Full Length Research Paper

Relation between cyberbullying and problem solving: A study on Turkish university students

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In this study, cyberbullying living frequency, what the cyber environments in which cyberbullying is lived are, and the relation between ‘being victim of cyberbullying’ and ‘being cyberbullying’ status and problem solving skill of university students are analysed. This research is done by attendance of 460 students from five different faculties of Cankiri Karatekin University. Data is collected by ‘Cyberbullying and Internet Aggression Scanning Scale- CIASS” and “Problem Solving Inventory-PSI”. Data is analysed with arithmetical average, standard deviation, percentage and correlation techniques. It is determined at the end of the research that 87% of the attendants are exposed to cyberbullying in the recent month. However, at the same period, it is determined that 13% of the attendances are exposed to cyberbullying. Also, in the recent month 3% of the attendants are found that they are doing cyberbullying. It is seen that cyberbullying occurs mostly in chat-rooms and facebook. It is determined that problem solving skills of the attendants is at the middle level. A negative relation between being exposed to cyberbullying and problem solving is determined. There is not a relation between being cyberbullying and problem solving.

Key words: Cyberbullying, peer victimization, internet aggression, problem solving.

INTRODUCTION

Today, communication technologies enter into process of rapid development. This rapid development tendency seen in communication technologies can be said to cause certain negative results as well as providing social benefits. As a result of gradually popularization and becoming widespread of communication technologies, especially the tyrannous behaviours of the young people begin to bringing into the various cyber environments notably on internet. During the last decades, cyberbullying observed among the peers, directs the academicians to this field to have researches. In this scope, the analyzing researches of cyberbullying observed among the peers can be said to be in increasing tendency in the last years (Barrio et al., 2007; Catherine et al., 2007; Kartal and Bilgin, 2009; Perren and Hornung, 2005). For instance, in a study which mentions the extensity of peer victimization, 15% of young people being exposed of to various kinds and density peer victimization is reported (Kepenekçi and Çınkır, 2006). As a more fatal development, it is determined that young people are more suffered from mobbing than the adults (Fitzpatrick et al., 2007).

Unfortunately, researches indicate that students who suffered from bullying have various kinds and dimensions psychological problems (Menesini et al., 2009). For instance, loneliness sensation, sleep disorders and depression indications are determined on the students who are suffering from bullying (Fleming and Jacobsen, 2009). Accordingly, among the sufferers, attention deficits are reported (Ivarsson et al., 2005). The researches point out to the suicide tendency among the victims of bullying is relatively becoming widespread (Kiriakidis, 2008; Skapinakis et al., 2011). It is determined in the studies focus on the relations between various demographical
variables and bullying, there are more male perpetrators than female (Pepler et al., 2006), young from low-income groups are more suffering from bullying (Due et al., 2009) and perpetrators attend school less (Alikasifoglu et al., 2007).

Peer victimization is described as “suffering of a student from continuous annoying behaviours of one or more students in a certain period” (Hamarus and Kaikkonen, 2008). In order to mention about bullying, the condition of “being deprived of effective defending power of victim” should occur (Correia and Dalbert, 2008). It is stated that the valid criteria to determine whether the students are “perpetrators” or “victims” is repeating the tyrant behaviour at least two times in a month (Solberg and Olweus, 2003).

It is stated that the bullying cases which have gradual increasing tendency among the students have occurrence tendency in the cyber environments (Raskauskas and Stoltz, 2007). One of the most important factors which cause this case is the rapid development tendency seen in information communication technologies and easy access to such tools. For instance, the researches indicate that communication via mobile phones is intensive (Dempsey et al., 2009).

It is possible to describe the cyberbullying within the context of traditional bullying conceptualize as “one or more people have intentional aggressive behaviour to the ones who has not power of defence by using electronical communication tools, during a certain period and continuously” (Smith et al., 2008). In the studies of cyberbullying, it is determined that 12% of the young tyrannise to others on internet, 4% of them are victims and 3% of them are both perpetrator and victim (Ybarra and Mitchell, 2004a). In another study, it is seen that 56.1% of the students are exposed to cyberbullying (Hoff and Mitchell, 2009).

