

CYBER-BULLYING SENSIBILITY STATUS OF THE HIGH SCHOOLS OF ESKISEHIR (TURKEY)

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ABSTRACT: **Aim:** To assess the cyber-bullying sensibility levels of first-class high school students and to investigate some factors which are thought to be associated with the cyber-bullying. **Material-Method:** This study is a cross-sectional study conducted on the first-class students of high schools between from December 2012 to February 2013 in Eskişehir, Turkey. The study group consisted of 825 students (87.4% of target population). The Cyber-bullying Sensibility Scale (CBSS) was used to evaluate the level of cyberbullying sensibility. The scores for this scale range from 14 to 42. While the score was increasing, the sensibility of cyber-bullying was rising. In statistical analyses, Mann-Whitney U test, Kruskal-Wallis test, and Spearman Correlation Analysis were used. **Results:** Of the students, 236 (28.6%) were girl and 589 (71.4%) were the boy. The mean age was 14.91 ± 0.62 years. The average scores of the students taken from the CBSS were 34.34 ± 6.43 (min: 14, max: 42). It was found that the sensibility level of cyber-bullying was higher in females than males ($p < 0.05$). The cyberbullying sensibility level was found to be higher in those who have internet access in the place they stayed ($p < 0.05$). Cyber-bullying sensibility level was higher among mobile phone users ($p < 0.05$). It was found that there was a weak correlation between the duration of daily mobile phone usage and cyber-bullying sensibility level ($p < 0.05$). **Conclusion:** According to the results of our study, girl students, and the students, whose mother graduated from high school and college, and whose father graduated from university, and those who have internet access in the place they stayed, and mobile phone users have the high level of cyberbullying sensibility.

Keywords: Cyberbullying, High School, Internet, Mobile Phone.

1. INTRODUCTION

While cyberbullying is defined as willful and repeated harming another person by using the Internet or other digital technologies, we can define of the cyber-bullying sensibility is as follows: "1) avoidance of behaviors that may lead to exposure to bullying behaviors during the use of cyber tools such as the internet, mobile phones; 2) to be aware of these threats; 3) to take precautions of these threats; 4) to be careful the against that may create threats" (Patchin and Hinduja, 2015; Tanrikulu *et al.*, 2015).

Cyber-bullying most commonly has been occurring in the form of disturbing messages and social attacks via websites, e-mail, instant messaging, and chat rooms (Slonje *et al.*, 2013).

In terms of efforts of the elimination of cyberbullying, it is especially important to increase the level of sensibility to cyberbullying among young people who use information and communication technologies intensively (Akturk, 2015).

It is known that cyber-bullying is closely related to the mental health of adolescents/young people (Bannink *et al.*, 2014). There are positive relations between anxiety, depression and suicidal thoughts, anger/aggression (Capurso *et al.*, 2017; Tozun and Babaoglu, 2018), use the alcohol/smoking/substance use with cyber-bullying (Casas *et al.*, 2013; Low and Espelage, 2013). Additionally, cyber-bullying is observed to be associated with a low level of the quality of life in victims (Davison and Stein, 2014; Dobry *et al.*, 2013).

The aim of this study was to assess the cyber-bullying sensibility levels of first-class high school students and to investigate some factors which are thought to be associated with the cyber-bullying.

2. MATERIAL-METHOD

This cross-sectional study was conducted between from December 2012 to February 2013. Target population (N: 944) of the study was the first graduate students of three high schools in Eskişehir city

center, Turkey. In the study period, 87.4% of the target population has been reached. Thus, the study group occurred with 825 students.

A questionnaire form that containing questions about some of the characteristics of was prepared by the researchers, and were filled out by the students under the observation of the researchers.

The Cyber-bullying Sensibility Scale (CBSS) was used to assess the level of cyber-bullying sensibility.

This scale was developed by Tanrikulu *et al.* (2013) and consists of 14 items with "yes, sometimes, no" options. Scores that can be taken from this scale range from 14 to 42, and as the score increases, the sensibility to cyber-bullying is also increasing.

Those with body mass index $> 25 \text{ kg / m}^2$ were accepted as overweight/obese (Mean Body Mass Index (BMI), 2018). Those who report hurry, enthusiastic, hasty are considered as "A-Type" personality. On the contrary, those who say that they are quiet, calm, patient, planned programs are accepted as "B-Type" personality (Yetiskinlere yonelik testler ve anketler, 2018).

