

A Study On Developing A Cyberbullying Scale For High School Students

DOI: 10.26466/opus.684140

*

Ali Arslan* - Okan Bilgin ** - Murat İnce

* Prof. Dr., Zonguldak Bülent Ecevit Üniversitesi

E-Mail: arslan54tr@yahoo.com

ORCID: [0000-0002-3707-0892](https://orcid.org/0000-0002-3707-0892)

**Dr. Öğr. Üyesi, Zonguldak Bülent Ecevit Üniversitesi

E-Mail: bilgin.okan@gmail.com

ORCID: [0000-0001-6233-4290](https://orcid.org/0000-0001-6233-4290)

*** Dr. Öğr. Üyesi, Zonguldak Bülent Ecevit Üniversitesi

E-Mail: muratince20@hotmail.com

ORCID: [0000-0003-0557-0419](https://orcid.org/0000-0003-0557-0419)

Abstract

Bullying is classified as physical bullying that involves hitting, pushing and hindering; verbal bullying that involves insulting, giving names, embarrassing; and emotional bullying that involves excluding from group, backbiting and breaking the friendship. Cyberbullying is another aspect of bullying. The purpose of this study is to develop a scale of cyberbullying behaviors for adolescents. Items in the trial form of the scale were written a literature review by the researchers. Trial form of scale consisted of 25 items. The pilot study for the scale was conducted for 231 students attending from high schools in Zonguldak province. An explanatory factor analysis was performed for the construct validity of the scale. A four-factor construct was obtained in the results of analysis. These factors were named as "disturbing via cyber", "cyber harassment", "vengeance", "spoofing". These four factors explained 66.235% of total variance. The Cronbach Alpha coefficients of these factors were varied between 0.58 and 0.91.

Keywords: Cyberbullying, adolescents, exploratory factor analysis

Lise Öğrencilerine Yönelik Siber Zorbalık Ölçeđi Geliřtirme Çalışması

*

Öz

Zorbalık; vurmak, itmek, engel olmak gibi fiziksel zorbalık, hakaret etme, lakap takma, utandırma gibi sözel zorbalık ve gruptan dışlamak, arkasından konuşmak, arkadaşlık ilişkilerini bozmak gibi davranışları içeren duygusal zorbalık olarak sınıflandırılmaktadır. Siber zorbalık da zorbalığın alt boyutlarından birini oluşturmaktadır. Bu çalışmanın amacı, ergenlerin siber zorbalık davranışlarını ölçmeye yönelik bir ölçek geliřtirmektir. Ölçeđin pilot çalışması, Zonguldak ilinde yer alan ortaöğretim kurumlarında öğrenim görmekte olan 231 öğrenci üzerinde yürütülmüştür. Ölçeđin yapı geçerliliđi için açımlayıcı faktör analizi yapılmıştır. Analiz neticesinde ölçeđin dört faktörlü bir yapı gösterdiđi görülmüştür. Dört faktör toplam varyansın %66,235'ini açıklamaktadır. Bu faktörlerin güvenilirlik katsayılarının ise 0,58 ile 0,91 arasında deđiřtiđi bulunmuştur.

Anahtar Kelimeler: Siber Zorbalık, Ergenler, Açımlayıcı Faktör Analizi

Introduction

Covering a period from puberty to adulthood, adolescence is a period of transformation and development during which not only biological changes but also psychological and social changes occur and young individuals try to establish their place within the society (Yazgan İnanç, Bilgin and Kılıç Atıcı, 2015). Adolescents encounter several issues such as family relationships, school problems, friendship, identity crisis and choice of occupation during this period (Gül and Güneş, 2009; Avcı, 2006; Eskin, 2000; Ertem and Yazıcı, 2006; Köse, 2015; Telli, Brok and Çakıroğlu, 2008). While peer relationships start to be of particular importance in this period, behaviors such as advising, acting in unison, peer support and creating a behavioral model often occur, and being recognized by the peer group becomes the most important thing (Bayhan and Işıtan, 2010; Demir, Baran and Ulusoy, 2005). Mostly manifesting itself as paired relationships or cliques and clusters, groups of friends also function to bring certain behavioral measures significantly. Adolescents feel the urge to meet the requests of the group to be its part. In general, the bullying behavior defined as dominant individuals' disturbing others on purpose may become an instrument of preserving the group identity. Once excluded from the group, bullies orientate toward gangs formed by excluded and aggressive individuals like them that constitute an environment to which they can be accepted (Aksel and Yılmaz Irmak, 2014).

