The Investigation of Predictors of Cyberbullying and Cyber Victimization in Adolescents

Bünyamin Ateş¹
Erzincan Binali Yıldırım University

Alican Kaya²
Ağrı İbrahim Çeçen University

Erhan Tunç³
Gaziantep University

Abstract

In this study, subjective well-being and perceived social support from family, friends, and teachers, were examined to determine how effective on the levels of cyber victimization and bullying in adolescents. The research was conducted on the basis of the relational screening model. The sample group of this study is created by high school students that continue education at the high school level in Erzincan and Ağrı provinces in 2017-2018 academic year, they have chosen by unselected sampling method, as determined by 416 (53.7%) are male and 358 (46.3%), including girls, are a total of 774 adolescents. The Cyber Victimization and Bullying Scale (Çetin, Yaman & Peker, 2011), Adolescent Subjective Well-Being Scale (Eryılmaz, 2009), Perceived Social Support Scale (ASLÖ-R) (Yıldırım, 1997, 2004), and Personel Information Form were used as the data collection tools in the study. The data obtained in the study were analyzed by stepwise regression analysis method from multiple linear regression analysis. According to research findings; subjective well-being in adolescents, perceived social support from family, friends, and teachers variables reveal significance at the level of cyber victimization and bullying.

Keywords: Adolescents, cyber bullying, cyber victimization, perceived social support, subjective well-being.

DOI: 10.29329/ijpe.2018.157.9
Introduction

Human is a social entity has the potential to establish and maintain positive relations with other people, while at the same time it can enter into negative experiences such as bullying or exposure to bullying. Bullying is defined as an ongoing violence by an individual or group against a defenceless person at the same time with physical or psychological consequences (Olweus, 1993). Bullying can take place in the form of a single individuals practice, as well as in the form of a group of bullying (Fitzgerald, 1999). According to Olweus (1993), bullying occurs in two forms; direct bullying that manifests itself in verbal and physical attacks, indirect bullying in the form of social exclusion, or inter-personal bullying. Both individuals, who are exposed either directly or indirectly to the bullying, negatively affect the psychological structure of the individual by creating traumatic effects on the individual (Rigby & Cox, 1996; Cardoso et al. 2018; Tokunaga, 2010; Woodruff, Template, Adams & Yost, 2017).

The development of technology and the emergence of new means of communication have led to a rapid increase in the number of people who communicate using modern technologies (Privitera & Campbell, 2009; Eryaman, 2007). Although technological advances have made their lives easier in a variety of ways, it has brought to new problems in the field of psychology. As a reflection of these, it has now begun to be seen in the virtual space by changing the form of bullying and exposure to bullying behavior (Raskauskas & Stoltz, 2007). Individuals may be exposed to cyberbullying by someone else from miles away with mass media such as the internet, or they may bully someone else, or physically.

A current problem and concept, cyber-victimization, is defined as the situation in which one or more individuals are exposed to harmful behavior personally or individuals experience it as legal entity through communication technologies (Aricek, 2011). Cyber bullying; by a group or individual, with computer or mobile phone, etc. is defined as an aggressive, intentional harmful behavior carried out by means of communication (Smith et al. 2008). Cyber buling or cyber victimization can be seen in various forms. Some of those; online fighting, harmful activities, libel, identity change, unauthorized use of information, provocation, cyber harassment and exclusion (Willard, 2007). Unlike real victimization and bullying, there is no physical interaction between the cyber victim and the cyber bully. In this regard, cyber victimization and bullying have become an international problem (Antoniadou & Kokkinos, 2015; Ayas & Horzum, 2012; Bhat, 2008; Boronenko, Menshikov & Marzano, 2013; Keith & Martin, 2005).

The impact of cyber bullying on the victim can be more damaging for a few reasons. The first one can be more damaging than the attacker that keeps his identity hidden. Second, because there is no direct relationship with the victim, the attacker may tend to feel less empathy or regret. Third, Mass media can reach a large audience in a short time. Finally, adult control is limited because the number of adults using the internet is less (Dempsey, Sulkowski, Nichols & Storch, 2009; Kokkinos, Antoniadou & Markos, 2014; Smith & Slonje, 2010).

Individuals exposed to bullying or bullying others, were found to be 2.5 times more likely to be bullied or bullying (Hinduja & Patchin, 2008). It is seen that the cyber bullies and the cyber victims are affected from the related situations. It is found that those who exposed to cyber bullying has Suicidal ideation and depression (Bauman, Toomey & Walker, 2013; Hinduja & Patchin, 2010; Ybarra & Mitchell, 2004), decline in school achievement (Schneider, O’Donnell, Stueve & Coulter, 2012), lack of motivation (Beran & Li, 2005), sadness and anger (Mishra, Saini & Solomon, 2009), loneliness, problems in social interaction (Tokunaga, 2010). As can be understood from the results of the study, both exposure to bullying and bullying others lead to various negative effects on the mental health and lives of the individuals.

