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An Examination of the Relationship between Cyberbullying Perceptions and Psychological Aggression Behaviours among University Students



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Abstract: The aim of this study is to determine and analyse the relationships between the cyberbullying perceptions of university students and their psychological aggression behaviours. The population of the study in the relationship survey model included 250 university students from different Faculties at Akdeniz University (Antalya/TURKEY). In order to measure the cyberbullying perceptions and psychological aggression behaviours of these university students, the "Cyberbullying Questionnaire" and the "Psychological Aggression Questionnaire" were used. Pearson correlation coefficients were calculated to evaluate the relationships among the variables used in the study. Results of this study revealed that there is a positive and moderate level relationship between cyberbullying perceptions and psychological aggression behaviours. Moreover, there is a negative and high-level relationship between cyberbullying perceptions and gender.

Key words: Cyberbullying Perceptions, Psychological Aggression Behaviours, University Students.

INTRODUCTION

Internet and online technologies have taken their places in our daily life as the world's most popular communication tools. Rapid progress in internet and cellular phone technology has created infinite new areas for youngsters. In the present day, computers, the internet, cellular phones and other technological tools have become a part of youngsters' lives. As such, making friends, sustaining and creating social relationships and creating norms occur through the use of these tools [1].

The benefits of the internet, mostly in terms of education, are unquestionable. Nonetheless, in other technological advancements, problems can occur caused by misuse of the internet. Lately, technologic advancements and usage of the internet mostly by youngsters caused bullying that only previously occurred in schools to be carried forward to technology [2]. With this, a new kind of bullying which started in schools is now prevalent: "cyberbullying" [3].

Cyberbullying is identified as "repeatedly and intentionally supporting hostile behaviors using communication technologies like email, cellular phone, pagers, short message services and websites individually or as a group" in international literature [4]-[5]-[6].

Cyberbullying has been a problem that was first noticed in countries with vast internet access, such as the

United States of America and Canada, but it has since spread worldwide in the last 10 years. It became a focus rapidly because it occurred between youngsters in particular and the results were more devastating than predicted [7]. As this problem has been observed lately in Turkey, experts in education and psychology fields have started working on this subject.

When the literature is examined, it can be seen that cyberbullying is a common problem. Cyberbullied individuals are affected negatively. Serious problems such as low self-esteem, disappointment, psychosomatic symptoms, non-attendance at school, social adjustment disorders, fear of school, academic failure, loneliness, anxiety, depression, avoiding internet usage and suicide are being seen [1]-[2]-[3]-[5]-[8]-[9].

It is stated [10] that cyber victims struggle with loneliness, are often unable to create social relationships, and exhibit aggressive behaviours and it is indicated that the effect of cyberbullying on social relationships is similar to traditional bullying. Also, it is underlined that cyber victims may be unable to develop positive social behaviours.

Despite the fact the cyberbullying victims may have serious psychological problems, most teachers have not noticed that cyberbullying is a serious problem among youngsters. Only a few teachers think that students would harm each other using communication technologies [11]-[12]-[13]-[14]-[15]. Furthermore, even though students see teachers as the authorised people that can prevent cyberbullying, only 30% of teachers are aware of the issue [8].

When studies made about cyberbullying in Turkey are examined, a limited amount of research that identifies students' cyberbullying perceptions are found; however, none of the studies see cyberbullying as a mental problem, and then relate these behaviours to psychological aggression.

When the given information is taken into consideration, the main purpose of this study is as follows: to determine a significant relation between psychological aggression levels of university students who exhibit cyberbullying behaviours. Sub problems related to this purpose are: International Journal of Advances in Computer Science and Technology (IJACST), Vol.2, No.8, Pages : 11-14 (2013) Special Issue of ICET5E 2013 - Held during 16-17 August, 2013, Thailand

- Do cyberbullying behaviour levels and the psychological aggression states of University students differ significantly between genders?
- Do cyberbullying behaviour levels and the psychological aggression states of University students differ significantly between ages?
- Is there a relation between cyberbullying behaviour levels and psychological aggression states?

METHOD

Study Model

This survey is a scientific study which has been applied according to general browsing patterns. Browsing patterns are the survey approaches that aim to describe a situation that is still continuing or one that is in the past. One of these approaches is a general browsing pattern. This is a layout applied on an example or examples in a universe which consists of many employees in order to pass a general judgment [16].