Pişkin (2002) states that bullying is composed of deliberate words and actions that aim to harm the victim physically, mentally, socially and psychologically and the victim is not in a place to protect himself/herself against this repetitive behavior. Bullying is classified as physical bullying that involves hitting, pushing and hindering; verbal bullying that involves insulting, giving names, embarrassing; and emotional bullying that involves excluding from group, backbiting and breaking the friendship (Arslan Özdiğer and Savaşer, 2008). Cyberbullying is another aspect of bullying (Yaman, Eroğlu and Peker, 2011).

With increasing use of technology today, it is observed that cyberbullying has become an important problem (Arıca, 2011). Cyberbullying is defined as repetitive use of technological devices by an individual or society to hurt others (Belsey, 2004) and conscious and repeated behaviors harming others via Internet or technological devices (Agatston, Kowalski and Limber, 2007).

Arıcak (2009) defines cyberbullying as deliberate, repetitive and discomfoting behaviors of an individual or group to harm others via technological tools. Cyberbullying seems to be associated with several different problems particularly during adolescence in the literature.

Studies on cyberbullying have found that cyberbullying causes emotions of anger, sadness, vengeance and hostility (Beran and Li, 2005; Katzer, Fetchenhauer and Belschak, 2009; Palmer and Thakordas, 2005; Ybarra and Mitchell, 2007; Yaman and Peker, 2012; Arıcak, 2009; Usta, 2013; Özbay, 2013; Yaman and Peker, 2012; Peker, 2015a), low self-esteem and sense of helplessness (Cenat et al., 2014; Ayas 2016; Hinduja and Patchin, 2008; Yaman and Peker, 2012), psychological problems such as depression, eating disorders and anxiety (Hawker and Boulton, 2000; Gamez-Guadix, Orue, Smith and Calvete, 2013; Raskauskas and Stoltz, 2007; Ybarra and Mitchell, 2007; Beran and Li, 2005; Juvonen and Gross, 2008; Dalmaz, 2014; Özel, 2013), disappointment and loneliness (Raskauskas and Stoltz, 2007; Özer, 2014), decreasing school achievement (Nishina, Juvonen and Witkow, 2005; Schwartz, Gorman, Nakamoto and Toblin, 2005; Raskauskas, Rubiano, Offen and Wayland, 2015; Li, 2007; Willard, 2007; Juvonen and Gross, 2008; Eroğlu, 2011; Beran and Li, 2005; Dalmaç Polat and Bayraktar, 2016), school absence (Kirby, 2008; Beran and Li, 2005; Mitchell, Ybarra and Finkelhor, 2007), problems in peer relationships (Wolak et al, 2007; Bayar 2010; Pekşen Süslü, 2016), and suicidal thoughts (Gini and Espelage, 2014; Bauman, Toomey and Walker, 2013; Hinduja and Patchin, 2009) among victims. In the literature, there are studies concluding that cyberbullying, which has an impact on individual in various domains, has been increasing nowadays.

According to the 2016 data obtained by the Cyberbullying Research Center, cyber victimization has been following a rising trend. The rates of those who reported cyber victimization were 18.8% in 2007, 28.7% in 2009, 29.2% in 2011, 34.6% in 2014, and 33.8% in 2016. Exceptionally, less victimization was observed in 2013 at 24.1% than in previous years (Hinduja and Patchin, 2018).

Erdur-Baker and Kavşut (2007) reported a cyberbullying rate at 28% and a cyber victimization rate at 30% in their research with Turkish adolescents. In another study conducted by Arıcak et al. (2008) to identify cyberbullying behaviors of Turkish adolescents, it was observed that 35.7% of the students exhibited cyberbullying behaviors while 23.8% of them exhibited both cyber-

bullying and cyber victimization behaviors. It was found that the most frequent cyberbullying experienced by the adolescents was being insulted via electronic communication tools at 20.2%. It was found in the research that cyberbullying and cyber victimization were more prevalent among the male students, and the most frequent types of cyberbullying were telling someone something on the virtual platform instead of telling it to their faces, pretending to be someone else and saying something not true. 40% of the students reported that they knew what to do when cyberbullied and 49% of them stated that they thought cyberbullies would be caught. It was observed in a study performed by Serin (2012) in Turkey that 26.52% of the students were somehow involved in cyberbullying. It was also found that 9.42% of the students were cyberbullying, 11.79% were cyber-victimized and 5.31% were both cyberbullies and cyber-victims.