It is possible to order the most known types of cyberbullying as below (Arrcak, 2009; Dempsey et al., 2009);

1. Gossiping about the victim on internet environment,
2. Publishing the shameful photos or information of the victim on internet environment,
3. By using the electronic communication tools of the victim, threatening the victim or sending the messages which include evil tongue about victim
4. Introduction of the tyrant himself as a victim on internet environment and mobbing to the others by using the name of victim,
5. Blocking the victim to take place in play areas and private chat rooms on internet environment by the tyrant,
6. Sending no name calls, e-mails include spam and virus,
7. Sending short message or e-mail in order to scandalize a person or a group.

It is stated that one of the factors which plays role in occurrence of the cyber bullying is the broken friendship relations. Researches indicate that some young people do cyberbullying with the revenge sense just after the broken emotional relations. Cyberbullying can be said to trigger the jealousy and bias related to some sub-identities. Also, some young people are said to have tendency to cyberbullying with the purpose of excluding from the group or keeping his/her own place in the group (Hoff and Mitchell, 2009).

As it is understood, cyberbullying tendency among the young people is increasing as a result of rapid change and development seen in communication technologies. Under these circumstances, it can be said that international academical attention to cyberbullying is becoming dense (Dempsey et al., 2009; Hinduja and Patchin, 2007; Hoff and Mitchell, 2009; Patchin and Hinduja, 2006; Smith et al., 2006; Smith et al., 2008; Willard, 2007; Ybarra and Mitchell, 2004a; Ybarra and Mitchell, 2004b).

It can be said that the researches are oriented to the attitudes of the young people to informational communication technologies parallel to the developments in informational communication technologies in Turkey (Ceyhan, 2008; Köse et al., 2007; Çelik and İpçioğlu, 2006; Akkoyunlu and Yılmaz, 2005; Bakay, 2005). In the researches in Turkey, some negativeness caused by internet is seen as analyzing point in many respects (Arrcak, 2009; Dilmaç, 2009). Cyberbullying can be said to be researched among even limited number students in Turkey (Baker and Kavşut, 2007). But in literature scanning, the studies related to extensity level of cyberbullying on Turkish university students and cyberbullying types are not seen. In the literature analysis, it is seen that there is a gap between the relation of being cyberbullying victim and being cyber perpetrator and problem solving skills. In this concern, cyberbullying and problem solving skill relation is analysed in this research. One of the most important variables related to cyberbullying is the problem solving skill which is a personal characteristic. Complicated society structure causes to increasing number and density of problems of the people. For this reason, problem solving skill takes place among the subjects of psychology related to keeping mental health. Problem solving skill is an important skill which is required for a person to have a healthy life and keeping his mental health. Generally the human life is full of problems and the cases cause stress. Many of the stressful cases are related to unimportant cases for person (loosing keys, stuck in traffic, problems with neighbours...). Other cases (divorce, being dismissed, death of a relative, etc.) are more important than daily problems. Whether it is important or not, it is certain that these cases cause stress have effect on feeling fine physical and psychological. Among most of the important characteristics that a person should gain in overcoming stress, problem solving skill takes place (Izgar et al., 2004).
PROBLEM SOLVING

Problem solving is a process of overcoming the difficulties in order to achieve a goal. Eryüksel (1996) describes the problem solving as a cognitive-behavioral process during which following the certain logical sequences in order to achieve the solution of any problem. Aksu (1989) describes the problem solving as overcoming the difficulties period in order to overcome the difficulties of reaching to an ability and a target needed. Alaylıoğlu and Oğuzkan (1976) describe the problem solving as a work which is attempted to have new relations or reveal the current relations by the people who have maturity against the cases observed and heard. According to another description, problem solving which is mental process is a process for choosing one of the different options which causes an action. Problem solving can also be described as revealing the current relations against the new cases and events, having new relations and according to the purpose having a certain result. Aysan (1988) describes the problem solving as the behaviours related to revealing the cognitive periods which evaluate the internal and external sources in order to have a balance in interaction with environment and turning the case in favour of themselves. Kabadayı (1992) states that problem solving process which is a mental activity and ability and a method used in education, and describes problem solving as “cognitive characteristic or behaviour”, “an affective characteristic”, “a method” and “an experience”.