Before starting to the study, necessary permissions were obtained from the Provincial Directorate of National Education. Verbal approvals were obtained from the students.

The results of the study were presented as a poster at the 16th National Public Health Congress (Antalya, Turkey, 27-31 October 2013).

Frequency values were presented as median (min-max) and numbers and percentages (n, %). Statistical Package for the Social Sciences (SPSS) version 15.0 was used for data entry and analysis. In the statistical analyses, Mann-Whitney U test, Kruskal-Wallis test, Spearman correlation analysis were used. $p < 0.05$ values were accepted as statistically significant.

3. RESULTS

Of the students 28.6% (n: 236) was girl, and 71.4% (n: 589) was boy. The mean age of the students was 14.91 ± 0.62 years. In the study, A-type personality was determined in 477 (57.8%), and B-type was determined in 348 (42.2%) students. The frequency of the overweight/obese students was 8.4% (n: 69). The frequency of the students who have the first school and lower educational level in their mother/father were 56.0% (n: 462), and 33.2% (n: 274), respectively.

Obtained CBSS scores of students range from 14 to 42 points, and the mean score was 34.34 ± 6.43 . Cyber-bullying sensibility level was higher in two Anatolian high schools' students than the vocational school students ($p < 0.05$).

Cyber-bullying sensibility level was higher in girls than in boys ($p < 0.05$). Cyber-bullying sensibility level was lower in 16 and upper age group than the other age groups ($p < 0.05$).

Those with his/her mother's "high school and university" educational level, and those with his/her father's "university" educational level have a higher cyber-bullying sensibility level than the others (for each one $p < 0.05$).

In the study, it was could not find any relation between cyberbullying sensibility level and family type, living with his/her family, type of personality and overweight/obese parameters (for each one, $p > 0.05$).

The distribution of the median scores of the Cyberbullying Sensibility Scale according to some socio-demographic characteristics was presented in Table 1.

Table 1. The distribution of the median scores of the Cyberbullying Sensibility Scale according to some socio-demographic characteristics

Some Socio-demographic Characteristics (N: 825)	n	Score of Cyberbullying Sensibility Scale Median (min-max)	Test value z/KW; p
Name of High School			50.360; <0.001
Fatih Anatolian High School	174	38.0 (20-42)	
Salih Zeki Anatolian High School	127	37.0 (14-42)	
Yunus Emre Vocational High School	524	34.0 (14-42)	
Gender			4.879; <0.001
Girl	236	38.0 (14-42)	
Boy	589	35.0 (14-42)	
Age groups (year)			13.367; <0.001
14	190	36.0 (14-42)	
15	533	36.0 (14-42)	
>16	102	32.5 (14-42)	

Family type			
Nuclear	686	36.0 (14-42)	5.610; 0.060
Extended	86	34.5 (14-42)	
Fragmented	53	34.0 (14-42)	
Living with his/her family			
No	51	35.0 (14-42)	0.859; 0.390
Yes	774	36.0 (14-42)	
Type of personality			
A type	477	35.0 (14-42)	0.494; 0.621
B type	348	36.0 (14-42)	
Overweight/obese			
No	756	36.0 (14-42)	0.056; 0.956
Yes	69	35.0 (14-42)	

Source: Author

Cyber-bullying sensibility level was found to be higher among those with internet access in their residents ($p < 0.05$).

Cyber-bullying sensibility was higher among the mobile phone users ($p < 0.05$). There was a weak correlation between the duration of daily mobile phone use and the level of cyber-bullying sensibility ($p < 0.05$).

4. DISCUSSION

It is expected that efforts will be made to develop sensibility on cyber-bullying in communities where the cyber environment is part of life. These efforts will also give fruit over time (Tanrikulu *et al.*, 2015). In the study, the mean CBSS score of the students participating in the study was 34.34 (max: 42). According to the mean score, it can be considered that the cyber-bullying sensibility level of the study group is quite high.

