliated to Ministry of Education. Data were collected through four different data collection tools: Multidimensional Scale of Peer Victimization, Self-Concept Scale Piers-Harris Children's, Family Assessment Device and a personal information form. **Results:** According to the Victimization Scale, 17% of students were in the cycle of bullying (5.3% of aggressors, victims of 5.9%, 5.8% both aggressors as victims). The bullying was significantly more common in the mother-father separated group, in the group that had witnessed violence between family members and those who had been treated violently by family members. Bullying was significantly lower in students with healthy families compared with those who do not have healthy families and students with high average score on the self-concept compared to those with low average score. **Conclusions:** This study shows the need to implement effective measures to prevent bullying in schools. Based on the results of the study, it should be emphasized that education can be directed to families through programs to prevent bullying. The focus of the implementation can be concentrated on the effect of family relations on students' behavior. The existing programs of bullying prevention can be directed to increase the level of self-esteem of students with low self-esteem, because they are more likely to become involved in bullying incidents.

Descriptors: Bullying; Crime Victim; Self Concept; Family Relations; Education; Primary and Secondary.

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INTRODUCTION

Bullying is a problem that is widely seen by all people, irrespective of age, gender, ethnic background, religious beliefs, or socioeconomic status, and in every place throughout the world that can occur once or frequently. The spread of bullying in schools in every country in the world threatens the physical and psychological health of children and young people. The effect of bullying, which is considered to be a severe trauma for students, is not limited to school ages but continues having a negative effect on public health throughout the lifetime⁽¹⁾. Bullying in school has been defined by Rigby as the use of repeated physical and psychological pressure by a stronger individual or groups against a weaker person or groups⁽²⁾, and by Olweus as unprovoked negative behaviors by one or more students directed at another student or students in a regular and deliberate manner⁽³⁾. Bullying behaviors can be verbal, physical or social. Verbal bullying includes calling names, making fun of, hurting the other person's honor, belittling, needling, insulting, threatening; physical bullying includes hitting, punching, kicking, scratching, tripping, spitting; and social bullying includes ignoring, excluding, treating as if one is not there, treating like a stranger, making inappropriate gestures, spreading rumors, staring antagonistically, hiding personal belongings or damaging them. In general in bullying events there are two groups: the bully using the aggressive behaviors and those exposed to these behaviors and victims harmed by them. However researchers are reporting that there are more student groups and different classifications in bullying events: they are classified as bully, victim, bully and victim, and spectator⁽⁴⁻⁶⁾. The negative effects of bullying behaviors on students are associated with the type of bullying and the students' frequency/ duration of exposure to bullying. Bullying experiences have been determined to have negative psychosocial outcomes on school children^(7,8). The objective of the research was to determine high school students' roles in the cycle of bullying, students' self-concept, and the effect of characteristics associated with the family relations on peer bullying.

Relationship between Bullying and Self-Concept

Self-concept is comprised of the judgments individuals have about themselves and explains how the individual sees and evaluates himself/herself. In research conducted on the relationship between bullying and self-concept it has been determined that children with high self esteem experience less misunderstanding and conflict with their peers, low self esteem increases bullying⁽⁹⁾ and these children are more often targets of peer bullying, exposure to bullying causes even lower self esteem^(9,10) and most victims are also

bullies. Gultekin⁽¹⁰⁾ determined that students with low self esteem attack weaker students in a desire to increase their self esteem.

Bullying and Family Relations

There are four important family-related factors known to be present when children and adolescents display bullying behaviors:

1. An emotional approach of the family, particularly the person responsible for the child's care (generally the mother) towards the child
2. The person or people responsible for the care of the child demonstrating permissive attitudes towards aggressive behaviors
3. Family's use of strength when raising the child
4. Child's temperament

In the results of studies which have examined the relationship between bullying and family relations it has been emphasized that the family-child relationship is very important. It has been determined that the family supporting children in forming healthy relationships, being positive models for children, warning children about behaviors that include bullying, creating a democratic environment within the family, avoiding excessive control or being overly protective of children, supporting their independence, and training them in an environment that respects individuality are effective for decreasing bullying⁽¹¹⁻¹⁷⁾.