Considering the statistics of general population in Turkey, the population between the age of 6-24 which is the target group of this research seems to be leading in the use of information technologies according to the research results of TSI (2017) household use of information technologies. According to the report, computer usage was at 32.2% and Internet usage at 26.6% in 2004 while computer usage peaked at 70.6%. Despite decreasing trend of computer usage, Internet usage kept rising at 87.2% in 2017 (TSI, 2017). This can be explained by the change in individuals' usage habits following the popularity of mobile devices in particular. As is seen in previous studies, it can be argued that it is important to detect cyberbullying which causes problems in several domains and have lately become widespread. In this sense, there are scale development studies about different aspects of cyberbullying.

The Cyberbullying Inventory revised by Erdur-Baker and Topçu (2010) determines being a cyberbully and cyber-victim. The "Cyber Bully/Victim Scale" developed by Ayas and Horzum (2010) is composed of a 23-item questionnaire. It comprises of three factors: sexual cyber bully/victim, cyber hindrance-harm, and cyber-rumoring. The "Cyberbullying Sensibility Scale" developed by Tanrikulu, Kınay and Arıcak (2013) is a one-factor scale that measures sensibility levels regarding cyberbullying. Similarly, Ayas, Aydın and Horzum (2015) developed the "Cyberbullying Awareness Scale" which has three factors of "prevention of cyberbullying at school, recognition of cyberbullying, and regarding cyberbullying as a problem." The "Virtual World Risk Perception Scale (VWRPS)" developed by Arslankara and Usta

(2018) has five subscales of “virtual corruption, virtual depreciation, virtual possibility, virtual opportunity, and virtual awareness”. There are also adaptation studies on “Cyberbullying and Internet Aggression Scanning Scale-CLASS” developed by Hinduja and Patchin (2009) (Özdemir and Akar 2011) and “Cyberbullying Scale” developed by Regan W. Stewart, Christopher F. Drescher, Danielle J. Maack, Chad Ebesutani and John Young (2014) (Küçük, İnanıcı, Ziyalar, 2017). The “Cyberbullying Scale” (Arıcak, Kınay and Tanrıku, 2012) developed within the same scope with this study is composed of 24 items and one factor.

In the literature, cyberbullying is observed to be a current type of bullying which causes several problems and has been increasing its influence (Hinduja and Patchin, 2018; TSI, 2017). It can be argued that adolescents are highly involved in cyberbullying and cyberbullying has a negative impact on adolescents from different aspects due to prevalent use of technology during adolescence in particular. Therefore, this study is of importance for identifying various aspects of cyberbullying. The basic difference of this study from other scale development studies; It investigates the concept of cyberbullying in a wider scope by considering the dimensions of “disturbing via cyber”, “cyber harassment”, “vengeance” and “spoofing”.

Accordingly, it is aimed to develop a scale to identify high school students’ cyberbullying behaviors and investigate the psychometric features of the scale in question.

Method

Design

This is not a research study but a scale development study aiming to explore cyberbullying behaviors of high school students.

Participants

The pilot study for the scale was conducted with 231 high school students in Zonguldak province in the academic year of 2016-2017. 149 (64%) of the participants are female while 81 (36%) of them are male. 52 (23%) of them were from a Science high school, 61 (26%) were from a vocational high school, and

118 (51%) were from an Anatolian high school. 94 (41%) of the participants were ninth-graders, 108 (47%) were tenth-graders, and 29 (12%) were eleventh-graders.

Data Analysis

Cyberbullying Scale for High School Students

The steps below were followed in the scale development process.

Developing the Trial Form of the Scale

Items in the trial form of the scale were written a literature review by the researchers. Based on the opinions of two curriculum and instructional experts and one psychological counseling and guidance expert on optimum length, comprehensibility and adequacy of the items, it was decided to include 25 items in the trial form. The scale items were designed in accordance with the 5-point Likert type to be answered "strongly agree", "agree", "partially agree", "disagree", and "strongly disagree".

Pilot Study of the Scale

The scale was applied to 231 high school students whose characteristics were described previously.

Data Analysis

An exploratory factor analysis was performed to explore the construct validity of the scale. Eigenvalues of the factors were also examined to decide the factor construct of the scale, and the factors above eigenvalue 1 were accepted as a factor. Item-total correlations of the scale items were calculated to reveal the internal validity, and therefore, to what extent the scale items were distinguishing.