Study Group

The study was carried out on 250 university students from different Faculties at Akdeniz University in the education year 2012-2013.

Data Collection Tools

In this research, which aims to investigate the relationship between university students' perceived cyberbullying and their psychological aggression behaviours, an information form and two measures were used to collect data.

Personal Information Form

This was developed by researchers and was used to obtain socio-demographic information about participants. There are four questions in the form concerning age, gender, the department they have been studying in and their monthly income.

Sensibility Scale Related to Cyberbullying

A 24 article scale [17] was developed in order to identify the cyberbullying sensibility of youngsters. Cronbach's alpha coefficient was calculated as 0.95 for the scale and the test-over-test reliability coefficient was found to be 0.70. Participants gave their answers in a 4 option Likert type survey as follows: (1) Never, (2) Sometimes, (3) Frequently, and (4) Always. The lowest score for the survey was 24, and the highest score was 96. High scores taken from surveys show that participants exhibit cyberbullying behaviours.

Aggression Questionnaire

This [17] is an updated and translated Turkish version of the Buss-Durkee Hostility Scale. The scale was developed by Buss and Warren (2000) in order to evaluate anger and aggression. This 5 choice Likert type scale consists of 34 articles and 5 sub-scales: Physical Aggression, Verbal Aggression, Anger, Hostility, and Indirect Aggression. Internal consistency of the scale is high, the Cronbach's alpha coefficient is 0.95, and the test-over-test correlation is r=0.48 and 0.76. In the scale, answers are; "1=Not Appropriate to my character", "2=Rather Appropriate to my character", "3=A Little Appropriate to my character", "4=Very Appropriate to my character", "5=Fully Appropriate to my character". Aggression level is decided by examining the subscale and the overall scores in the scale (\leq 29: very low, 30-39: low, 40-44: low-middle, 45-55: middle, 56-59: highmiddle, 60-69: high and \geq 70: very high).

Data Analysis

SPSS software was used for the analysis and a frequency analysis was applied in order to calculate the arithmetic mean, standard deviation and descriptive variable for each item in the measures. A T-test and a One-Way Analysis of Variance (ANOVA) were applied according to variables in order to determine whether the difference between the means is statistically significant. When the results of the variance analysis pointed out significant difference between the groups, a "Dunnet C multiple comparison test" was applied. The level of significance was set at p<0.05. The relationship between university students' perceived cyberbullying and their psychological aggression behaviours was measured with a "Pearson product-moment correlation coefficient". Subquestions were answered with the interpretation of the statistical data acquired through these analyses.

FINDINGS

This study aims to identify whether the differences in the perception of university students on cyberbullying and psychological aggression behaviours are dependent on their demographic qualities. At the same time, the relationship between cyberbullying and psychological aggression behaviours levels was investigated.

In order to find out whether there is a significant difference in the students' perceived cyberbullying (CB) and their psychological aggression behaviours (PAB) levels according to the "sex" variable, a t-test was applied for independent samples in the analysis of the data. The findings are shown in Table 1.

Table 1: The Results of Cyberbullying andPsychological Aggression Behaviour Levels AccordingTo the Variable of "Sex"

	Sex	Ν	X	sd	df	t	Sig.*
СВ	Female	153	1.11	.18	248	.87	.53
	Male	97	1.13	.19			
PAB	Female	153	1.92	.63	248	1.44	.06
	Male	97	2.04	.70			
*p> .05							

02.05

The examination of Table 1 shows that both the cyberbullying and psychological aggression behaviours levels of university students do not point out a significant difference according to the variable of sex.

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In order to find out whether there is a significant difference in the students' perceived cyberbullying and their psychological aggression behaviour levels according to the "age" variable, a one-way analysis of variance (ANOVA) was applied for data analysis and all the assumptions of the analysis have been checked. The findings are shown in Tables 2 and 3.