METHODS

This research had a descriptive, comparative, and correlational design. The research was conducted in Istanbul province, which is the largest metropolitan city in Turkey and which shelters people from different socioeconomic backgrounds in Turkey. The data were obtained from 1670 students in the 9th and 10th grades, in six high schools, two of which were regular public high schools, two were occupational and two were private. The sample size for the research was calculated accepting a 95% probability ($\alpha=0.05$) and a 30% frequency of events with a deviation of $d=0.005$ ^(18,19) and using the formula $n=t^2 \cdot p \cdot q / d^2$ ⁽²⁰⁾. For every grade (9th and 10th grades) and for every type of school (regular public, occupational, private) $n=323$ was determined. Because the sample group was in two grades (9th and 10th grades) and three different types of schools (regular, occupational, private) it was determined that the sample needed to include at least 1615 (323x5) students. The study was conducted between March and April 2008. The scientific and ethical issues were evaluated from the committee which was under the control of Education

Ministry. Written permission to conduct the research based on the committee report was obtained from the Istanbul Provincial Education Ministry and also from the district Education Ministries in which the schools were located. So mainly, the school administrators were responsible for all the researches conducted at school and they give permission for the survey only under their control. The data were collected during a class hour deemed appropriate by school management. Before beginning the students were told the purpose of the research and given information about the data collection tools. The forms were distributed by the researcher to the students who agreed to participate in the classrooms and the students were prevented from communicating with each other while completing the forms. It took an average of 30-40 minutes to answer the forms.

The data collection tools used in this research was "Personal Information Form," "Multi-dimensional Peer Victimization Scale," "Piers-Harris Children's Self-concept Scale," and "Family Assessment Device."

Personal Information Form: included questions about the students' sociodemographic characteristics, current grade in school, type of school, grade point average (because academic achievement is known to be associated with bullying), and school attendance.

Piers-Harris Children's Self-Concept Scale was developed by Piers and Harris (1964) in the US. The scale is used in the determination of development of self-concept (or understanding of self), dimensions, and relationships with personal and environmental elements. The scale was adapted for Turkish in 1985-1986 by Catakli and Oner. The internal consistency of the scale was tested with with Cronbach alpha coefficients and the reliability alpha values were .81-.89. This self-report type of tool has 80 items and can be used with groups or individuals between 10-19 years old. The raw score for the scale is 0-80. Having a high score from the scale shows that the individual has positive thoughts about himself/herself; having a low score shows that the individual has negative thoughts and feelings about himself/herself.

Family Assessment Device (FAD) was developed at Brown University in the US in 1993 within the framework of the Family Research Program at Butler Hospital. This tool has 60 items and is a general assessment of whether or not a family carries out its duties. The tool's validity and reliability study for the Turkish adaptation was conducted by Isil Bulut who found the internal consistency to be .86 - .89. Every item is a sentence with a positive or negative statement about family life. The tool can distinguish families' structural characteristics and interaction among family members as "healthy" or "unhealthy." Every item is

given a value between 1 and 4. A score above 2 on the scale is interpreted as showing a move towards being unhealthy. The possible score from the tool is between 60 and 140⁽²¹⁾.

Multi-dimensional Peer Victimization Scale (MPVS) was developed the first time by Mynard and Joseph in 2000. The tool's Turkish adaptation was conducted by Gultekin⁽¹⁰⁾. The tool was adapted for Turkish by Pekel Uludagli⁽²²⁾. There are 28 questions on this tool which is of the self-report type. The tool's total Cronbach alpha internal consistency coefficient was .92. In this study the Cronbach alpha internal consistency coefficient for those exposed to bullying was found to be .90 and for those who were bullies was .92.

RESULTS

According to the Peer Victimization Scale 17% of the students were in the bullying cycle (5.3% as bully, 5.9% as victim, 5.8% as both bully and victim) and 83% had not been involved in a bullying incident (Table I).