When choosing the scale items, factor loadings, communalities and item-total correlations of the items were examined. Items with low values with re-

spect to factor loadings, communalities and item-total correlations were excluded from the scale. Also, items with high factor loadings in multiple factors and items with a high factor loading alone in one factor were excluded to finalize the scale.

Cronbach's Alpha (α) internal consistency coefficient was utilized to determine whether the scale provides reliable results.

Findings

Kaiser-Meyer-Olkin (KMO) and Bartlett's Sphericity Test values of the data were examined to decide whether the data were suitable for a factor analysis. In the first analysis, KMO value of the data was found to be 0.89 and Bartlett's Sphericity Test value ($\chi^2=2567.312$; $p<0.05$) was found to be significant. These analysis results indicated that the data were suitable for a factor analysis (George and Mallery, 2016).

An exploratory factor analysis was performed to explore the factor construct of the scale. Varimax rotation method was also utilized to achieve the factor construct of the scale. Item 6, due to its high factor loading in multiple factors, items 1, 2, 10, 24 and 25 due to their low communalities values and items 7, 17 and 18 due to no high factor loading in any factors were excluded from the scale. After the exclusion of the items, the scale was found to have four factors with 16 items.

Names of the factors, their eigenvalues and variance explained by each factor are presented in Table 1.

The first factor was named "Disturbing via Cyber". This factor refers to repeated and insistent use of technological devices by individuals to disturb others (Item example for this factor: "I send them various online application requests to disturb people"). This factor explains 26.470% of the total variance. Communalities values of this factor's vary between 0.55 and 0.80; their factor loadings vary between 0.67 and 0.87; and their corrected item-total correlations vary between 0.64 and 0.83. Cronbach's alpha (α) internal consistency coefficient of this factor was calculated to be 0.91.

Table 1. Reliability and validity scores of "Cyberbullying Scale"

| Factor | Item | Communalities | Factor Loadings | Corrected Item-Total Correlation | Eigenvalues | Explained Variance | α |
|----------------------|------|---------------|-----------------|----------------------------------|-------------|--------------------|----------|
| Disturbing via Cyber | 14 | 0.80 | 0.87 | 0.83 | 4.23 | 26.470 | 0.91 |
| | 15 | 0.73 | 0.78 | 0.76 | | | |
| | 16 | 0.76 | 0.85 | 0.78 | | | |
| | 20 | 0.79 | 0.85 | 0.81 | | | |
| | 21 | 0.55 | 0.67 | 0.64 | | | |
| | 22 | 0.71 | 0.80 | 0.74 | | | |
| Cyber Harassment | 11 | 0.74 | 0.75 | 0.71 | 2.57 | 16.077 | 0.81 |
| | 12 | 0.72 | 0.74 | 0.71 | | | |
| | 13 | 0.63 | 0.71 | 0.62 | | | |
| | 23 | 0.63 | 0.75 | 0.51 | | | |
| Vengeance | 3 | 0.55 | 0.72 | 0.42 | 2.05 | 12.834 | 0.69 |
| | 8 | 0.72 | 0.76 | 0.62 | | | |
| | 9 | 0.56 | 0.70 | 0.48 | | | |
| Spoofing | 4 | 0.73 | 0.84 | 0.42 | 1.74 | 10.854 | 0.58 |
| | 5 | 0.44 | 0.61 | 0.36 | | | |
| | 19 | 0.55 | 0.59 | 0.39 | | | |
| Total | 16 | | | | - | 66.235 | 0.87 |

The second factor was named "cyber harassment". This factor refers to discomforting behaviors toward individuals in one's social circle particularly via smartphones and other ways (Item example for this factor: "I feel happy after I've been bothering someone on the phone"). This 4-item factor explains 16.077% of the total variance. This factor's communalities vary between 0.63 and 0.74; their factor loadings vary between 0.71 and 0.75; and their corrected item-total correlations vary between 0.51 and 0.71. Cronbach's alpha (α) internal consistency coefficient of the scale items was calculated to be 0.81.

The third factor was named "vengeance". This factor refers to individuals' tendency to get even with others (Item example for this factor: "In virtual environment, it is okay to take revenge on people who are unfair to me in real life"). This 3-item factor explains 12.834% of the total variance. This factor's communalities vary between 0.55 and 0.72; their factor loadings vary between 0.70 and 0.76; and their corrected item-total correlations vary between 0.42 and 0.62. Cronbach's alpha (α) internal consistency coefficient of the scale items was calculated to be 0.69.

