

Cyberbullying awareness in secondary and high schools

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Abstract

This study examines cyberbullying awareness in schools based on the statements of teachers and managers. Survey data were collected from 376 educators in 277 middle and high schools. The 'Questionnaire for Cyberbullying Awareness at School' was used as the data collection tool and data were collected online and analysed with frequency and percentage statistics. The findings show that: schools have wrong or inadequate strategies concerning recognition and intervention of cyberbullying; techniques for cyberbullying prevention is sufficient, concerning the creation of an anti-cyberbullying school culture and taking technological precautions; however, the creation of an anti-cyberbullying curriculum, and the construction of specific anti-cyberbullying policies for schools, is lacking in teachers' cyberbullying awareness. It is clear that cyberbullying awareness in secondary schools and high schools in Turkey must be increased.

Keywords: Cyberbullying, cyberbullying awareness, cyberbullying recognition, cyberbullying prevention, cyberbullying intervention.

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1. Introduction

Cyberbullying (the use of technology to intentionally harm or harass others) has been increasing rapidly among the youth for many years, and educators and researchers are understandably concerned that this problem is growing faster than the effectiveness of educators' and parents' abilities to respond (Bauman, 2010). Researchers emphasise the importance of student-school-parent cooperation to handle cyberbullying (Keith & Martin, 2005; Kowalski, Limber & Agatston, 2012; Shariff, 2008; Wong-Lo & Bullock, 2011) and they recommend prevention and intervention strategies not only for teachers but also for students, school managers and parents as well (Hinduja & Patchin, 2005; Kowalski et al., 2012). Although teachers know that face-to-face bullying is a serious problem, only a few of them think that students can harm each other using communication technologies (Beran & Li, 2005). Mason (2008) argues that although teachers recognise traditional school bullying, few are aware of the extent to which bullying occurs off school grounds and through digital means. In addition, some studies have found that teachers feel unprepared to deal with cyberbullying (Cassidy, Brown & Jackson, 2012). According to Eden, Heiman and Olenik-Shemesh (2013), teachers' confidence in managing cyberbullying problems was not high.

In order to handle cyberbullying, it is necessary to recognise, prevent and intervene in cyberbullying incidents in an appropriate manner. In this study, the awareness levels of secondary schools and high schools in Turkey against cyberbullying are defined. In this study, 'awareness level' is defined as a school's ability to handle cyberbullying within the context of recognition, prevention and intervention. These levels were determined by the statements of teachers and managers, collected through Keser and Kavuk's (2015) 'Questionnaire for Cyberbullying Awareness at School'. The awareness level of schools concerning cyberbullying recognition, prevention and intervention was examined in this paper.

2. Method

2.1. Participants

Because cyberbullying is particularly prevalent among middle and high schools (Kowalski, Giumetti, Schroeder & Lattanner, 2014; Slonje, Smith & Frisen, 2013), these schools were included in this study. The target population consists of two cities. City selection criteria were the cyber-crime rates. The Turkish cyber-crime rate average is around 7.04 criminal acts per 10,000 people in a city (Ilbas & Koksall, 2011). For this study, all cities that fall above the cyber-crime rate average and all cities that fall below the cyber-crime rate average were grouped into separate sets. One city was randomly selected from the above average set and the other city was randomly selected from the below average set.

The data collection tool was sent to all schools ($N = 887$) in the target population. According to Cochran's (1977) formula, for $N = 887$, the smallest sample size is $n = 268$. The questionnaire was returned from 277 schools, which meets Cochran's criteria. The 376 participants, who actively answered the questionnaire, consisted of 284 school managers (75.5%), 42 information and communication technology (ICT) teachers (11.2%) and 50 school counsellors (13.3%).

2.2. Data collection

In this study, the 'Questionnaire for Cyberbullying Awareness at School', which was developed by Keser and Kavuk (2015), was used as the sole data collection tool. The questionnaire measures the awareness level of secondary schools and high-schools of handling cyberbullying within many different dimensions. The questionnaire is composed of 51 questions, divided into three sections: namely cyberbullying recognition, cyberbullying prevention (in terms of an anti-cyberbullying school climate, curriculum and education, and anti-cyberbullying policies and technological precautions) and

cyberbullying intervention. The questionnaire includes 30 questions with a single answer and 21 questions with multiple answers.