Table I - Students' Roles in the Bullying Cycle According to the Peer Victimization Scale. Istanbul, Turkey, 2008. (N=1670)

ROLES	n	%
Neither bully nor victim	1385	83.0
Either bully or victim	97	5.8
Bully	89	5.3
Victim	99	5.9
Total	1670	100.0

The students' roles in the bullying cycle were examined according to the status of experiencing violence from the family. 19% of the students who were both victim and bully had been treated violently by a family member (5% had not), 16% of the students who were victims had been treated violently (5.3% had not), 5% of the bullies had been treated violently (5.4% had not), and 60% of those who were neither bully nor victim had been treated violently (84.4% had not). A statistically very significant difference was determined for percentages of roles in the bullying cycle between groups (Chi square = 56.838; p=0.000) (Table II). In the advanced analysis section, while comparing those who have been treated violently and not, it was founded out that those who have not treated violently had a significantly low level in the percentage of neither victim nor bully, high level in the percentage of those who were victim and both victim and bully, and similar level in the percentage of those who were bullies.

Table II - The comparison of family violence and the role of the students' in bullying cycle. Istanbul,Turkey, 2008. (N=1670)

THE STATE OF FAMILY		BULLYING CYCLE ROLE								Pearson Chi-Square p
		Neither bully nor victim		victim		bully		Either bully or victim		
		n	%	n	%	n	%	n	%	
Do your family members apply violence on you?	Yes	60	60.0	16	16.0	5	5.0	19	19.0	Chi-Square =56,838 p=.000
	No	1325	84.4	83	5.3	84	5.4	78	5.0	
Do you see family members applying violence to each other?	Yes	116	66.7	22	12.6	12	6.9	24	13.8	Chi-Square =43,190 p=.000
	No	1269	84.8	77	5.1	77	5.1	73	4.9	

Table III - Students' roles in the bullying cycle according to their group in the family assessment device. Istanbul,Turkey, 2008. (n=1670)

Family Assessment Device		Roles in the Bullying Cycle*								Pearson χ^2 p
		Neither bully nor victim		victim		bully		Either bully or victim		
		n	%	n	%	n	%	n	%	
Groups according to Family Assessment Device	Healthy Family	772	88.8	36	4.1	35	4.0	26	3.0	$\chi^2=47.860$ p= .000
	Unhealthy Family	613	76.5	63	7.9	54	6.7	71	8.9	

* Role in bullying cycle, groups according to FAD, Healthy Family

Table IV - Students' piers-harris self-concept scale score means according to roles in bullying cycle. Istanbul,Turkey, 2008. (n=1670)

Peer Victimization Scale	Piers-Harris Self-Concept Scale		
Roles in the Bullying Cycle	n	Mean	Sd
Neither bully nor victim	1385	60.194	8.969
Victim	99	54.485	10.299
Bully	89	55.225	9.239
Either bully or victim	97	51.392	10.013
Total	1670	59.079	9.472

F= 43,458, df=3, p=0,000

Table V - Relationship between students' scores about being a victim and bully, their Piers-Harris self-concept scale scores, and family assessment device score means. Istanbul, Turkey, 2008. (N=1670)

		Piers-Harris Self-Concept Scale Score Means	Family Assessment Device Score Means
Self-Concept Scale Score	Pearson Correlation Value (r)	-.50	
	p value	.000	
Score for being bullied (Victim)	Pearson Correlation Value (r)	-.32	.25
	p value	.000	.000
Score for bullying (Bully)	Pearson Correlation Value (r)	-.22	.21
	p value	.000	.000

The children's roles in the bullying cycle were examined according to the scores they received from the Family Assessment Device (Table III). The percentage of those who were both bully and victim in children with healthy families was 3% (8.9% in those who did not have healthy families); the percentage of those who were victims who were in healthy families was 4.1% (7.9% in those without healthy families); the percentage of those who were bullies who were in healthy families was 4% (6.7% in those without healthy families); the percentage of those who were neither victim nor bully who were in healthy families was 88.8% (76.5% in those without healthy families). A statistically highly significant difference was found in the difference between percentages of students' roles in bullying cycle according to their family structure ($\chi^2 = 47.860$, $p=0.000$). In the advanced analysis the percentage of children who were bullies and victims was significantly higher in unhealthy families than in healthy families.

A comparison was made between the students' roles in the bullying cycle and the self-concept score means. A statistically highly significant difference was between groups ($F=43.458$; $p=0.000$) (Table IV). In the advanced analysis (Tukey analysis) it was seen that the group who was neither bully nor victim had a higher self-concept score mean (at a statistically highly significant level) than the group who was both bully and victim ($p=0.000$).

