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Relations of Cyber Bullying Sensitivity to Perceived Social Support and to Parent and Peer Attachments in High School Students[1-2]

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ABSTRACT

Growing evidence has shown the importance of cyberbullying sensitivity in preventing cyberbullying in adolescence. Yet, limited research has examined the relations of cyberbullying sensitivity to perceived social support as well as to attachment with parents and peers. The aim of this study was to examine the relations of cyberbullying sensitivity to sociodemographic characteristics, internet usage characteristics, perceived social support, and parental and peer attachment in high school students. The present study was a cross-sectional school survey to which a total of 831 adolescents were admitted (505 males and 326 females; mean age, 16.13 years). The adolescents completed some forms and scales, including a Personal Information Questionnaire, the Cyber Bullying Sensitivity Scale (CSS), the Multidimensional Perceived Social Support Scale (MPSSS), and the Parent and Peer Attachment Inventory (IPPA). The resulting findings showed that 74.6% of participants had daily internet access. In this context, it was found that household rules for internet use were less strict among those participants who were comparatively older or were attending higher classes. It was also determined that students with high social support and parental attachment scores spent less time on the internet. Girls' scores for CSS, friend support, and peer attachment were found higher than those found in the boys. A positive correlation was established between the CSS scores and the MPSSS and IPPA scores. Social support and attachment

[1]This study was produced from Ankara University Forensic Sciences Institute, Forensic Psychology Master's thesis titled "Evaluation of cyberbullying sensitivity in high school students in terms of sociodemographic characteristics, perceived social support and parent and peer relations: The case of Çerkezköy District in Tekirdağ" conducted by Mihriban KIRCALLIOĞLU under the supervision of Prof. Dr. Filiz Orhon.

[2]This study has been presented as an oral presentation in 2nd International Eurasian Congress of Social Pediatrics & 6th National Congress of Social Pediatrics (*Mihriban Kırcallıoğlu, Filiz Şimşek Orhon. Evaluation of Cyber Bullying Sensitivity in High School Students in Terms of Sociodemographic Characteristics, Perceived Social Support and Parent and Peer Relations. 2nd International Eurasian Congress of Social Pediatrics & 6th National Congress of Social Pediatrics, online congress, November 26-29, 2020*).

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scores of the group with a reportedly better school achievement were found significantly higher than those found in other groups. Gender, family income, and family support were determined as the predictive factors with respect to cyberbullying sensitivity. In conclusion, social support and positive communication with parents and peers may be effective factors in preventing the risks of problematic internet use and of exposure to cyberbullying in adolescence.

Keywords: Adolescent, Attachment, Cyber Bullying, Perceived Social Support, Sensitivity

Lise Öğrencilerinde Siber Zorbalık Duyarlılığının Algılanan Sosyal Destek ve Ebeveyn ve Akrana Bağlanma ile İlişkisi

ÖZ

Artan kanıtlar, ergenlik döneminde siber zorbalığın önlenmesinde siber zorbalık duyarlılığının önemini göstermiştir. Bununla birlikte, sınırlı sayıda araştırma, siber zorbalık duyarlılığı ile algılanan sosyal destek ve ebeveynler ve akranlarla bağlanma arasındaki ilişkileri incelemiştir. Bu çalışmanın amacı, lise öğrencilerinde siber zorbalık duyarlılığı ile sosyodemografik özellikler, internet kullanım özellikleri, algılanan sosyal destek ve ebeveyn ve akrana bağlanma arasındaki ilişkiyi incelemektir. Bu çalışma, 831 ergen (505 erkek ve 326 kadın; ortalama yaş, 16.13 yıl) ile yapılan kesitsel bir okul anket çalışmasıdır. Ergenler, Kişisel Bilgi Anketi, Siber Zorbalık Duyarlılık Ölçeği, Çok Boyutlu Algılanan Sosyal Destek Ölçeği ve Ebeveyn ve Akran Bağlanma Envanteri'ni içeren form ve ölçekleri doldurmuştur. Bulgular, katılımcıların %74,6'sının her gün internet erişimine sahip olduğunu göstermiştir. Katılımcıların yaş ve sınıf düzeyi arttıkça evde internet kullanımına ilişkin kural/kısıtlamanın azaldığı bulunmuştur. Sosyal destek ve ebeveyne bağlanma puanları yüksek olan öğrencilerin internette daha az zaman geçirdikleri belirlenmiştir. Kızların siber zorbalık duyarlılık puanları, arkadaş desteği puanları ve akrana bağlanma puanları erkeklerden daha yüksek bulunmuştur. Siber zorbalık duyarlılık puanları ile sosyal destek ve bağlanma puanları arasında pozitif bir korelasyon bulunmuştur. Okul başarısının daha iyi olduğunu bildiren grubun sosyal destek ve bağlanma puanları anlamlı olarak daha yüksek bulunmuştur. Cinsiyet, aile geliri ve aile desteği siber zorbalık duyarlılığını yordayıcı faktörler olarak tespit edilmiştir. Sonuç olarak, ergenlik döneminde problemli internet kullanımı ve siber zorbalığa maruz kalma risklerini önlemede sosyal destek ve ebeveyn ve akranlarla olumlu iletişim etkili faktörler olabilir.

