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Values as a Predictor of Cyber-bullying Among Secondary School Students

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Abstract**—**The use of new technologies such internet (e-mail, chat rooms) and cell phones has steeply increased in recent years. Especially among children and young people, use of technological tools and equipments is widespread. Although many teachers and administrators now recognize the problem of school bullying, few are aware that students are being harassed through electronic communication. Referred to as electronic bullying, cyber bullying, or online social cruelty, this phenomenon includes bullying through e-mail, instant messaging, in a chat room, on a website, or through digital messages or images sent to a cell phone. Cyber bullying is defined as causing deliberate/intentional harm to others using internet or other digital technologies. It has a quantitative research design nd uses relational survey as its method. The participants consisted of 300 secondary school students in the city of Konya, Turkey. 195 (64.8%) participants were female and 105 (35.2%) were male. 39 (13%) students were at grade 1, 187 (62.1%) were at grade 2 and 74 (24.6%) were at grade 3. The "Cyber Bullying Question List" developed by Arıcak (2009) was given to students. Following questions about demographics, a functional definition of cyber bullying was provided. In order to specify students' human values, "Human Values Scale (HVS)" developed by Dilmaç (2007) for secondary school students was administered. The scale consists of 42 items in six dimensions. Data analysis was conducted by the primary investigator of the study using SPSS 14.00 statistical analysis software. Descriptive statistics were calculated for the analysis of students' cyber bullying behaviour and simple regression analysis was conducted in order to test whether each value in the scale could explain cyber bullying behaviour.

Keywords**—**Cyber bullying, Values, Secondary School Students

I. Introduction

THE use of new technologies such internet (e-mail, chat rooms) and cell phones has steeply increased in recent years. Especially among children and young people, use of technological tools and equipments is widespread. Although many teachers and administrators now recognize the problem of school bullying, few are aware that students are being harassed through electronic communication [7]. Referred to as electronic bullying, cyber bullying, or online social cruelty, this phenomenon includes bullying through e-mail, instant messaging, in a chat room, on a website, or through digital messages or images sent to a cell phone [19]. Cyber bullying is defined as causing deliberate/intentional harm to others using internet or other digital technologies [25]; [26] . Cyber bullying has recently emerged as a new form of bullying and rassment Cyber bullying is defined as "an individual or a group will fully using information and communication involving electronic technologies to facilitate deliberate and repeated harassment or threat to another individual or group by sending or posting cruel text and/or graphics using technological means" [6]; [8]; [18]; [23] ; [25]; [27]; [28]. Methods include texting derogatory messages on mobile phones, with students showing the message to others before sending it to the target; sending threatening e-mails; and forwarding a confidential e-mail to all address book contacts, thus publicly humiliating the first sender [9]. There are two major electronic devices that young bullies can employ to harass their victims from afar. First, using a personal computer, a bully can send harassing e-mails or instant messages, post obscene, insulting, and slanderous messages to online bulletin boards, or develop Web sites to promote and disseminate defamatory content. Second, harassing text messages can be sent to the victim via cellular phones [25].

Research towards a better understanding of cyber bullying behaviour in various age groups has increased recently. Reference [19], investigated cyber bullying behaviour among children and adolescents, Reference [4] among primary school second stage students (pre-adolescent), Reference [16] among secondary school students and Reference [2] and Reference [14] among university students.

Every four children is a cyber victim and children who are cyber bullied, in particular, experience various negative consequences such as anger and distress [22]. Reference [25] Cyber bullied students felt disappointed, nervous and upset and thus their relationships at school, in the family and with friends are negatively influenced. Cyber bulling and being cyber victim have adverse consequences on an individual's psychology. Individual values in life also affect behaviour. Social scientists assert that values have a substantial role in explaining human behaviour [21]. Values are closely related to human feelings, thoughts and behaviour. Social and cultural values have different effects on different individuals. In human relations, values are not unidirectional and one-to-one [3]. Therefore, values could be associated with existing or acquired human behaviour.