The fourth factor was named "spoofing". This factor refers to participating in the cyber activities by hiding oneself, their accounts or identities (Item example for this factor: "I have at least one anonymous / fake account"). This

3-item factor explains 10.854% of the total variance. This factor's communalities vary between 0.44 and 0.80; their factor loadings vary between 0.59 and 0.84; and their corrected item-total correlations vary between 0.36 and 0.42. Cronbach's alpha (α) internal consistency coefficient of the scale items was calculated to be 0.58.

When corrected item total correlations and Cronbach's alpha (α) internal consistency of items in factors is examined, it is interpreted that these items measure validly and reliably cyberbullying tendency of high school students. Solely Cronbach's alpha (α) internal consistency coefficient of spoofing factor is lower than the other factors in this scale. The reason of lower Cronbach's alpha (α) internal consistency value might be that there are 3 items in spoofing factor.

Conclusion and Discussion

A scale to identify cyberbullying tendencies of high school students was developed in this study. In the exploratory factor analysis performed on the obtained data with the Varimax rotation method, the scale was found to be composed of “disturbing via cyber, cyber harassment, vengeance, and spoofing” factors.

The factors were named upon a broad literature review. The “cyber harassment” subscale of the scale comprises of items about exhibiting discomforting behaviors toward one's social circle particularly via mobile phones or other ways. In the literature, cyber harassment is defined as sending repeated aggressive messages to an individual via electronic mail or other written messaging tools. Cyber harassment generally occurs via e-mail or texting. It involves sending threatening, extremely aggressive or blackmailing and harmful messages repetitively. Harm is one-way in cyber harassment, and it may manifest itself as use of only capitals, excessive use of punctuation and abusive behaviors. Cyber harassment is often defined as being associated with problems in regard to ending the relationship (Baker, 2010; Hines, 2011; Mason, 2008; Mieczynski, 2008; Willard, 2005; 2007).

Another subscale of the scale, “vengeance”, can be observed in studies on cyberbullying as well. In this type of cyberbullying, also called “retaliatory cyberbullying”, individuals have been bullied by others before and use the

Internet to get back at them. Juvonen and Gross (2008) found the exact opposite in their study. Accordingly, school-based bullies do not use cyberspace for retaliation. Previously bullied youngsters are more likely to retaliate at school. Targets (victims) of retaliatory bullies are individuals who bully others. Hinduja and Patchin (2009) described cyberbullying as insistent and repetitive use of computer, mobile phones and other electronic devices to harm others. It has been emphasized that an action needs to meet the following criteria to be named "cyberbullying": Insistence: Previously planning to perform a behavior. Repeating: Constant performance of bullying behaviors in the same form. Harm: It aims to make others suffer.

Referring to hide oneself, their accounts or identities to participate in cyber activities, the "spoofing" subscale is also addressed in the literature. According to the concept of "spoofing", cyberbullies create an illusion of invisibility as their cyberspace identity is ambiguous. With this sense of invisibility, they have no concerns of being detected, social exclusion or punishment, and they can reveal part of their characteristics which they carefully hide when offline. Hence, cyberbullies may elude their responsibilities of their cyber behaviors. In addition, this can hinder their ability to regret due to the decrease in their social and emotional ideas, empathy or behaviors (Cooper, 2005; Suler, 2004; Willard, 2005; in Baker, 2010).

Consequently, it can be concluded from the item-total correlations and Cronbach's Alpha internal consistency coefficients of the items forming these factors that the scale can identify students with cyberbullying tendency in a proper way and distinguish such students from those who do not have this tendency.

This study was conducted using only the exploratory factor analysis. Applying the scale to a similar group, the data can be subjected to a confirmatory factor analysis.

Kaynakça / References

- Agatston, P. W., Kowalski, R. and Limber, S. (2007). Students' perspectives on cyber bullying. *Journal of Adolescent Health*, 41(6), 59-60.
- Aksel, Ş. and Yılmaz-Irmak, T. (2014). *Gelişim psikolojisi bakış açısıyla çocuk suçluluğu*. Ege Üniversitesi Yayınları, İzmir.

