Examining the opinions of high school students regarding their awareness of being a virtual victim

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Abstract

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This research investigated high school students' awareness of being a virtual victim. The "Virtual Victim Scale" was used to measure awareness. The scale consists of 19 items and three subscales. The data obtained from the research were examined in terms of "blocking and harming in the virtual environment", "creating rumours in the virtual environment", and "sexual bullying in the virtual environment". For this purpose, students studying from 9th grade to 12th grade in high schools in the Buca district of Izmir province in the 2023-2024 academic year were selected. Three hundred ninety-seven students participated in the research. Of the participants, 214 were girls and 183 were boys. The age range of the students is 14 to 19. According to the findings, a significant difference was found between students' awareness of being a virtual victim in terms of "obstructing and harming in the virtual environment" and "creating rumours in the virtual environment" according to gender. It was understood that male students were significantly more aware of being virtual victims than female students. When the average of students' awareness of virtual victims by age is examined, it is seen that 15-year-old students for the dimensions of "preventing and harming in the virtual environment" and "creating rumours in the virtual environment"; For the "sexual bullying in the virtual environment" dimension, 17-year-old students' awareness is higher than students of other ages. A significant difference was found between students' awareness of being a virtual victim in all sub-dimensions according to age.

Key Words: Virtual victim, high school students, victim.

Introduction

Today, rapid progress and transformations in information technologies cause young people to be significantly affected by this process's positive and negative effects (Livingstone & Brake, 2010). Especially the fact that many young people have social media accounts and that these areas are

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outside the supervision of their parents makes it necessary for young people to be aware of the negativities they may encounter. In this sense, high school students need to increase their awareness of situations where they may become virtual victims so that they can take necessary precautions. Virtual victimisation is when a person or group is deliberately exposed to negative behaviour by the person or people they communicate with through technological devices in virtual environments and suffers material and moral damage (Arıcak et al., 2012; Yuluğ, 2020).

Various studies have noted the existence of some factors associated with cyberbullying and cyber victimisation but have avoided identifying them as direct causes. These factors include gender, age, socio-economic status, frequency of internet use, family approaches and personality characteristics. Although there is no definitive consensus on the causes of cyberbullying behaviours, these factors have been influential (Gönültaş, 2019). There are different views on the impact of gender on cyberbullying. Some studies have stated that girls tend to bully more, while others indicate that boys tend to bully more (Keith & Martin, 2005; Erdur-Baker & Kavşut, 2007). For example, Altundağ (2016) found that male students at the high school level were more likely to be victims of cyberbullying than females. Various views on gender may result from research conducted in different geographies and times.
Additionally, it has been stated that individuals who bully generally have more dominant, easily angered personalities, have low problem-solving skills, have difficulty complying with the rules, and resort to violence (Serin, 2012). The impact of age on cyberbullying is also debated without a clear consensus. Gönültaş (2019) stated that some studies argue that age is an important factor, while others argue that it has no effect. Williams and Guerra (2007) showed that cyberbullying varies according to grade level in their study of 5th, 8th and 11th-grade students selected as samples. Accordingly, it was observed that the highest cyberbullying and victimisation was generally experienced among secondary school students. In general, the lack of consensus on the relationship between age and cyberbullying indicates the need for research on larger age groups in this area.

Cyberbullying Tools

Cyberbullying has become a widespread phenomenon with the increasing use of technological devices. With the rapid advancement of technology, various technological devices have become part of people's daily lives, and thanks to the internet, individuals have gained the ability to communicate online without any space or time limitations. Since digitally competent individuals need to be interactive and productive in the digital environment, they are also expected to be conscious citizens of the digital world (Altunkaynak & Çağımlar, 2023). This constant online communication has led to a more active interaction with the world and, in addition to enriching our lives with its positive aspects - entertainment, sharing, communication - has also brought about a new form of bullying, namely online bullying (İğdeli, 2018). The widespread use of smartphones has significantly increased the possibility of continuous and instant access to the internet so that individuals can reach others at any time. Cyberbullying can occur through a variety of communication tools, such as emails, instant messaging applications, social media

platforms, online games, and written, audio, and visual messages sent via mobile devices. In this digital age, where communication is not permanently established in positive ways, when these tools are misused, they can turn into tools of cyberbullying. This situation draws attention to the benefits of technology in our lives and its potential dangers and undesirable consequences.

