The relationship between the cyberbullying/cybervictmization and loneliness among adolescents

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ARTICLE INFO

ABSTRACT

This study focuses on the relationship between the concepts of cyberbullying/cybervictimization and loneliness. The subjects of the study were 389 secondary school students, of whom 159 were boys and 230 were girls, from various schools in the city of Trabzon. The study was carried out in the fall semester of the 2009–2010 academic year. The Loneliness Scale (UCLA) and the Cyberbullying Scale were used in the study. Correlation technique, multiple regression analysis and independent *t* test, were employed for statistical analysis. The study concluded that there was a significant correlation between becoming a cybervictim and loneliness among adolescents. Loneliness predicted by cybervictimization. These results were discussed and some conclusions were made.

1. Introduction

There have been rapid developments in the field of Information and Communication Technologies (ICT) for the last ten years. As a result of this, people have begun to widely use means of modern technologies such as cell phones and internet in order to communicate (Privitera, Campbell, and Campbell, 2009). This is very important not only for the grown up but also the young people. Related research reports that 97% of the young in the USA have access to internet in some way or another (Lathouwers, Moor, and Diden, 2009). At first glance, this might seem to be an advantage since people meet their needs for communication effectively, but it may affect their social lives in a negative way as well. It can easily be stated that young people and children may be subjected to some unfavorable circumstances on the net. One of these anti-social and aggressive circumstances, among many caused by the virtual media, is cyberbullying.

1.1. Cyberbullying and cybervictimization

One of the danger children and the young face nowadays is cyberbullying, which derives more and more attention from the scientific circles recently. There have been various classifications and definitions of this phenomenon in the international literature. Ybarra and Mitchell (2004) define cyberbullying as a behavior indirectly the same as traditional bullying behavior but one which is a little different in terms of its repetitive nature and psychological violent content. According to Patchin and Hinduja (2008) cyberbullying is a kind of behavior in the virtual environment which contains deliberate and

repetitive violence and insult. Li (2007) defines the term cyberbullying as repetitive and destructive sense or attitude of damaging others through the use of cell phones, internet, e-mail etc. Willard (2004) proposes seven categories of cyberbullying: flaming, online harassment, cyber talking, denigration, masquerade, outing and exclusion. In a study conducted on 813 adolescents, Dehue, Bolman and Vollink (2008) concluded that 16% of the participants were involved in cyberbullying behavior. They also concluded that more boys showed such a behavior than girls. Some studies focused on the electronic means used in cyberbullying. Patchin and Hinduja (2008) found that the most widely used ones were PCs (by sending e-mails, hacking the personal web sites, by sending obscene and dishonorable messages) and cell phones (by sending messages containing menace and humiliation). These findings lead to a question whether there is a relationship between cyberbullying and the use of PCs and the internet. The recent number of internet users across the world is significant to answer this question. An Independent survey company estimated this number as 1.733.993.741 in a study conducted in September 2009 (Internet World Statistics, 2009). In Turkey, this number is reported to be about 26.500.0009. According to a 2009 report revealed by Turkish Statistical Institution (TSI) 10, 39% the residences in Turkey have internet access. Another eye-catching issue is the age groups of internet users. TSI (2009) also reports that mostly people in 16–26 age group use internet in Turkey. Given these issues, the problem of cyberbullying among the young is one that needs some urgent and utmost attention.

1.2. Relations with variables

Perhaps its reason rather that the definition and prevalence of cyberbullying get attention. To know about what variables affect

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cyberbullying is of great importance in conducting studies to suggest some measures and solutions. Some studies have been done on cyberbullying according to some variables such as intelligence, self-confidence and depressive feelings (Diden et al., 2009) and traditional bullying, empathy (Topçu, 2008), psychological symptoms which are hostile feelings and psychotic symptoms (Arıcak, 2009; Tynes and Giang, 2009). It has been documented by related research that cyberbulliers are people who need social support, have unhappy feelings and eager to use drugs (Srabstein and Piazza, 2008). In connection to this it has been revealed that cybervictims experience unhappiness, depression, disappointment (Ybarra, 2004) and have problems in adaptation to the environment Patchin and Hinduja (2008). In this sense it has been determined that feeling of loneliness is related to alcoholism, unhappiness and social shyness (Åkerlind and Hörnquist, 1992; Oullet and Joshi, 1986). So that reason loneliness is an important issue in cyberbullies and cybervictims. It is also crucial to reveal relationship between cyberbullying and cybervictimization behaviors of individuals and perception of loneliness in terms of providing more assistance to those ones. Recent studies show that, in spite of the existence of many variables affecting cyberbullying, investigations on the relationship between cyberbullying and loneliness has remained a little neglected or ignored. This study is important in terms of filling the gap in the related literature.