It is thought that it is important to know the factors that are related to the current and new problem of cyber bullying which expose individuals to such behaviors and direct individuals to these behaviors. It can be said that it is important that such situations related to cyberbullying are predictable.
before they occur, especially considering the fact that preventive work is more important in recent times. Although protective mental health studies are important for these situations, it is thought to be more important in terms of the adolescence period, known as a critical period, in which successful and unsuccessful periods can lead to serious effects for later periods. In this study, cyber bullying cases of adolescents were examined and variables of subjective well-being and perceived social support were considered as one of the variables that could be related to and influenced by these variables.

Subjective well-being has been used as synonymous with the concept of happiness (Diener, 1984). It is defined as the assessment of a person's own life in terms of cognitive and emotional aspects. These assessments may be directed towards short-lived situations as well as long-term life situations (Diener, Lucas, Oishi & Suh, 2002). Subjective well-being can be defined as frequent positive affect, rare negative affect, and high life satisfaction as a whole. Subjective well-being consists of affect (positive and negative affect) and cognitive (life satisfaction) components (Diener, Suh, Lucas & Smith, 1999). While the affective component reflects positive emotions, joy, excitement, interest, emotions, alertness and trust, together with positive emotions; negative feelings defined as subjective distress and dissatisfaction reflect situations such as anger, fear, sadness, guilt, disdain and disgust (Ben-Zur, 2003). The cognitive component, on the other hand, reflects life satisfaction for evaluating one's own life according to the subjective standards (Schimmack et al. 2002). Subjective well-being involves frequent and high level of positive emotions, less frequent and low levels of negative emotions, and a high level of life satisfaction (Diener, Lucas, Oishi & Suh, 2002; Diener & Tov, 2007). The first two include emotional evaluation, and life satisfaction involves cognitive appraisal (Diener & Tov, 2007).

Subjective well-being is based on the individual's self-assessment, and this is differentiated from traditional clinical psychology. It is more important the person's own beliefs about the well-being. Evaluating an individual's life according to their own point of view can cause a serious problem for someone, even though they are not aware of it. Subjective well-being is not sufficient alone to define mental health. Because people can have a mental problem while they are happy. So subjective well-being is not synonymous with psychological well-being. The life satisfaction of a person with delusions can be overjoyed and happy but this person's mental health can not be considered to be intact. Likewise, a person who is functional in many ways in his life may be equally unhappy. Perhaps it can be said that subjective well-being constitutes only one dimension of psychological well-being (Diener, Suh & Oishi, 1997).

Another variable thought to be related to cyber victimization and bullying is social support. The concept of social support has attracted the attention of researchers since the mid-1970s (Zimet, Dahlem, Zimet & Farley, 1988). Social support is defined as information that emerges depending on the belief that the individual is loved, appreciated, and valued by others in a social network (Cobb, 1976). According to another definition, social support includes a range of assistance provided by an individual as a result of social interaction with other individuals (Cooke, Rossman, Mccubbin & Patterson, 1988). Perceived social support is defined as the perception of the help the individual receives from the environment (Brausch & Decker, 2014). Perceived social support resources were identified as family, friends, teachers and other important people (Yildirim, 1997, 2004; You & Lu, 2014; Zimet, Dahlem, Zimet & Farley, 1988). In the context of this information, perceived social support can be defined as a situation in which a person perceives the level of support provided by various sources of social support. In this context, there may also be differences between the support provided by the source of social support and the perception of that support. A person may underestimate or on the contrary, overestimate it, while receiving a genuine strong support from social support resources.

Two models of social support have been put forward. One of them is a buffer model and the second is a main effect model. According to the buffer model, social support has a function that protects a individual from the effects of stressful events. Social support protects a individual from the harm of stress by eliminating the harmful effects of stress. In this regard, social support serves as a buffer. The basic effect model argues that whether or not the individual is stressed, the social support
has a positive and beneficial effect on an individual. According to this model, there is a direct relationship between social support and the health of the individual. Social support has a positive impact on an individual's health (Cohen & Syme, 1985; Cohen & Wills, 1985). In addition, it is known that social support has a protective function against various problems (depression, anxiety, alcohol addiction) (Cobb, 1976)

When these variables are considered as a whole, it is thought that if the adolescence has healthy period, it can have positive effects for this period and for the later periods of adolescents. It can be said that one of the factors that can be effective in the adolescence period is to protect the adolescents not only from the real environment but also from the virtual environment and to increase their awareness. At this point, it is thought that it is important for individuals in adolescence to be exposed to cyberbullying and to determine the variables related to the cyber bullying behaviors and to have knowledge on this subject. In this study, subjective well-being and perceived social support (from family, friends and teachers), which may be related to cyber bullying situations and which may be influential on their bullying, are examined. The main idea in determining these variables is that adolescents with a high level of subjective well-being, positive affect, a low affection, a high level of life satisfaction and a high level of social support from the social environment, will experience less cyberbullying and less cyberbullying. Within the light of the previous studies, it is aimed to investigate the effects of subjective well-being and perceived social support (family, friends, teachers) in cyber victimization and bullying levels of adolescents. In short, the question below is tried to be answered, "Is it possible to predict cyber bullying and cyber victimization levels of adolescents from the subjective well-being and perceived social support (family, friends, teachers) variables?"

**Method**

**Research Models:** This research was conducted based on the relational screening model. This model is a research model for determining the presence or degree of mutual exchange between two or more variables (Karasar, 2016).