The school administrators, ICT teachers and school counsellors have crucial roles in cyberbullying prevention (Li, 2008) and school administrators shall be aware of events which occur at their schools. Therefore, specifically, these educators were asked to answer the questionnaire. During the analysis of the questionnaire, frequency and percentage statistics were used. Since the findings regarding middle and high schools do not have a meaningful difference compared to each other, findings are presented such that the combined results are introduced.

3. Findings

3.1. Awareness level of schools concerning cyberbullying recognition

The first sub-goal of the study was to assess the awareness of schools concerning cyberbullying recognition. There were 15 items in the data collection tool related to this subject (m1–m15). The answers regarding the comparison of cyberbullying with traditional bullying are illustrated in Table 1 (m1–3). More than a quarter of the participants found cyberbullying more dangerous than physical bullying (25.3%) or verbal bullying (26.9%), and 21% of them found cyberbullying more dangerous than social/relational bullying. 19.7% of the educators stated that traditional bullies and cyberbullies are the same people (m4).

Regarding the impact of cyberbullying on the classroom (m5), 40.2% of the educators reported that it creates a hostile environment; while 24.2% of the participants stated that cyberbullying makes it more difficult for children to learn. 10% of the educators said that they did not have any idea regarding the subject. In a multiple choice question, 62.8% of the educators indicated that students would tell the incident to their friends if they suffer, or had suffered, from cyberbullying (m6). Within this multiple choice question, 49.2% of the educators stated that students would tell the cyberbullying incident to a school counsellor; 42.8% answered with school management; 33.5% mentioned parents; 30.9% answered with a teacher and 28.2% of them indicated that students would tell an ICT teacher about the incident.

According to the questionnaire, 12.8% of the participants reported the presence of cyber-victims in their schools (m7), while 10.1% admitted the presence of cyberbullies in their schools (m8). The percentage of educators who did not know whether there was a cyber-victim or not in their schools is 29.3%, while the percentage of educators who did not know whether there was a cyber-bully or not is 25.3%. Only 2.7% of the participants think of cyberbullying as a major problem in their schools (m9). The participants were asked to report how many cyberbullying incidents they experienced in their school within the last 3 months, rating the number of incidents on a scale of 0–10 (m10).

When the educators were asked about the most frequent cyberbullying incidents (m11), 10.6% of them mentioned rude nicknaming, 9.3% answered with spreading rumours, 7.2% mentioned the behaviour of pretending like somebody else on the Internet. Regarding the most frequent ICT tools that are used for cyberbullying purposes (m12,13); 18.4% of the educators mentioned social networking sites, while 16% of the participants pointed to smart/mobile phones. Regarding the incremental trend of cyberbullying incidents, 7.4% of the educators reported an increase in the number of incidents, while 3.2% reported a decrease (m14). According to educators, cyberbullying incidents occur most frequently in 8th grade and less frequently in 5th and 6th grades (m15).

3.2. Awareness level of schools concerning cyberbullying prevention

The schools' awareness levels for prevention of cyberbullying were the second section of this study, used to assess the schools' overall cyberbullying awareness. Twenty-nine items related to cyberbullying prevention that was separated into four subsections were present within the

questionnaire. These sub-sections include the creation of an anti-cyberbullying school culture, the creation of an anti-cyberbullying curriculum and education, construction of specific anti-cyberbullying principles and taking technological precautions. The educators' opinions, in each subsection, are summarised below.

Participant responses regarding the 'creation of an anti-cyberbullying school culture' subsection (m16–19) are summarised in Table 2. While 68.6% of the participating educators indicated that students who were cyberbullied or witnessed a cyberbullying incident would tell the incident to a trusted adult and receive support from that person (m16), 73.7% of the them claimed that students were asked to report incidents of cyber victimisation and cybersecurity problems to school administration or teachers (m17). The vast majority of the participants (91.0%) stated that students clearly knew that school administration wouldn't tolerate the inappropriate use of technology (m18). More than two-thirds of the participants (67.6%) said that they were working on creating a school culture that does not consider cyberbullying as an acceptable behaviour in their schools (m19).

