An Examination of the Relationship Between Self-Control and Cyber Victimization in Adolescents

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ABSTRACT

Purpose: Cyber bullying is a new phenomenon which adversely affects young people. Exposure to the cyber bullying can negatively affect the mental health. The aim of this study is to examine the predictive effect of self-control on cyber victimization in adolescents. Research Methods: The study group was composed of 353 Turkish secondary school students. The research data were collected using the Brief Self-Control Scale and Cyber Victimization Scale. To examine predictive relationships between self-control and cyber victimization, the descriptive relational model was used. In the study, the analysis of the data was made using the Pearson Correlation Coefficient and structural equation modelling. Findings: As a result of the study, significant relationships were determined in the negative direction, at low and moderate level between the impulsivity and self-discipline sub-dimensions of the self-control scale and cyber language victimization, hidden identities and cyber forgery sub-dimensions of the cyber victimization scale. Another result of the study was that the self-control latent variable (SC) covering the impulsivity and self-discipline sub-dimensions predicted negatively the cyber victimization latent variable (CV), which relates to cyber language victimization, hidden identity and cyber forgery sub-dimensions. Implications for Research and Practice: As a result of the study, it was found that self-control predicted cyber victimization in a negative way. The structural modelling analysis indicated that the model related to self-control's predicting cyber victimization was acceptable and the model could account for the relationships between the observed and the latent variables sufficiently. Counselors can place students in activities to improve their self-control skills.

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Introduction

The use of communication technologies has become an indispensable phenomenon for people. Internet use is becoming more widespread and has become essential part of life (Dogan, 2016; Eroglu, 2016). Information and communication technologies are developing quickly. At the beginning of the 21st century, adolescents began to use the Internet actively. Blogs, social networks and instant messaging have created a new world for young people (Antoniadou & Kokkinos, 2015). Developments and changes that create a positive impact on the lives of individuals can nonetheless lead to results that do not want conventional terms of individual and social. In this case, information and communication-context can be seen more clearly as a product of technological development (Ates & Guler, 2016). Especially when people use communication tools intensively, there can be a rapid change in their relationships in their daily lives.

Online participation does not only enable a person to reach information at his/her fingertips; it also offers such benefits as entertainment and the means to learn various social and emotional skills. For example, cyber environment provides a place for expressing emotions in a healthy way, treating others tolerantly and respectfully, critical thinking, decision making, self-control skill and learning (Berson, 2000). The cyber world provides young people with such opportunities as self-discovery, social support, playing games, communication with others and academic support (Tokunaga, 2010). Therefore, information and communication technologies can be said to provide a significant contribution in the life of young people.

If young people do not use the Internet in a positive way like discovering new things and relaxing, they will not establish positive interactions with others in cyberspace nor enhance developmental characteristics. A great majority of young people use computers and the Internet in a negative and harmful way like causing harm to others and exhibiting aggressive behaviors. The new form of online aggression and victimization is called cyber bullying (Mishna, Cook, Gadalla, Daciuk & Solomon, 2010). In other words young people can use communication technologies to harm others.

Cyber bullying behaviors can be seen in different forms in daily life. A cyber bully may establish communication with a victim by using an e-mail under a fake name or creating imaginary accounts on social media sites. At the same time, an individual might become the victim of cyber bullying while playing a game, at school, home or in his/her private quarters. Due to the use of modern technology, we may come across cyber bullying behaviors any time of day. A beneficial therefore technology has made possible new form of bullying and may be abused (Paullet & Pinchot, 2014). In short, we can face cyber bullying behavior just about everywhere.

