Cyberbullying and Basic Needs: A Predictive Study within the Framework of Choice Theory

Taskin Tanrikulu

Fatih University, Faculty of Education, Department of Psychological Counseling and Guidance, 34500 Büyükçekmece, Istanbul, Turkey
Telelephone: +90 212 866 33 00 (2832); Fax: +90 212 866 33 37; E-mail:
ttanrikulu@fatih.edu.tr

ABSTRACT This research investigated the degree to which basic needs, determined within the framework of choice theory, predict cyberbullying behavior. For this purpose, in the second semester of the 2012-2013 academic year, 685 students were recruited from four public high schools in Istanbul, of whom 341 students were women (50.2%); 344 were men (49.8) . Their average age was between 15 and 19. In the study, basic needs were discussed in the dimensions of being free, belonging, power and enjoyment. Progressive regression analysis was conducted in order to explore cyberbullying prediction level of basic needs. For the regression analysis, first, the suitability of data was examined and it revealed that cyberbullying behaviors were understood to be predicted by the needs of belonging and power. Given that these two variables together explained 12.8 percent of cyberbullying, it could be argued that there is a negative relationship between them: when the level of belonging needs and power decrease, tendency to cyberbullying behaviors increases.

INTRODUCTION

Bullying behaviors have always been encountered frequently, thus require the intervention of psychological counselors at schools, especially at secondary educational institutions. However, in recent decades, cyberbullying has arisen as a growing problem.

Developing technology provides constantly new and different communication facilities and each new technology brings about some problematic behaviors with it. Developing technology has increased the use of tools such as internet and mobile phones at schools, which however further caused students to become anti-social because of using such tools (Wright et al. 2009). Another noteworthy problem is that students develop behaviors that are a new form of bullying behavior which is conceptualized as cyberbullying (Baker and Kavsut 2007).

This study discussed which basic needs predict cyberbullying in those who are engaged in cyberbullying. Basic needs in the research were defined as with the framework of William Glaser's choice theory (2000).

Definition of Cyberbullying

Cyberbullying is defined as a "collection of all behaviors, in technological or relational man-

ner, intended to cause harm to an individual, a group, or to a private or legal entity by using information and communication technologies" (Tanrikulu et al. 2015). It is also discussed as "behaviors that include the use of information and communication technologies, such as e-mail, mobile phone, pager, text messaging service and websites, that support deliberate, repeated and hostile conduct by an individual or a group with the purpose of inflicting harm" (Agatston et al. 2007; Ang and Goh 2010; Aricak 2009; Patchin and Hinduja 2006; Totan 2007; Wright et al. 2009). It includes activities such as cyber-stalking, flaming or humiliation, and embarrassment, all of which can be performed either by an individual or by a group (Anderson 2010).

Different studies report that 50 percent of adolescents are engaged in cyberbullying behaviors or exposed to these behaviors (Calvete et al. 2010; Qing 2005; Li 2007; Vandebosch and Van Cleemput 2009; Wright et al. 2009). While there are some studies arguing that cyberbullying behaviors are more prevalent among males (Aricak et al. 2008; Baker and Kavsut 2007; Sahin et al. 2010), there are also some studies having explored that gender does not predict cyberbullying (Hinduja and Patchin 2009; Özdemir and Akar 2011).

Cyberbullying can occur in many different forms. Therefore, cyberbullying behaviors can be classified as follows:

i.   Flaming: using threatening and unethical contents in online discussions.
ii. Harassment: repeatedly sending humiliating and insulting messages.
iii. Denigration: making accusations about a person in the nature of slander, damaging his/her reputation and engaging in gossip.
iv. Impersonation: imitating a person with a fake account and embarrassing and putting him/her into difficult situations with his/her friends and social environment by sending humiliating and harmful messages.
v.   Outing: sharing a person's photos and videos without permission.
vi. Trickery: deceiving people by acting friendly, gaining their trust and asking them to do things, and thus accessing their information.
vii. Exclusion: keeping a person away from a community knowingly and trying not to include him/her.
viii. Cyber-stalking: harassing people until rendering them weary.
ix. Humiliating: recording a humiliating situation or a physical attack on a person by using various information and communication tools and spreading it in online media.
x.   Sexting: sending sexual photos or images of oneself or others (Siegle 2010; Walker 2009; Willard 2007).

Studies show that there is a strong similarity between cyberbullying and traditional bullying (Slonje et al. 2013; Twyman et al. 2010). In this sense, cyberbullying can be defined as a type of traditional bullying (Baker and Kavsut 2007; Jose et al. 2011). Cyberbullying shows similarity with traditional bullying in that there is disproportionate power between individuals in cyberbullying; it involves aggressiveness; cyberbullying behaviors are also recurring (Dooley et al. 2009; Grigg 2010) and they support one another (Jose et al. 2011). Besides, cyberbullying is different from traditional bullying in some aspects. Cyberbullying uses mobile phones, computer and other information and communication technologies. Individuals engaged in cyberbullying can act it out without exposing their identities (Barlett 2015; Slonje et al. 2013). Although events of traditional bullying are witnessed by people physically present at the time, situations that happen as a result of cyberbullying can be informed to

many people by means of virtual environments. Sexual content can also be used simply and easily in cases of cyberbullying. Although in traditional bullying the victim can escape from the effects of bullying by leaving the place where the incident occurs, it is difficult for victims exposed to cyberbullying to find an environment in which they can escape from its effects (Mason 2008). This is because the content is known by many people and kept in a place that is open to public access (Ayas and Horzum 2010).

