Examination of Peer Bullying Among Primary and Middle School Children in Ankara

Ankara'daki İlköğretim Öğrencileri Arasında Akran Zorbalığının İncelenmesi

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Öz

Bu araştırmanın temel amacı, Ankara'da 4, 5, 6, 7, ve 8. sınıf ilköğretim öğrencileri arasında zorba, kurban ve zorba-kurban öğrenci oranlarını belirlemektir. Araştırmada, farklı tür zorbaca davranışların (sözel, fiziksel, söylenti yayma, dışlama ve eşyalara zarar verme) cinsiyet, eğitim düzeyi ve sosyoekonomik düzey bakımından farklılaşıp farklılaşmadığı da incelenmiştir. Araştırma biri alt SED, biri üst SED ve ikisi orta SED olmak üzere dört ilköğretim okulunda, toplam 1154 öğrenci üzerinde gerçekleştirilmiştir. Araştırmada, veri toplamak amacıyla araştırmacı tarafından geliştirilen "Akran Zorbalığı Anketi" kullanılmıştır. Bulgular öğrencilerin "35.1'inin "kurban", "30.2'sinin "zorba", "6.2'sinin ise "hem zorba hem de kurban" olduğunu göstermektedir. Bulgular ayrıca, "zorba" ve "zorba-kurban" grubunda erkeklerin, "kurban" grubunda ise kızların daha fazla olduğunu ortaya koymaktadır. Veriler, üst sosyoekonomik düzey (SED) okuldaki çocukların, orta ve alt SED okuldaki çocuklara oranla daha fazla zorbalık yaptıklarını göstermektedir. Araştırmada ayrıca, en yaygın zorbalık türünün sözel zorbalık olduğu, bunu fiziksel zorbalığın izlediği görülmektedir.

Anahtar Sözcükler: Akran zorbalığı, kurban, zorba, zorba-kurban, cinsiyet, eğitim düzeyi, SED.

Abstract

The main aim of this research is to find the frequency of occurrence of being a victim, bully, and bully-victim among 4th, 5th, 6th, 7th, and 8th grade children in Ankara. In addition, different types of bullying behaviors (verbal, physical, rumor spreading, isolation, and attacks on property) are also examined in relation to the sex, grade level, and socio-economical level (SEL). A total of 1154 children from four different schools (one of lower SEL, one of higher SEL and two of middle SEL) took part in the research. In order to collect data a "Peer Bullying Questionnaire" was designed and used by the researcher. The results showed that a substantial number of the children were self-identified as "victims" (35.1%) and "bully/victims" (30.2%) and 6.2% as "bullies". The results also showed a higher percentage for boys as "bullies", and "bully/victims" groups and higher percentage for girls as "victims." It was also found that children from higher SEL were more commonly engaged in bullying behavior than children from middle and low SEL. The data also showed that the most frequent type of bullying behavior children were subjected to was verbal bullying followed by physical bullying.

Keywords: Peer bullying, victims, bullies, bully-victims, sex, grade level, Socio-economical level,

Introduction

Bullying as a subcategory of aggressive behavior has probably occurred as long as there have been schools. However, until the pioneering work of Olweus in the 1970s, it had not received

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much attention. Shortly after Olweus' work in Scandinavian countries, interest in this research type spread in other countries. Research in different countries showed that bullying is a major problem from primary to high school in many Western and Eastern countries.

Definition of bullying

Olweus (1999a), a pioneer in this area, defines school bullying or victimization as "when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students" (p.10). He described bullying in relation to three main criteria: 1) it is aggressive behavior or intentional *harm doing* 2) it is performed *repeatedly and over time*, 3) it takes place within the context of an interpersonal relationship characterized by an imbalance of power.

Prevalence of Bullying Behavior

Several studies conducted to find out the prevalence of bullying behaviors. For example, Genta et al. (1996) found that in Italy, the percentage of the victims was 40% among primary school students and 28% among middle school students, and bullies 20% among primary and 15% among middle school students. In Israel, the rate of victims was 30.7%, bullies 8.6% and bully-victims 23% (Rolider and Ochayon, 2005), in Denmark (among both primary and middle school) 16.4% were victims, 8.2% bullies and 9.5 bully-victims (Kristensen and Smith, 2003), in the Netherlands 16.2% of the children were bullied regularly (several times a month or more often), and 5.5% of the children bullied other children on a regular basis. Another 31.9% indicated that they had bullied another student at least once during the current term (Fekkes, Pijpers and Verloove-Vanhorick, 2005). In Portugal the percentage of victims was found 20% and bullies 16% (Pereira et al., 2004), in USA Peskin, Tortolero and Markham (2006) found 12% (victims) 7% (bullies) and 5% (bully-victims). In Greece the percentage of victims varied from 15% to 30%, bullies from 6% to 17% and bully-victims were between 5% and 10% (Andreou, 2001; Kalliotis, 2000; Pateraki, 2001). Recently a large scale study was conducted in order to find the prevalence of bullying among middle-school students in 19 low and middle income countries (Fleming and Jacobsen, 2009). In this research, the prevalence of bullying within individual countries ranged from 20 to 40% in China, Lebanon, Morocco, Oman, Philippines, United Arab Emirates, United Republic of Tanzania and Venezuela to 41-61% in Botswana, Chile, Guyana, Jordan, Kenya, Namibia, Swaziland, Uganda, Zambia and Zimbabwe. Tajikistan was the only country with a prevalence of **bullying** that is less than 20%.