It was determined that when the students' Family Assessment Device scores were increased, their scores from the Self-Concept Scale decreased ($r=-0.50$; $p=0.000$), being a victim ($r=0.25$; $p=0.000$) and bullying scores increased ($r=0.21$; $p=0.000$); but when their scores from the Self-Concept Scale decreased being a victim ($r=-0.32$; $p=0.000$) and bullying scores increased ($r=-0.22$; $p=0.000$) (Table V).

DISCUSSION

Different prevalence rates have been determined in research about bullying for different countries, cultures, age groups included in the research, and associated with the measurement tool^(1,3,6,20,21). The bullying rate has been reported to be 8% in Norway⁽¹⁾, 9% in Canada⁽²²⁾ and 29.9% in the US (of these 13% were bullies, 10.6% victims and 6.3% both bully and victim)⁽²⁰⁾. In studies conducted in Turkey, Gültekin⁽¹⁰⁾ has reported that 13.6% of children were exposed to peer bullying and also Uludagli and Ucanok⁽²²⁾ found a bully rate of 7.6% and victim of 9.3%. In this study, according to the Peer Victimization Scale, 17% of the students were in the bullying cycle (5.3% as bully, 5.9% as victim, and 5.8% as both bully and victim), but 83% were not involved in bullying events (Table I). The results of this study are similar to those reported by Gültekin⁽¹⁰⁾, Uludagli and Ucanok⁽²²⁾ and those from other countries⁽²³⁻²⁵⁾. In other studies it has been determined that being authoritarian, stern attitude and discipline practices directed at children increase the child's tendency for bullying^(12,15). Also in studies which have examined the causes for peer bullying it has been shown that children take as models and, through social reinforcement, assimilate positive and negative characteristics of their families and that a child's relationship with his/her family and the family attitude are important and can have an effect on relationships with peers^(13,16,17,24,26-30). In this study students treated violently by family members were involved in more bullying events than those who were not treated violently at a statistically significant level ($\chi^2 = 56.838$; $p=0.000$); the families' use of physical violence to discipline their child may be a factor influencing the children's preference for using this method that they have learned from their families to get what they want from their friends⁽²⁸⁾. There are also

many studies which support this finding^(1,12,15,26,27,31-33). It has been determined that adolescents with family problems show uncontrolled aggressive behaviors, in children with inconsistent and undisciplined families there is a higher rate of being a bully and in authoritarian families there is a higher rate of being a victim than in children not in authoritarian families^(28,29,30,33). In the literature it has been reported that children who witness family disagreements are more involved in bullying incidents^(12,15,27,31), receive disciplinary punishments at school more often and demonstrate more behavioral disorders^(27,33). In this study students who witnessed family members acting violently toward one another had a higher bullying involvement rate than those who had not witnessed this violence and the difference was found to be at a high level of statistical significance ($\chi^2 = 43.190$, $p=0.000$). Family conflict having a negative effect on children's peer relationships is a factor in obtaining this finding that children use these negative behaviors learned in their families with their friends. Said another way, this finding can be interpreted to mean that negativity experienced in the family environment is reflected in the school environment. Articles in the literature have reported that the rate of bullying is higher in children who have weak family ties, cold family relations, and who were raised in single parent homes^(11,29,30,33). In this study the percentage of those not involved with bullying was significantly lower in the group whose parents were separated compared to those whose parents were together (Table II; $\chi^2 = 23.795$, $p=0.001$) which is consistent with the literature. It is expected that the outcome of children having ties with their family from birth and the communication within the family being healthy, family members carrying out their functions in a healthy manner, and families using a democratic style of child-raising is having children with a healthy self-concept, being able to form healthy peer relationships, being able to express themselves well, and being able to solve problems without using bullying^(11,28-30,33). In this study the children's bullying cycle roles were examined according to the scores they received from the Family Assessment Device. The rate of involvement in bullying events (as bully, victim, or both bully and victim) was lower in students living in healthy families (11.2%) than in those living in unhealthy families (23.5%) and the difference was found to be significant at an advanced degree (Table 3: $\chi^2 = 47.860$, $p=0.000$). A similar finding was obtained in the relationship between the students' Family Assessment Device scores and being a victim of bullying (Table 3: $r=0.25$, $p=0.000$) and using bullying (Table 3: $r=0.22$, $p=0.000$). These findings are consistent with the literature. Children's development of self-concept, which is formed by their judgments about themselves, is particularly negatively affected in family environments in which violence is used^(15,27) and is associated with social