Anahtar Kelimeler: Siber Zorbalık, Ergen, Bağlanma, Algılanan Sosyal Destek, Duyarlılık

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INTRODUCTION

Adolescence is a period when there is a tendency to engage in risky behaviors. Brain maturation continues during adolescence, and significant changes are detected in brain structure and function during this period (Vijayakumar et al., 2018). Therefore, it is known that this age group is particularly vulnerable and cannot fully perceive the connection between their behaviors and their consequences (Ang, 2015). Impulsivity, sensation seeking, thrill seeking, depression, and other individual differences also contribute to risk taking that resist standard risk-reduction interventions during adolescence (Reyna & Farley, 2006). With limited contextual cues and relative anonymity of the online environment, adolescents tend to be more disinhibited and to engage in more high-risk behaviors (Ang, 2015). Thus, the online environment seems to be the basis for increasing risks, including cyberbullying.

Cyberbullying is generally defined as deliberate and repeated aggressive activities inflicted toward an individual or a specific group of individuals through the use of electronic technologies (Guo, 2016; Tokunaga, 2010; Vaillancourt et al., 2017). With the widespread use of digital technologies in adolescents, the traditional form of aggression has been replaced by cyberbullying in recent years (Jimenez, 2019). According to a 2019 national representative survey of 4,972 middle and high school students aged 12 to 17 in the United States, 37% of adolescents reported being cyberbullied once in their lifetime (Patchin, 2019). In a previous study conducted in seven European countries, the cyber victimization rate was found to be 13.3-37.3 in the adolescent age group (Athanasiou et al., 2018).

Exposure to cyberbullying has been found to be more stressful, and render more serious consequences compared to traditional bullying (Hellfeldt et al., 2020). Previous studies show that cyberbullying is related to serious mental health concerns including depression, anxiety, self-esteem problems, emotional distress, substance use, school absenteeism, and suicidal behavior in adolescents. On the other hand, perpetrators of cyberbullying are more likely to report increased substance use, aggression, and delinquent behaviors (Bannink et al., 2014; Field, 2018; Vaillancourt et al., 2017).

Various factors such as previous cyberbullying behavior, access to internet, duration of internet use, adolescents' ability to use technology, age, family management and social relationships are important factors affecting the exposure to cyberbullying or becoming a victim (Athanasiou et al., 2018; Foody et al., 2019; Kowalski et al., 2014). Among these, the factors related to parents and peers seem important based on the social and developmental characteristics of adolescence. Developing a positive parent-adolescent emotional bond, as early as possible, as well as maintaining positive peer relationships and perceived friend support are particularly important in adolescents' development. (Ang, 2015; Foody et al., 2019).

The prevention of cyberbullying and elimination of its negative effects are of great importance for the health of adolescents. One common strategy to prevent cyberbullying is to provide information for youth, parents, and school personnel on what constitutes cyberbullying and on how to avoid being a victim (Espelage & Hong, 2017). Sensitivity is one of the solutions to cope with anxious stimuli, and it can be viewed as a means through which any threatening stimulus can be avoided, and awareness can be increased (Krahé et al., 2011). Cyberbullying behaviors can be perceived as a threat by individuals, and they can protect themselves against

this threat by increasing their sensitivity (Cassidy et al., 2013; Hinduja & Patchin, 2010). Accordingly, cyberbullying sensitivity may serve to avoid those behaviors that otherwise may cause the subject to become the victim of bullying during the use of cyber devices, to gain awareness of the existence of such threats, as well as to take precautions and keep a high level of attention to distinguish the stimuli that may pose a threat (Tanrıkulu et al., 2013).

A key component in the social environment of adolescents is the presence or absence of social support, which can be defined as the individual's perception of being cared for, valued, and included in his or her social environment, including the family, peers, and other significant people (Saylor & Leach, 2009). It has been suggested that a strong social support perceived by adolescents and positive relationships of adolescents with their parents and peers would reduce the risk of online victimization (Foody et al., 2019; Livingstone et al., 2015; Ronis & Slaunwhite, 2019). Therefore, social support and secure attachment turn out to be important factors in the development of cyberbullying sensitivity in adolescents. In this context, though, there are a limited number of studies focusing on the relationship between cyberbullying sensitivity and adolescents' perceived social support and their attachment to their parents and peers. In short, all the considerations above encouraged us to conduct the present study, through which we examined the relations of cyberbullying sensitivity to socio-demographic characteristics, internet usage habits, perceived social support and attachment to parents and peers in high school students.

METHOD

The present study is a cross-sectional school survey, which we carried out using the relational survey model. We obtained the ethical permission for this study from the Health Sciences Ethics Committee of Ankara University, under serial number 02-40 of 29/01/2018. This study was approved by the Provincial Directorate of National Education and conducted in line with standard procedures for the protection of human participants.

Participants and Procedures

Our sample was selected using the disproportionate cluster sampling method. The sample of this study consisted of students from high schools, for which permission was obtained from the Provincial Directorate of National Education. The exclusion criteria from the study included the presence of history of seeking assistance from judicial authorities due to previous child abuse, the presence of traditional bullying or cyberbullying, and the failure of parents in signing the consent form.