Cyberbullying is a phenomenon that emerges with the advancement of technology and is carried out through various tools. These tools and their use in cyberbullying can be categorised as follows:

Telephone: Cyberbullying can be carried out by methods such as disturbing the person with phone calls or sending inappropriate photos, messages and videos. Such content can be distributed to large groups without the victim's consent and may contain threatening messages, damaging the victim's self-confidence (Metin, 2017; Bhat, 2008).

Email: Emails containing damaging or hurtful content can be quickly delivered to a broad audience. These e-mails may contain verbal, audio, and visual materials and can be spread in a chain (Bhat, 2008).

Instant Messaging: Mutual or group conversations occur through various instant messaging platforms. Cyberbullies can use these platforms to send derogatory, threatening and harassing messages to target people (Nuccitelli, 2007; Willard, 2007).

Chat Rooms: Chat rooms where real-time conversations take place offer the opportunity to move into private conversations and can lead to social exclusion. Situations such as misuse of personal information, displaying risky behaviour, use of anonymous identities and harassment of the victim may occur in these environments (Willard, 2007; Bauman, 2014).

Forums: Forum sites where discussions on specific topics take place are an environment where cyberbullies tend to humiliate, threaten other people and send harmful content. You can remain anonymous on these sites using your membership information (Metin, 2017; İğdeli, 2018).

Social Networking Sites: These sites, where personal accounts are created and different contents are shared, can be used as a threat to individuals' private lives. Bullying, which occurs through the publication of photos, documents or videos that others may not like, can be humiliating (Metin, 2017; İğdeli, 2018).

Blogs: Blogs where diaries and thoughts are shared can be used to make disturbing comments about others, which can be considered cyberbullying (Bhat, 2008).

Social Networking Sites: These platforms include features such as instant messaging, photo and information sharing, and may cause security problems when sharing personal information. The superficial nature of relationships creates difficulties in terms of privacy and makes it easier for cyberbullying to occur (Bauman, 2014); (Metin, 2017).

These tools act as factors that facilitate cyberbullying to occur and, therefore, need to be taken into account in combating cyberbullying.

Tools used for cyberbullying include social media platforms, instant messaging applications, emails, online games and mobile phones. These tools can facilitate cyberbullying, causing people to harm others anonymously.

This research aims to determine high school students' awareness of being a virtual victim. For this purpose, the distinctive roles of students' demographic factors on awareness were revealed. This study is critical because there are not enough studies in the literature that have a consensus on

demographic factors such as gender and age, both in terms of cyberbullying and cyber victimisation.

Method

Research Design

The study used the relational screening method, one of the quantitative research designs, to reveal the awareness of virtual victims among high school students. The relational screening method is defined as the model used to determine the relationship between two or more variables (Büyüköztürk et al., 2018). The independent variable of the research is the descriptive data of the students, and the dependent variable is the responses of high school students to the sub-dimensions of the research, which are "blocking and harming in the virtual environment", "starting rumours in the virtual environment" and "sexual bullying in the virtual environment".

Participants

The research population includes students studying from the 9th to the 12th grade in high schools in the Buca district of Izmir province in the 2023-2024 academic year, and students in a particular grade range constitute the limitation of the research. Unlike the limitations of the research, an attempt was made to reach all the students in the sample selection.

Table 2. Descriptive statistics for demographic factors

Demographic Characteristic		**N**	**%**
Gender	Female	214	53,9
	Male	183	46,1
Age	14 years old	18	4,5
	15 years old	69	17,4
	16 years old	103	25,9
	17 years old	113	28,54
	18 years old	76	19,1
	19 years old	18	4,5

According to Table 1, 53.9% of the participants are female and 46.1% are male. 4.5% of the participants are 14 years old, 17.4% are 15 years old, 25.9% are 16 years old, 28.54% are 17 years old, 19.1% are 18 years old, and 4.5% are 'i is 19 years old.