When examining the literature of different countries regarding the prevalence of cyber bullying, the author discovered numerous studies. Cyber bullying is commonly observed in the early adolescent and adolescent ages. For example, in a study carried out with secondary and high school students, nearly half the students had experienced cyber victimization and 34% of them been cyber bullies themselves.
(Mishna et al., 2010). In another study, the rate of the students falling victim to cyber bullying was about 19% and that of the students being cyber bullies was about 17% (Heiman, Olenik-Shemesh & Eden, 2015). Jung et al., (2014) found that one of ten students did cyber bullying, while Felmlee and Faris (2016) determined that 5.8 % of the young people aged between 14-18 years old fell victim to cyber bullying. Ramsey, Dilalla and Mccrary (2015) found out that 5% of the young people aged between 18-22 years old were cyber victims. DePaolis and Williford (2014) determined that approximately 18% of middle school students were cyber victims. In summary, studies in the literature have shown that cyber bullying is increasingly a common.

Exposure to cyber bullying can negatively affect the psychology of individuals. Individuals being subjected to cyber bullying have low self-esteem, lack of concentration and suicidal thoughts (Bauman & Newman, 2013; Bonanno & Hymel, 2013). Studies have found a significant relationship between cyber bullying and emotional problems (Sjurso, Fandrem & Roland, 2016). It is reported that cyber bullied people experience excessive levels stress (Wright, 2015), sorrow, and desperation (Raskauskas & Stoltz, 2007; Wolak, Mitchell & Finkelhor, 2006); depression and emotional problems (Brown, Demaray & Secord, 2014). Research results show the mental health effects of exposure to cyber bullying.

Exposure to the cyber bullying can affect the school life and friendship relationships of adolescents. However, it is emphasized that in students subjected to cyber bullying display such problems as not wanting to go to school and fear of attending school (Raskauskas & Stoltz, 2007). Cyber bullying events arise generally from relationship problems in cyber environment such as jealousy, intolerance, and upsetting others (Akbulut & Erst, 2011). As a result, young people spend a lot of time on the Internet. A adverse situations in daily life can lead to cyber bullying behavior online.

In the study, self-control is one concept examined. Self-control is described as how an individual’s regulates’ and controls his/her feelings, thoughts and behaviors in order to establish good relationships with others (Baumeister, Bratlavsky, Muraven & Tice, 1998; Muraven, Tice & Baumeister, 1998). Gottfredson & Hirschi (1990) state that individuals with low self-control have such characteristics as impulsively and selfish behavior, taking pleasure in risk-taking a preference for physical activities instead of mental ones, and a preference for choosing simple tasks over complicated ones. For this reason, the behaviors of individuals with low self-control aim at short-term targets and are shaped according to impulsive pleasure-taking (Hirschi & Gottfredson, 1993). Family attitudes play an important role in the development of low self-control.

It is reported that low self-control affects victims both indirectly and directly. For victims, the possibility of encountering more frequent risky situations and encountering criminal behaviors of individuals with insufficient self-control have a direct impact. Making decisions about situations to reveal their faults affects individuals with low self-control as victims directly (Bossler & Holt, 2010). It was
reported that low self-control is related to the display of violent behaviors (Schreck, Stewart & Fisher, 2006), being a victim (Holtfreter, Reisig & Pratt, 2008), exhibition of reckless behaviors (Forde & Kennedy, 1997), risky life styles (Stewart, Elifson & Sterk 2004), commission of crimes (Schreck, Wright & Miller, 2002), positive emotions, learner engagement, academic achievement (King & Gaerlan, 2014). Ultimately, researchers reported problematic behavior caused by low self-control.

**Purpose of The Study**

Studies have revealed that cyber bullying as a by product of abusing information and communication technologies is a gradually increasing problem among children and young people. The advancing technology could make enhance this problem even worse. For this reason, studies on how to carry out preventive measures are increasing. It is projected that this study could make a contribution to preventive method. Finding the relationship between self-control and cyber victimization in adolescents would be provide an important resource for field specialists (i.e., psychological counselors, psychologists, social service specialists and school administrators) in prevention. In this direction, the purpose of this study is to examine the predictive effect of self-control on cyber victimization.