Finally, in Turkey, among primary school students, Yıldırım (2001) found that the percentage of victims among 4th grade students was 26%, bullies 16% and bully-victims 23%, Kapçı (2004) found about 40% of the students (4th and 5th grades) were either victim or bullies. Among middle school children, Gokler (2007) found that the percentage of victims among 8th grade students was 27%, bullies 10%, and bully-victims 21%, Dölek (2002) found that the percentage of victimized students was 31% among 5th grade, and 24% among 7th grade students, whereas Pekel (2004) found lower percentages among 5th and 6th grade students; 9.3% (victims), 7.6% (bullies) and 6.4% (bully-victims).

Type of Bullying

A great number of studies confirm that the most common type of bullying behaviour among school children is verbal bullying (Fekkes, Pijpers, and Verloove-Vanhorick, 2005; Pereira et al., 2004; Rolider and Ochayon, 2005), although Ando, Asakura and Simons-Morton (2005) found that the highest prevalence of bullying and victimization among Japanese students was ignoring someone and excluding someone from a group of friends. Regarding the second common type of bullying, some studies revealed that this was rumor spreading (Fekkes, Pijpers, and Verloove-Vanhorick, 2005; Pereira et al., 2004) whilst others reported that it was physical bullying (Ando, Asakura and Simons-Morton, 2005; O'Moore and Hillery, 1989; Rolider and Ochayon, 2005).

The frequency of the different types of bullying differs from study to study partly because

they used different measurement criteria, instrument and time intervals surveyed. For example Rolider and Ochayon (2005) found that 92% of the students reported observing verbal, 87% physical and 77% indirect bullying in various areas in their school. Pereira et al. (2004) found that the most common type of bullying was name calling (54% and 45%), followed by rumors spreading (36% and 32%), physical bullying (34% and 27%), stealing, taking belongings (32% and 29%), threatening (23% and 24%), isolation (11% and 17%) in the North and in the South part of the Portugal respectively. Fekkes, Pijpers, and Verloove-Vanhorick (2005) asked children what types of bullying they had experienced during the last four weeks. A substantial number of children experienced name-calling (30.9%), the spreading of rumors (24.8%), being ignored or not allowed to participate (17.2%), or being kicked, hit or pushed (14.7%). In Turkey, the study of Yurtal and Cenksever (2006) reveals that 64% of the students were pushed, 58% were swear at, 56% called bad names, 49% made fun of, 45% had their property harmed, and 44% of them were victims of rumor spreading. Özdener et al. (2007) in their research on 7th and 8th grade students found that 72% of the students were sometime in their school life victimized in some form of bullying, whereas 18.7% of the students report that they were victimized with all types of bullying.

Sex Differences

Many researchers have indicated that boys were more often found to be bullies than girls (Camodeca, Terwogt and Schuengel, 2002; Fekkes, Pijpers and Verloove-Vanhorick 2005; Nordhagen, et al., 2005; O'Moore and Hillery, 1989; Pereira et al., 2004). A small number of studies found no significant gender differences, indicating both boys and girls bullied others equally (Kristensen and Smith, 2003; Peskin, Tortolero and Markham, 2006).

Although research generally demonstrates that bullying behavior was far more prevalent in boys than in girls, related to victimization the findings are mixed. Some researchers reported that the number of boys and girls being victimized is about the same (eg. Fekkes, Pijpers and Verloove-Vanhorick, 2005; Peskin, Tortolero, and Markham, 2006), while others have found that more boys are victimized (eg. O'Moore and Hillery, 1989; Pereira et al., 2004).

The studies in Turkey indicate that boys were more frequently bullied and victimized than girls (Dölek, 2002; Pekel, 2004; Takış, 2007; Yurtal and Cenkseven, 2007). However Kapci (2004) found no significant differences between boys and girls either in victimization or bullying.

Age and Bullying

A number of studies reported that bullying usually decreases with age. For example Olweus (1991) and Whitney and Smith (1993) reported a clear and fairly steady decline with age (from 8 to 16 years). This age trend was also supported by a longitudinal study (Pelligrini and Long, 2002) from fifth to seventh grade of a total rural school district in North America. The findings of Andreou (2000), Rios-Ellis, Bellamy and Shoji (2000), Pateraki (2001), Smith, Madsen, and Moody (1999) also indicate that bullying appears less widespread amongst older students and similarly, the percentage of victims lowers when age increases (Olweus, 1999b; Pateraki, 2001; Fonzi at al., 1999). In contrast, two studies in Turkey found that bullying among older children are higher than lower grades (Kandemir, 2006; Yurtal and Censeven, 2006).