1.3. Purpose of the study

There seems to be a close relationship between loneliness and the concepts of cyberbully/cybervictim, for technological developments can directly affect our psycho-social development and mutual relationships. To this end, this study dwells on the relationship between loneliness and the phenomenon of cyberbully/cybervictim.

2. Method

2.1. The study group

The study was conducted with 389 secondary school children, 159 of whom were boys (40.9%) and 230 girls (59.1%), in the fall semester of 2009–2010 academic year in Trabzon.

2.2. Data collection tools

2.2.1. Cyberbullying scale (CBS)
The scale, developed by Topçu (2008), uses two forms containing 26 items of Likert scale to uncover cyberbullies and cybervictims. The Cronbach reliability factor of the scale has been calculated as .86. Assessment was based upon the total points collected through the scale.

2.2.2. Loneliness scale (UCLA)
The UCLA Loneliness Scale was developed by (Russell, Peplau, and Ferguson 1978) to assess an individual's subjective feelings of loneliness or social isolation. The Cronbach internal reliability factor of the scale, which was translated into Turkish by Demir (1989), has been calculated as .96. The five week test-after-test reliability factor of

Table 1
Correlations.

	1	2	3
1. Being a cyberbully	1		
2. Cybervictim	.738**	1	
3. Loneliness	.036	.104*	1
Mean	1.390	1.506	2.584
SD	0.488	0.501	0.297

* Correlation is significant at the 0.05 level.
** Correlation is significant at the 0.01 level.

Table 2
Predicting cyberbullying.

Predictor variables	B	SE	B	t
(Constant)	.081	.126		
Lonelineless	.035	.048	.036	.717

R = .03, R² = .01, and corrected Adjusted R² = −.01.

the scale is .94. This scale has widely been used in studies focusing on loneliness.

2.3. Data analysis

Measurement was performed during students' class time and completed in around 20 min. The data obtained from the collection procedure was then prepared for the appropriate statistical procedures on computer, using SPSS 15.0. Correlation technique, multiple regression analysis and Independent t test, were employed for statistical analysis. The results are presented in tables.

3. Results

3.1. Explaining the relationship between cyberbullying, cybervictimization and loneliness

Table 1 contains the results of the correlations. In the analysis, no relationship was found between points of cyberbullying and those of loneliness. However, there appeared a low but positive correlation between the points of cybervictimization and those of loneliness (r = 0.104, p < 0.01). Additionally, it can be said that there is a positive relation between the points of being a cybervictim and cyberbullying (r = 0.738, p < 0.05).

Tables (2) and (3) contain the results of the multiple regression analyses to predict cyberbullying and cybervictimization. It has been found out that loneliness is not a meaningful predictor of cyberbullying. On the other hand loneliness (t = 2.062, p < 0.05) predicted cybervictimization.

Data analysis demonstrated that there was no significant statistical correlation between the points of loneliness of the cyberbullies. However, there was a significant relationship between the high points of loneliness of the cybervictims and the lower ones (t = −2.199, p < 0.05) (Table 4).

4. Discussions and suggestions

It would be possible to claim that the findings of the study shed light on the 21st century profile of the concepts of cyberbullying and cybervictimization. While technology plays a crucial role in terms of making our lives easier, it creates many problems which, according to some scientific circles, can wipe out its positive effects (Christofides, Muise and Desmarais, 2009; Fogel and Nehmad, 2009). Especially developments in information technologies have recently created some rattling side effects especially in the lives of the young. This is why cyberbullying and cybervictimization have been of utmost importance in recent years.

The contribution of this study to the literature is that it determines and evaluates the variables of cyberbullying and cybervictimization.