**Sample Group:** The study group consisted of 774 high school students (adolescents), 416 (53.7%) male, 358 (46.3%) female, who continue to education at high school level in Erzincan and Ağrı province in 2017-2018 academic year. The distribution is given in Table 1. The age range of the research group was 13-18; the mean age was 15.25.

**Table 1. Distribution of Research Groups by Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>416</td>
<td>53.7</td>
</tr>
<tr>
<td>Female</td>
<td>358</td>
<td>46.3</td>
</tr>
<tr>
<td>Total</td>
<td>774</td>
<td>100</td>
</tr>
</tbody>
</table>

**Data Collection Tools:**

**Cyber Victim and Bullying Scale (CVBS)**

The scale was developed by Çetin, Yaman & Peker (2011). The scale consists of two parallel forms, one of which is cyber victimization (CVS) and the other is cyber bullying (CBS), the 22 items, the quintile rating and the three subscales (cyber linguistic bullying/victimization “CLB”, identity concealment “IC” and cyber counterfeiting, “CC”). The increase in scores in CVS indicates exposure to bullying, and the increase in scores in CBS indicates that bulling situations increase. Internal consistency reliability coefficient was found as .89 for CVS. In addition, internal consistency coefficients of CVS were .86 for CC subscale, .80 for CLB subscale and .68 for IC subscale. The internal consistency coefficient of the CBS was .89. Internal consistency coefficients of the subscales
of CBS were .83 for CC, .81 for CLB and .69 for IC. Within the scope of this study; the Cronbach Alpha reliability coefficient is .88 for the scale victimization, and .89 for the cyber bullying form. To determine the criterion-related validity of the scale, the Turkish version of the Aggression Scale was used. The correlation coefficients between VCBS and Aggression scale were found to be .27 for CVS and .36 for CBS. The correlation coefficients between the Aggression Scale and subscales of CVS were .27 for CC and .20 for CLB and IC. The correlation coefficients between the subscales of CBS were .40 for CC, .22 for CLB and .26 for IC. In the confirmatory factor analysis, the fit indices of the model are: The compliance index value of CVS were RMSEA = .058, NFI = .94, CFI = .96, IFI = .94, RFI = .93, GFI = .90 and NNFI = .96. The compliance indices of CBS are RMSEA = .056, NFI = .95, CFI = .97, IFI = .95, RFI = .94, GFI = .91 and NNFI = .97 (Çetin, Yaman & Peker, 2011).

Adolescent Subjective Well-Being Scale

The scale was developed by Eryılmaz (2009) with the aim of measuring the subjective well-being of adolescents between 14-18 years of age. The scale is a quartile rating scale consisting of 15 items and four dimensions (Satisfaction with family relationships, important satisfaction with others, life satisfaction and positive emotions). The higher the score on the scale, the higher the level of subjective well-being. Factor analysis of the scale revealed that four factors accounted for 61.64% of the total variance. 35.79% of the explained variance was explained by satisfaction with family relations, 9.70% with satisfaction with significant others, 8.69% with life satisfaction and 7.44% with positive affective subscales. Substance factor loads range from .63 to .79. The Cronbach alpha internal consistency reliability coefficients were .86 for all dimensions, .83 for satisfaction with family relationships, .73 for satisfaction with significant others, .81 for life satisfaction, and .66 for positive emotions. Spearman Brown reliability coefficients were found to be .83 for satisfaction with the scale, .83 for satisfaction with family relationships, .61 for satisfaction with significant others, .79 for life satisfaction, and .54 for positive feelings. The test-retest reliability coefficient of the scale was .83. In this study, Cronbach Alpha reliability coefficient was determined to be .95 for the whole scale.

Perceived Social Support Scale (PSSS-R)

The scale was developed by Yıldırım (1997) and then revised in 2004 (PSSS-R). The scale consists of 50 items, triple grading, three sub-dimensions, perceived social support from family (PSF), perceived social support from friends (PSFr.) and perceived social support from teachers (PST). There are 3 negative expressions on the scale (17, 29. and 44.). The scale is scored in the sub-dimensions as well as in the total. Increasing the score from the scale means that the individual has more social support. Alpha reliability coefficient, test retest (rxx) results were examined to determine the reliability level of the scale. Alpha = .93, rxx = .91 for all PSSS-R; Alpha 0.94, rxx = .89, for PSF; Alpha for PSFr = .91, rxx = .85; Alpha = .93, rxx = .86 for PST. In this study, the Cronbach Alpha reliability coefficient for the whole scale was .98, .98 for PSF, .96 for. PSFr. .96 for PST. The KMO coefficient for all PSSS-R is .933 and Bartlett test was found significant. The common factor variance is between .389 and .695. It has been determined that PSSS-R has a general factor and the total score can be used in the analyzes. There are 20 items in the PSF subscale of PSSS-R. KMO coefficient for PSF subscale .935 and Bartlett test was found significant. The common variance of the factors is between .350 and .641. The PSFr. subscale has 13 items. The KMO coefficient for the PSFr. subscale is .940 and Bartlett test was found significant. The common variance of the factors is between .354 and .614. There are 17 items in the PST subscale. The KMO coefficient for PST is .950 and Bartlett test was found significant. The common variance of the factors varies between .402 and .653 (Yıldırım, 2004).