On the other hand, some studies have failed to find the effect of age (Craig, 1998; Schwartz, Proctor, and Chien, 2001; Smith, 1991). Some studies revealed mixed results. Kristensen and Smith (2003) found that the younger children tended to be victims and bully/victims more than the older sample, whereas bullies tended to be more in the older grades.

Method

In this study, the extent and nature of the bullying problem occuring in Ankara was studied. We address it by asking these questions:

- 1- What is the frequency of occurrence of being a bully, victims, and bully-victims among primary and middle school children in Ankara?
- 2- Are frequencies of overall bullying and different types of bully, victims, and bully-victims significantly different with respect to sex, school level (primary versus middle school), and socioeconomical level (SEL)?
- 3- By whom children are bullied (by a single boy, by several boys, by a single girl, by several boys, or by boys and girls together).

Participants

The sample consisted of 1154 children (52% males and 48% females) drawn from the fourth to eight grades of four schools, all of which provide primary and middle level education in Ankara, Turkey. From those pupils 438 were in the primary (4th year= 209, 5th year= 229) and 716 were in the middle school (6th year= 275, 7th year= 233, 8th year= 208). The age of the participants ranged from 9 to 16 years (mean=12.0, SD=1.50). From the four schools, one school was private and had students from high Socio Economic Level (SEL) (n=268) whilst the other three were state schools with one established amongst a low SEL (n=413) community and two in middle SEL (n=473). Children weren't selected according to their family SEL, but schools were selected according to the criteria put by the Ministry of National Education. The lower SEL and middle SEL schools were randomly selected out of the lists published by the Ministry of National Education. For the higher SEL category a private school was chosen, the main factor influencing the decision was securing permit to carry out the research.

Instrument

In order to measure bullying, an anonymous questionnaire which was similar to that of Olweus' (1994) was designed by the author. The instrument contained 35 single or multiple-choice questions. In the questionnaire, bullying behaviors were described by five categories as follows: Physical (hit, kick, push, slap etc.), verbal (insult, call hurtful and nasty names, make fun of somebody, tease, swear etc.), isolation (isolate, ignore etc.), rumor spreading (tell bad things behind the back, tell false stories, try to get the others to dislike the person etc.), attacks on property (take things or money, steal, deliberated damage on properties of others etc.). The children were asked how often they were bullied by other children and how often they bullied others. The response categories were "nearly everyday", "at least once a week", "once a month", "once a term", and "once a year".

In the preface of the instrument a short explanation is given about what bullying or being bullied means. The bullying was defined as: when a child is exposed, repeatedly and over time, to negative actions on the part of one or more other students (Olweus, 1999a).

Before developing questionnaire items, an extensive bullying literature and bullying questionnaires were reviewed. Furthermore, the draft instrument is delivered to 15 experts who are working in the area of "psychological services in education" and "measurement and evaluation" at Faculty of Educational Sciences, Ankara University, in order to provide content validity of the questionnaire. Content validity of the instrument was ensured by 80% agreement on test items by experts.

In order to determine the reliability level of questionnaire, test-retest reliability was calculated separately for primary (n=145), and middle school children (n=124) for one week interval. As a result, test-retest reliability coefficients for victim sub-scale were found as 77 for primary (grade 4^{th} and 5^{th}), and .79 for middle school children (year 6^{th} , 7^{th} , and 8^{th}). The test-retest reliability coefficients of the bullying sub-scale are calculated as .82 for primary, and .85 for middle school children. The results indicated that the instrument was both valid and reliable and therefore could be used as an instrument to measure prevalence of bully and victims both in primary and middle school students.

Classification of Bullies, Victims, and Bully-Victims

Students were classified as "victims" when they reported to have been subjected to any form of bullying behavior at least once a week, but not engaged in any type of bullying towards others at least once a week". Similarly, children were categorized as "bullies" when they admitted to have been engaged in any form of bullying behavior at least once a week, but not being bullied at the same time duration. The third group, called "bully/victims", included those children who reported to have been both targets and perpetrators of bullying at least once a week.

Material and Procedure:

Before the main application, a pilot application on 4th and 5th grades (n=120) was also undertaken. The pilot study showed that several questions needed some verbal alterations. In the main application, the instrument was administered in class by the researcher and three-trained research assistants who read aloud the standardized instructions, the definition of bullying and the questions to the pupils of primary schools. The middle school children read and answered the questionnaires themselves while the researcher and research assistants were present. Class teachers were not present during those 40-minute sessions and pupils were not obligated to write their name.