- Arıcağ, T., Siyahhan, S., Uzunhasanođlu, A., Sarıbeyođlu, S., ıplak, S., Yılmaz, N., and Memmedov, C. (2008). Cyberbullying among Turkish adolescents. *Cyber Psychology and Behavior*, 11(3), 253–261.
- Arıcağ, O.T. (2009). Üniöersite öđrencilerindeki siber zorbalık davranıřlarının bir yordayıcısı olarak psikiyatrik belirtiler. *Eurasian Journal of Educational Research*, 34, 167-184.
- Arıcağ, O. T. (2011). Siber Zorbalık: Genlerimizi bekleyen yeni tehlike. *Kariyer Penceresi*, 6, 10–11.
- Arslankara, V. B., and Usta, E. (2018). Development of Virtual World Risk Perception Scale (VWRPS). *Bartın Üniöersitesi Eđitim Fakóltesi Dergisi*, 7(1), 111-131.
- Arslan Özdiner, S. and Savařer, S. (2008). İnsan hakları ve ocuk hakları bađlamında okulda zorbalık. *Florence Nightingale Hemřirelik Dergisi*, 16 (61), 65-70.
- Avcı, M. (2006). Ergenlikte toplumsal uyum sorunları. *Atatürk Üniöersitesi Sosyal Bilimler Enstitüsü Dergisi*, 7 (1), 39-63.
- Ayas, T. and Horzum M. B. (2010). Sanal zorba / kurban ölek geliřtirme alıřması. *Akademik Bakıř Dergisi*, 19,1-17.
- Ayas, T., and Aydın, F. (2015). Sanal zorbalık farkındalık öleđi: Geerlilik ve güüvenirlilik alıřması. *Online Journal Of Technology Addiction and Cyberbullying*, 2(2), 38-51.
- Ayas, T. (2016). Sanal zorbalık olaylarına karıřan ve karıřmayan öđrencilerin öz sayđı ve dıřadönüklükle iliřkisinin incelenmesi. *Eđitim ve Bilim*, 41 (186), 205-216.
- Bauman, S., Toomey, R. B. and Walker, J. L. (2013). Associations among bullying, cyberbullying, and suicide in high school students. *Journal of Adolescence*, 36(2), 341-350.
- Bayhan, P. and Iřitan, S. (2010). Ergenlik döneminde iliřkiler: akran ve romantik iliřkilere genel bakıř. *Aile ve Toplum*, 11 (5), 33-44.
- Beran, T. and Li, Q. (2005). Cyber-harassment: A study of a new method for an old behavior. *Journal of Educational Computing Research*, 32, 265-277.
- Cenat, J. M., Hebert, M., Blais, M., Lavoie, F., Guerrier, M. and Derivois, D. (2014). Cyberbullying, psychological distress and self-esteem among youth in Quebec schools. *Journal of Affective Disorders*, 169, 7-9.
- Dalma Polat, Z. and Bayraktar, S. (2016). Ergenlerde siber zorbalık ve siber mađduriyet ile iliřkili deđiřkenlerin incelenmesi. *Mediterranean Journal of Humanities*, 6 (1), 115-132.