Table 3
Predicting cybervictimization.

Predictor variables	B	SE	B	t
(Constant)	.929	.115		
Lonelineless	.091	.044	.104	2.062*

R = .10, R² = .04, and Adjusted R² = −.01.
* t value is significant at the 0.05 level.

Table 4
Results of the ındependent t test examining the relation between cyberbullying and being a cybervictim.

	Points of loneliness	N	$\bar{X}$	S	sd	t	p
Being a cyberbully	High	166	30.228	7.629	387	− 0.440	0.660
	Low	223	30.560	7.142			
Being a cybervictim	High	166	29.427	5.563	387	− 2.199	0.028[*]
	Low	223	30.878	7.452			

[*] t value is significant at the 0.05 level.

Recent studies found some significant correlations between cyberbullying and empathy, bullying, depression and use of internet (Blais, 2008; Harcey, 2007). However, the variables describing cyberbullying and cybervictimization are not limited to these findings. Loneliness is thought to be an important variable. It is one of the most important problems affecting human beings in modern age (Özkürkçügil, 1998), which reaches its peak in adolescence (Brennan, 1982; Ostrov and Offer, 1980). When related literature is examined it can be seen that there are studies which reveal relationships between loneliness and use of technological devices such as mobile phones and computers (Amichai-Hamburger and Ben-Artzi, 2003; Moody, 2001). Thus, it becomes reasonable to seek a correlation between the use of technology, which is widespread among adolescents, and loneliness. This leads to the idea that young people use information technologies to quench their sense of loneliness by communicating with others. To this end, the study looks for any relationship between loneliness and cyberbullying and cybervictimization. In this study, a correlation was found between cybervictims and loneliness while there was no significant correlation between cyberbullying and loneliness, which is a new finding. Then, it is found that loneliness predicted by cybervictimization and there was a significant relationship between the high points of loneliness of the cybervictims and the lower ones. All this findings point out that loneliness is a crucial factor of being cyberbully and cybervictim.

It has been determined that cybervictims experience unhappiness, disappointment and have problems in adaptation to the environment (Patchin and Hinduja, 2008; Ybarra, 2004). It has been stated that individuals who demonstrate those types of behaviors are inclined to loneliness (Åkerlind and Hörnquist, 1992; Oullet and Joshi, 1986). Hence, there is a close relationship between being cyberbully and cybervictim and loneliness. Furthermore, adolescents who are subjected to cyberbullying spend a lot of time on the net and cell phones (DeBell and Chapman, 2003; Lathouwers, Moor and Diden, 2009). The reason of this might be related to the idea that individuals who are inclined to loneliness use mobile phones and internet as a tool for isolating self from the society. This suggests that cybervictims suffer from loneliness. Cybervictims are not aggressive and do not provoke aggressive behaviors. This means that the high level of loneliness of cybervictims can be attributed to bad experiences they have with their peers. Researchers claim that when adolescents are marginalized from peer groups, this may create a psychological trauma, which leads to loneliness (Karahan, Sardoğan, Sar, Ersanlı, Kaya and Kumcağız, 2004). To marginalize others on the net, and to nickname others are among cyberbullying behaviors (Li, 2008; Olweus, 2005). Loneliness and use of internet create an ideal environment for cyberbullying behaviors.

Much of the responsibility to prevent cyberbullying and cybervictimization can be placed upon parents. Since education begins in the family environment, parents should guide their children in effective and correct use of the internet. The way to this guidance goes through empathy and dialogue. Other parties that should take measures and responsibility are schools, teachers and other educational institutions. Studies and organizations aiming to prevent cyberbullying should be initiated in schools. Schools should take more professional help and academic counseling. Determination and helping to persons who suffer from cyberbullying on time will play a crucial role in the solution of the problem. To achieve this successful coordination among all social, governmental and educational institutions is required.

In this study certain limits should be considered. First, the data are not representative of adolescents throughout Turkey because this study conducted only in city of Trabzon. Secondly, all of the data collected in this study were obtained from self-report scales. Therefore, the results may be limited by the adolescents' lack of openness. It is suggested that future studies which focus on other variables that are considered as effective in relations between cyberbulliers and cybervictims and level of loneliness would contribute significantly to the related literature.

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