Personal Information Form

In order to learn the personal information of the adolescents constituting the research group, this research was based on the principle of confidentiality.
Collection of the Data:

After receiving the permission for the research, the sample group has been determined. A simple random sampling method was used in the study group and the volunteering of adolescents was also taken into consideration. In the data collection process, necessary explanations were made about the research to students. After that, data collection tools were applied in groups to the research group. The data collection time lasted approximately 45 minutes.

Analysis of Data:

In the analysis process, the data obtained firstly were based on normality and linearity analyses were done. The distances between the extreme values that strengthen normality (multivariate) and linearity assumptions were examined in terms of the distance between the mahalanobis distance (18.47), cook's (Cook' <1) and Leverage Values (.000 - .020). Data sets were also examined for kurtosis, skewness values, scatter and histogram graphs. As a result of these examinations, 18 data gathered from students were extracted from the analysis process because they constitute an extreme value problem that would affect the data analysis. The number of sampling was found to be appropriate, provided that the number of variables involved in the analysis process was taken into account. Another assumption of the multiple linear regression analysis is that there is no high correlation coefficient between the predictor variables. In previous studies carried out, it is necessary to have a correlation value of more than .80 to indicate that there are multiple links between the predictor variables. (Table 3), the tolerance values were higher than .20, the VIF values were less than 10 and the CI values were less than 30. The Durbin-Watson values were examined to examine the independence of faults; values are between 1 and 3 and it was not found that there was not a problem. It was determined that the obtained data were suitable for multiple linear regression analysis. The data obtained in the study were analyzed by stepwise regression analysis method from multiple linear regression analysis. The significance level of .05 was taken into account in the study (Akbulut, 2010, Büyüköztürk, 2011, Can 2013, Seçer, 2015).

Findings

Mean and standard deviations of the study group in terms of variables were given in Table 2.

Table 2. Mean and Standard Deviations in Terms of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>X</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyber Victim (C.V.)</td>
<td>774</td>
<td>41.86</td>
<td>29.14</td>
</tr>
<tr>
<td>Cyber Bullying (C.B.)</td>
<td>774</td>
<td>40.86</td>
<td>29.68</td>
</tr>
<tr>
<td>Adolescent Subjective Well-Being (A.S.W.)</td>
<td>774</td>
<td>42.68</td>
<td>13.42</td>
</tr>
<tr>
<td>Perceived Social Support from Family (P.S.F.)</td>
<td>774</td>
<td>38.95</td>
<td>15.42</td>
</tr>
<tr>
<td>Perceived Social Support from Friends (P.S.Fr.)</td>
<td>774</td>
<td>25.33</td>
<td>9.28</td>
</tr>
<tr>
<td>Perceived Social Support from Teachers (P.S.T.)</td>
<td>774</td>
<td>34.08</td>
<td>11.82</td>
</tr>
</tbody>
</table>

When the results of Table 2 were examined, it was found that the mean of the research group in terms of variables was as follows: Cyber victimization ($\bar{X} = 41.86$), Cyber bullying ($\bar{X} = 40.86$), adolescent subjective well-being ($\bar{X} = 42.68$), perceived social support from family ($\bar{X} = 38.95$) perceived social support from friends ($\bar{X} = 25.33$) and perceived social support from teachers ($\bar{X} = 34.08$). The relationship between adolescents’ cyber victim cyber bullying, subjective well-being and perceived social support from teachers, family, friends, variables was examined by simple correlation analysis method and the results are given in Table 3 below.
According to Table 3, there is a significant negative correlation between cyber victimization, cyber bullying and subjective well-being, perceived social support from family, teachers, and friends. It has also been found that there is a significant level of positive relationship between subjective well-being and perceived social support (family, friends, teachers) and sub-dimensions of social support. Finally, it is also seen that there is no correlation value over the .80, which can be defined as multiple-link between predictor variables. When the ANOVA results that test the meaningfulness of the degree of explanatory variable for the relation between the predictive variables for regression analysis and the predicted variance of predicted variance were examined, it was found that the explained variance or regression model was statistically significant (p <.01). F values for ANOVA results are given in Tables 4 and 5. Table 4, (F₁/₇₇₂=266.04; F₂/₇₇₁=217.73; F₃/₇₇₀=159.67; F₄/₇₆₉=122.12; p<.01); table 5 shows, (F₁/₇₇₂=171.73; F₂/₇₇₁=147.70; F₃/₇₇₀=108.81; F₄/₇₆₉=83.26; p<.01). From these results, it can be said that the predicted variables are successful in the procedure. The results of the stepwise regression analysis of the multiple linear regression analysis for the prediction of the cyber victimization and bullying in adolescents are presented in tables 4 and 5. When tables 4 and 5 were examined, it was seen that subjective well-being and perceived social support (family, friends and teachers) in adolescents significantly are related to, cyber victim and bullying; so they are included in the process of multiple linear regression analysis (stepwise). There is a significant negative correlation between the variables of cyber victim and bullying and subjective well-being, perceived social support (family, friends and teachers), both according to beta and correlation values. Subjective well-being in adolescents and the perceived social support from family, friends and teachers are variables about 39% (R = .623; R² = .388; P <.01) of the total variance for the cyber victim and this result also accounts for approximately 30% (R = .550; R² = .302; P <.01) of the total variance for the cyberbullying.