- Dalmaz, E. (2014). *Üniversite öğrencilerinde siber zorbalık/mağduriyet, depresyon ve anksiyete arasındaki ilişkinin incelenmesi*. Haliç Üniversitesi, Sosyal Bilimler Enstitüsü, Psikoloji Anabilim Dalı, Uygulamalı Psikoloji Programı Yüksek Lisans Tezi, İstanbul.
- Demir, N. Ö., Baran, A. G. and Ulusoy, D. (2005). Türkiye’de Ergenlerin arkadaş-akran grupları ile ilişkileri ve sapmış davranışlar: Ankara örnekleme. *Bilişim*, 32, 83-106.
- Erdur-Baker, Ö. and Kavşut, F. (2007). A new face of peer bullying: Cyberbullying. *Journal of Euroasian Educational Research*, 27, 31-42.
- Erdur- Baker, Ö. and Topçu, Ç. (2010) The Revised Cyber Bullying Inventory (RCBI): validity and reliability studies. *Procedia Social and Behavioral Sciences*, 5, 660–664
- Eroğlu, Y. (2011). *Koşullu öz-değer, riskli internet davranışları ve siber zorbalık/mağduriyet arasındaki ilişkinin incelenmesi*. Sakarya Üniversitesi, Eğitim Bilimleri Enstitüsü, Eğitim Bilimleri Anabilim Dalı, Eğitimde Psikolojik Hizmetler Bölümü Yüksek Lisans Tezi, Sakarya.
- Ertem, Ü. and Yazıcı, S. (2006). Ergenlik döneminde psiko-sosyal sorunlar ve depresyon. *Aile ve Toplum*, 3(9), 7-12.
- Eskin, M. (2000). Ergen ruh sağlığı sorunları ve intihar davranışıyla ilişkiler. *Klinik Psikiyatri*, 3, 228-234.
- Gamez-Guadix, M., Orue, I., Smith, P. K. and Calvete, E. (2013). Longitudinal and reciprocal relations of cyberbullying with depression, substance use and problematic internet use among adolescents. *Journal of Adolescent Health*, 53(4), 446-452.
- Gini, G. and Espelage, D. L. (2014). Peer victimization, cyberbullying, and suicide risk in children and adolescents. *JAMA*, 312(5), 545-546.
- Gül, S. K. and Güneş, İ.D. (2009). Ergenlik dönemi sorunları ve şiddet. *Sosyal Bilimler Dergisi*, 11 (1), 79-101.
- Hawker, D. S. and Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, 41(4), 441-455.
- Hinduja, S. and Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior*, 29, 129-156.
- Hinduja, S. and Patchin, J. W. (2009). *Bullying beyond the schoolyard: preventing and responding to cyberbullying*. Thousand Oaks, CA: Sage Publications.
- Hinduja, S. and Patchin, J. W. (2018). *Cyberbullying Identification, Prevention, and Response*. Cyberbullying Research Center

- Hines, H.N. (2011). *Traditional bullying and cyber-bullying: are the impacts on self-concept the same?* Lisans Bitirme Tezi. Western Carolina University, North Carolina.
- Juvonen, J. and Gross, E., F. (2008). Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health*, 78 (9), 496-505.
- Katzer, C., Fetchenhauer, D. and Belschak, F. (2009). Cyberbullying: Who are victims? A comparison of victimization in internet chatrooms and victimization in school. *Journal of Media Psychology*, 21, 25-36.
- Kirby, E. (2008). Eliminate bullying - A legal imperative. *A Legal Memorandum*, 8 (2), 1-6.
- Köse, N. (2015). Ergenlerde akran ilişkilerinin mutluluk düzeyine etkisi. *İnönü Üniversitesi Eğitim Bilimleri Enstitüsü Dergisi*, 2 (4), 1-6.
- Küçük, S., İnanıcı, M. A., and Ziyalar, N. (2017). Siber zorbalık ölçeği Türkçe uyarlaması. *Adli Tıp Bülteni*, 22(3), 172-176.
- Li, Q. (2007). Bullying in the new playground: Research into cyberbullying and cyber victimisation. *Australasian Journal of Educational Technology*, 23(4), 435-454.
- Mason, K. (2008). Cyberbullying: A preliminary assessment for school personnel. *Psychology in the Schools*, 45(4), 323-348.
- Mieczynski, N.D. (2008). *Cyberbullying: exploring the experiences of mental health professionals*. Antioch University, New England, New Hampshire.
- Mitchell, K. J., Ybarra, M. and Finkelhor, D. (2007). The relative importance of online victimization in understanding depression, delinquency, and substance use. *Child Maltreatment*, 12, 314-324.
- Nishina, A., Juvonen, J. and Witkow, M.R. (2005). Sticks and stones may break my bones, but names will make me feel sick: The psychosocial, somatic, and scholastic consequences of peer harassment. *Journal of Clinical Child and Adolescent Psychology*, 34(1), 37-48.
- Özbay, A. (2013). *Ergenlerde siber zorbalık, siber mağduriyet, aleksitimi ve öfke ifade etme biçimleri arasındaki ilişki*. Fatih Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Bilimleri Anabilim Dalı, Rehberlik Ve Psikolojik Danışmanlık Programı Yüksek Lisans Tezi, İstanbul.
- Özdemir, M., and Akar, F. (2011). Lise öğrencilerinin siber-zorbalığa ilişkin görüşlerinin bazı değişkenler bakımından incelenmesi. *Kuram ve Uygulamada Eğitim Yönetimi*, 17(4), 605-626.