Data Collection Tools

The "Cyber Bully / Victim Scale" developed by Ayaş and Horzum (2010) consists of a total of 19 items and three factors in order to reveal the cyberbullying and exposure levels of students who "cyberbully" their peers and "are cyberbullied". The cyberbully scale consists of two parallel scales, the first defined as the "virtual bully scale" and the second as the "virtual victim scale", consisting of the same items asked differently. Students are expected to mark how often they use the words and actions in the cyberbully scale and how often they engage in these words and actions in the

virtual victim scale. The lowest score that can be obtained from the cyberbully and victim dimensions of the scale is 19, and the highest score is 95. As the scores increase, the situation of being a bully and a victim increases. In this study, the "Virtual Victim Scale" was used, and an attempt was made to determine the students' exposure to cyberbullying. Cronbach's alpha internal consistency coefficients are taken as a basis to control the normality distribution of the data, and this value must be at least 70% (Gürbüz & Şahin, 2018). Considering the factors' Cronbach alpha internal consistency coefficients, the alpha value was calculated for the entire scale (α=.89), and the alpha values calculated for the sub-dimensions are given in the table below.

Table 1. Cronbach's alpha internal consistency coefficients of the scale and sub-dimensions

Lower dimension	**Cronbach alpha internal consistency coefficient**
Blocking and damaging in the virtual environment	,94
Creating rumours online	,73
Sexual bullying online	,93

Analysis of Data

The data obtained in the research were analysed through the SPSS 22.0 program. In this context, descriptive statistics were used for the demographic characteristics of the participants. Before analysing the research data, variance analysis and regression analysis assumptions were considered. Average values calculated with the Compute Variable in the program were used for scale expressions. The study used independent groups' t-tests and one-way analysis of variance (ANOVA) to determine the differences between groups. Post hoc analysis was conducted to determine which variables caused these differences.

The tables and their comments prepared for the findings obtained from the research will be examined under this heading.

Findings

Table 3. Descriptive statistics regarding scale sub-dimensions

Lower dimension	N	Min	Max	Mean	Std. Deviation
Blocking and damaging in the virtual environment	397	1,00	4,13	1,7758	,76167
Creating rumours online	397	1,25	4,50	2,0680	,76383
Sexual bullying online	397	1,00	4,00	1,7690	,74473

According to the values calculated for the sub-dimensions in the "Virtual Victim Awareness Scale", the average value for "preventing and harming in the virtual environment" is 1.7758; The

average value for “creating rumours in the virtual environment” is 2.0680; It was found to be 1.7690 for "sexual bullying in the virtual environment". According to the results, the highest awareness among high school students is seen when students spread rumours in the virtual environment.

Table 4. T-test of high school students' awareness of being a virtual victim according to gender

Variable	**Groups**	**N**	**$\bar{x}$**	**Sd**	**t**	**df**	**p**
Blocking and damaging in the virtual environment	Female	214	1,4439	,42437	10,635	395	,000
	Male	183	2,1639	,87780			
Creating rumours online	Female	214	1,7477	,46974	10,130	395	,000
	Male	183	2,4426	,86570			
Sexual bullying online	Female	214	1,7223	,72377	1,352	395	,177
	Male	183	1,8236	,76689			

When the t-test results of high school students' virtual victim awareness are examined according to gender, it is seen that the sub-dimensions of "blocking and harming in the virtual environment" and "making rumours in the virtual environment" differ according to the student's gender. The difference in question is statistically significant ($p<.05$). When the answers given regarding the reason for the difference were examined together with their average values, it was seen that the situation was because male students expressed their virtual victimisation status more than female students. In addition, no significant difference was detected between the "sexual bullying in the virtual environment" sub-dimension and gender.

Table 5. Mean and standard deviation values of high school students' virtual victim awareness according to age

Dimensions	Group	N	Mean	Std. Deviation
Blocking and damaging in the virtual environment	14 Age	18	1,1875	,19294
	15 Age	69	2,5091	1,13786
	16 Age	103	1,8265	,52254
	17 Age	113	1,6493	,60316
	18 Age	76	1,3898	,30752
	19 Age	18	1,6875	,70743
	Total	397	1,7758	,76167
Creating rumours online	14 Age	18	2,1250	,12862
	15 Age	69	2,9529	,97324
	16 Age	103	1,8786	,42134
	17 Age	113	1,7699	,49455
	18 Age	76	1,8191	,68993
	19 Age	18	2,6250	,64312
	Total	397	2,0680	,76383
Sexual bullying online	14 Age	18	1,8730	,50183
	15 Age	69	1,8364	,94959
	16 Age	103	1,7143	,61266
	17 Age	113	1,9166	,86006
	18 Age	76	1,6184	,53063
	19 Age	18	1,4286	,52546
	Total	397	1,7690	,74473

According to the age of the students, the highest awareness in the dimension of "obstructing and harming in the virtual environment" and "creating rumours in the virtual environment" is in the 15-year-old group; The highest awareness in the dimension of "sexual bullying in the virtual environment" is in the 17 age group.