**Method**

**Research Design**

To examine predictive relationships between self-control and cyber victimization, the descriptive relational model was used in the study. The theoretical model developed in order to account for the relationship between adolescents' self-control and cyber victimization was tested.

**Research Sample**

The study group was composed of 353 students receiving education at five high schools in the city of Erzurum, Turkey in the 2014-2015 educational year. Two hundred and nine participants (59.2% of the total) were female and 144 (40.8%) were male. The grade break down of students was roughly equal: 26.6% were in 9th grade; 29.6% were in 10th grade; 31.2% were in 11th grade; and 13.6% were in 12th grade.

**Research Instrument and Procedure**

**Brief self-control scale (BSCS).** One of the data collection tools used in the study is the Brief Self-Control Scale. The scale was adapted into Turkish by Neboglu, Konuk, Akbaba, Eroglu (2012). The reliability coefficient for the entire scale was found to be .83; for the dimension of impulsivity, it was .81; for the dimension of self-discipline, it was .87. The test-retest reliability for the whole of the scale was determined to be .88; for the dimension of impulsivity, .83; for the dimension of self-discipline, .85.

**Cyber victimization and bullying scale (CVBS).** In order to determine the students' cyber bullying and cyber victimization behaviors, the CVBS developed by Cetin, Yaman and Peker (2011) was used. The scale is composed of two forms and the
dimensions of cyber language victimization/bullying (CLV/B hiding identity (HI) and cyber forgery (CF)). There are 22 questions in the scale. The scale was evaluated via using five-point Likert type grading. Within the scope of this study, the cyber victimization form was used. The internal consistency of the CVS was found to be .89. The internal consistency coefficients were .86, .80 and .68 respectively for the CF, CLV and HI sub-dimensions of the scale; the test-retest reliability coefficients were .87, .80 and .69. The increase observed in the total score obtained for the CVS indicates an increase in the possibility of experiencing cyber bullying.

Data Analysis

Before analyzing the data of the study, for the multivariate data, in order to determine values which are likely to affect the normal distribution, the Mahalanobis distance values were calculated. As a result of this calculation procedure, scales belonging to four people were excluded from the data set. After this procedure, analyses were conducted of 353 pieces of data. The relationships between self-control and cyber victimization were examined via Pearson Product-Moment Correlation; the predictive effect of self-control on cyber victimization was examined using structural equation modelling. Shumacker and Lomax (2004) described structural equation modelling as a statistical approach revealing causal and mutual relationships between observed and latent variables to test a theoretical model. In the study, analyses of the data were made via using the LISREL 8.54 and SPSS 21.00 programs.

Results

The result of the analyse of the data obtained from the study, the relationship between adolescents’ self-control and cyber victimization behaviors, the means and the standard deviation values are presented in Table 1.

Table 1. Pearson Correlation Analysis Results Related to Relationships Between Self-Control and Cyber Victimization

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Impulsivity</td>
<td></td>
<td>.30*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Self-Discipline</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Cyber Language</td>
<td></td>
<td>-.33*</td>
<td>-.18*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Victimization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Hiding Identity</td>
<td></td>
<td>-.22*</td>
<td>-.11*</td>
<td>.58*</td>
<td>1</td>
</tr>
<tr>
<td>5 Cyber Forgery</td>
<td></td>
<td>-.17*</td>
<td>-.11*</td>
<td>.66*</td>
<td>.65*</td>
</tr>
<tr>
<td>X</td>
<td>15.45</td>
<td>14.78</td>
<td>9.81</td>
<td>7.54</td>
<td>12.78</td>
</tr>
<tr>
<td>Sd</td>
<td>4.15</td>
<td>3.00</td>
<td>4.07</td>
<td>3.37</td>
<td>4.65</td>
</tr>
</tbody>
</table>

*p<.05
When Table 1 is examined, significant negative relationships are observed at low and moderate levels between the impulsivity and self-discipline sub-dimensions on the self-control scale and the cyber language victimization, hidden identity and cyber forgery sub-dimensions of the cyber victimization scale. Moreover, it is observed that the sub-dimensions on the cyber victimization scale are significantly positively related with one another at a moderate level. Furthermore, a significant positive relationship between the impulsivity and self-discipline sub-dimensions of the self-control scale are found at a moderate level.