### Table 3. Simple Correlation Analysis Coefficients in Terms of Variables

<table>
<thead>
<tr>
<th></th>
<th>C.V.</th>
<th>C.B.</th>
<th>A.S.W.</th>
<th>P.S.F.</th>
<th>P.S.Fr.</th>
<th>P.S.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.V.</td>
<td>1</td>
<td>-</td>
<td>-5.06</td>
<td>-4.56</td>
<td>-.393</td>
<td>-.410</td>
</tr>
<tr>
<td>C.B.</td>
<td>-</td>
<td>1</td>
<td>-4.27</td>
<td>-4.18</td>
<td>-.363</td>
<td>-.380</td>
</tr>
<tr>
<td>A.S.W.</td>
<td>1</td>
<td>.288</td>
<td>.207</td>
<td>.205</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.S.F.</td>
<td>1</td>
<td></td>
<td>.665</td>
<td>.617</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.S.Fr.</td>
<td>1</td>
<td></td>
<td>.585</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.S.T.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**P<.01

### Table 4. Multiple Linear Regression Analysis (Stepwise) Results Regarding Prediction of Cyber Victimization

<table>
<thead>
<tr>
<th>Model</th>
<th>U.C.</th>
<th>S.C.</th>
<th>Correlations</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
<td>Zero-Order</td>
<td>Partial</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>88.78</td>
<td>3.01</td>
<td>29.44</td>
<td>**</td>
<td>.506</td>
<td>.256</td>
</tr>
<tr>
<td>A. S. W.</td>
<td>-1.09</td>
<td>.067</td>
<td>-.506</td>
<td>-16.31</td>
<td>**</td>
<td>-.506</td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>104.62</td>
<td>3.13</td>
<td></td>
<td>33.40</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>A.S.W.</td>
<td>-8.88</td>
<td>.065</td>
<td>-.409</td>
<td>-13.60</td>
<td>**</td>
<td>-.440</td>
</tr>
<tr>
<td>P.S.F.</td>
<td>-6.38</td>
<td>.057</td>
<td>-.338</td>
<td>-11.23</td>
<td>**</td>
<td>-.456</td>
</tr>
<tr>
<td>3 (Constant)</td>
<td>111.59</td>
<td>3.34</td>
<td></td>
<td>33.34</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>A.S.W.</td>
<td>-8.76</td>
<td>.064</td>
<td>-.403</td>
<td>-13.64</td>
<td>**</td>
<td>-.441</td>
</tr>
<tr>
<td>P.S.F.</td>
<td>-4.18</td>
<td>.069</td>
<td>-.221</td>
<td>-6.02</td>
<td>**</td>
<td>-.456</td>
</tr>
<tr>
<td>P.S.T.</td>
<td>-4.71</td>
<td>.089</td>
<td>-.191</td>
<td>-5.31</td>
<td>**</td>
<td>-.410</td>
</tr>
<tr>
<td>4 (Constant)</td>
<td>113.47</td>
<td>3.41</td>
<td></td>
<td>33.18</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>A.S.W.</td>
<td>-8.74</td>
<td>.064</td>
<td>-.402</td>
<td>-13.65</td>
<td>**</td>
<td>-.442</td>
</tr>
</tbody>
</table>
The subjective well-being variance was examined in the first step of the multiple linear regression analysis process for predicting the cyber victimization is -.506 in the prediction of cyber victimizations of adolescents (Beta coefficient). The t test results for the significance of the beta coefficient were significant (t = 16.31; P < .01). The subjective well-being variant selected alone accounts for about 26% of the cyber victims of adolescents. (R= .506; R² = .256).

In the second step of the stepwise regression analysis, the perceived social support from family variable of the subjective well-being variable was also added in model. When other variables affecting cyber victimization in adolescents were held constant, subjective well-being and perceived social support from family variables together account for about 36% of the cyber victimization (R=.601; R²=.361). Beta coefficient of subjective well-being variable in adolescents when other variables in the model were kept constant is -.409; the Beta coefficient of the variable of social support perceived from family is -.338. The t test results for the significance of the beta coefficient were found significant (t_{ASW}=-13.60; t_{PST}=-11.23; P<.01).

In the third step of the stepwise regression analysis, the perceived social support from teachers was added to subjective well-being and perceived social support from family variables. When other variables affecting cyber victimization in adolescents were held constant, subjective well-being, perceived social support from teachers and family together account for about 38% of the cyber victimization (R=.619; R²=.384). When other variables in the model are kept constant, Beta coefficient of subjective well-being variable and perceived social support from family variable respectively are -.403 and -.221. the Beta coefficient of the perceived social support from teachers variable is also -.191. The t test results for the significance of the beta coefficient were found significant (t_{ASW}=-13.64; t_{PST}=-6.02; t_{PSF}=-5.31; P<.01).