- Özel, S. (2013). Lise öğrencileri arasında siber zorbalık, siber mağduriyet, depresyon ve benlik saygısı ilişkisi. Fatih Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Bilimleri Anabilim Dalı, Rehberlik ve Psikolojik Danışmanlık Programı Yüksek Lisans Tezi, İstanbul.
- Özer, H. (2014). Ortaokul öğrencilerinin siber zorba/siber kurban yaşantıları. *Akademik Bakış Dergisi*, 41, 1-19.
- Peker, A. (2015). Negatif duygunun siber zorbalık ve mağduriyete ilişkin yordayıcı rolünün incelenmesi. K. Ü. *Kastamonu Eğitim Dergisi*, 23 (4), 1633-1646.
- Pekşen Süslü, D. (2016). Lise öğrencilerinde siber zorbalık ve siber mağduriyetin benlik saygısı, anne, baba ve akran ilişkileri açısından incelenmesi. Maltepe Üniversitesi, Sosyal Bilimler Enstitüsü, Psikoloji Anabilim Dalı, Geleşim Psikolojisi Programı Doktora Tezi, İstanbul.
- Pişkin, M. (2002). Okul zorbalığı: tanımı, türleri, ilişkili olduğu faktörler ve alınabilecek önlemler. *Kuram ve Uygulamada Eğitim Bilimleri Dergisi*, 2, 531-562.
- Raskauskas, J. and Stoltz, A.D. (2007). Involvement in traditional and electronic bullying among adolescents. *Developmental Psychology*, 43, 564-575.
- Raskauskas, J., Rubiano, S., Offen, I. and Wayland, A. K. (2015). Do social self-efficacy and self-esteem moderate the relationship between peer victimization and academic performance?. *Social Psychology of Education*, 18(2), 297-314.
- Schwartz, D., Gorman, A. H., Nakamoto, J. and Toblin, R. L. (2005). Victimization in the peer group and children's academic functioning. *Journal of Educational Psychology*, 97(3), 425.
- Serin, H. (2012). *Ergenlerde siber zorbalık / siber mağduriyet yaşantıları ve bu davranışlara ilişkin öğretmen ve eğitim yöneticilerinin görüşleri*. Doktora Tezi. İstanbul Üniversitesi Sosyal Bilimler Enstitüsü. İstanbul
- Tanrikulu, T., Kınay, H. and Arıca, O. T. (2013). Siber zorbalığa ilişkin duyarlılık ölçeği: Geçerlik ve güvenilirlik çalışması. *Trakya Üniversitesi Eğitim Fakültesi Dergisi*, 3(1), 38-47.
- Telli, S., Brok, P. and Çakıroğlu, J. (2008). Teachers' and students' perceptions of the ideal teacher. *Education and Science*, 33 (149), 118-129.
- TÜİK (2017). *Hanehalkı Bilişim Teknolojileri Kullanım Araştırması-2017*.
- Usta, A. (2013). *Lise öğrencilerinin öfke düzeyleri ile siber zorbalık düzeyleri arasındaki ilişkinin incelenmesi*. Ondokuz Mayıs Üniversitesi, Eğitim Bilimleri Enstitüsü, Eğitim Bilimleri Anabilim Dalı Yüksek Lisans Tezi Yüksek Lisans Tezi, Samsun

- Willard, N. (2005). Educator's Guide to Cyberbullying and Cyberthreats. <http://www.cyberbully.org/cyberbully/docs/cbcteducator.pdf>.
- Willard, N. (2007). Cyberbullying and cyberthreats: Responding to the challenge of online social aggression, threats, and distress. Illinois: Champaign Research Press.
- Yaman, E., Erođlu, Y. and Peker, A. (2011). *Başçıkma stratejileriyle okul zorbalığı ve siber zorbalık*. Kaknüs Psikoloji. İstanbul.
- Yaman, E. and Peker, A. (2012). Ergenlerin siber zorbalık ve siber mağduriyete ilişkin algıları. *Gaziantep Üniversitesi Sosyal Bilimler Dergisi*, 11 (3),819-833.
- Yazgan İnanç, B., Bilgin, M. and Kılıç Atıcı, M. (2015). *Gelişim psikolojisi*. Pegem Akademi, Ankara.
- Ybarra, M., and Mitchell, K.J. (2007). Prevalence and frequency of internet harassment instigation: Implications for adolescent health. *Journal of Adolescent Health*, 41,189-195.

Kaynakça Bilgisi / Citation Information

Arslan, A., Bilgin, O. and İnce, M. (2020). A study on developing a cyberbullying scale for high school students. *OPUS–International Journal of Society Researches*, 15(10. Year Special Issue), 4723-4738. DOI: 10.26466/opus.684140