**Structural Equation Modelling**

Having determined the significant relationships between self-control and cyber victimization, the predictive effect of self-control on cyber victimization was tested via structural equation modelling. The latent variable of self-control (SC) was measured via the observed variables of impulsivity and self-discipline. The latent variable of cyber victimization (CV) was measured via the observed variables of cyber language victimization (clv), hiding identity (hi) and cyber forgery (cf). The findings related to the predictive effect of the latent variable of self-control (SC) on the latent variable of cyber victimization (CV) are shown in Figure 1.

![Figure 1](image)

χ²: 3.13, sd: 3, p: .37, RMSEA: .011

**Figure 1. Structural equation model between self-control and cyber victimization**

Figure 1 show the implicit variable of self-control (SC) covering impulsivity and self-discipline predicts negatively the implicit variable of cyber victimization covering the sub-dimensions of cyber language victimization, hiding identity and cyber forgery (β = -.40, t = -4.47). It was determined that all the paths shown in the model were significant (χ²/sd= 1.04, NFI= .99, CFI= .99, GFI = .98, AGFI = .98, SRMR= .014 ve RMSEA= .011; Byrne, 2010; Kline, 2011). This finding suggest that self-control has a significant effect on being subjected to cyber bullying in adolescents. In other words, the obtained findings revealed that adolescents’ increasing self-control levels decrease their chances of experiencing cyber victimization.

**Coefficients of Determination Related to Structural Equation Model**

The findings related to self-control’s coefficients accounting for the variance in cyber victimization are given in Table 2.
Table 2.
Coefficients of Determination Related to Structural Equation Modelling

<table>
<thead>
<tr>
<th>Accordance Parameter</th>
<th>Coefficient Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Impulsivity</td>
<td>.53</td>
</tr>
<tr>
<td>2. Self-discipline</td>
<td>.17</td>
</tr>
<tr>
<td>3. Cyber language victimization</td>
<td>.62</td>
</tr>
<tr>
<td>4. Hiding identity</td>
<td>.57</td>
</tr>
<tr>
<td>5. Cyber forgery</td>
<td>.70</td>
</tr>
</tbody>
</table>

When Table 2 is examined, it can be observed that self-control (SC) accounts for 53% of the impulsivity variance and 17% of the self-discipline variance in the measurement model related to self-control. Moreover, in the measurement model related to cyber victimization, cyber victimization (CV) accounts for 62% of the variance in cyber language victimization, 57% of the variance in hiding identity and 70% of the variance in cyber forgery. It was determined that the self-control latent variable accounted for 18% of the variance in the cyber victimization latent variable.

Findings Related to Total and Indirect Effects in Structural Modelling

The total effects of the SC implicit variable on impulsivity and self-discipline and those of the CV latent variable on cyber language victimization, hiding identity and cyber forgery and the indirect effects of the SC latent variable on the observed variables of CV are shown in Table 3.

Table 3.
Total and Indirect Effects Determined In Relation To Structural Equation Modelling

<table>
<thead>
<tr>
<th>Observed Variables</th>
<th>Total Effect</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Impulsivity</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>2. Self-discipline</td>
<td>.41</td>
<td></td>
</tr>
<tr>
<td>3. Cyber language victimization</td>
<td>.79</td>
<td>-1.30</td>
</tr>
<tr>
<td>4. Hiding identity</td>
<td>.76</td>
<td>-1.03</td>
</tr>
<tr>
<td>5. Cyber forgery</td>
<td>.83</td>
<td>-1.57</td>
</tr>
</tbody>
</table>