In the fourth step of the stepwise regression analysis, social support variable perceived from friends was added to subjective well-being variable and social support from family and teachers. When other variables affecting cyber victimization are held constant in adolescents, subjective well-being, social support variables perceived from family, teachers, and friends together account for approximately 39% of the cyber victimization (R=.623; R²=.388). When other variables in the model are kept constant, Beta coefficient of subjective well-being variable in adolescents is -.402; the Beta coefficient of the perceived social support from family variable is -.173, the Beta coefficient of the perceived social support from teachers variable is -.163, and the Beta coefficient of the perceived social support from friends variable is -.099. The t test results for the significance of the beta coefficient were found significant (t_{ASW}=-13.65; t_{PSF}=-4.18; t_{PST}=-4.34; P<.01; t_{PSF}=-2.49; P<.05).

In the fourth step, subjective well-being, perceived social support variables from family, friends and teachers, were found to be significant predictors of cyber victimization in adolescents when the beta coefficients of the variables entering the model and the t test results of the significance of the beta coefficients were taken into consideration. According to Beta values, the best predictors of cyber victimization in adolescent are respectively "subjective well-being", "perceived social support from family", "perceived social support from teachers" and "perceived social support from friends".

From this point of view, the order of importance of the predictive variables over the cyber victimization is subjective well-being, perceived social support from family, perceived social support from teachers and social support from perceived friends.
In the first step of the multi-linear regression analysis process for the prediction of the cyber bullying, Beta coefficient of the subjective well-being variability examined is -.427. The t test results for the significance of the beta coefficient were found significant (t=-13.10; P<.01). The subjective well-being variant explains about 18% of cyber bullying of adolescents when singly included in the process ($R^2=.182$).

In the second step of the stepwise regression analysis, the perceived social support from family variable of the subjective well-being variable added to process. When other variables affecting cyber bullying held constant, subjective well-being and perceived social support from family variables together account for about 23% of cyber bullying ($R^2=.227$). Beta coefficient of subjective well-being variable in adolescents when other variables in the model are kept constant is -.334; the Beta coefficient of the variable of perceived social support from family also is -.322. The t test results for the significance of the beta coefficient were found significant (tASW=-10.44; tPSF=-10.06; P<.01).

In the third step of the stepwise regression analysis, subjective well-being and the perceived social support from family variables added to the perceived social support from teachers in model. When other variables in adolescents affecting cyber bullying kept constant, subjective well-being, social support perceived from family and teachers variables together account for about 30% of the cyberbullying ($R^2=.298$). When other variables in the model are kept constant, Beta coefficient of subjective well-being variable in adolescents -.329; the Beta coefficient of the perceived social support from family variable is -.210 and the Beta coefficient of the perceived social support from teachers variable is -.183. The t test results for the significance of the beta coefficient were found significant (tASW=-10.41; tPSF=-5.36; tPST=-4.76; P<.01).

In the last step of the stepwise regression analysis, subjective well-being, perceived social support from friends and family, and perceived social support from friends variables were added simultaneously. When other variables affecting cyber bullying in adolescents are kept constant subjective well-being, perceived social support from family, teachers, and friends variables together account for about 30% of cyber bullying ($R^2=.302$). When other variables in the model are kept constant, Beta coefficient of the subjective well-being variable in adolescents -.328; Beta coefficient of the perceived social support from the family variable is -.165, Beta coefficient of the perceived social support from teachers variable is -.157, and Beta coefficient of the perceived social support from friends variable is -.094. The t test results for the significance of the beta coefficient were found significant (tASW=-10.41; tPSF=-3.72; tPST=-3.90; P<.01; tPSFr=-2.22; P<.05).