Heppner and Peterson (1982) describe problem solving different from others. According to them, problem solving means the concept of overcoming the problems. They state that in real life, problem solving is directing information and affective periods in an order as behavioural reactions with the purpose of internal and external requisites. Another dimension of the problem solving is problem solving in interpersonal relations. Öğülmüş (2001) describe the interpersonal problems as at least one of the parts which have interaction comprehend difference between current interaction style and ideal interaction style; because of this difference they feel tension, attempt to resolve this tension, but these attempts are blocked. There may be numerous sources of interpersonal problems. They may be source scarcity (money, time, information, etc. people have), psychological requirements which are not meet (have power, belonging, freedom, enjoyment, etc) and differences in values, priorities and principles (Öğülmüş, 2001). In addition to these, Heppner and Peterson (1982) indicate that people are hasty and they use six different approaches such as deliberative approach, avoidant approach, evaluative approach, self-confident approach and planned approach while solving problems.

Kuzgun (1988) states that the success of problem solving is based on right description of the problem. If the annoying case of person is not described completely, finding the right solving approach is not possible. Even if the problem is described completely, if there is not enough information about this problem, effective solutions can not be found. After collecting sufficient information, behaviour types to solving problem are formulized. By beginning from the choice which is thought to bring the best solution, current choices are applied and then they are evaluated. When it is successful, continues in this way, on the other hand other choices are tried (Kuzgun, 1988). Öğülmüş (2001), with a similar approach, defines the rational problem solving process as realizing the problem, description of problem, producing alternatives, choosing, applying, evaluating and correcting of solutions.

In a study of Heppner and his friends (1987), the relation between the evaluations of own problem solving skills and physical and psychological health of the people is researched. Findings indicate a relation between problem solving and psychological adaptation relation. Ones who evaluate themselves as unsuccessful in problem solving are determined as troubled, oversensitive, depressive, obsessive-compulsive disorders on relations between people. Also, it is found that they indicate more hostility. Also, according to Heppner and Peterson (1982), problem solving has relation with self confidence and efforts for problem solving. In a research done by Kaya (1992), there are important relations between the problem solving skills level comprehended by university students and depressive emotions levels, self-respect levels, ego persistence, sensation to criticism, confidence to other people and feeling threats in interpersonal relations. Also, the best variables that predict the problem solving skill are determined as self-respect, sensation to criticism, confidence to other people and feeling threats in interpersonal relations.

PURPOSE OF THE STUDY

In the light of these discussions, it can be thought that rapid development period seen in information technology obliges the people to adapting to this process healthily. But, it is reported that the people who use information technology sometimes are exposed to cyberbullying or they do cyberbullying (Mishna et al., 2012; Özdemir and Akar, 2011). In this case, the relations between being exposed to cyberbullying in cyber environments and problem solving skills of the people are worried. In this research, in this framework the answers of the questions below are searched;

1. What is the level of frequency of “being cyber perpetrator” or “being cyber victim” of university students and in which cyber environments cyberbullying is seen?
2. What is the level of problem solving of university students?
3. Is there any meaningful relation between “being cyber perpetrator” or “being cyber victim” and problem solving skills of the university students?
Table 1. The Numbers of the Participants Who Are Cyberbullying Victim and Being Cyber Perpetrator

<table>
<thead>
<tr>
<th>Cyberbullying victim attendants</th>
<th>Cyber perpetuator attendants</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=460</td>
<td>N=460</td>
</tr>
<tr>
<td>Never</td>
<td>402</td>
</tr>
<tr>
<td>One</td>
<td>87</td>
</tr>
<tr>
<td>Once or twice</td>
<td>28</td>
</tr>
<tr>
<td>Many times</td>
<td>6</td>
</tr>
<tr>
<td>Quite a lot</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
</tr>
</tbody>
</table>

**METHOD**

This research is done by quantitative research method based on scanning model. In this research, relation between cyberbullying and problem solving skills of university students is analysed by multi-variable data analysis techniques.