When the values given in Table 3 are examined, it is observed that the self-control latent variable (SC) directly affects the variables of impulsivity and self-discipline; the cyber victimization latent variable (CV) directly affects the variables of cyber language victimization, hiding identity and cyber forgery. Moreover, the observed variables of impulsivity and self-discipline indirectly affects the observed variables of the cyber victimization scale over the SC latent variable. In other words, the SC latent variable indirectly affect the indicative variables of the CV latent variable and it was found that this effect was not direct.
Discussion and Conclusion

Discussion

This study examined the predictive effect of self-control, composed of the dimensions of impulsivity and self-discipline on adolescents’ experiences of cyber victimization. The predictive effect of self-control on cyber victimization was tested with the structural equation modelling. As a result of testing the structural equation modelling, it was found that the self-control latent variable accounted for 18% of the cyber victimization latent variable and self-control predicted cyber victimization in a negative way. The findings revealed that if adolescents’ self-control levels increased, the possibility of their experiencing cyber victimization decreased. This result is consistent with research findings indicating that low self-control increases cyber victimization (Bossler & Holt, 2010; Vazsonyi, Machackova, Sevcikova, Smahel & Cerna, 2012). In light of the findings obtained from the study, self-control appears to be a strong predictor of cyber victimization in adolescents; as self-control decreases, exposure to cyber bullying is likely to increase. One adolescents being cyber bullied their low self-control level. In other words, self-control is a negative risk factor in terms of cyber victimization.

Researchers have shown that the behavior of individuals with low self-control. Since individuals with low self-control make impulsive decisions, this may lead to them to involvement in criminal behaviors. Hence, their risk of being a victim increases (Higgins, Fell & Wilson, 2006; Higgins & Makin, 2004). As individuals with low self-control, they may display risky behaviors. Although these actions give pleasure to an individual for a short period of time, they may, at the same time, lead them to become victims and to encounter harmful software (Bossler & Holt, 2009). However, individuals may interact with people who they do not know in chat rooms and cyber environments and, as a result, be subject to harmful behaviors (Gilboa, 1996; Hinduja & Patchin, 2008). As a result, individuals with low self-control may show risky behavior in the virtual environment. This situation can lead to life cyber bullying.

Researchers indicate that individuals with low self-control have problems in contact with others. It is stated that individuals with low self-control have difficulty establishing relationships with others and low empathy levels and social ties. At the same time, they may interpret other people's intentions incorrectly (Gottfredson & Hirschi, 1990). It is emphasized that people with difficulty evaluating other people's intentions in face-to-face interactions have an important disadvantage in on-line environments (Herring, 1999; Wall, 2001). As a result, these experiences may lead to decreasing social support and experiences of victimization. In this context, individuals with low self-control can easily be frustrated in the cyber environment.

Virtual environments provide opportunities for individuals to express themselves. This can lead to loss of self-control. Thoughtless or aggressive behaviors in the online environment may lead to victimization in the cyber environment. People who cannot cope with others in the online environment may use conflict-
prone and aggressive language when establishing communication (Gilboa, 1996; Herring, 1999). Individuals with low tolerance may harm others and exhibit more threatening behaviors in their online social interactions (Bossler & Holt, 2010). Individuals with low self-control are associated with peers that support the cybercrime (Higgins et al., 2006). As a result, people with low self-control of virtual environments are provided to describe themselves using the wrong conditions can lead to cyber victimization.

Researchers have reported that the reason they are victims of the personality traits of individuals with low self-control. It is reported that since individuals with low self-control exhibit risky behaviors and have characteristics increasing the possibility of their getting involved in crime such as impatience, insensitiveness and impulsivity that increase, the possibility of their getting involve in crime being a victim increases (Gottfredson & Hirschi, 1990). Moreover, individuals with low self-control may peers who tend to get involved in risky situations and commit crimes (Schreck et al., 2002). As a result, having low self-control can lead to cyber victimization.