There were nine questions with a one answer option and four multiple choice questions related to the 'creation of an anti-cyberbullying curriculum and education' subsection (m20–32). Participant responses for the one answer option questions are summarised in Table 2. According to Table 2; 62.2% of the participants stated that prevention of cyberbullying was a part of the school's educational policy (m20). 71% of the educators thought the administrators (m21); 66% thought the teachers (m22), 48.9% thought the students (m23) and 19.1% thought the parents (m24) know how to prevent cyberbullying. Only 23.9% of the participants thought that upper graders inform lower graders about cyberbullying (m25). More than three-quarters of the participants (77.9%) thought that school staff is aware of the legal rules concerning cyberbullying (m26). Three-fourths of the participants (75.3%) thought that school staff know the responsibilities of the school and the precautions that should be taken around the school concerning cyberbullying (m27). 67% of the participants reported that there were informative afterschool activities at their schools, teaching proper, healthy and ethical computer and Internet use towards the students (m28).

More than half of the participants (58.8%) thought that school administrators; 52.6% thought the class guidance teachers; 46.5% thought the ICT teachers; 43.6% thought school guidance counsellors; 22.9% thought friends; 20.7% thought the Internet and 20.2% thought that parents are the main information source, provided to students for the prevention of cyberbullying (m29). Participants were asked about what kind of informative activities are done with students, teachers and parents at their schools regarding cyberbullying prevention (m30–32, Table 3). Although informing students about cyberbullying prevention during free activity hours is most preferred, barely half of the participants (47.9%) reported that it is conducted during those hours. Free activity hours, as defined in the public education system in Turkey, include hours in the class during which students are free to study for a range of courses or involve themselves in extracurricular activities such as painting or drawing. Organising a seminar or a conference is the most popular activities for teachers and parents, yet less than one-third of the participants reported that these activities are conducted for teachers (according to 31.9% of participants) and for parents (according to 30.6% of participants).

In the subsection for the 'creation of anti-cyberbullying principles' (m40–46), there were seven questions with the single answer option (Table 2). Less than half of the participating educators (42%) said that they have a clear school policy towards cyberbullying (m40), 52.7% of the participants stated that there are principles and rules regarding cyberbullying at their schools (m41); 47.1% of the participants claimed that the school's anti-cyberbullying policies include behaviours outside of school (m42). More than half of the participants (54.5%) stated that the school policies and rules are known by the students (m43); 59.6% stated that teachers know them (m44) and 35.3% stated that parents know them (m45). Lastly, 39.9% of the participants stated that policies and rules about cyberbullying were posted on the school website and/or bulletin boards (m46).

In the subsection for 'taking technological precautions' (m47–51), there were five questions with the single answer option (Table 2). 72.1% of the participants stated that there is a website blocking

software/hardware at their schools (m47); 54.8% claimed that there is a software/hardware at their school(s) to monitor content viewed on the school network (m48); 86.7% of the participants stated that there is an antivirus software for their school computers (m49); 91% of them mentioned that their school uses safe Internet packages (m50); 92.6% of them thought they avoid publishing any personal information of the students on the school website (m51).

3.3. Awareness level of schools concerning cyberbullying intervention

Concerning cyberbullying intervention, there were five questions with the single answer option and two multiple choice questions (Table 4). Half of the participants (50.5%) claimed that they take cyberbullying events or suspicious cases seriously at their schools (m33); only 23.4% of the participants stated that their school has a school-specific intervention method for cyberbullying (m34). According to 70.2% of the participants, schools are careful about anonymity when it comes to reporting cyberbullying events (m35). More than two-thirds of the participants (68.6%) claimed that in cases of cyberbullying incidents, school staff know when to intervene (m36); 70.7% of participants stated that in cases of cyberbullying incidents, school staff know when to contact security units (m37). According to the participants' answers, information necessary to intervene with cyberbullying cases (m38) include 87.5% of the participants answered 'detailed information about the incident'; 'support from the victim's family (85.9%)'; 'the victim's identity (84.8%)'; 'the bully's identity (84%)'; 'the school's policy towards cyberbullying (83%)' and 'support from the bully's family (77.4%)'. The participants' answers to questions concerning their response(s) to a cyberbullying incident (also known as an intervention strategy) are provided in Table 5 (m39). According to Table 5, the most preferred intervention strategy for educators is 'talking to the victim (84%)'; the least preferred intervention strategy is 'notifying the school's security staff (5.3%)'.