Analysis Procedure

Descriptive statistics were computed first. Next, prevalence estimates for being bully, victim, and bully-victims were computed for the total sample and then by gender, grade level, and by socio-economic level (SEL). Analyses of gender, grade level differences, and SEL were also conducted for specific types of bullying and victimization. Chi-square statistics were then computed comparing the number of frequencies within these categories. An alpha of 0.05 was used to designate statistical significance.

Results

Frequency of Bullying

Table 1 shows the distribution of "victims", "bully" and "bully-victims" breakdown by sex (boys and girls), education level (primary and middle school), and socio economic level (higher, middle and lower SEL). The overall results will be given firstly, later sex, education level and SEL differences will be given and compared separately.

Table 1. Frequency and Percentages of Students Identified as "Victims", "Bullies", and "Bully/Victims" (Breakdown by Sex, Education Level and Socio Economic Level)

	N		Victims		Bullies	Bully/Victims		
		N	%	N	%	N	%	
Gender								
Boys	599	176	29,4	55	9,0	207	34,6	
Girls	555	229	41,3	16	2,9	141	25,4	
Total	1154	405	35,1	71	6,2	348	30,2	
Education Level								
Primary	438	157	35,8	21	4,8	118	26,9	
Middle	716	248	34,6	50	7,0	230	32,1	
SEL								
Higher	268	83	31,0	32	11,9	37	13,8	
Middle	473	173	36,6	19	4,0	135	28,5	
Lower	413	149	36,1	20	4,8	176	42,6	

Overall

The results in overall show that a substantial number of the children were self-identified as "victims" (35.1%) and "bully/victims" (30,2%) and more than 6% identified as "bullies".

Sex Differences

Table 1 shows that a higher percentage was self-reported as "bullies", and "bully/victims" among boys than among girls (chi [sub 2] (d.f. 1) =19,80, p< .000) and (chi [sub 2] (d.f. 1) = 11,46, p < .001), respectively. However, the percentage of girls were found to be significantly higher in the "victims" group than the boys (chi [sub 2] (d.f. 1) =17,85, p < .000).

Comparison of Primary and Middle School Children

When the percentages of "bullies", "victims", and "bully/ victims" groups were analyzed according to their level of education, it was found that none of these groups differed significantly between primary and middle school children.

SEL Differences

The results indicated that the percentage of the victimized children (victims) did not differ significantly according to their SEL. However, the percentage of "bully" children differ significantly among different SEL (chi[sub 2] (d.f. 2) =20,51, p< .000). The "bully" children percentage was significantly higher in higher SEL than both children in middle, and lower SEL (chi[sub 2] (d.f. 2) =16,76, p< .000) and (chi[sub 2] (d.f. 2) =11,61, p< .001), respectively. No significant differences were found between middle and lower SEL children in "bullies" group. In contrast, the percentages of bully/victim children differ significantly according to their SEL (chi[sub 2] (d.f. 2) =65,04, p< .000). Table 1 shows that the percentage of "bully/victims" children in the lower SEL was significantly higher than those in the higher and middle SEL (chi[sub 2] (d.f. 1) =62,76, p< .000) and (chi[sub 2] (d.f. 1) =19,17, p< .000), respectively. Additionally, the percentages of "bully/victims" in the middle SEL were also significantly higher than in the higher SEL (chi[sub 2] (d.f. 1) =20,84, p< .000).

Types of Bullying

The percentages of different types of bulling behavior for children identified as "victims", "bullies", and "bully/victims" broken down by all children and by sex are shown in the Table 2, by education level in table 3, and by SEL in Table 4.

Table 2.

Percentages of Different Types of Bulling Behavior for Students Identified as "Victims", "Bullies", and "Bully/Victims" Broken Down by Overall and Sex

	Victims (%)			Вι	ıllies (%)		Bully/victims (%)		
Type of Bullying	Overall	Boys	Girls	Overall	Boys	Girls	Overall	Boys	Girls
Verbal	33,5	30,4	36,9	7,1	8,8	5,2	14,5	17,4	11,4
Physical	26,3	23,4	29,4	6,9	11,5	2,0	12,5	14,4	10,5
Rumor Spreading	16,4	14,0	18,9	2,7	3,8	1,4	2,9	3,0	2,9
Isolation	11,9	11,4	12,4	5,5	5,8	5,2	3,4	4,0	2,7
Attacks on Property	10,8	9,5	12,3	1,6	2,0	1,1	2,1	2,3	1,8

Note: Children could select more than one response.

Overall

Examining the data from Table 2, the most frequent types of bullying behavior reported by "victims", "bullies", and "bully/victims" children were verbal bullying (insult, call hurtful and nasty names etc.), and physical bullying (hit, kick, push, slap etc.). The third common type of bullying behavior both in "bully" and "bully/victims" groups was isolation, followed by rumor

spreading, and attack on property. However in "victims" group, rumor spreading was higher than isolation.