According to Kubiszewski et al. (2015) cyberbullying and school bullying overlapped very little. The majority of students involved in cyberbullying were not simultaneously involved in school bullying. Moreover, results indicated that psychosocial problems (psychological distress, social disintegration, general aggression) varied according to the form of bullying. Victims of school bullying had greater internalizing problems than cybervictims, while school bullies were more aggressive than cyberbullies. Given the sizable proportion of adolescents involved in bullying (school and cyber) and its significant relationship with mental health, the issue warrants serious attention from school and public health authorities.

On the other hand, cyberbullying is different from traditional bullying in that it does not involve psychical power; it is generally anonymous and victims are not aware of their problems and emotional reactions. Considering that they would not be caught, cyberbulliers have a little fear of receiving punishment (Kiriakidis and Kavoura 2010). In traditional bullying, it is rare to see a person as a victim and the bullier at the same time. However in cyberbullying, it can be observed more often that bulliers can also be victims of cyberbullying or traditional bullying (Mason 2008). In traditional bullying, there is disbalance of physical power, but in cyberbullying, bulliers can be young, weak and silent. Nevertheless, bulliers are more powerful than their victims in terms of technological possibilities and the ability to use technology (Vandebosch and Van Cleemput 2008).

Causes of Cyberbullying

In research conducted by Raskauskas and Stoltz (2007), students cyberbullied for enjoyment (38%), revenge (25%) and their own bad situation (6%). The others did not offer a reason as to why they did it.

It was found that there is a strong positive relationship between cyberbullying behaviors and problems such as experiencing perception problems, hyperactivity, problems of behavior control, low sociability, frequent use of alcohol and cigarette and feeling unsecure in school (Nixon 2014; Sourander et al. 2010).

In research conducted on psychiatric symptoms as predictors of cyberbullying, fewer psychiatric symptoms were observed in individuals who had not previously engaged in bullying or who were not subjected to bullying than in naïve-victims and bully-victims. It was observed that hostile feelings and psychotic symptoms predicted cyberbullying. In addition, it was also observed that interpersonal sensitivity and psychotic symptoms explained the likelihood of becoming a cyber victim or cyber bully (Aricak 2009).

In addition to this, behaviors such as anger and aggression were also found to be associated with cyberbullying (Nixon 2014; Schultze-Krumbholz and Scheithauer 2009). Individuals showing behaviors of anger and aggression also display cyberbullying behaviors (Patchin and Hinduja 2010b).

It was found that there is a positive relationship between moral breakdown and bullying and the level of cyberbullying (Twyman et al. 2010). People living alone and people with low levels of self-respect (Nixon 2014), peer optimism, social acceptability and low ability to make friends have been observed to engage in cyberbullying behaviors more frequently (Schoffstall and Cohen 2011).

It's been found that there is a positive relationship between cyberbullying and verbal IQ and total IQ. People with high IQ (Intelligent Quotient) level cyberbully more often (Didden et al. 2009). In a study, in which the relationship between cyberbullying and empathy was analyzed, it was found both bullies and victims have lower level empathy (Ang and Goh 2010; Schultze-Krumbholz and Scheithauer 2009).

According to Dredge et al. (2014) number of Facebook friends and traditional bullying victimisation were also significant predictors of cyberbullying victimization. also self-presentation on Facebook can increase the likelihood of eliciting negative attention from potential perpetrators.

One of the important reasons behind cyberbullying is feeling of revenge. In König et al.'s (2010) study more than half of the adolescents who cyberbully stated that they were exposed to traditional bullying and 41 percent stated that they were also victims of cyberbullying, which thereby led to a vicious circle: cyberbullying behaviors lead to feeling of taking revenge.

Some studies have also been conducted to analyze whether academic achievement is among the causes of cyberbullying. Most of the studies report that there is not any significant relationship between cyberbullying and academic achievement (Beran and Li 2005; Huang and Chou 2010; Li 2007). However, there are some studies stating that there is negative correlation between academic achievement and cyberbullying (Peker et al. 2012).

Effects of Cyberbullying

Since people are more likely to be involved in cyberbullying than traditional bullying, it can lead to more serious consequences compared to traditional bullying (Dooley et al. 2009). Cyberbullying can cause harmful effects such as crises and depression, fear of people or feeling ashamed (Nixon 2014; Slonje et al. 2013), a constant state of agitation, aversion to virtual environments and technology, use of addictive drugs, avoiding responsibility and alienation from school (Mason 2008; Morales 2011; Schneider et al. 2012). In his study Goebert et al. (2011) discovered that the use of addictive drugs by cyber victims is much more common than cases of depression and suicide.

Thinking committing suicide is, on the other hand, the most unsatisfactory outcome to happen because of exposure to cyberbullying (Nixon 2014). Such gloomy thoughts of committing suicide are observed by people exposed to cyberbullying more than those exposed to traditional bullying (Hinduja and Patchin 2010).

In another research, feelings of vulnerability and powerlessness were found to happen to those who have been exposed to cyberbullying. In addition, a variety of anti-social problems and personality related problems, such as aggressive behaviors, feeling sadness (Giménez Gualdo et al. 2015), and fears about security, were also seen (Spears et al. 2009). Negative thoughts about experiencing bullying again reveal problems with regard to the issues of school attendance and motivation (Mason 2008; Wong-Lo et al. 2011).