**STUDY GROUP**

The research group contains 460 students from Cankiri Karatekin University during 2012 to 2013 academic years. Participants were selected randomly. They filled in the scales voluntarily. The researcher visited the faculty and asked students if they could fill in the scales during the break times. The scales did not include any personal information (including names, student numbers etc). 300 of the participants are female and 160 of them are male. The average age of the participants is 22. 120 of the participants are from Faculty of Literature, 100 of them are from Faculty of Science, 80 of them are from Faculty of Economics and Administrative Sciences, 112 of them are from Faculty of Forestry and other 58 of them are from Faculty of Engineering. 124 of them are freshmen, 158 of them are sophomore, 121 of them are junior and 57 of them are senior.

**DATA COLLECTION TOOLS**

In this research, in order to determine cyber-mobbing cases, "Cyberbullying and Internet Aggression Scanning Scale-CIASS" and "Problem Solving Inventory-PSI" are used. The psychometrical characteristics of data collection tools are as in below.

**Cyberbullying and Internet Aggression Scanning Scale-CIASS**

The original version of CIASS is developed by Hinduja and Patchin (2009), and the adaptation study of the scale into Turkish is done by Ozdemir and Akar (2011). CIASS includes two separate subscales of "Cyberbullying Victiminess" and "Being Cyber Perpetrator" which have nine items. The validity and reliability studies of the original scales are done on the basis of data received from 266 students who have education in two separate high schools. In this study, alpha value of sub-scale of "Being victim of Cyberbullying" is calculated as .74, and alpha value of sub-scale of "Being Cyber Tyrant" is calculated as .87. The construct validity of sub-scales is examined by factor analysis (principal component analysis). In these examinations, it is determined that both of the sub-scales are under 1 factor. The factor load values of Being Cyber bullying Victim are between .504 and .599, and eigenvalue is 2.92. The variance rate of the scale is 68%. Being Cyberbullying sub-scale factor load values are between .615 and .800, eigenvalue is 2.62. The variance rate of the scale is 81%. In the Turkish adaptation of the scale similar results are received and the scale is reported as valid and reliable in Turkish culture (Ozdemir and Akar 2011).

**Problem Solving Inventory-PSI**

The original version of PSI is developed by Heppner and Petersen (1982), and the Turkish adaptation studies are done by Şahin et al. (1993). PSI is a Likert type scale which has 35 articles and pointed between1 to 6. The lowest point is 35; the highest point is 192 which can be received from PSI. The highest points received from the scale indicate that the person find he is insufficient about problem solving, on the other hand the lowest points are interpreted as the person is successful in problem solving. The original version of PSI has three dimensions such as "reliability to problem solving skill", "approach-avoidance" and "personal control". The Croanbah-Alpha parameter of the original version is reported as 0.90. In the Turkish adaptation of PSI, it is stated that it is more reliable (Alpha parameter .81). But, in the factor analysis on Turkish adaptation, it is determined that PSI include six separate factor such as "Hasty Approach: 9 items (α=.78)", "Deliberative Approach: 5 items (α=.76)", "Avoidant Approach: 4 items (α=.74)", "Evaluator Approach: 3 items (α=.69)", "Self Confident Approach: 6 items (α=.64)", and "Planned Approach: 4 items (α=.59), and 31 items.

**ANALYSIS OF DATA AND PROCEDURE**

In the research, the scales are collected by direct applying to the attendants by the researcher. The scales are given to the students before the courses and completion of the scales based on the volunteering principle is provided. Data collection period is completed in 30 days. The data received in the research is calculated with arithmetical average, standard deviation, percentage and Pearson correlation parameter. In the analysis of data, SPSS.20 version is used and tests of significance occur at the level of 0.001.