 Table 2: Descriptive Statistics of the Teachers

 According To the Variable of "Age"

	Age	N	\overline{X}
	18-20 (1)	31	1.102
СВ	21-22 (2)	179	1.125
	23-25 (3)	40	1.076
	18-20 (1)	31	1.449
PAB	21-22 (2)	179	2.024
	23-25 (3)	40	2.097
*p> .05			

Table 3: The ANOVA Results of School Climate and

 Organisational Commitment Levels According To the

 Variable of "Age"

		-					
		Sum of Square	df	Mean Square	F	Sig.*	Dif.
	B.G	.085	2	4.794	1.186	.307	
СВ	W.G	8.803	247	.398			NONE
	Total	8.887	249				
PAB	B.G	9.589	2	.042	12.051	.000	1-2
PAD	W.G	98.263	247	.036			1-2
	Total	107.852	249				1-5
*p:	> .05						

The examination of Table 3 reveals that while the cyberbullying levels of students according to the "age" variable do not show a significant difference, their psychological aggression behaviours levels do. According to the results of the post-hoc analysis, the arithmetic mean of psychological aggression behaviours level scores among students aged 23-25 years (\dot{X} = 2.097) is greater than the arithmetic means of students of 21-22 years old (\dot{X} = 2.024) and those of students aged 18-20 years old (\dot{X} = 1.449). Another difference occurs in the organisational commitment levels between teachers with 6-10 years of service (\dot{X} = 2.6949) and teachers with over 21 years of service (\dot{X} = 2.6949).

The relationship between the students' perceived cyberbullying and their psychological aggression behaviours levels was measured via a "Pearson product-moment correlation coefficient". The findings are shown in Table 4.

Table 4: The Relationship between Cyberbullying and

 Psychological Aggression Behaviours

	0	00			
			СВ	PAB	
СВ		Pearson	1	.374**	
		Correlation			
		Sig. (2-tailed)		.000	
		N	250	250	
РАВ		Pearson	.374**	1	
		Correlation			
		Sig. (2-tailed)	.000		
		N	250	250	

**Correlations is significant at the .01 level (2-tailed)

When Table 4 is examined, the correlation between the students' perceived cyberbullying and their psychological aggression behaviours levels is observed to be positive, significant and linear (r=.374). According to this finding, it is possible to say that the psychological aggression levels of university students who exhibit cyberbullying behaviours are also high.

DISCUSSION

The purpose of this study was to identify the dimensions of university students' perceived cyberbullying and their psychological aggression behaviours and whether these perceptions vary depending upon certain demographic qualities. When the results are examined, it is found that there is not a significant gender-based difference between cyberbullying behaviour levels and psychological aggression states of university students. Additionally, though there was not an age-based significant difference between cyberbullying behaviour levels of university students, there was a difference between their psychological aggression states.

When international literature is examined, it is found that the main research problems are the prevalence of cyberbullying, age-based differences, types of cyberbullying, and its relation to traditional bullying [6].

In the study group, there is no gender-based difference on bullying perceptions and the psychological aggression of students. This shows that bullying perceptions and psychological aggression according to the cyberbullying perceptions of students are equal. The findings in the literature are parallel to these findings [1]-[3]-[6]-[18]-[19].

In addition, it is found that, as age increases, the psychological aggression behaviour of university students increased as well. According to these findings, psychological aggression behaviours of students aged 23-25 are greater. The reason for this could be because these subjects live apart from their families and are reaching the ages at which students become adults [22], [23]. It is noted that one of the most important developmental duties during these stages of passing into adulthood is to manage to create secure romantic relationships while keeping close and warm relationships with one's parents. As a matter of fact, depressive symptoms caused by loneliness of university students can increase their psychological aggression behaviours [24].

According to another finding of the study, a positive, significant and linear relation was found between cyberbullying behaviour levels and the psychological aggression state of university students. According to this finding, as cyberbullying behaviour levels of these university students increases, their psychological aggression behaviours follows the same pattern.

As the ratio of fostering these types of opportunities increases for students who follow technological developments closely, these kinds of problems in schools and universities may increase. Despite the fact that cyberbullying events take place between the doer and the

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Special Issue of ICET5E 2013 - Held during 16-17 August, 2013, Thailandvictim, other students in the school are affected as well.[22] J. J.However, studies show that doers and victims are morethelikely to have psychological problems than the students[23] J.

who are not involved [9]-[10]-[20]-[21].

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