Depression, social isolation and behaviors of inflicting self-harm are frequently observed

problems in victims of cyberbullying (Nixon 2014; Mason 2008; Wong-Lo et al. 2011). Problems such as perception difficulties, emotional or relationship difficulties, insomnia, headaches, recurrent abdominal pain, and not feeling oneself safe at school can also occur (Nixon 2014; Sourander et al. 2010). In addition, previously conducted research also reveals the presence of low self-confidence and self-respect in victims (Didden et al. 2009; Mason 2008; Patchin and Hinduja 2010a). In a study conducted by Navarro et al. (2011) on the 10-12 age group, the presence of social anxiety and especially the fear of negative evaluation were observed in cyber victims. The emergence of emotional symptoms in women victims is higher than in male victims (Dooley et al. 2010).

Choice Theory and Bullying

According to choice theory, whatever a human being does from birth to death is a behavior. Even though these behaviors are influenced by a number of conditions external to an individual, the power that steers behaviors originates from within the human being. People themselves choose to behave in a certain way and these choices are made in order to satisfy the need that they feel at that moment—namely, their motive (Kaner 1993).

Basic needs are among the topics human sciences deal with including psychological anthropology (Spindler 1980). In his choice theory (Glasser 1985), Glasser handled basic needs that direct human behaviors. According to Glasser (1985), there are five main motives that result from the genetic structure of the human being as follows: survival and reproduction, belonging, obtaining power, freedom and enjoyment. According to choice theory, an individual's negative emotions are caused by the non-fulfillment of all or some of these given requirements.

Survival and reproduction is a need that is found in the genetic program of all living organisms. This also includes the need to persevere, feel safe and struggle. Another dimension of this need is desire to survive. Sexuality can be evaluated in this context. *Belonging* includes both love and belonging. This need shapes all our lives because we all want to maintain both love and dedication throughout our lives. *Power* is a need peculiar to human beings. Human beings derive pleasure by both controlling relationships and obtaining more than what they have in their possession. This desire for pleasure transforms into controlling the external world. *Freedom*, according to Glaser, is what makes us human. Being dominated is against human nature. Glasser states that human beings try to be free in many different areas, ranging from their relationships with other human beings to expressing themselves freely. Even though human beings obey rules and traditions, sometimes they try to meet this need by violating these in a harmless manner. *Enjoyment* is discussed as a characteristic found in the genetic structures of advanced organisms in the choice theory. According to Glaser, enjoyment is the need that is met most easily. Many things can be found to do for enjoyment. Even just laughing contributes to meeting this need. However, problems in relationships land the first blow to enjoyment (Glasser 1999).

There are studies that explain the relationship between traditional bullying and these basic needs. Palanci and Özbay (2005) state that bullying behaviors tend to decrease in a learning environment where basic needs are met. Esici (2007), in his research, identified that behaviors classified as traditional bullying increased when the level to which basic needs were met decreased. However, in a study conducted by Çalik et al. (2009) with students at elementary school level, it was argued that unmet basic needs did not predict bullying behaviors.

Research Hypothesis and Aim

According to Glasser, all of our behaviors aim to meet basic needs. People meet these needs in two ways: healthy and unhealthy (Glasser 1999; Tanrikulu 2014). This perspective of Choice Theory is the basis of the research hypothesis. In this sense, main hypotheses are as below:

Cyberbullying behaviors also aim to meet a person's one or more than one of basic needs.

A person's unsuccessful attempt to meet one or more of the basic needs leads to cyberbullying behaviors.

In accordance with this hypothesis, the aim of the study is to determine which basic needs and to what degree predict cyberbullying behaviors.

METHODOLOGY

Participants

Research data was collected from 685 students studying in the second semester at four public high schools on the European side of Istanbul during the 2012-2013 academic year. The

sampling was determined according to the suitable sampling model. The study group consisted of 341 female students (50.2%) and 344 male students (49.8%). The ages of the research subjects varied between 15 and 19 years. Of the participants, 117 (17.1%) were 15 years old, 253 (36.9%) were 16 years old, 216 (31.5%) were 17 years old, 90 (13.2%) were 18 years old and 9 (1.3%) were 19 years old. In terms of grade level, 124 of the participants (18.1%) were in ninth grade, 299 (43.6%) were in tenth grade and 262 (38.2%) were in eleventh grade.

Data Collection Tools

Cyberbullying Scale

The scale developed by Aricak et al. (2012), was used to measure the level of cyberbullying behaviors in adolescents. Consisting of 24 items, the scale is based on a Likert-type scale (Never, Sometimes, Often, Always).

The scale was prepared in a single scale factor. This single factor has an eigen-value of 12.139 and it explains 50.58 percent of total variance. The Cronbach alpha value calculated for the entire scale is .95; test-retest coefficient was calculated as .70.

In the rating scale, "never" response scored one point, "sometimes" response scored two points, "often" response scored three points and "always" response scored four points. In this way, a lowest score of 24 points and a highest score of 96 points were possible on the scale. Higher point totals on the scale indicated more cyberbullying behaviors.

Basic Needs Scale (BNS)

The scale that measures basic needs within the framework of choice theory was developed by Ikinci (2003) for high school students. The validity and reliability analysis of the scale were performed on 299 people. The scale consists of 26 items and was prepared for adolescents. The scale was understood to be four-factored as a result of factor analysis. These four factors explain 45 percent of total variance. The basic needs measured in the scale were loving and being loved, power, freedom, and enjoyment. Higher point totals on the scale indicate that the basic needs are being met at a higher level. The reliability coefficients of the scale calculated for general and subscales are between .83 and .64.

Information Survey

A survey was administered in the study in order to determine the demographic and personal characteristics of the participants. The prepared survey included categorical questions such as age, gender, grade level and how successful they see themselves academically.