Sex Differences

In "victims" group, both boys and girls reported that the most frequent type of bullying behavior that they were subjected to was verbal bullying followed by physical bullying, rumor spreading, isolation, and attack on property. In relation to sex comparisons in "victims" group, the percentages of females were found to be significantly higher than males in verbal bullying (chi[sub 2] (d.f. 1) =5,84, p< .016), in physical bullying (chi[sub 2] (d.f. 1) =5,35, p< .021), and in rumor spreading (chi[sub 2] (d.f. 1) =5,04, p< .025).

In "bullies" group, the most frequent type of bullying behavior that boys reported to be engaged was physical bullying followed by verbal bullying, isolation, rumor spreading, and attack on property. In contrast to the boys, physical bullying was less frequent than verbal bullying and isolation in girls "bullies" group. However, in girls "bullies" group, the most frequent type of bullying that girls engaged was verbal bullying, and isolation (equally high) followed by physical bullying, rumor spreading, and attack on property. However, the data show that in "bullies" group, the percentages of males were found to be significantly higher than females in three out of five different bullying forms. The differences were significant in physical bullying (chi[sub 2] (d.f. 1) =40,61, p< .000), in verbal bullying (chi[sub 2] (d.f. 1) =5,73, p< .017), and in rumor spreading (chi[sub 2] (d.f. 1) =6,33, p< .012).

In "bully/victims" group verbal and physical bullying were the most frequent and attack on property was the least common bullying type both in boys and girls groups. However the percentage of boys were significantly higher than girls in physical (chi[sub 2] (d.f. 1) =4,03, p< .045), and verbal bullying (chi[sub 2] (d.f. 1) =8,41, p< .004).

These results indicated that in general, the percentage of girls was higher in victimized group whilst the percentage of boys was higher in "bullies", and "bully/victims" groups.

Comparison of Primary and Middle School Children

Examining the data from the Table 3, the most frequent type of bullying behavior reported by the "victims" group was verbal bullying, followed by physical bullying, rumor spreading, isolation, and attack on property. This sequence was valid both for primary, and middle school children.

Table 3.

Percentages of Different Types of Bulling Behavior for Students Identified as "Victims", "Bullies", and "Bully/Victims" Broken Down by Education Levels

	Victim	s (%)	Bullies	(%)	Bully/victims (%)		
Type of Bullying	Primary	Middle	Primary	Middle	Primary	Middle	
Verbal	33,6	33,5	5,7	8,0	12,6	15,6	
Physical	20,8	29,6	6,4	7,3	10,0	14,0	
Rumor Spreading	14,8	17,3	2,5	2,8	3,0	2,9	
Isolation	11,4	12,2	5 <i>,</i> 7	5,4	2,7	3,8	
Attacks on Property	10,7	10,9	0,7	2,1	1,8	2,2	

Note: Children could select more than one response.

In the "bully" group, the most frequent type of bullying behavior reported by the primary school children was physical bullying, followed by verbal bullying, and isolation. In contrast, for the middle school children the most frequent type of bullying behavior was verbal bullying followed by physical bullying and isolation. The least occurring bullying types were attack on property, and rumor spreading both for the primary, and middle school children.

In the "bully/victims" group, the two most common types of bullying behavior was verbal bullying, and physical bullying both for the primary, and middle school children. The other types of bullying forms were relatively less widespread in both groups.

In relation to the primary and middle school differences, the data showed that the percentage of middle school children in physical bullying were found to be significantly higher than the percentages of the primary school children both in "victims" (chi[sub 2] (d.f. 1) =10,95, p< .001) and bully/victim groups (chi[sub 2] (d.f. 1) =3,82, p< .05). No significant differences were found in any other bullying forms between primary and middle school children.

SEL Differences

Examining the data from the Table 4, the most frequent types of bullying behavior students reported were verbal bullying, followed by physical bullying, indirect bullying (isolating, rumor spreading), and attacks on property. The sequences were valid for all children belonging to different socio economic level with the exception of that in the lower SEL "bullies" group, where the most frequent types of bullying behaviors were found to be physical and isolation rather than verbal.

Table 4.

Percentages of Different Types of Bulling Behavior for Students Identified "Victims", "Bullies", and "Bully/Victims" Broken Down by SEL.

	Victims (%)			E	Bullies (%))	Bully/victims (%)		
Type of Bullying	Higher	Middle	Lower	Higher	Middle	Lower	Higher	Middle	Lower
Verbal	20,9	33,0	42,4	10,8	7,0	4,8	7,1	13,5	20,3
Physical	19,8	25,4	31,5	8,2	5,1	8,2	6,3	10,6	18,6
Isolation	6,7	10,1	17,2	4,9	3,8	8,0	1,5	2,3	5,8
Rumor Spreading	10,8	15,4	21,1	3,7	1,9	2,9	1,1	2,7	4,4
Attacks on Property	6,7	7,6	17,2	2,2	0,4	2,4	0,7	1,9	3,1

Note: Children could select more than one response.