In our study, Anatolian high school students had a higher level of sensibility on cyber-bullying than vocational high school students ($p < 0.05$). This result can be attributed to the fact that Anatolian high school students have higher academic success than their vocational high school students and their families have a higher education level and Anatolian high school students have higher socioeconomic level families than the others. Another our result that supports this result was that cyber-bullying sensibility is higher in students with mothers and father's higher education level ($p < 0.05$). In a study conducted in China, it also reported that poor students were associated with virtual bullying victimization (Chang *et al.*, 2015).

Both Turkey and in many studies conducted in various countries around the world were reported that the higher frequency for cyber-bullied persons in boys, and girls have a higher frequency of cyber-bullying victim (Hemphill and Heerde, 2014; Marcum *et al.*, 2012; Peker *et al.*, 2012; Snell and Englander, 2010). However, it is also reported that the gender differs have shown tends to decrease in terms of becoming a cyber-bullied person and becoming a victim of cyber-bullying (Barlett and Coyne, 2014). In line with the results of these studies, it can be expected that girls have a higher level of cyber-bullying sensibility. There was also a result of our study ($p < 0.05$).

In the study, the cyber-bullying sensibility level of students aged 16 and over was lower than that of students aged 14 and 15 ($p < 0.05$). This result should be regarded as a sign so that Turkey was gathered the fruits of efforts on the sensibility of cyber-bullying made, recently.

B-Type personality was thought to be more suitable for high cyber-bullying sensibility because of its features. The result of a study from Greece can be shown as a support to our thought. Kokkinos *et al.* (2013) were reported that those who use aggression, passive avoidance and situation control to cope with interpersonal stressors were more likely to be cyber-victimized. However, it was not found any difference between A-Type and B-Type personalities in terms of cyber-bullying sensibility level in our study ($p > 0.05$). This may be because the personality types were determined by the students themselves. In the study, anyone personality scale was not used. In the literature, any study investigating the relationship between A-type and B-type personality with cyber-bullying sensibility was not found. Along with that, Eksi (2012) was reported that narcissistic personality has an indirect effect on cyber-bullying.

Having a nuclear family and living with their family indicate that their families are more interested in the students. Parental control is important in terms of the fight on cyber-bullying in the adolescent age high school students.

In a study that reported parental attitude and cyber-bullying, Eastern Asian originated Canadians that is seen less of cyber-bullying, it is known that there is the more parental control on Eastern Asian originated Canadians than European origin Canadians. However, in our study any relationship is found between family type, living with his/her family and cyber-bullying sensibility.

Being overweight/obese is directly related to body appearance on adults. Teenagers that don't like his/her body appearance are mostly a victim of cyber-bullying. For this reason, we expected the cyber-bullying sensibility level higher on overweighed/obese high school students. But in this study, the relation between being overweighed and cyber-bullying sensibility is not found. In a study from Brazil, it is reported that the cyber-bullying is underrepresented on the teenagers who live in a city and has a pleasant appearance. In a study from China, there are more victims of cyber-bullying between overweight/obese students. And it is reported that there is no relationship between being overweight/obese and cyber-bullying (da-Costa *et al.*, 2015; Liu *et al.*, 2016; Shapka and Law, 2013).

Keith and Martin (2005) wrote a manuscript about creating a culture of respect in a cyber-World in 2005. As life evolved in the cyber world, cyber-bullying problems were inevitable. But in time the fight against cyber-bullying started and began to form a culture. This study's results indicate those who have internet access in their residents, mobile phone users, and the long-time duration of daily mobile phone users have higher cyber-bullying sensibility than the others (for each one, $p < 0.05$). These results point to the fact that, after a sufficient period of time, the students of the study group who were part of the daily life of the cyber world evolved a cult against cyber-bullying. On the other hand, the effect of the fight against cyber-bullying that the government and non-governmental organizations' effort is cannot be ignored.

Limitations: The limitations of this study are: 1) to be a cross-sectional study, 2) to be realized in only three high school studies.

5. CONCLUSION

According to the results of our study, girl students, and the students those his/her mother graduated from high school and upper, and the students who's his/her father graduated from university, and those who have internet access in their residents, and mobile phone users have the high level of cyber-bullying sensibility. It may be helpful to inform students about control of the internet and mobile phones usage in order to increase cyberbullying sensibility. Additionally, to plan guidance services, and to provide help to students who are exposed to cyberbullying are important efforts in terms of cyberbullying sensibility.

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