4. Discussion

Overcoming cyberbullying requires understanding cyberbullying, taking preventative steps for this kind of behaviour and intervening appropriately during such incidents. In this study, the awareness of middle schools and high-schools to combat cyberbullying was investigated. Findings are discussed in line with the survey results from the study's data collection instrument; these survey results are compared and contrasted with observations in cyberbullying literature.

The first section of the data collection instrument focused on the recognition of cyberbullying. Answers to these items revealed that some of the educators had wrong or inadequate information when comparing cyberbullying with real-life bullying, recognising bullies and their victims, evaluating the effect of cyberbullying on the classroom, and analysing cyberbullying incidents at schools; in other words, their cyberbullying awareness was low.

Although there are some similarities between real-life bullying and cyberbullying, in literature, it has been stated that cyberbullying can and does affect some individuals more negatively (Bauman, 2013; Kowalski et al., 2012). At the start of the study, it was assumed that educators would find cyberbullying to be as harmful as other types of bullying; however, there were a significant number of participants who claimed that cyberbullying is less harmful than regular bullying, or that any type of bully is harmful at all.

Most of the educators considered themselves to be the point of contact that students would go to if and when a cyberbullying incident would occur. In reality, students' reactions were much different. For example, Hinduja and Patchin (2009) indicated that less than 5% of the victims told a teacher about their cyberbullying experiences. Mishna et al. (2009) found, in their study, that 33% of the teachers felt that the students would tell them if they were being cyberbullied; however, only 3% of the students actually said that they would tell a teacher if they experienced cyberbullying. According to that study, most of the teachers thought that their students would tell a friend if they were being cyberbullied (Mishna et al., 2009). Previous research has indicated that children seem to be most

comfortable reporting bullying experiences to their friends (Rigby, 2002). While cyberbullying creates a negative atmosphere amongst the students, it also causes problems within the area of academic achievement (Arsenault et al., 2006; DeVoe, Kaffenberger & Chandler, 2005; Gati, Tenyi, Tury & Wildmann, 2002). A small group of the educators mentioned these negative effects. Most of the participants had the inadequate knowledge or no idea about these effects.

The number of the educators who did not know whether there are cyber bullies, or bully-victims, in their schools was remarkable. Previous studies show that cyberbullying incidents were not often shared with teachers (Agatson et al., 2007; Finkelhor, Turner & Hamby, 2012; O’Connell, Pepler & Craig, 2004). This deficiency could result from both the low number of reported incidents and due to the teachers’ low awareness levels on the subject of cyberbullying.

According to the educators, the most common cyberbullying cases at their schools are name calling, spreading rumours in cyberspace and impersonating someone online. In Kavuk’s (2011) master thesis, conducted on 2,082 middle school students, the most common cyberbullying behaviours that the students demonstrated included making annoying sexual noises through anonymous phone calls, e-mail account hacks, making fun of other students due to out-of-date ICT tool models or spamming others’ emails so that s/he couldn’t receive any messages. According to Akbulut, Sahin and Eristi (2010), the most frequent cyberbullying incidents were cursing in instant messaging programs, masquerading, sending harassing emails or instant messages and disturbing others in instant messaging programs who do not want to talk to the cyber-bully. More than two-thirds of the educators did not comment at all on cyberbullying activities, media or tools in the current study. This finding could result from a lack of cyberbullying incidents at the participants’ schools; another possibility is that educators did not want to mention, or are not aware of, the cyberbullying events that do occur at their schools.