**FINDINGS**

In this section of the study, principally the frequencies of being cyberbullying victim and being cyber perpetrator of the participants are analysed. In the Table 1, the frequencies and percentage values of being cyberbullying victim and being cyber perpetrator of the participants in the last month are given to show the prevalence of the cyberbullying cases among the participants.

As it is followed in Table 1, 87% of the attendants declare that they have never been exposed to cyberbullying, 28% have been exposed once, 3.4% once or twice, 2.1% many times and 0.8% quite a lot times have been exposed to cyberbullying. Accordingly, numbers of people who declare that they have been exposed to cyberbullying once or more time are 58 (12.60%). On the other hand, 97% of the attendants declare that they have never tyrannized during the last month, the other 1.5%
have tyrannized only once and 1% once or twice. In this case, 12% of the attendants state that they have tyrannised once or a few time (2.60%).

In Table 2, in which cyber environments the participants are exposed to bullying or in which environments they are perpetrator are given as frequency and percentage values to describe the cyber environments where the cyberbullying cases occur.

As it is seen in Table 2, the cyber environment in which cyberbullying cases are relatively more experienced are the social share website named as “Facebook”. While 47 of the attendants state that they are exposed to cyberbullying on “Facebook”, 12 of them state that they are cyber perpetrators on “Facebook”. In a similar way, 47 of the attendants state that they are exposed to cyberbullying, it is understood that 10 of the attendants are the victims of cyberbullying in chat rooms. While 22 of the attendant state that they are exposed to cyberbullying via immediate messages, 11 of them state that they are cyber perpetrators by sending immediate messages.

In Table 3, problem solving skills, mean and standard deviation values of the participants are indicated separately for six factors of PSI are indicated to describe the participants’ problem solving skills in different sub-dimensions of PSI.

As it is seen in Table 3, on the calculations of total points of PSI, the average of problem solving abilities of the attendants occur at 90.25 levels. This finding means that problem solving abilities of the attendants are “intermediate”. When the average points calculated for sub-dimensions of PSI are analysed, they are calculated as “Hasty Approach” is 43.03, “Deliberative Approach” is 14.25, “Avoidant Approach” is 16.03, “Evaluator Approach” is 6.28, “Self-Confident Approach” is 15.78, “Planned Approach” is 8.44, as “Hasty Approach” is 43.03, “Deliberative Approach” is 14.25, “Avoidant Approach” is 16.03, “Evaluator Approach” is 6.28, “Self-Confident Approach” is 15.78, “Planned Approach” is 8.44. These findings are interpreted as the attendants have “intermediate” points in each of the sub dimensions of PSI.

In Table 4, Pearson Correlation Parameter calculated for the structure of relation between problem solving abilities and being cyberbullying victim and being cyber perpetrator of the participants are given.

As it is seen in Table 4, there is a counterblow, intermediate and significant relation between “being victim of cyberbullying” and “problem solving ability” (r=–.63; p<.001). Accordingly, the level of being cyberbullying victim of the attendants whose problem solving skills are higher occurs relatively few. On the other hand, there is a counterblow, intermediate and meaningful relation between “Being Cyberbullying” and problem solving ability (r=–.44; p<.001). According to this finding, while the problem solving ability is getting higher, being cyber tyrant tendency is relatively getting lower. However, negative and meaningful relation between “deliberative approach” (r=–.27; p<.001); “evaluative approach” (r=–.34; p<.001); “self-confident approach” (r=–.44; p<.001) and “planned approach” (r=–.47; p<.001) is determined. Also, there is a relatively low and positive relation between “hasty approach” (r=.17; p<.001) and “avoidant