In relation to SEL differences, in "victims" group, the percentage of lower SEL was significantly higher than both higher and middle SEL children in any type of victimization. The data show that the lower SEL children were significantly more victimized than higher SEL and middle SEL children respectively in verbal (chi[sub 2] (d.f. 2) =32.77, p< .000) and (chi[sub 2] (d.f. 2) =7.90, p< .005), in physical (chi[sub 2] (d.f. 2) =11.32, p< .001) and (chi[sub 2] (d.f. 2) =4.06, p< .044), in isolation (chi[sub 2] (d.f. 2) =15.70, p< .000) and (chi[sub 2] (d.f. 2) =9.41, p< .002), in rumor spreading (chi[sub 2] (d.f. 2) =12.07, p< .001) and (chi[sub 2] (d.f. 2) =4.73, p< .030) and in attack on property (chi[sub 2] (d.f. 2) =15.70, p< .000) and (chi[sub 2] (d.f. 2) =19.06, p< .000). Children belonging to the middle SEL were victimized significantly higher than higher SEL children only in verbal victimization (chi[sub 2] (d.f. 2) =12.23, p< .000).

In "bullies" groups, differences related to SEL were small and only some comparisons were statistically meaningful. The data indicated that higher SEL children bullied significantly more often than lower SEL children in verbal (chi[sub 2] (d.f. 2) =8,70, p< .003), while lower SEL children bullied more than middle SEL children in isolation (chi[sub 2] (d.f. 2) =7,12, p< .008). In addition, both higher SEL (chi[sub 2] (d.f. 2) =5,28, p< .022) and lower SEL children (chi[sub 2] (d.f. 2) =6,59, p< .010) more commonly attacked on property than middle SEL children did.

Similar to the "victims" group, in "bully-victims" group the percentage of lower SEL children was significantly higher than in higher SEL children in any of the bully-victim form, in verbal (chi[sub 2] (d.f. 2) =22.23, p< .000), in physical (chi[sub 2] (d.f. 2) =20.67, p< .000), in isolation (chi[sub 2] (d.f. 2) =7.69, p< .006), in rumor spreading (chi[sub 2] (d.f. 2) =5.70, p< .017) and in attack on property (chi[sub 2] (d.f. 2) =4.35, p< .037). The percentage of lower SEL children was

also significantly higher than that of middle SEL children in some bully-victim form, in verbal (chi[sub 2] (d.f. 2) =7.35, p< .007), in physical (chi[sub 2] (d.f. 2) =11.70, p< .001) and in isolation (chi[sub 2] (d.f. 2) =7.06, p< .008). However the percentage of middle SEL children was significantly higher than higher SEL children only in verbal bullying (chi[sub 2] (d.f. 2) =7.14, p< .008).

Who are the Bullies?

Table 5 shows that in overall, about 54% of the children were bullied by one boy whilst only 16% were bullied by one girl. The data also show that 35% of children were bullied by several boys, whilst only 7.5% of the children were bullied by several girls. A small percentage of children reported that they were bullied by several boys and girls together (6%).

Table 5.

Percentages of Children Who Were Bullied by Boys and Girls either Individually or Collectively ("Victims" and "Bully/Victims")

	Overall	SEX		Educatio	n Level	SEL		
	Total n=750	Boys n=381	Girls n=369	Primary n=274	Middle n=476	Higher n=120	Middle n=305	Lower n=325
Bullied by one boy	53,7	52,0	55,6	56,9	51,9	49,2	53,4	55,7
Bullied by one girl	16,3	7,3	25,5	17,2	15,8	9,2	12,1	22,8
Bullied by several boys	35,1	44,9	24,9	29,9	38,0	41,7	35,7	32,0
Bullied by several girls	7,5	4,5	10,6	4,7	9,0	13,3	5,9	6,8
Bullied by boys and girls	6,1	6,0	6,2	6,2	6,1	5,0	6,2	6,5

Concerning sex differences, boys were mainly bullied by one or several boys together, whilst girls were bullied both by boys (either individual or together), and by girls (either individual or together). Boys were relatively less often bullied by girls. At education level, both primary and middle school children were bullied mostly by boys and less likely by girls. Although a similar pattern was observed for primary and middle school children, middle school children were more bullied collectively either by several boys or by several girls than primary school children. Related to SEL, children were mainly bullied by one or several boys together. However the percentage of children who were bullied by a girl was higher among lower SEL than both higher and middle SEL. Another difference was that the percentage of higher SEL children who were bullied collectively either by several boys or by several girls was higher than both lower SEL and middle SEL.