Table 6. ANOVA and posthoc analysis results of high school students' virtual victim awareness according to age

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**	**Tukey HSD**
Between Groups	56,864	5	11,373	25,723	,000	14 age/15-16 age 15 age /14-16-17-18-19 age 16 age /14-15-18 age 17 age /15 age 18 age /15-16 age 19 age /15 age
Within Groups	172,871	391	,442			
Total	229,735	396				
Between Groups	78,116	5	15,623	39,946	,000	14 age /15 age 15 age /14-16-17-18 age 16 age /15-19 age 17 age /15-19 age 18 age /15-19 age 19 age /16-17-18 age
Within Groups	152,922	391	,391			
Total	231,039	396				
Between Groups	7,087	5	1,417	2,607	,025	15 age /19 age 16 age /17 age 17 age /16-18-19 age 18 age /17 age 19 age /15-17 age
Within Groups	212,542	391	,544			
Total	219,629	396				

According to the averages of high school students' awareness of being a virtual victim in terms of sub-dimensions, It was concluded that the statistical difference between "blocking and harming in the virtual environment" [F (5, 391) = 25.723] and the age of the students was significant. According to the results of the post-hoc analysis regarding the reason for this difference, Between 14-year-old students and 15-16 age group students, 15-year-old students and 14-16-17-18-19 age group students, 16-year-old students and 14-15-18 age group students, 17-year-old students and 15-year-old students, It was determined that there was a significant difference between 18-year-old students and 15-16-year-old students, and between 19-year-old students and 15-year-old students in terms of their answers. When the Tukey HSD results are examined together with the average values, students in the 15 and 16 age groups are more aware of obstruction and harm in the virtual environment than students of other ages.

According to the "creating rumours in the virtual environment" sub-dimension [F (5, 391) = 39.946], it was concluded that the statistical difference in terms of the age of the students was significant. According to this, 14-year-old students with 15-year-old students, 15-year-old students with 14-16-17-18-year-old students, 16-year-old students with 15-19-year-old students, 17-year-old students with 15-19-year-old students, 18-year-old students with 15-19-year-old students, 19-year-old students A significant difference was found between the students in the 16-17-18 age group and their answers in terms of their answers. When the Tukey HSD results are evaluated together

with the average values, it is seen that students in the 15- and 19-year-old age groups have a higher level of awareness about creating rumours in the virtual environment than students in other age groups.

When the findings regarding the "sexual bullying in the virtual environment" sub-dimension were examined, it was concluded that the statistical difference according to the age of the students was significant with [F (5, 391) = 2.607]. A significant difference was found between the answers given by the students between the ages of 15 and 19, between the ages of 16 and 17, between the ages of 17 and the 16-18-19 age group, between the ages of 18 and 17, and between the students between the ages of 19 and 15-17. When the Tukey HSD results were evaluated with the average values, it was understood that the average values of the students' answers were close. However, in favour of the 17-year-old students, their awareness of sexual bullying in the virtual environment was higher than other age groups.

Results

This study used the "Cyber Bully / Victim Scale" developed by Ayaş and Horzum to examine high school students' awareness of being a virtual victim. The scale consists of 19 items and three sub-dimensions. Three hundred ninety-seven high school students studying between the 9th and 12th grades were selected to determine the participants. Some conclusions were reached within the scope of the research. These:

1. 214 students are girls and 183 are boys; Age ranges are 14 and 19.
2. According to the findings of the research, it is seen that the dimension in which students have the highest level of awareness regarding their awareness of being a virtual victim is "creating rumours in the virtual environment" ($\bar{x}$ = 2.0680). It is seen that the average scores in the dimensions of "blocking and harming in the virtual environment" ($\bar{x}$ = 1.7758) and "sexual bullying in the virtual environment" ($\bar{x}$ = 1.7690) are close to each other.
3. According to the findings, a significant difference was found between students' awareness of being a virtual victim in terms of "obstructing and harming in the virtual environment" and "creating rumours in the virtual environment" according to gender. Male students' average awareness of being blocked and harmed in the virtual environment was higher than female students. In addition, the average awareness of male students regarding spreading rumours in the virtual environment is higher than that of female students. All these results show that male students have significantly more awareness of being a virtual victim than female students.
4. When the averages of students' awareness of virtual victims according to age are examined, for the dimensions of "obstructing and harming in the virtual environment" and "creating rumours in the virtual environment", 15-year-old students, For the "sexual bullying in the virtual environment" dimension, 17-year-old students' awareness is higher than students of other ages.
5. When the findings were examined, a significant difference was found between the students' awareness of being a virtual victim in all sub-dimensions.

References

Altundağ, Y. (2016). The relationship between cyberbullying and problematic internet use in high school students. *Online Journal of Technology Addiction & Cyberbullying, 3*(1), 27–43.

Altunkaynak, M. & Çağımlar, Z. (2023). The effect of the programme prepared for the development of digital fluency in Turkish lessons on the digital fluency of classroom teachers. *Journal of Mother Tongue Education, 11*(3), 580-599.

Arıcak, O. T., Tanrıkulu, T., & Kınay, H. (2012). Initial psychometric findings of the cyber victimisation scale. *Mediterranean Journal of Educational Research, 11*, 1-6.

Ayaş, T., & Horzum, M. B. (2010). Virtual bully/victim scale development study. *Academic View Journal, 19,* 1-17.

Bauman, S. (2014). *Cyberbullying: What counsellors need to know.* New York City: John Wiley & Sons.

Bhat, C. (2008). Cyber Bullying: Overview and Strategies for School Counsellors, Guidance Officers, and All School Personnel. *Australian Journal of Guidance and Counselling, 18*(1), 53–66.

Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2018). *Scientific research methods (24th ed.).* Ankara: Pegem Akademi Publications.

Erdur-Baker, Ö., Kavşut, F. (2007). The new face of peer bullying: Cyberbullying. *Eurasian Journal of Educational Research 27*, 31-42.

Gönültaş, M. (2019). Investigating university students' cyberbullying and cyber victimisation levels according to problematic internet use levels and demographic variables (Master's Thesis) —Ege University Institute of Social Sciences, Izmir.

Gürbüz, S. and Şahin, F. (2018). *Research Methods in Social Sciences (5th Edition).* Ankara: Seçkin Publishing.

İğdeli, F. (2018). Investigation of university students' cyberbullying, cyber victimisation and cyberbullying sensitivity in the context of various variables (Master's Thesis). Eskişehir, Anadolu University Institute of Educational Sciences.

Keith, S. & Martin, M.E. (2005). Cyber-Bullying: Creating a Culture of Respect in a Cyber World. Reclaiming Children and Youth. *The Journal of Strength-based Interventions, 13*: p. 224.

Livingstone, S., & Brake, D. R. (2010). On the rapid rise of social networking sites: New findings and policy implications. *Children & Society, 24*(1), 75–83.

Metin, K. E. (2017). Secondary school teachers' levels of cyberbullying and coping strategies with cyberbullying. *Journal of Education and Social Research, 4*(2), 33–49.

Nuccitelli, M. (2014). Cyberbullying examples, bullying and cyberbullying tactics, Retrieved from https://goo.gl/aonpby

Serin, H. (2012). Cyberbullying/cyber victimisation experiences in adolescents and the views of teachers and educational administrators on these behaviours (Doctoral Thesis). Istanbul University Institute of Social Sciences.

Willard, N. (2007). *Cyberbullying and cyberthreats: Responding to the challenge of online social aggression, threats and distress (3rd bs.).* Champaign: Research Pres.

Williams, K.R. & Guerra, N.G. (2007). Prevalence and predictors of internet bullying. *Journal of Adolescent Health, pp. 41*, 14–21.

Yuluğ, E. (2020). Internet addiction, cyber victimisation and psychosocial assessment in sexually abused children (Specialization Thesis). Mersin, Mersin University Faculty of Medicine, Department of Forensic Medicine.