factors experienced throughout life. Positive interactions between children and their families from childhood support the development of a positive self-concept^(5,9). Individuals with healthy self-concept development are aware of their own positive and negative aspects; unhealthy individuals who exaggerate their positive sides are narcissistic, deny their inadequacies, have very fragile egos, are quickly defensive and may be aggressive⁽⁵⁾. In studies which have compared the self-concept of bullies and victims in a bullying cycle it has been determined that the self-concept of victims is low and of bullies is high, but this elevation may be unhealthy^(5,10). In some of the research on the relationship between bullying and self-concept it has been determined that bullying increases low self-concept⁽⁹⁾ and that children with high self-concept experience more misunderstanding and conflict with their peers. In the comparison of students' bullying cycle roles with their Self-Concept Scale scores in this study it was determined that students in the bullying cycle had lower self-concept scores and there was a highly statistically significant difference in their roles (Table 4; $F=43.458$; $p=0.000$). The self-concept score mean was the lowest for those in the both victim and bully group. This finding is similar to study results by^(4,5,10,18,24). In the comparison of the students' self-concept score means with their Family Assessment Device scores it was determined that there was a negative relationship between them at a statistically significant level (Table 5; $p=0.000$; $r=-.50$), as the self-concept score mean fell the Family Assessment Device score increases. In the study by Mizell-Christie (2003) the children's self esteem in those who had conflict in their families, compared to those who did not, was lower and family conflict was shown to have a direct effect on children's bullying behavior.

CONCLUSION

In this study it was determined that 17% of the students were in the bullying cycle and 83% were not involved in bullying incidents according to the Peer Victimization Scale, that the percentage of students involved in bullying was higher in those who had witnessed violence among family members, that the percentage of those who were victims and both victims and bullies was higher in students who had been administered violence by family members, that according to the score from the Family Assessment Device, the percentage of students who were not involved in bullying was significantly higher in students who lived in healthy families than in those who did not, and that the students' self-concept score means, according to their place in the bullying cycle, in the group not involved in bullying was significantly higher than other groups. Based on the results obtained in this study it is recommended that

education be directed at families in bullying prevention programs that will be implemented in consideration of the effect family relations have on students' bullying behaviors or that existing programs be increased and that since students with low self esteem are involved in more bullying incidents that they be given education about how to raise their self esteem.