### Table 2. Cyber Environments Where Cyberbullying Occurs (n) (%)

<table>
<thead>
<tr>
<th>Cyber environments where cyberbullying occurs</th>
<th>Sufferers of cyber mobbying</th>
<th>Ones who are cyber perpetrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>In chat rooms</td>
<td>47</td>
<td>10</td>
</tr>
<tr>
<td>Sending e-mail to post boxes</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Delivering Instant Message</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Sending Short Message to Mobile Phone</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Calling Mobile Phone</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Sending Picture or Video Message</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>In MySpace</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>In Facebk</td>
<td>47</td>
<td>12</td>
</tr>
<tr>
<td>In other social share sites</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>In Twitter</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>In Youtube</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>In other Diğer sanal ortamlarda</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>In Interactive play sites (backgammon, rummikub etc.)</td>
<td>22</td>
<td>9</td>
</tr>
<tr>
<td>While Playing Playstation</td>
<td>17</td>
<td>3</td>
</tr>
</tbody>
</table>

### Table 3. Mean and standard deviation values for six factors of PSI

<table>
<thead>
<tr>
<th>Sub-Dimensions of PSI</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hasty Approach</td>
<td>43.03</td>
<td>7.67</td>
</tr>
<tr>
<td>Deliberative Approach</td>
<td>14.25</td>
<td>3.07</td>
</tr>
<tr>
<td>Avoidant Approach</td>
<td>16.03</td>
<td>4.27</td>
</tr>
<tr>
<td>Evaluator Approach</td>
<td>6.28</td>
<td>1.03</td>
</tr>
<tr>
<td>Self-Confident Approach</td>
<td>15.78</td>
<td>2.87</td>
</tr>
<tr>
<td>Planned Approach</td>
<td>8.44</td>
<td>1.54</td>
</tr>
<tr>
<td>Total point</td>
<td>90.25</td>
<td>18.03</td>
</tr>
</tbody>
</table>
approach (r=.23; p<.001) points and being cyberbullying victim points. Accordingly, the attendants who have hasty attitudes when they face to the problems have tendency to be cyberbullying victim. In a similar way, the attendants who have avoidant attitudes when they face to the problems have tendency to be exposed to cyberbullying. Finally it is minute amount between having cyber mobbing attitudes and hasty approach (r=.04; p<.001) and avoidant approach (r=.03; p<.001) of problem solving abilities.

DISCUSSION, RESULT AND SUGGESTIONS

In this research, the views of university students on cyberbullying and problem solving abilities are analysed. First of all, in the research it is determined that 13% of the attendants are exposed to cyberbullying in recent month. However, the findings of 3% of the participants are cyber perpetrators are seen in the research. It is seen that the values seen related to being exposed to cyberbullying and being cyber perpetrators of the participants are seen as parallel with the similar study findings of literature (Nansel et al., 2001; Olweus, 1994). It is reported that in the aforementioned studies rate of the students who are exposed to cyberbullying is about 15%. But it is seen that the rates of being exposed to cyberbullying in literature are reported in different ways. For instance, Ybarra and Mitchell (2004a) in their own studies, report that approximately 4% of the young are exposed to cyberbullying, Hoff ve Mitchell (2009) state that this rate is about 50%. Ozdemir and Akar (2011) who analyse the being exposed to cyberbullying levels of Turkish high school students; determine that this rate is about 14%. Therefore, it can be said that there are certain differences between the findings occur in this research and the findings reported in similar reports. It can be said that these differences may arise from population and sample

It is seen that cyberbullying case in the current research is about 3%. In similar researches of this subject, cyberbullying cases are seen about 10% (Ozdemir and Akar, 2011; Ybarra and Mitchell, 2004a). Accordingly, it can be said that the attendants have relatively low level cyberbullying behaviours in the current research. A possible reason of this case may be the differences between the study groups. For instance, Ozdemir and Akar (2011) have a study on high school students. High school students are relatively in the identity confusion of puberty because of their ages. However, the university students on whom the current study is carried out enter into the process of psychological maturity. Accordingly, relatively few cyberbullying behaviours of the university students may be determined with their ages. Also, the life goals and choice of profession of university students are relatively determined. But, the possible cyberbullying studies may be done in future may be thought to be done according to covering high school and university students by extending.