In this study, two-thirds of the educators gave supportive responses to items concerned with creating an anti-cyberbullying school culture. Most of the educators thought that when students experience cyberbullying, they would immediately contact an adult. However, previous research reveals a different response. In Choucalas’ (2013) research, the participants were asked if the student had told a school staff member about cyberbullying. Parents (47%), educators (76%) and administrators (67%) perceived that school staff was notified about all incidences of cyberbullying; however, student responses (22%) did not support those assumptions. Students indicated that 48% of the cyberbullying incidents that they experienced, they did not contact school staff.

According to the questionnaire responses to items on curriculum and education, it is apparent that there weren’t any instructional activities offered for teachers, students or parents that addressed cyberbullying and how to combat and handle this issue. Almost half of the educators stated that cyberbullying is not a part of the curriculum at their schools. In a study carried out by Kowalski and Limber (2007), it was observed that only a few educators had cyberbullying-related discussions with their students. According to the participants in this study, one-third of school personnel, more than half of the students and a majority of the parents do not know how to handle cyberbullying. Similarly, Choucalas (2013) reported that half of the teachers and one-third of the school principals thought that educators do not know how to handle cyberbullying. According to Hinduja and Patchin (2009), one method to increase cyberbullying awareness in students is guidance and interaction between older and younger students. The majority of the educators stated that this type of guidance and interaction amongst the students does not exist in their schools.

Parents are obliged to monitor their children’s activities on the Internet, while teachers, school counsellors, administrators and policymakers must adapt to a rapidly evolving technological society, address emerging challenges and guide children to become civic-minded individuals (Shariff, 2005). Almost one-third of the educators in this study stated that school personnel is not informed about the legal regulations regarding cyberbullying; they are not aware of cyberbullying precautions that need to be taken around the school; they do not perform any informative after-school activities or they do not have any information regarding any of these issues. Although the most crucial point of cyberbullying

prevention is to provide necessary training to school personnel, the lack of studies and training on this topic is striking. The amount of educators that claimed there is a presence of training for students, teachers and parents is very low. Educators stated that students and teachers are mostly informed and trained on the subject of cyberbullying during free activity hours, while meetings and seminars are organised for parents only.

Prevention is not complete without the construction of an anti-cyberbullying policy and the use of technological precautions. Many of the schools in the study use their existing policy, for traditional bullying, as a guide for their responses to cyberbullying incidents. However, due to the anonymous nature of cyberbullying, its capacity for an infinite audience and the participation by large numbers of young people, traditional responses to bullying are ineffective (Shariff, 2005). One of the prerequisites of cyberbullying prevention is the existence of school-specific cyberbullying politics, strategy, principles and rules. Almost half of the contributors to the study stated that their schools' lack school-specific cyberbullying principles and rules, or that they are unaware whether these principles and rules exist or not. In similar research, participants were asked if their school districts had a procedure or policy, with a range of responses and consequences to address cyberbullying. Again, the majority of the overall responses were unsure (52%), followed by yes (35%) and no (13%) answers in Choucalas' study (2013). In another study, it was concluded that the participating school districts did not have a specific cyberbullying policy; the traditional bullying policy was applied during all bullying incidents (Ryan, Kariuki & Yilmaz, 2011). In the current study, more than half of the educators believed that cyberbullying principles and rules are known by teachers and students, yet a small group of the educators stated that cyberbullying principles and rules are known by parents. These numbers can be interpreted as a result of a lack of training, by the participants, on cyberbullying awareness and prevention.

Concerning technological precautions at schools, the majority of the educators stated that computers at school are equipped with website blocker software/hardware and anti-virus software and secure Internet packages are used at school. In addition, more than half of the educators reported the presence of tracker software/hardware that logs viewed content on the school's Internet network.