### Table 5. Multiple Linear Regression Analysis (Stepwise) Results Regarding Cyber Bullying Prediction

<table>
<thead>
<tr>
<th>Model</th>
<th>U.C.</th>
<th>S.C.</th>
<th>Correlations</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>Zero-Order</td>
<td>Partial</td>
<td>R</td>
<td>R²</td>
<td>F</td>
<td>df</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1(Constant)</td>
<td>81.12</td>
<td>3.22</td>
<td>-25.19</td>
<td>-13.10</td>
<td>-.427</td>
<td>-.427</td>
<td>.427</td>
<td>.182</td>
<td>171.73</td>
<td>1/772</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.S.W.</td>
<td>-.943</td>
<td>.072</td>
<td>-.427</td>
<td>-13.10</td>
<td>-.427</td>
<td>-.427</td>
<td>.427</td>
<td>.182</td>
<td>171.73</td>
<td>1/772</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2(Constant)</td>
<td>96.50</td>
<td>3.39</td>
<td>-28.44</td>
<td>-10.44</td>
<td>-.427</td>
<td>-.352</td>
<td>.526</td>
<td>.227</td>
<td>147.70</td>
<td>2/771</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.S.W.</td>
<td>-.738</td>
<td>.071</td>
<td>-.334</td>
<td>-10.44</td>
<td>-.427</td>
<td>-.352</td>
<td>.526</td>
<td>.227</td>
<td>147.70</td>
<td>2/771</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.S.F.</td>
<td>-.619</td>
<td>.062</td>
<td>-.322</td>
<td>-10.06</td>
<td>-.418</td>
<td>-.341</td>
<td>.546</td>
<td>.298</td>
<td>108.81</td>
<td>3/770</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3(Constant)</td>
<td>103.29</td>
<td>3.63</td>
<td>-28.39</td>
<td>-10.41</td>
<td>-.427</td>
<td>-.351</td>
<td>.546</td>
<td>.298</td>
<td>108.81</td>
<td>3/770</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.S.W.</td>
<td>-.726</td>
<td>.070</td>
<td>-.329</td>
<td>-10.41</td>
<td>-.427</td>
<td>-.351</td>
<td>.546</td>
<td>.298</td>
<td>108.81</td>
<td>3/770</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.S.F.</td>
<td>-.405</td>
<td>.076</td>
<td>-.210</td>
<td>-.53</td>
<td>-.418</td>
<td>-.190</td>
<td>.550</td>
<td>.302</td>
<td>83.26</td>
<td>4/769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.S.T.</td>
<td>-.459</td>
<td>.096</td>
<td>-.183</td>
<td>-.476</td>
<td>-.380</td>
<td>-.169</td>
<td>.550</td>
<td>.302</td>
<td>83.26</td>
<td>4/769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4(Constant)</td>
<td>105.12</td>
<td>3.72</td>
<td>28.26</td>
<td>-10.41</td>
<td>-.427</td>
<td>-.351</td>
<td>.550</td>
<td>.302</td>
<td>83.26</td>
<td>4/769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.S.W.</td>
<td>-.725</td>
<td>.070</td>
<td>-.328</td>
<td>-10.41</td>
<td>-.427</td>
<td>-.351</td>
<td>.550</td>
<td>.302</td>
<td>83.26</td>
<td>4/769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.S.F.</td>
<td>-.317</td>
<td>.085</td>
<td>-.165</td>
<td>-.372</td>
<td>-.418</td>
<td>-.133</td>
<td>.550</td>
<td>.302</td>
<td>83.26</td>
<td>4/769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.S.T.</td>
<td>-.393</td>
<td>.101</td>
<td>-.157</td>
<td>-.390</td>
<td>-.380</td>
<td>-.139</td>
<td>.550</td>
<td>.302</td>
<td>83.26</td>
<td>4/769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.S.Fr.</td>
<td>-.300</td>
<td>.135</td>
<td>-.094</td>
<td>-.222</td>
<td>-.363</td>
<td>-.080</td>
<td>.550</td>
<td>.302</td>
<td>83.26</td>
<td>4/769</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Unstandardized Coefficients ; Standardized Coefficients) (**P<.01; *P<.05)
In the last step, subjective well-being, social support variables perceived from family, friends, and teachers were found to be significant predictors of cyber bullying in adolescents when the beta coefficients of the variables entering the model and the t test results regarding the significance of the beta coefficients were taken into account. According to the beta values, it has been found that cyber bullying of the adolescents showed a significant level of "subjective well-being" in the first place, "social support perceived from family" in the second place, "social support perceived from teachers" in the third place and "social support perceived from friends" in the last place.

Conclusion, Discussion and Suggestions

As a result of the research; There was a significant negative correlation between cyber bullying and subjective well-being, perceived social support from family, perceived social support from teachers, and perceived social support from friends. In other words, the levels of subjective well-being and perceived social support (from family, friends, teachers) of adolescents increase as the levels of cyber victimization and bullying decrease. In addition to this result, subjective well-being in adolescents, perceived social support from family, friends and teachers variables found to be one of the predictor of cyber victimization and bullying. Variables of subjective well-being in adolescents and perceived social support from family, friends and teachers together account for about 39% of the total variance for the cyber victim in adolescents and account for about 30% of the total variance associated with bullying. Cyber victim and bullying in adolescents found to be significantly predictors of "subjective well-being" in the first place, "perceived social support from family" in the second place, "perceived social support from teachers" in the third place, and "perceived social support from friends" in the third place.

Depending on the results above, there is a positive set of technology results, as well as negative consequences such as cyber bullying and cyber criminality. The rapid development of technology and the diversification of information communication tools have led to the introduction of a social being into new experiences. As a result of this, the concepts of cyber bullying and victimization emerged as a current problem.

As a result of the research, it was observed that there was a negative correlation between cyber-victimization in adolescents and cyber bullying, subjective well-being occurrence, and that subjective well-being in adolescents was first ranked in cyber victimization and bullying. The results of these findings suggest that adolescents with low subjective well-being levels may exhibit more cyber bullying behaviors. In other words, individuals who has negative emotions and has very low life satisfaction can make more cyber bullying and more cyber victimization. The results of the study supporting this finding in the field are very limited, and result of the study is consistent with the findings of study conducted by Navarro, Ruíz-Oliva, Larrañaga & Yubero (2015). This study also concluded that there was a significant negative correlation between bullying and subjective well-being. It has been determined that cyber bullying and victimization in the field lead to serious negativities on the lives of individuals. The level of well-being of individuals who received positive feedback on virtual communication platforms was increased, while those who received negative feedbacks were found to have low self-esteem and well-being (Valkenburg, Peter & Schouten, 2006). When the results of this study considered as a whole, it can be said that one way of protecting adolescents against cyber victims and cyberbullying is increase in their subjective well-being. Thus, the chances of experiencing cyberbullying for those who have positive emotions and life satisfaction may be reduced to the most extreme.