Discussion

The findings of this study show that bullying among primary and middle school children in Ankara is a substantial problem. The data confirm that about 35% of the students were self-identified as victims, 6% as bully, and 30% as bully-victims. Research conducted in several countries showed a substantial disparity in the percentage of students who reported to have been bullied and being bullies. For example Fekkes, Pijpers, and Verloove-Vanhorick (2005) reports that studies in several countries indicate a prevalence of 8–46% for regularly bullied children and 5–30% for regular active bullies. A review by Schwartz, Proctor, and Chien (2001) showed very large differences in prevalence estimates between studies. Among the 10 studies which had used self-reports as a basis for classification, the overall prevalence of bully-victims varied between 0.4% and nearly 29%. Nordhagen et al. (2005) compared 3000 randomly selected children aged 2–17 years in each of five Nordic countries. The results showed that the number of parents reporting bullying of their child varied between 7.2% (in Sweden) to 22.6 (in Finland). Nansel, et al. (2004) report that a cross-national study in 25 countries ranged from 9% in Sweden to 54% in Lithuania. Similar to these researches, past Turkish studies also show considerable variation.

In these researches the percentage of victims varied from 9% to 31%, bullies from 8% to 16% and bully-victims were between 6% and 26% (Dölek, 2002; Gokler, 2007; Gültekin, 2003; Kapçi, 2004; Pekel, 2004; Yıldırım, 2001). Since research conducted in Turkey and in other countries used different definitions, criteria, measures and time intervals, it is difficult to make accurate comparison of prevalence of bullying. Nevertheless, the results of the present research indicate that the bullying and victimization among Turkish primary and middle school children is very high and need to be taken into consideration. The findings suggest that bullying behaviors among school-age children in Ankara is a significant educational problem.

In this study, sex differences were examined and a higher percentage for boys in bullies groups and a higher percentage for girls in victims group were found. In literature the same trend has been observed that is boys more often have been found to be bullies than girls (Camodeca, Terwogt and Schuengel, 2002; Fekkes, Pijpers and Verloove-Vanhorick 2005; Nordhagen, et al., 2005; O'Moore and Hillery, 1989; Pereira et al., 2004). On the other hand a small number of researches found no significant gender differences in bullying incidents (Kristensen and Smith, 2003; Peskin, Tortolero and Markham, 2006). In victimization, some report that the number of boys and girls is about the same (eg. Fekkes, Pijpers and Verloove-Vanhorick, 2005; Mellor, 1990; Peskin, Tortolero, and Markham, 2006; Whitney and Smith, 1993), while others have found that more boys are victimized (O'Moore and Hillery, 1989; Pereira et al., 2004). Moreover, Kristensen and Smith (2003) reveals that more girls are victimized than boys. The Turkish research generally indicate that boys were significantly more bullied and victimized than girls (Dölek, 2002; Pekel, 2004; Takış, 2007; Yurtal and Cenkseven, 2007).

With relation to grade level differences, this study revealed that primary and middle school children did not differ either in bullying or victimization. These findings are supporting some of the previous research findings. For example the review of Schwartz, Proctor, and Chien (2001) concluded that no systematic age-trends could be found. Also, the study by Craig (1998) reported roughly similar percentages in primary and junior grades. However a great of number of studies reported that the percentage of bullying usually increase and victims lowers when age increases (Andreou, 2000; Boulton and Underwood, 1992; Fonzi at al., 1999; O'Moore and Hillery, 1989; Olweus, 1991; Olweus, 1999b; Pateraki, 2001; Pelligrini and Long, 2002; Rios-Ellis, Bellamy and Shoji, 2000; Salmivalli, 2002; Smith, Madsen, and Moody, 1999; Whitney and Smith, 1993). Similarly, two Turkish studies found that bullying among older children is higher than in lower grades (Kandemir, 2006; Yurtal and Censeven, 2006).

Looking at the social-economic level, the results of this study indicated that students of higher SEL schools more frequently identified themselves as bullies in bully group whereas the students in bully-victim group of lower SEL schools were more numerous. Part of the findings of this research is in line with the findings of other studies. For example Whitney and Smith (1993) found a modest relationship of bully/victim problems with lower social class groups in the UK. Similarly O'Moore, Kirkham and Smith (1997) found a significantly higher percentage of bullying in schools where there was a higher concentration of pupils from low socioeconomic groups around schools. In a recent study, Pereira et al. (2004) found that low social class was one of the significant risk factors for bullying behaviors among aged 9-16 Portuguese children. One implication of this is that schools belonging to both higher and lower SEL need special attention. Intervention programs should focus on different activities for different SEL.