The third part of the data collection instrument focused on the cyberbullying intervention methods of schools. Though prevention precautions have reduced the amount of cyberbullying incidents, it is impossible to eradicate all potential cyberbullying events. Methods of cyberbullying evaluation and intervention are not completely known by school personnel. While half of the educators stated that cyberbullying incidents and suspected cyberbullying events are handled seriously at their schools, the other half believe that these incidents are not considered serious or stated that they do not have any information on the subject. Any effect that a cyberbullying incident will inflict on a student varies, based on how the incident emerged, the tools that were used and the setting in which the cyberbullying event occurred. All of these variables also affect the method of intervention. For example, if the cyberbullying incident is a simple incident, such as nicknaming, that occurred once or twice amongst two students, one method of intervention could include forced reconciliation between the students and making sure that the incident is not repeated. On the other hand, if the cyberbullying incident includes a website that contains violence, perversion, extortion, threats or pornography, police should be informed (Willard, 2007). Therefore, schools need detailed guidelines that provide reasonable boundaries and direction as to the extent of the school and the school personnel's responsibilities (Shariff, 2005). However, in the current study, almost one-third of the educators stated that the right method of intervention is not known by school personnel or claimed that they do not have any idea regarding the subject.

Willard (2007) stated that school personnel, who play a crucial role in cyberbullying prevention, generally show an unwillingness to take part in the intervention of cyberbullying incidents due to their hesitations regarding the legal boundaries surrounding the phenomenon of cyberbullying. However, in this study, the majority of educators stated that they would intervene if they face a cyberbullying incident. Additionally, the most frequent method of intervention that the

educators would use is to inform the parents of the cyber-bully and/or the victim. Though there has not been a study on prevention or intervention programmes that curb cyberbullying, several suggestions have been offered by experts (Hinduja & Patchin, 2009; Kowalski et al., 2012; Von Marees & Petermann, 2012). Many recommend direct instruction in Internet safety and appropriate behaviours in cyberspace; strategies such as blocking offenders and reporting abuse and anti-bullying school policies that specifically refer to cyberbullying as a prohibited behaviour (Bauman, 2013).

5. Conclusion and recommendations

The results of this study show that there is a need, at schools in Turkey, to increase the awareness level of students, teachers, school administrators and parents regarding the appropriate methods of cyberbullying recognition, prevention and intervention. Schools and decision makers have very important duties in this subject. Each school should define their own cyberbullying profile and training needs of the school participants and perform studies (through parent meetings, seminars, editing the school website, student activities, etc.) based on these training needs. This study can be used as a reference by practitioners in schools to evaluate their cyberbullying awareness, to find out the training needs of school participants and to organise related activities. Additionally, on the city and country-wide level, directorates of national education of cities are advised to conduct training for school administrators, ICT teachers and school counsellors regarding the preparation and execution of anti-cyberbullying school programmes. With more involvement on the school and national level, the phenomenon of cyberbullying may be more effectively treated and eradicated (well not quite, but close enough).

Table 1. Participant views regarding the comparison of cyberbullying with physical, verbal and social/relational bullying

Options	Physical bullying		Verbal bullying		Social/relational bullying	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Cyberbullying is more dangerous than	95	25.3	101	26.9	79	21.0
Cyberbullying is less dangerous than	41	10.9	38	10.1	59	15.7
Both are equally dangerous.	218	58.0	226	60.1	223	59.3
None of them is dangerous.	6	1.6	0	0	1	0.3
I do not have an idea	16	4.2	11	2.9	14	3.7

Table 2. Participant views regarding cyberbullying prevention section

Items	Yes		No		No idea	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
m16 If your students were involved in a cyberbullying incident, would they inform a trusted adult instead of remaining silent?	258	68.6	27	7.2	91	24.2
m17 Do you regularly remind your students to ask the school administrators or their teachers for help if they have a problem with cyberbullying?	277	73.7	43	11.4	56	14.9
m18 Do your students know that the improper use of technology will not be ignored by the school management?	342	91	12	3.2	22	5.9
m19 Do you work to create a school environment where cyberbullying is not considered popular among students?	254	67.6	67	17.8	55	14.6
m20 Is combating cyberbullying considered a part of your school's curriculum?	234	62.2	94	25	48	12.8

m21	Do your school administrators know how to address cyberbullying issues?	267	71	51	13.6	58	15.4
m22	Do teachers in your school know how to address cyberbullying issues?	248	66	57	15.2	71	18.9
m23	Do your students know how to address cyberbullying issues?	184	48.9	107	28.5	85	22.6
m24	Do the parents of your students know how to address cyberbullying issues?	72	19.1	150	39.9	154	41
m25	Do the upper graders in your school inform the lower graders about cyberbullying?	90	23.9	194	51.6	92	24.5