Perceived social support is a situation in which individual support from different sources, such as family, friends and teachers, is perceived as personal. In this study, it was observed that the perceived social support from family in adolescents was in the second place of cyber-victimization and bullying and that there was a significant negative correlation between them. Research findings supporting these results were found in the field literature survey. (Fanti, Demetriou & Hawa, 2012; Peker & Eroğlu, 2015). In addition to these findings, it has been found that the monitoring strategies.
and rules of the families on appropriate or inappropriate sites reduce the risk of children becoming victims of cyber attacks (Mesch, 2009). Similarly, it has found that individuals who use electronic technology with family control and rules share less personal information (Navarro, Serna, Martinez & Ruiz-Oliva, 2013).

Individuals who thought they were receiving social support were less likely to use the internet and in addition. It was found that internet usage habits of them and goals are differed from each others (Sezer & Işgör, 2017). Considering these situations, it is understood that perceived social support is an important function of family and family's perceptions of cyber victimization and bullying. When the studies are evaluated as a whole, it can be said that there is a protective function of the social support perceived from the family at a high level in cases of cyber victimization and bullying. Otherwise, it can be said that the people who can not receive or support the high level of support from their families try to gain it from the virtual environment and as a result the use of virtual communication tools as uncontrolled, it may cause to increase the cases of cyber victimization and bullying. In this context, to protect adolescents against cyber victimization and bullying, families can be more aware of this issue and provide more support for their children.

As a result of the research, it was determined that perceived social support from teachers is a predictor of cyber bullying and victimization in adolescents and bullying is in the third rank. In addition to that, there was a meaningful relationship between them in the negative direction. In the previous studies, it has been seen that cyber victimization and cyberbullying are handled and examined with different variables; however, it hasn't been found any studies of the perceived social support from teachers, cyber victimization and the cyber-bullying are discussed together. In this context, it can be said that school life and teacher influence are not taken into consideration because cyberbullying and victimization are performed in the virtual environment (Eroğlu, 2014). However, it is known that adolescents spend a large majority of their time in school, and that teachers are important in the development of adolescents (Eccles & Roeser, 2003). It has been determined that the awareness of the cyberbullying by the teachers who work in school is so important and that the problems experienced by the victims lead to various problems such as; decline in study duration, academic achievement and suicidal thoughts (Akbiyik & Kestel, 2016; Beran & Li, 2008), depression (Landoll et al. 2015) and low self esteem (Özdemir, 2014). When these results are evaluated together, it can be said that the perceived social support from teachers is important for adolescents and also supporting adolescent with high level social support from teachers are protective especially in the case of cyber victimization and bullying. At this point, it is possible for teachers to increase their awareness in this regard against victim and bullying situations in adolescents to give more support to adolescents.

As a result of the research, it was determined that perceived social support from friends was predictor in the last order and there was a meaningful relationship between them in the negative direction. When the general characteristics of adolescence are taken into consideration, it can be said that the friends of the adolescents in their social life and the perceived social support from them are important in this healthy turnover. In this period, it is considered that adolescents who perceive social support from friends at upper level will be exposed to less virtual bullying. While social environment and perceived social support which are essential for maintaining a compatible life protect adolescent against victimization, at the same time they have protective effect not to bully others by the adolescents in any way. In this context, it can be said that perceived social support from friends is significant in terms of eliminating the victimization and bullying situations or reducing them to minimum level. In the investigations, exposure to bullying is known to cause a variety of psychosomatic problems on the victims (Yen et al. 2014; Chang et al. 2015; García-Moya, Suominen & Moreno, 2014; Sumter & Baumgartner, 2017). In another studies conducted at this point, it was determined that the social support obtained from friends decreased the stress because of being exposing cyberbullying on the victim and was effective in creating a sense of belonging and social loyalty in the individual (Naslund, Aschbrenner, Marsch & Bartels, 2016; Tokunaga, 2010). Cyberbullying is known to be associated with peer rejection (Wright & Li, 2013).
Especially in adolescence, it can be said that adolescents tend to share their experiences of cyberbullying with friends rather than their parents, and compared to their parents, their peers can better understand some of the virtual issues (Sasson & Mesch, 2014). People who are exposed to bullying are in demand for support and help from friends and family and teachers as well as from accessible sources (Jenkins, Fredrick & Wenger, 2018). It can be said that perceived social support may reduce the level of the individual becoming a cyber bully and a cyber victim. In other words, if social support diminishes, it can be said that individuals can enter into undesirable experiences. In such cases of social support diminishment, individuals seek this support they need in cyber environments, and as a result of the rapid and uncontrolled access provided by the internet, adolescents may enter into negative experiences such as cyber bullying and cyber victimization. At the end of this study, the following suggestions were made:

- The population and sample groups in which the research is carried out can be changed in order to understand better the cases of cyberbullying and cyber victimization and to close the gaps of literature.

- The predictive power of these variables can be investigated by choosing other variables instead of subjective well-being, perceived social support from family, friends and teachers.

- It is possible to prevent or reduce these and other adverse experiences by increasing the support provided from individuals as a result of understanding predicting effect of the social support of the individuals on the negative experiences.

- Educational institutions can be informed and educated about cyber victimization and bullying situations and students can be warned about these situations.

References