REFERENCES

1. Olweus D. *Bullying At School: what we know and what we can do?* Oxford: Blackwell; 1993.
2. Rigby K. The relationship between reported health and involvement in bully/victim problems among male and female secondary school children. *J Health Psychol.* 1998;3(4):465–76.
3. Olweus DES. Prevalance estimation of school bullying with the Olweus / Bully Questionnaire. *Aggressive Behav.* 2003;29:239–68.
4. Salmivalli C, Kaukiainen A, Kaistaniemi L, Lagerspetz K.(1999). Self evaluated self-esteem, peer-evaluated self-esteem, and defensive egotism as predictors of adolescents' participation in bullying situations. *Pers Soc Psychol Bull.* 1999;25:1268–78.
5. Espelage D. Bullying in early adolescence: the role of the peer group; eric clearinghouse on elementary and early childhood education [cited 2012 May 5]. Available from: http://www.ericfacility.net/databases/eric_digests/ed471912.html
6. Berger K. Update on Bullying at School: Science forgotten? *Developmental Review.* 2007;27:90–126.
7. Forero R, McLellan L, Rissel C, Bauman A. Bullying behavior and psychosocial health among school students in New South Wales, Australia: cross sectional survey. *Br Med J.* 1999;319(7206):344–9.
8. Kim SY, Koh JY. School bullying and youth violence: causes or consequences of psychopathologic behavior? *2006;63:1033–41.*
9. O'Moore AM, Kirkham C. Self-esteem and its relationship to bullying behaviour. *Aggressive Behavior.* 2001;2:269–83.
10. Gultekin Z. The Development of a peer victimization scale [dissertation]. Turkey: Hacettepe University Social Science Institute; 2003.
11. Bowers L, Smith PK, Binney V. Perceived family relationships of bullies, victims and bully/victims in middle childhood, *Journal of Social and Personal Relationships.* 1994;11:215–32.
12. Baldry AC, Farrington PD. Bullies and delinquents: personal characteristics and parental styles. *J Community Applied Psychology.* 2000;10:17–31.
13. Curtner-Smith ME. Mechanisms by which family processes contribute to school-age boys' bullying. *Child Study Journal.* 2000;30:169–86.
14. Connolloy I, O'Moore M. Personality and family relations of children who bully. *Pers Individ Dif.* 2003;35:559–67.
15. Mizell-Christie CA. Bullying: The consequences of interparental discord and child's self concept. *Family Process.* 2003;42(2):237–53.
16. Ahmed E, Braithwaite. Forgiveness, reconciliation, and shame: three key variables in reducing school bullying. *J Soc Issues.* 2005;62:347–70.
17. Akgun S. The evaluation of peer bullying from the point view of father-mother attitudes and father-mother adolescent relationships [dissertation]. Turkey; 2005.
18. Kapcı EG. Bullying type and severity among elementary school students and its relationship with depression, anxiety and self esteem. Ankara University, Journal of Faculty of Educational Sciences. 2004;37:1–13.
19. Piskin M. School Bullying: definition, types, relational factors and preventions. *Journal of Educational Sciences in Theory & Practice.* 2002;2:531–562.
20. Chernick MR, Friis R. *Introductory biostatistics for the health sciences modern applications including bootstrap.* New Jersey: John Wiley & Sons Publication; 2003.
21. Bulut I. (1990). *Family Assessment Scale Handbook.* Özgüzelis Publication. Ankara.
22. Uludagli N, Ucanok Z. Loneliness, academic achievement and types of Bullying behavior according to sociometric status in bully/victim groups. *Turkish J Psychology.* 2005;20(56):77–92.
23. Nansel T, Overpeck N. Bullying behaviors among U.S. Youth. *JAMA.* 2001;285(16):2094-100.
24. Seals D, Young J. Bullying and victimization: prevalence and relationship gender, grade level, ethnicity, self-esteem and depression. *Adolescence.* 2003;38(152):735–47.
25. Craig WM, Pepler DJ. (2003). Identifying and targeting risk for involvement in bullying and victimization. *Can J Psychiatr.* 2003;48(9):577–82.
26. Duncan RD. Maltreatment by parents and peers: the relationship between child abuse bully victimizationand

- psychological distress. *Child Maltreat.* 1999;4:45–55.
27. Hoover RL. A Methodological study of family and personalty variables associated with discrimination and bullying [Phd dissertation] USA: Universty of Cincinati; 2005.
 28. Aubrey L.S., Iannotti, R.J., Nansel, T.R. and Haynie, D.L, (2007). Adolescent bullying involvement and perceived family, peer and school relations: commonalities and differences across race/ethnicity. *Journal of Adolescent Health*, 41: 283–93.
 29. Burk LR, Park J, Armstrong JM, Klein HM, Goldsmith HH, Waxler CZ, Essex MJ. Identification of early child and family risk factors for aggressive victim status in first grade. *J Abnorm Child Psychol.* 2008;36(4):513-26.
 30. Rigby K, Slee PT, Martin G. Implications of inadequate parental bonding peer victimization for adolescent mental health. *J Adolescent.* 2007;30(5):801–12.
 31. Waddell M. Grouping or ganging: the psychodynamics of bullying. *British Journal of Psychotherapy.* 2007;23(2):189–206.
 32. Moretti MM, Obsuth I, Odgers SL, Reebye P. Exposure to maternal vs. paternal partner violence, PTSD and aggression in adolescent girls and boys. *Aggressive Behav.* 2006;32:385–95.
 33. Stevens V, Bourdeaudhuij I, Van Oost P. Relationship of the family environment to children’s involvement in bully/victim problems at school. *J Youth Adolesc.* 2002;31(6):419–28.

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