Process and Data Analysis

The study was planned and completed in the second term of 2012-1013 school year. Within the scope of the study, four different high schools requiring different academic qualifications in a metropolitan city were visited. The data was collected from randomly selected classes, the researcher interviewed students in each class and ensured that students answered the scale. This survey application process lasted two weeks.

The data collected was entered into SPSS 17 and the process analysis was carried out. Pearson's Product-Moment Correlation analysis was conducted in the research in order to determine the relationships between the variables. Multiple regression analysis was performed in order to examine the variables that predict cyberbullying.

In the research, analyses were launched on 685 data. The compliance of data for the regression analysis was first examined. The points examined were the linearity of the relationship between cyberbullying and the level of basic needs, and whether or not the scores exhibited a normal distribution. As a result of the analyses, the diagrams were understood to show a linear relationship. No significant deviations from normality were understood to exist as a result of the examination of the histogram and normal distribution graphs. In order to examine multivariate normality hypothesis, Mahalanobis distance values were calculated for understanding the presence of extreme values related to variables. In this examination, since Mahalanobis distance values on the data of 17 people were seen to be over $[\chi^2_{(6)} = 22.46, p=.001]$ reference value, data of these people were not included in the analysis because they were understood to be extreme values. Thus, statistical operations were performed on 668 students and data were made to meet with the multivariate normality hypothesis.

The ratio of variable numbers to the observation number is 1/111. The study group is

known to be five-times the number of independent variables in multivariate regression analysis (Meyers 2013). In this regard, the sampling size was found to be sufficient.

The variables of gender and academic success perception were also thought to be predictor variables in the research. Since the variables of gender and academic success perception are categorical variables, these variables were transformed into dummy variables (Field 2009). In this process of transformation, the gender dummy variable was made by re-coding the gender variable as male=0 and female=1. The variable of academic success perception (weak, below average, above average and good), which consists of five categories, were also re-coded in order to create dummy variables. For this purpose, dummy variables of "weak", "below average", "average" and " above average" were considered as the reference variable and "good" category, which was excluded from this category, was transformed into a dummy variable. In this coding, while the category itself was coded as "one (1)" other categories were coded as "zero (0)." Thus, while re-coded "good" is included in regression analysis as an independent variable, since dummy variables of "weak", "below average", "average" and "above average" were not considered as reference variables, they were ex-

cluded from analysis. The significance level was accepted as .05 in the research.

FINDINGS

In this study, whether the needs of freedom, belonging, enjoyment and power in high school students, and whether the variables of gender and perceived academic success are significant predictors of the level of cyberbullying were researched. To this end, the needs of freedom, belonging, enjoyment, power, the variables of gender, and perceived academic success were included in the analysis in order to perform linear multivariate regression analysis. The results of linear multivariate regression analysis performed in this context are presented in Table 1.

The model explained cyberbullying to be in the level of 13.5 percent (R^2=.135) when Table 1 was examined. Although there is a negative and low level of correlation (r_1-0.149; r_3-0.115; r_5-0.96; p<.01 r_6-0.081; p<.05) between the variables of being free, enjoyment, gender and academic success perception and cyberbullying, these variables were not seen to make a significant contribution (p>.05 belonging to β values) to the regression model. For this reason, stepwise regression analysis was conducted in which these variables that did not make any signifi-

Table 1: Results of multiple regression analysis for the prediction of cyberbullying behaviors

Model 1	R	R^2	Â	t	p	Double r	Partial r
Constant	.367	.135		29.609	.000		
1. Freedom			-.053	-1.221	.223	-.149	-.047
2. Belonging			-.270	-5.818	.000	-.340	-.221
3. Enjoyment			.073	1.700	.090	-.115	.066
4. Power			-.138	-3.052	.002	-.271	-.118
5. Gender			-.036	-.900	.368	-.096	-.035
6. Perception of Academic Success			-.034	-.898	.370	-.081	-.035

Note: In Model 1, since gender and academic success perception are categorical variables, the gender variable is coded as a dummy variable in the form of male=0 and female=1, the variable of academic success perception is coded as a dummy variable in the form of good=1 and other categories are coded in the form of 0. In this way, these two variables of 'female' and 'good' were included in the analysis.

Table 2: Results of stepwise regression analysis for the prediction of cyberbullying behaviors

Model	R	R^2	Â	t	p	Double r	Partial r
Constant	.340	.115		36.779	.000		
Belonging			-.340	-9.325	.000	-.340	-.340
Constant	.357	.128		32.097	.000		
Belonging			-.273	-6.449	.000	-.340	-.243
Power			-.130	-3.064	.002	-.271	-.118

cant contribution were excluded. Findings related to this second analysis are given in Table 2.

The findings of stepwise regression analysis of the variables related to the needs of belonging and power, which are predictive variables, are given in Table 2. Even though they are not found in Table 2, statistical data were also obtained in order to examine some assumptions about the regression analysis. First of all, the largest variance inflation factor (VIF) value was understood to be 1.365 when statistical values related to multiple connections were examined, and, in this respect, all values were less than 10, which is the standard value, and closer to 1 (Field 2009). In addition, the lowest tolerance value was understood to be .733 and all values were above the standard value of .2 (Field 2009). Regression analysis was seen not to have a problem of multiple connections as a result of these data. In addition, when Durbin-Watson analysis was performed in order to test whether autocorrelation exists in the model or not, the obtained value was seen to be between reference values (1.5-2.5) for (DW=1,990) autocorrelation (Field 2009) and it has been concluded that there was no autocorrelation in the model. As a result of these analyses, since assumptions of stepwise regression analysis were seen to be met, the findings related to the model in Table 2 were to be evaluated.