When different types of bullying and victimization are examined, this study showed that in overall the most frequent types of bullying behavior the children exhibited and were subjected to were "verbal bullying", followed by "physical bullying" whereas the least frequent types of bullying behavior was attack on property. These findings were valid for "victims", "bullies" and also "bully/victims" groups. In the literature a great number of studies confirm that the most common type of bullying among school children is verbal bullying or specifically name-calling (Fekkes, Pijpers, and Verloove-Vanhorick, 2005; O'Moore and Hillery, 1989; Pereira et al., 2004; Rolider and Ochayon, 2005; Whitney and Smith, 1993). While some research showed that

the second frequent form of bullying was physical (Ando, Asakura and Simons-Morton, 2005; O'Moore and Hillery, 1989; Rolider and Ochayon, 2005; Whitney and Smith, 1993), some others reported that it was rumor spreading (Fekkes, Pijpers, and Verloove-Vanhorick, 2005; Pereira et al., 2004).

When we compare the type of bullying and sex, in this research, a clear difference was found among boys and girls related to different type of bullying in "bullying" groups. The most frequent type of bullying behavior that boys reported to engage was physical bullying whereas, for girls, the most prevalent bullying type was verbal bullying, followed by isolation. These findings are in line with numerous past researches which clearly indicate that boys were more likely to experience physical forms of bullying (physical attacks, hitting, kicking, threaten), whereas girls were more likely to experience indirect forms of bullying such as excluding others, spreading of rumors, intentionally ignoring, damaging someone's reputation etc. (Boulton and Underwood, 1992; Fekkes, Pijpers, and Verloove-Vanhorick, 2005; Çınkır and Karaman-Kepenekçi,, 2003; Nansel, 2001; Olweus, 1993; Ogulmus, 1995; Pateraki, 2001; Whitney and Smith, 1993). Since the results showed that boys generally bully directly and physically whereas girls verbal and indirectly, gender-role stereotypes should be addressed in Turkish bullying intervention program. In Turkish society and schools there is still the tendency to relegate girls to a submissive role and boys to an aggressive one.

In relation to type of bullying and grade levels, in this study, no major differences were found between primary and middle school children indicating that the most types of bullying behaviors are "verbal" and "physical" whereas the least type is "attack on property" in "victims" and "bully/victims" groups. However in "bully" group the most frequent type of bullying behavior reported by the primary school children was physical while it was verbal for the middle school children. In addition, the percentage of middle school children in physical bullying was found to be significantly higher than of the primary school children both in "victims" and bully/victim groups. Similar results were found by Gültekin (2003) and Lösel and Bliesener (1999) who reported that whereas physical bullying is predominant amongst younger pupils, verbal and psychological bullying becomes more common amongst older ones.

When we weighted the type of bullying against the SEL, in this study, the most frequent types of bullying behavior students reported were verbal bullying, followed by physical bullying, indirect bullying (isolating, rumor spreading), and attacks on property. The sequences were valid for all children belonging to different socio economic level with the exception of that in the lower SEL "bullies" group, where the most frequent types of bullying behaviors were found to be physical and isolation rather than verbal. Although sequences of bullying types were generally similar, however, in "victims" and "bully/victims" groups, the percentage of lower SEL was significantly higher than both higher and middle SEL children in most of the bullying behaviors. These findings indicate that schools, in which low SEL families children attend, need more attention.

When we tried to asses "who are the bullies", the findings of this research show that in overall children were bullied either by one boy or a group of boys. This pattern was valid for primary and middle school children as well as children belong to different SEL groups. The only difference was that girls were in addition bullied by an individual girl apart from being bullied by a boy or by a group of boys. Boys were relatively less often bullied by girls. At education level, both primary and middle school children were bullied mostly by boys and less likely by girls. Although a similar pattern was observed for primary and middle school children, middle school children were more bullied collectively either by several boys or by several girls than primary school children. Related to SEL, children were mainly bullied by one or several boys together. However the percentage of children who were bullied by a girl was higher among lower SEL than both higher and middle SEL. Another difference was that the percentage of higher SEL children who were bullied collectively either by several boys or by several girls was higher than both lower SEL and middle SEL.

These results more likely stem from many different causes and compose a complex structure. One of these causes could be that children also face bullying behaviors at home. Maybe adults at home and at schools fail in their duty of care, so the children display aggressive behaviors because that is the only way to survive in this bullying environment. Another explanation could be that children learn to behave aggressively by copying adult's role model. In addition, many researches indicate that often children who are abused may express their anger through bullying. However separate research needs to be conducted in order to find out the cause of bullying.

Conclusion

In conclusion, the results of our study support the previous research in Turkey indicating that bullying is a substantial problem in Turkish primary and middle schools. It appears that schools do not always effectively deal with bullying problems. Accordingly, setting up and developing a whole-school approach intervention programs is an important need for primary and middle school students for the prevention and reduction of bullying. Many researches suggest that all parties (school staff, pupils and parents, as well as organizations connected to the school community) need to be involved in cooperative efforts to prevent and diminish bullying behavior in schools. Bullying incidents would be diminished by regular and structural communication on the subject of bullying between children, teachers, school counselors, guidance and research centers, parents and other organizations. All these sides, particularly children, should be motivated to be actively involved in the school-based anti-bullying programs.

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