It is possible to reach the result of the cyberbullying has a threat on young people based on the findings. It is determined that cyberbullying cases are observed generally on chat rooms and social share website facebook on internet. The possible reason of this may be tendencies of young people to have and carry on social relations on internet. The researches related to this point indicate that the internet usage frequency among young people is gradually increasing (Akjoyunlu and Yilmaz, 2005). Also, there are certain studies reporting that young people are getting addicted to internet (Wang et al., 2011).

In the research, relation between being exposed to cyberbullying and being cyber tyrant and problem solving abilities of the university students is analysed. The findings indicate that there is a negative relation between the cases of higher problem solving ability and being cyberbullying victim. The success of the problem solving period is substantially based on the right description of the problem. Person is required to comprehend what the cases which may disturb him/her are or what the cases are (Kuzgun, 1988). Accordingly, this case may be evaluated as the attendants whose problem solving

<table>
<thead>
<tr>
<th>Scales</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being Victim of Cyberbullying</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being Cyber Tyrant</td>
<td>-67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSI (All)</td>
<td>-63</td>
<td>-44</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hasty Approach</td>
<td>17</td>
<td>.04</td>
<td>.13</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deliberative Approach</td>
<td>-27</td>
<td>.34</td>
<td>.77</td>
<td>-24</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidant Approach</td>
<td>.23</td>
<td>.03</td>
<td>.34</td>
<td>.33</td>
<td>.25</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluator Approach</td>
<td>-34</td>
<td>.34</td>
<td>.84</td>
<td>-63</td>
<td>.88</td>
<td>.17</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Confident Approach</td>
<td>-44</td>
<td>-44</td>
<td>.85</td>
<td>.57</td>
<td>.67</td>
<td>.54</td>
<td>.53</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Planned Approach</td>
<td>-47</td>
<td>-47</td>
<td>.83</td>
<td>.73</td>
<td>.89</td>
<td>.48</td>
<td>.78</td>
<td>.74</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: All values are significants at the level 0.001.
abilities are higher are exposed to be victim of cyberbullying at lower levels, and they may describe the cases which cause trouble them on internet environment. In another words, these attendants may be thought as “they have tendencies to avoid from the cases which cause trouble on internet environment”.

In the previous researches carried out related to problem solving, the relations between problem solving ability and depression, anxiety disorders, self confidence, self respect, confidence to another people and feeling threat on relations among people (Happner et al., 1987; Heppner and Peterson, 1982; Kaya, 1992). In this way, the finding received in current study is ready to contribute to literature. In the current research it is seen that the people who have higher problem solving ability know how to handle cyberbullying on cyber environments as in casual life. It is an important finding which indicates the people who have lower problem solving ability are exposed to more cyberbullying. Probably the people who have lower problem solving ability do not know how to keep themselves on the internet and similar environments. Also, when these people are exposed to cyberbullying, they do not know accurately how to handle with this problem. However, there are legal enforcements about cyberbullying on cyber environments. Therefore, young people are required to have education about gradually getting widespread internet literacy. Within this concern, it is important to have education about this subject for students from primary education and high schools. The general conclusion about how to prevent being exposed to cyberbullying on internet and the importance of having education for young people about how to handle with this case psychologically and legally if they are exposed, is received.

Based on the findings and the discussion, it can be concluded that cyberbullying is a new kind of danger among the university students. As it was mentioned in the introduction section of the study, cyberbullying cases are becoming more common in the world. Therefore, it can be suggested to educators to inform people of the legal side of cyberbullying. In addition, prevention measures should be provided by state agencies. It can also be suggested that cyberbullying victims should be supported by psychologists. This study was conducted on university students. This is the limitation of the study. Further studies can be conducted in the high schools. In addition, some other variables including focus of control, self concept or psychological well being can be examined in regard to cyberbullying.

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