In the first stage of the stepwise regression analysis, the standardized regression coefficient (β) in the prediction of the variable "need for belonging" on the level of cyberbullying behaviors was found to be -.340. This variable was alone understood to explain 11.5 percent of cyberbullying behaviors ($R^2 = .115$). In the second stage of the stepwise regression analysis, the variable of "need for power" was included next to the variable of "need for belonging." These two variables together explain 12.8 percent of cyberbullying behaviors ($R^2 = 0.128$). Findings show, as the level of meeting needs of belongingness and power decreases, cyberbullying behaviors are observed more often. In this sense, it can be stated that needs of belongingness and power are important variables which predict cyberbullying negatively.

DISCUSSION

In this study, the predictive value of basic needs, gender, and the perception of academic success on cyberbullying behaviors was examined. As a result of the stepwise regression analysis, the needs for belonging and power were understood to predict cyberbullying behaviors at a significant level. This result seems to support William Glasser's (2000, 1985) view that needs, not realistically met, are the source of discipline problems experienced in school.

The research results show that the need of "belonging" is related to cyberbullying behaviors. It was seen that cyberbullying behaviors were much greater in those who experience problems in the issue of meeting the need for belonging. This need includes needs such as to love, to be loved, sharing things with others, and being valuable in the eyes of others. Since it is necessary for other people to meet the need for belonging, it is the most difficult need to meet, according to Glasser (1999). It was seen that this need is met less in those who engage in cyberbullying behaviors.

Choice theory states that people have the same basic problem. This basic problem is the individuals' inability to establish a satisfactory and successful relationship with at least one of the people whom they value in their respective lives or an inability to approach other people in order to attach with them (Tanrikulu 2014). In parallel with this view, a weaker parental relationship was found to be a feature that predicts cyberbullying (Seiler and Navarro 2014; Mason 2008). In this sense, cyberbullying behaviors can be explained by an individual's inability to develop satisfactory and healthy connections when discussed in terms of choice theory.

Another finding that explains that the need for belonging is a predictor of cyberbullying is the willingness of those who engage in cyberbullying to continue friendship relationships as an excuse for their these behaviors (Yaman and Peker 2012). In addition, cyberbullying behaviors were understood to be observed much more in the individuals who fail to gain autonomy in their social relationships and whose addictive ego speculation is higher (Çetin et al. 2012). It is known that there is a negative relationship between intrinsic self-worth perception and cyberbullying (Eroglu 2011) and cyberbullying behaviors were seen more in individuals whose self-esteem level is low (Brack and Caltabiano 2014; Schoffstall and Cohen 2011).

The relationship of bullying and offensive behaviors to the need for belonging has also been the subject of other research. Estell et al.

(2007), in their research, identified that those who engage in bullying feel excluded, from the sociometric point of view. According to another studys, bullying behaviors are seen at a higher rate in those who experience loneliness (Brewer and Kerslake 2015), and in the individuals whose levels of acceptance by society and establishing friendship with others are quite low (Jacobs et al. 2014; Schoffstall and Cohen 2011). According to research conducted by Glover et al. (2000), the possibility of displaying bullying behaviors is found to be higher in students who have weak family support. In research conducted by Esici (2007), it was also stated that there is a negative correlation between traditional school bullying and the need for belonging.

Therefore, the research result, which indicates a negative relationship between the need for belonging that corresponds to the needs for being included in a group and feeling self-worth and cyberbullying behaviors, is characteristic of the findings explained by the other research stated above.

Another result obtained from the research is the orientation of the need for power predicting cyberbullying. Accordingly, cyberbullying behaviors are observed much more in those who are insufficient in the area of meeting the need for power.

The need to be powerful can also manifest itself in the form of becoming sufficient in any area. A teacher may want to be a good educator and a father may want to raise a better child for this reason. However, sometimes people can also meet this need through negative behaviors. They can meet this need by using drugs and alcohol, by engaging in anti-social behaviors or by withdrawing into themselves, but these behaviors will prove to be insufficient in meeting the need to be powerful (Kaner 1993; Kubiszewski et al. 2015).

It has been indicated in various research that behaviors such as anger and aggression are behaviors that predict cyberbullying (Dilmaç 2009; Lonigro et al. 2015; Schultze-Krumbholz and Scheithauer 2009; Kubiszewski et al. 2015). Individuals who display cyberbullying behaviors are also observed to display anger and aggressive behaviors (Patchin and Hinduja 2010b; Slonje et al. 2013). According to Nixon (2014), perpetrators of cyberbullying are more likely to report increased substance use, aggression, and delinquent behaviors. Vandebosch and Van Cleem-

put (2008) state that those who are exposed to traditional bullying, in order to balance their situation, turn to cyberbullying behaviors because of the power they obtain through their knowledge of the internet, computers and other cyber communication tools. In a similar manner, those who consider themselves inadequate in terms of features such as physical strength and age also turn to cyberbullying behaviors in order to stabilize the situation (Vandebosch and Van Cleemput 2008). In this regard, it can be said that cyberbullying behaviors are aimed at meeting the need for power. Findings show, as the level of meeting needs of belongingness and power decreases, cyberbullying behaviors are observed more often. In this sense, it can be stated that needs of belongingness and power are important variables which predict cyberbullying negatively.

CONCLUSION

In this study, the predictive value of basic needs, gender, and the perception of academic success on cyberbullying behaviors was examined. Firstly, it was seen that cyberbullying behaviors were much greater in those who experience problems in the issue of meeting the need for belonging. Another result obtained from the research is the orientation of the need for power predicting cyberbullying. Accordingly, cyberbullying behaviors are observed much more in those who are insufficient in the area of meeting the need for power.