Table 3. Participant views regarding cyberbullying prevention section (continued)

	Items	Yes		No		No idea	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
m26	Is the school staff aware of the legal arrangements for ICT usage by students?	293	77.9	38	10.1	45	12
m27	Is the school staff aware of their responsibility to take measures outside the school to eliminate cyberbullying?	283	75.3	43	11.4	50	13.3
m28	Are there out-of-class informative activities directed towards students on correct, healthy and ethical computer and Internet use?	252	67	90	23.9	34	9
m40	Do you have a clear school policy about cyberbullying at your school?	158	42	163	43.4	55	14.6
m41	Are there any principles and rules specific to cyberbullying in your school?	198	52.7	126	33.5	52	13.8
m42	Do the school's cyberbullying principles include the out-of-school cyberbullying incidents?	177	47.1	113	30.1	86	22.9
m43	Are the school's principles and rules about cyberbullying known to the students?	205	54.5	108	28.7	63	16.8
m44	Are the school's principles and rules about cyberbullying known to the teachers?	224	59.6	79	21	73	19.4
m45	Are the school's principles and rules about cyberbullying known to the parents of students?	133	35.4	122	32.4	121	32.2
m46	Are the school's cyberbullying principles and rules posted on the IT class, school website or notice board?	150	39.9	174	46.3	52	13.8
m47	Does your school have website-blocking hardware/software installed on the Internet network?	271	72.1	66	17.6	39	10.4
m48	Does your school have content-monitoring hardware/software installed on the Internet network?	206	54.8	104	27.7	66	17.6
m49	Do you have anti-virus software on your school's computers?	326	86.7	26	6.9	24	6.4
m50	Do you have a secure Internet package on your school's computers?	342	91	15	4	19	5.1
m51	Are you taking precautions to prevent your students' personal information from being published on your school website?	348	92.6	5	1.3	23	6.1

Table 4. Informative activities conducted at school about cyberbullying

Activities	Towards students		Towards teachers		Towards parents	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Seminar/Conference organising	137	36.4	120	31.9	115	30.6
Out of school meetings and other organised events	22	5.9	40	10.6	37	9.8
Distributing printed materials	64	17.0	60	16.0	50	13.3
WebSite creation	2	0.5	3	0.8	4	1.1
Providing information on school website	21	5.6	19	5.1	17	4.5
Informing students at free activity periods	180	47.9	95	25.3	50	13.3
Encoring students to take elective IT course	103	27.4	41	10.9	30	8.0

Table 5. Participant views regarding cyberbullying intervention section

Items	Yes		No		No idea	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
m33 Do you take suspected and actual incidents of cyberbullying seriously at your school?	190	50.5	138	36.7	48	12.8
m34 Do you have a school-specific method to investigate cyberbullying events?	88	23.4	245	65.2	43	11.4
m35 Are the confidentiality principles being followed during the reporting of cyberbullying incidents in your school?	264	70.2	32	8.5	80	21.3
m36 In case of a cyberbullying incident in the school, does the school staff know at which stage to intervene the incident?	258	68.6	61	16.2	57	15.2
m37 In case of a cyberbullying incident in the school, does the school staff know at which stage to cooperate with the security units?	266	70.7	56	14.9	54	14.4

Table 6. Participant views regarding the cyberbullying intervention

Views	<i>n</i>	%
Talking to victim	316	84.0
Talking to victim's parents	253	67.3
Talking to bully if known	252	67.0
Suggesting school guidance services to the victim	237	63.0
Talking to bully's parents if known	232	61.7
Suggesting school guidance services to the bully if known	200	53.2
Reporting cyberbullying act to law enforcement	132	35.1
Notifying the school security staff	20	5.3
No intervention	4	1.1
No idea	15	4.0

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