In the definition of values, concepts which are highly related to values are belief and attitudes, normative standards and aims [24]. At this point, if we are to define values, multiple definitions will be more functional than a single agreed

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definition. A value is "the belief as to whether something could be desired or not" [17]. Values are encountered as criteria in individual's thoughts, attitudes, behaviour and actions and they constitute an inseparable element of social unity [15]. Accordingly, values contribute to the development of human personality [13]. Therefore, it is important to examine the values of cyber bullies and cyber bullying behaviour. Adolescents have been increasingly using technologies in their day-to-day social relations. Values are also considered to play a role in how adolescents sustain their social relations. Literature is insufficient in research on adolescent values in relation to cyber bullying behaviour. An investigation of students' cyber bullying behaviour and their values would contribute to "preventive counselling" services to stop cyber bullying and would advance the conceptual understanding of cyber bullying behaviour. Therefore, this study investigated cyber bullying behaviour and whether it could be explained by values.

II. METHOD

A. Means of Data Collection

It has a quantitative research design and uses relational survey as its method. *Questions Related to Cyber Bullying:* The "Cyber Bullying Question List" developed by Reference [2] was given to students. Following questions about demographics, a functional definition of cyber bullying was provided. Along with Reference [6] definition examples were also provided aiming at students' better understanding of the concept of cyber bullying. The following questions were addressed after the definition: According to the definition of cyber bullying above (1) "Have you ever been involved in cyber bullying?" (1-Never, 2-Once, 3-Two-four times, 4-Five times or more). (2) "Have you ever been cyber bullied?" (1-Never, 2-Once, 3-Two-four times, 4-Five times or more). (3) "Do you think you could be involved in cyber bullying in the future?" (1-Yes, 2-I'm not sure, 3-No).

Human Values Scale (HVS.) In order to specify students' human values, "Human Values Scale (HVS)" developed Reference [12] for secondary school students was administered. The scale consists of 42 items in six dimensions which are Responsibility, Camaraderie/Friendship, Being Pacifist (peace-lover), Respect, Tolerance and Honesty. It is a five-point Likert scale (A: Never, B: Rarely, C: Sometimes, D: Frequently, E: Always) and could be administered individually or in groups. The items were scored as A: 1- B: 2- C: 3- D: 4- E: 5. Higher/lower scores indicated that individuals had higher/lower human values.

Personal Data Questionnaire (Demographics). The personal data questionnaire was developed by the researchers in order to collect data on students' gender, education level and socio-economic status of their families.

B. Data Collection

The participants consisted of 300 secondary school students in the city of Konya, Turkey. 195 (64.8%) participants were female and 105 (35.2%) were male. 39 (13%) students were at grade 1, 187 (62.1%) were at grade 2 and 74 (24.6%) were at grade 3.

C. Data Analysis

Data analysis was conducted by the primary investigator of the study using SPSS 14.00 statistical analysis software. Descriptive statistics were calculated for the analysis of students' cyber bullying behaviour and simple regression analysis was conducted in order to test whether each value in the scale could explain cyber bullying behaviour.

III. FINDINGS AND IMPLICATIONS

The findings on how much of students' cyber bullying behaviour could be explained by values are presented in this section

TABLE I
SIMPLE REGRESSION ANALYSIS RESULT ON HOW MUCH OF STUDENTS' CYBER BULLYING BEHAVIOUR COULD BE EXPLLAINED BY VALUES

Variable	Standard Error	β	T	P
Responsibility	.316	.941	2.979	.003
$R=0.504$ $R^2=0.254$ $F=101.82$ $p=.000$				
Variable				
Camaraderie	.310	1.255	4.050	.000
$R=0.472$ $R^2=0.222$ $F=85.273$ $p=.000$				
Variable				
Respect	.296	.295	.994	.000
$R=0.599$ $R^2=0.359$ $F=167.035$ $p=.000$				
Variable				
Honesty	.334	1.186	3.557	.000
$R=0.453$ $R^2=0.205$ $F=77.052$ $p=.000$				
Variable				
Tolerance	.299	1.672	5.593	.000
$R=0.428$ $R^2=0.183$ $F=66.827$ $p=.000$				
Variable				
Pacifist	.319	1.626	5.105	.000
$R=0.412$ $R^2=0.170$ $F=66.827$ $p=.000$				