As results, according to Glasser, things that people want to do or reach in order to meet their needs make up the world that they wish to live in when discussed from the perspective of choice theory. Since the world that people wish to live in and the real world are different from each other, problems arise according to the individual and this difference leads individuals to certain behaviors. From this point of view, behavior is an attempt by people to overcome the difference between the place they live (that is, the real world) and the place where they want to live (the world of quality). Abnormal behaviors are caused by the inability to resolve this difference in a realistic manner. In this respect, cyberbullying behaviors can be considered as abnormal behaviors which originate from the individual's inability to meet the needs for belonging and power in a realistic manner.

RECOMMENDATIONS

In this study, basic needs are discussed within the frame of Choice Theory. Glasser determines five basic needs and associates them with all behaviors. In this sense, other studies in which the relationship between cyberbullying behaviors and other psychological needs will be analyzed can be suggested for further research.

The second recommendation of this study is that it was conducted in a metropolitan city. When we consider that needs are shaped also by social structure the findings are limited to social characteristics of the society. Therefore, similar studies can be conducted with groups with different social features and results can be compared.

Lastly, within the scope of findings of this study, studies aiming to meet power and belonging needs of adolescents who cyberbully can be conducted and their effects can be investigated. In this way, the validity of findings of this study can be tested.

REFERENCES

Agatston PW, Kowalsk R, Limber S 2007. Students' perspectives on cyber bullying. *Journal of Adolescent Health,* 4: 59-60.

Anderson WL 2010. Cyberstalking (cyberbullying) - proof and punishment. *Insights to a Changing World Journal,* 4: 18-23.

Ang RP, Goh DH 2010. Cyberbullying among adolescents: The role of affective and cognitive empathy, and gender. *Child Psychiatry and Human Development*, 41: 387-397. doi:10.1007/s10578-010-0176-3.

Aricak OT, Kinay H, Tanrikulu T 2012. First psychometric finding of cyberbullying scale. *Journal of Hasan Ali Yücel Faculty of Education (HAYEF),* 9: 101

Aricak T, Siyahhan S, Uzunhasanoglu A, Saribeyoglu S, Ciplak S, Yilmaz N, Memmedov C 2008. Cyberbullying among Turkish adolescents. *CyberPsychology and Behavior*, 11: 253-261.

Aricak OT 2009. Psychiatric symptomatology as a predictor of cyberbullying among university students. *Eurasian Journal of Educational Research*, 34: 167-184.

Ayas T, Horzum B 2010. Cyber bully/victim scale development study. *Academic Sight International Refereed Online Journal of Social Sciences,* 19: 1.

Baker ÖE, Kavsut F 2007. Cyberbullying: A new face of peer bullying. *Eurasian Journal of Educational Research,* 27: 31-42.

Barlett CP 2015. Predicting adolescent's cyberbullying behavior: A longitudinal risk analysis. *Journal of Adolescence*, 41: 86–95. doi: 10.1016/j.adolescence. 2015.02.006

Brack K, Caltabiano N 2014. Cyberbullying and self-esteem in Australian adults. *Cyberpsychology*, 8(2): 12–22.

Brewer G, Kerslake J 2015. Cyberbullying, self-esteem, empathy and loneliness. *Computers in Human Behavior*, 48: 255–260.

Beran T, Li Q 2005. Cyberharassment: A study of a new method for an old behavior. *Journal of Educational Computing Research*, 32: 265-277.

Calvete E, Orue I, Estévez A, Villardón L, Padilla P 2010. Cyberbullying in adolescents: Modalities and aggressors' profile. *Computers in Human Behavior*, 26: 1128-1135. doi:10.1016/j.chb.2010.03.017

Çalik T, Özbay Y, Özer A, Türker KT, Kandemir M 2009. Examination of primary school students' bullying status on the basis of the variables of school climate, pro-social behaviors, basic needs and gender. *Educational Administration: Theory and Practice*, 60: 555-576.

Çetin B, Eroglu Y, Peker A, Akbaba S, Persoy S 2012. The investigation of relationship among relational-interdependent self-construal, cyberbullying, and psychological disharmony in adolescents: An investigation of structural equation modeling. *Educational Sciences: Theory and Practice* (ESTP), 12: 646–653.

Didden R, Scholte RHJ, Korzilius H, De Moor JMH, Vermeulen A, O'Reilly M, Lang R et al. 2009. Cyberbullying among students with intellectual and developmental disability in special education settings. *Developmental Neuro-rehabilitation*, 12: 146-151. doi:10.1080/17518420902971356

Dilmaç B 2009. Psychological needs as a predictor of cyber bullying: A preliminary report on college students. *Educational Sciences: Theory and Practice,* 9: 1291-1325.

Dilmaç B, Aydogan D 2010. Parental attitudes as a predictor of cyber bullying among primary school children. *World Academy of Science, Engineering and Technology*, 67: 167-171.

Dooley JJ, Gradinger P, Strohmeier D, Cross D, Spiel C 2010. Cybervictimisation: The association between help-seeking behaviours and self-reported emotional symptoms in Australia and Austria. *Australian Journal of Guidance and Counseling*, 20: 194-209. doi:10.1375/ajgc.20.2.194

Dooley JJ, Pyzalski J, Cross D 2009. Cyberbullying versus face-to-face bullying. *Zeitschrift für Psychologie/Journal of Psychology*, 217: 182-188. doi:10.1027/0044-3409.217.4.182

Dredge R, Gleeson J, de la Piedad Garcia X 2014. Presentation on Facebook and risk of cyberbullying victimisation. *Computers in Human Behavior*, 40: 16–22. doi:10.1016/j.chb.2014.07.035

Eroglu Y 2011. *The Investigation Relationships among Contingencies of Self-worth, Risky Internet Behaviors, and Cyberbullying/Cyber-victimization.* MA Thesis, Unpublished. Sakarya: Sakarya University.