Individuals with low self-control may be exposed to cyber bullying behavior in cyberspace. Young people with low self-control are more likely to be engaged in a risky lifestyle and subjected to other crimes (Bossler & Holt, 2010; Schreck et al., 2006). Since individuals with low self-control spend too much time online and share too much personal information (Holt, Bossler & May, 2012), they may be subjected to cyber bullying. Since individuals with low self-control often engage in risky behaviors in the online environment to get short-term pleasure, they may become victims (Bossler & Holt, 2010; Holt et al., 2012). Consequently, the personal characteristics of individuals with low self-control are contributing to their becoming victims of cyber bullying.

**Conclusion**

This study found that self-control predicted cyber victimization in a negative way. The structural modelling analysis indicated that the model related to self-control's predicting cyber victimization was acceptable and the model could account for the relationships between the observed and the latent variables sufficiently. According to the research results, the adolescents' decreasing self-control related to impulsivity and lack of self-discipline, thus leading to their experiencing cyber victimization.

**Recommendations**

The findings of the study should be taken into account with the limitations. As a data collection tool, the self-control scale composed of two sub-dimensions, and the cyber victimization scale composed of three sub-dimensions, were used. Further studies could repeat the study using different scales related to self-control and cyber victimization. Hence, results of those studies could be compared and more detailed findings can be obtained. Another limitation of the study was its inclusion of
adolescent students aged between 14-18 years old. For this reason, the obtained results must be evaluated according to students in this age group. It is not possible to generalize the results of the study to other age groups. Replication of the study with students from different educational stages would increase the generalizability of the results. Counselors could then place students in activities to improve their self-control skills.

References


**Ergenlerde Öz-Kontrol İle Siber Mağduriyet Arasındaki İlişkinin İncelenmesi**

**Atif:**


**Özet**

başkalarına zara verecek davranışlar olarak tanımlanmaktadır. Bir diğer ifade ile siber zorbalık bilişim ve iletişim teknolojilerinin bir kişi yada gruba hakaret etmekte, iftira atmak ve alay etmek amacıyla kasıtlı ve tekraralanmış agresif davranışlar olarak belirtilmektedir. Siber zorbalık teknolojik araçların olumsuz bir özelliği olarak görülmektedir.

Siber zorba, farklı bir e-posta kullanarak ya da sosyal medya sitelerinde hayali hesaplar oluşturarak mağdurlar ile iletişim kurabilir. Aynı zamanda siber zorbalık oyun oynarken, okulda, evde ya da kiçe kullanarak mağdurlar ile iletişim kurabilir. İnsanlar modern teknolojinin kullanımı ile birlikte 24 saat siber zorbalık davranışları karşılaşıabilirler.

**Araştırmının Amacı:** Araştırmalar bilişim ve iletişim teknolojilerinin kötülük kullanılması sonucunda oluşan siber mağduriyetin çocukların ve gençler arasında giderek artan bir problem olduğunu ortaya koymaktadır. Özellikle teknolojinin gelişmesi bu sorunun giderek artmasıyla yol açacağı sonuçlar göz önüne alınarak mağdurlar ile iletişim kurmak ister. Bu çalışmanın amaçla ile siber mağduriyetin önceden önlenmesi, sonradan önlenmesi ve etkisi incelenmesidir. Bu çerçevede siber zorbalık eğilimlerinin alt boyutları incelenmiştir.


**Araştırmının Bulguları:** Araştırmının sonucunda öz-kontrol ölçeğinin alt boyutları olan dürüstülük ve öz-disiplinle siber mağduriyetin alt boyutları olan siber dilsel mağduriyet, kimliği güzelleme ve siber sahtecilik arasında negatif yönde düşük ve orta düzeyde anlamlı ilişkilerin olduğu görülmektedir. Ayrıca siber mağduriyet ölçeğinin alt boyutlarının birbirleriyle orta düzeyde pozitif yönde anlamlı bir


Anahtar Kelimeler: Lise öğrencileri, elektronik saldırıların karsılmak ve yapsal eşitlik modeli.