When each variable is examined individually, Table 1 indicates that values of responsibility, camaraderie, respect, honesty, tolerance and pacifist could explain students' cyber bullying behaviour. The analysis results revealed that responsibility explained 25%, camaraderie 22%, respect 35%, honesty 20%, tolerance 18% and pacifist 17% of students' cyber bullying behaviour.

TABLE II
DESCRİPTİVE STATISTICS FOR CYBER BULLYING

	No	Yes (Once or more)
Have you ever cyber bullied?	%80.4	%19.6
Have you ever been cyber bullied?	%47.8	%56.2
Have you ever disguised your identity online	%55.5	%44.5

Table 2 shows that 19.6% of students stated they have cyber bullied at least once, while 56.2% stated they were cyber bullied at least once. Moreover, 44.5% of the students reported that they disguised their identity online.

IV.DISCUSSION, CONCLUSION AND SUGGESTIONS

Cyber bullying negatively affects human psychology. An investigation of the variables that explain this behaviour is crucial. This study investigated cyber bullying behaviour in relation to human values (responsibility, tolerance, pacifist, respect, honesty). According to the findings of the study, the values of responsibility, tolerance, pacifist, respect and honesty significantly explained cyber bullying behaviour when analysed individually. Neglecting the affective dimension in education would result in a waste of a fundamental human potential. Feelings consist of elements such as preferences, joys, affections, beliefs, expectations, attitudes, feelings of appreciation, values, morals and ethics [5]. Among these, the concept of values plays an important role in people's lives. Trying to become clean of values and be entirely technological, adhering only to the traditional and the conventional and perceiving education simply as an infusion of ideas create the complexity of values. In the current education system, there is a tendency to isolate education from values and moral judgements [11]. In this context, individuals who hold moral judgements would less likely to perform cyber bullying behaviour.

The results also showed that students both cyber bullied (19.6%) and were cyber bullied (56.2%). Other studies have also reported different but not low levels of being cyber bullied such as Reference [1], 36.1%, Reference [22], 24.9%, Reference [19], 26.2%, Reference [4], 32.6%, and Reference [14] 55.3% . Being cyber bullied could be dangerous for students. Whatever the type of bullying is, both being cyber bullied and cyber bullying could seriously damage the psychology of the individual. The current study revealed that 19.6% of the participants cyber bullied others at least once and 44.5% disguised their identity online. Likewise, other studies reported that Reference [19], 16.3%, Reference [4], 22.5% and Reference [14], 22.5% of students cyber bullied others. One of the most important characteristics of cyber bullies is that they disguise their real identity. By hiding their identity, they believe that they could harm the victim more. The fact that these adolescent students disguised their real identities and almost a quarter of them cyber bullied at least once is a serious issue because an unhealthy completion of adolescence would influence their personality. Unhealthy social relationships during this period, in particular, would negatively affect the psychology of the adolescent.

Such a risk of adolescence bullying not only cause stress and harm but the adverse consequences of bullying experienced in childhood could also persist in adulthood. Furthermore, not only victims but also bullies are negatively affected. Students who were cyber bullied felt disappointed, nervous and upset and their relationships at school, in the family and with friends are negatively influenced [25]. Students, when cyber bullied, were upset, angry, and distrustful of their friends and were unwilling to go to school. In conclusion, cyber bullying behaviour is a risk factor for the psychology of adolescents [10]. Therefore, "preventive counselling" activities should be organised at schools based on social values against the adverse effects of cyber bullying. Moreover, for a better understanding of cyber bullying behaviour further research is required on different age groups investigating the effects of different variables.

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