Estell DB, Farmer TW, Cairns BD 2007. Bullies and victims in rural African American youth: Behavioral characteristics and social network placement. *Aggressive Behavior,* 33:145–159.

Esici H 2007. *The Relationship between the Secondary School Seventh Grade Students? Level of Fulfilling Their Basic Psychological Needs and the Bullying Behavior.* MA Thesis, Unpublished. Ankara: Gazi University.

Field AP 2009. *Discovering Statistics Using SPSS: And Sex, Drugs and Rock Roll.* 3rd Edition. Los Angeles: SAGE Publications.

Giménez Gualdo AM, Hunter SC, Durkin K, Arnaiz P, Maquilón JJ 2015. The emotional impact of cyberbullying: Differences in perceptions and experiences as a function of role. *Computers and Education*, 82: 228–235.

Glasser W 1985. Discipline has never been the problem and isn't the problem now. *Theory into Practice*, 24: 241–246. doi:10.1080/00405848509543181

Glasser W 1999. *Choice Theory a New Psychology of Personal Freedom*. New York: Harper Perennial.

Glasser W 2000. School violence from the perspective of William Glasser. *Professional School Counseling,* 4: 77-80.

Glover D, Gough G, Johnson M, Netta N 2000. Bullying in 25 secondary schools: Incidence, impact and intervention. *Educational Research*, 42: 141–156.

Goebert D, Else I, Matsu C, Chung-Do J, Chang J 2011. The impact of cyberbullying on substance use and mental health in a multiethnic sample. *Matern Child Health Journal,* 15: 1282-1286. doi: 10.1007/s10995-010-0672-x.

Grigg DW 2010. Cyber-aggression: Definition and concept of cyberbullying. *Australian Journal of Guidance and Counseling*, 20: 143-156. doi:10.1375/ajgc.20.2.143

Hinduja S, Patchin JW 2009. *Bullying Beyond the Schoolyard: Preventing and Responding to Cyberbullying*. California: Corwin Press.

Hinduja S, Patchin JW 2010. Bullying, cyberbullying and suicide. *Archives of Suicide Research*, 14: 206-221. doi:10.1080/13811118.2010.494133

Huang Y, Chou C 2010. An analysis of multiple factors of cyberbullying among junior high school students in Taiwan. *Computers in Human Behavior*, 26: 1581–1590. doi:10.1016/j.chb.2010.06.005

Ikinci M 2003. *The Relationship between the Degree of Basic Needs that Adolescents Meet and the Behaviours to Overcome.* MA Thesis, Unpublished. Trabzon: Karadeniz Technical University.

Jacobs NCL, Dehue F, Völlink T, Lechner L 2014. Determinants of adolescents' ineffective and improved coping with cyberbullying: A Delphi study. *Journal of Adolescence*, 37(4): 373–385. doi:10.1016/j.adolescence.2014.02.011

Jose PE, Kljakovic M, Scheib E, Notter O 2011. The joint development of traditional bullying and victimization with cyberbullying and victimization in adolescence. *Journal of Research on Adolescence*, 22: 301-309. doi:10.1111/j.1532-7795.2011. 00 764.x

Kaner S 1993. Control theory and reality therapy. *Journal of Faculty of Educational Sciences (JFES),* 26: 569-585.

Katzer C, Fetchenhauer D, Belschak F 2009. Cyberbullying: Who are the victims? *Journal of Media Psychology: Theories, Methods, and Applications*, 21: 25-36. doi:10.1027/1864-1105.21.1.25

Kiriakidis SP, Kavoura A 2010. Cyberbullying a review of the literature on harassment through the internet and other electronic means. *Family and Community Health*, 33: 82–93.

König A, Gollwitzer M, Steffgen G 2010. Cyberbullying as an act of revenge? *Australian Journal of Guidance and Counselling*, 20: 210-224. doi:10.1375/ajgc.20.2.210

Kubiszewski V, Fontaine R, Potard C, Auzoult L 2015. Does cyberbullying overlap with school bullying when taking modality of involvement into account? *Computers in Human Behavior*, 43: 49-57.

Li Q 2007. New bottle but old wine: A research of cyberbullying in schools. *Computers in Human Behavior*, 23: 1777–1791. doi:10.1016/j.chb.2005.10.005

Lonigro A, Schneider BH, Laghi F, Baiocco R, Pallini S, Brunner T 2015. Is cyberbullying related to trait or state anger? *Child Psychiatry and Human Development*, 46(3): 445-454.

Mason KL 2008. Cyberbullying: A preliminary assessment for school personnel. *Psychology in the Schools*, 45: 323-348. doi:10.1002/pits.20301

Meyers LS 2013. *Applied Multivariate Research: Design and Interpretation.* 2nd Edition. Thousand Oaks, Calif: SAGE Publications.

Morales M 2011. Cyberbullying. *Journal of Consumer Health on the Internet*, 15: 406-419. doi:10.1080/15398285.2011.623593

Navarro R, Yubero S, Larrañaga E, Martínez V 2011. Children's cyberbullying victimization: Associations with social anxiety and social competence in a Spanish sample. *Child Indicators Research*, 5: 281-295. doi:10.1007/s12187-011-9132-4

Nixon CL 2014. Current perspectives: The impact of cyberbullying on adolescent health. *Adolescent Health, Medicine and Therapeutics*, 5: 143–158.

Özdemir M, Akar F 2011. Examination of high school students' opinions on cyberbullying in terms of various variables. *Educational Administration: Theory and Practice*, 17: 605–626.

Palanci M, Özbay Y 2005. Reality therapy oriented support program to overcome social anxiety problems of high school and university students. In: S Erkan, A Kaya (Eds.): *Deneysel Olarak Sinanmis Grupla Psikolojik Danisma ve Rehberlik Programlari II.* Ankara: Pegem A Yayincilik.

Patchin JW, Hinduja S 2006. Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice,* 4: 148-169.

Patchin JW, Hinduja S 2010a. Cyberbullying and self-esteem. *Journal of School Health*, 80: 614-621. doi:10.1111/j.1746-1561.2010.00548.x

Patchin JW, Hinduja S 2010b. Traditional and nontraditional bullying among youth: A test of general strain theory. *Youth and Society*, 43: 727-751. doi:10.1177/0044118X10366951

Peker A, Eroglu Y, Ada S 2012. The investigation of predictors of cyberbullying and cyber victimization in adolescents. *AIBU Journal of Faculty of Education,* 12: 185-206.

Qing L 2005. Cyberbullying in Schools: Nature and Extent of Canadian Adolescents' Experience. *AERA Conference.* University of Calgary, Montreal. April.

Raskauskas J, Stoltz AD 2007. Involvement in traditional and electronic bullying among adolescents. *Developmental Psychology*, 43: 564-575.

Schneider SK, O'Donnell L, Stueve A, Coulter RWS 2012. Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American Journal of Public Health*, 102: 171-177. doi:10.2105/AJPH.2011.300308

Schoffstall CL, Cohen R 2011. Cyber aggression: The relation between online offenders and offline social competence. *Social Development*, 20: 587-604. doi:10.1111/j.1467-9507.2011.00609.x

Schultze-Krumbholz A, Scheithauer H 2009. Social-behavioral correlates of cyberbullying in a German student sample. *Zeitschrift für Psychologie/Journal of Psychology*, 217: 224-226. doi:10.1027/0044-3409.217.4.224

Seiler SJ, Navarro JN 2014. Bullying on the pixel playground: Investigating risk factors of cyberbullying at the intersection of children's online-offline social lives. *Cyberpsychology*, 8(4): 37–52.

Siegle D 2010. Cyberbullying and sexting: Technology abuses of the 21st century. *Gifted Child Today*, 33: 14-16.

Slonje R, Smith PK, Frisén A 2013. The nature of cyberbullying, and strategies for prevention. *Computers in Human Behavior*, 29(1): 26–32. doi:10.1016/j.chb.2012.05.024

Sourander A, Brunstein Klomek A, Ikonen M, Lindroos J, Luntamo T, Koskelainen M, Ristkari T et al. 2010. Psychosocial risk factors associated with cyberbullying among adolescents: A population-based study. *Archives of General Psychiatry*, 67: 720-728. doi:10.1001/archgenpsychiatry.2010.79

Spears B, Slee P, Owens L, Johnson B 2009. Behind the scenes and screens. *Zeitschrift für Psychologie / Journal of Psychology*, 217: 189-196. doi:10.1027/0044-3409.217.4.189

Spindler G 1980. *The Making of Psychological Anthropology.* Los Angeles: University of California Press.

Sahin M, Sari SV, Özer Ö, Er SH 2010. High school students' views about their cyberbully behaviours and self-exposition. *Journal of Social Sciences Faculty of Arts and Science Suleyman Demirel University*, 21: 257-270.

Tanrikulu T 2014. Cyberbullying from the perspective of choice theory. *Educational Research and Reviews*, 9(18): 660–665. doi:10.5897/ERR2014.1761

Tanrikulu T, Kinay H, Aricak OT 2015. Sensibility development program against cyberbullying. *New Media and Society*, 17(5): 708–719. doi:10.1177/1461444813511923

Totan T 2007. Suggestions for educators and parents on prevention of school bullying. *AIBÜ Journal of Faculty of Education,* 7: 190-202.

Twyman K, Saylor C, Taylor LA, Comeaux C 2010. Comparing children and adolescents engaged in cyberbullying to matched peers. *Cyberpsychology, Behavior, and Social Networking*, 13:195-199. doi:10.1089/cyber.2009.0137

Vandebosch H, Van Cleemput K 2008. Defining cyberbullying: A qualitative research into the perceptions of youngsters. *CyberPsychology and Behavior*, 11: 499-503. doi:10.1089/cpb.2007.0042

Walker JL 2009. *The Contextualized Rapid Resolution Cycle Intervention Model for Cyberbullying.* PhD Thesis, Unpublished. Arizona: Arizona State University.

Willard N 2007. Cyberbullying *and Cyberthreats: Responding to the Challenge of Online Social Aggression, Threats, and Distress*. Illinois: Champaign Research Press.

Wong-Lo M, Bullock LM, Gable RA 2011. Cyber bullying: Practices to face digital aggression. *Emotional and Behavioural Difficulties*, 16: 317-325. doi: 10.1080/13632752.2011.595098

Wright VH, Joy JB, Christopher TI, Heather NO 2009. Cyberbullying: Using virtual scenarios to educate and raise awareness. *Journal of Computing in Teacher Education,* 26: 35-42.

Yaman E, Peker A 2012. The perceptions of adolescents about cyberbullying and cyber victimization. *Gaziantep University Journal of Social Sciences*, 11: 819–833.