First, consent forms were sent to the parents of the participating students, and the interviews were conducted only once the consent forms were received. Written and verbal information about the purpose of the research was given to the students by the researcher and the instructions were explained accordingly. After this procedure, the students were asked to fill in the form and scales. The forms and scales used in the study were given to the participants in the same file and at the same time. Data were collected from 884 students attending four different high schools in Cerkezkoy, Tekirdag, Turkey, in the fall semester of the 2018-2019 academic year. After excluding survey packets with missing data, the final data of 831 participants (505 females and 326 males) were analyzed.

Measurement Tools

Personal Information Form

A separate questionnaire was used to collect demographic information about the participants in the study. This questionnaire included questions about participants' school, grade, age, gender, parents' education and occupation status, monthly income of families, school achievements as perceived by participants, internet access frequency, daily average time spent on the internet, and the purpose of using the means to access the internet.

Cyberbullying Sensitivity Scale (CSS)

The CSS scale, which includes questions to determine whether or not the questioned student is aware of the risks of the internet environment, consists of 13 items and a single factor. It is filled as "No" (1 point), "Sometimes" (2 points) and "Yes" (3 points) and scored accordingly. As reported by Tanrıkulu et al. (2013), the scale is a structure that explains 46.65% of the total variance, whereas the confirmatory factor analysis and fit values for this emerging structure confirm the model (Chi-square χ^2 / sd = 3,220, RMSEA = .082). They further reported that the internal consistency coefficients of the scale were found between .83 and .90, and that the split-half-test reliability coefficients were between .75 and .84. In addition, they found that the item-total correlations of the scale ranked between .42 and .63 for the integrated group, and all the differences between the averages of the 27% lower-upper groups were significant. The lowest score that can be obtained from the scale is 13 and the highest score is 39, with high scores indicating a high sensitivity to cyberbullying. (Tanrıkulu et al., 2013).

Multidimensional Scale of Perceived Social Support (MPSSS)

The purpose of the scale developed by Zimet et al. (1988) is to evaluate the adequacy of perceived social support. The validity and reliability study of the revised form of that scale in Turkey was conducted in 2001 (Eker et al., 2001). They reported that Cronbach Alpha internal consistency coefficients were calculated as .80 and above for the sub-dimensions and the entirety of the scale. The scale consisted of 12 items of 7 Likert type and had 3 sub-dimensions: support from family, friends, and a special person.

The Inventory of Parent and Peer Attachment (PPAI) Short Form

This inventory was created by Armsden and Greenberg (1987) to measure the commitment of young people to their parents and peers. The short form of the inventory, developed by Raja et al. (1992), consists of 24 7-point Likert-type items. The inventory contains two parallel forms: peer attachment and parent attachment. It also comprises items representing factors that promotes feelings of attachment, namely: (1) trust, (2) communication, and (3) alienation. It was adapted into Turkish by Günaydın et al. (2005), and both mother and father forms were found to have high internal consistency coefficients among questioned university students (Cronbach α = .88 and .90, respectively). Bayraktar et al. (2009) studied the features of the mother, father, and peer forms of the scale on high school students and found that the reliability coefficients of the forms were sufficient (peer form .73, parent forms .84).

Data Analysis

The data of the study were analyzed using the SPSS 20.0 (Statistical Package for the Social Sciences) statistical package program. Skewness and kurtosis values of all variables were examined, and the data were observed to show a normal distribution. Descriptive characteristics of the sampling and measurement tools were given first. Chi-square tests were conducted to evaluate the relationships between sociodemographic variables and internet usage habits. Pearson Correlation Analysis was performed to determine the relationship between research variables. The internal consistency coefficients of the scales used in the study were calculated by the Cronbach Alpha method. Independent groups' T test and one-way analysis of variance (ANOVA) were used to determine whether the research variables changed according to the sociodemographic characteristics and internet usage habits. Bonferroni test was applied as a post-hoc multiple comparison test to find out from which groups the difference originated. The hierarchical regression analysis was used to determine the variables that predict the sensitivity to cyber bullying. Statistical significance level was accepted as $p<0.05$.

RESULTS

Sociodemographic Characteristics and Internet Usage Habits

The descriptive statistics regarding the sociodemographic characteristics and internet usage habits of participants are shown in Table 1. Participants' ages and grades varied between 14 and 19 years (mean 16.13±1.13) and 9th and 12th grades, respectively. A total of 385 participants (46.3%) stated that their perceived school achievement was moderate.

Most of their mothers reported themselves to have an education level corresponding to primary school or below and were not working. Most of their fathers had a secondary or high school degree and were working.

It was determined that 620 participants (74.6%) could access the internet every day. A total of 235 participants (28.3%) were reported to spend more than 3 hours a day on the internet. 262 participants (31.5%) reported a rule or restriction on internet use at home (Table 1).

Table 1. Sociodemographic Characteristics and Internet Usage Habits of the Participants

Sociodemographic Characteristics	N (%)	Internet Usage Habits	N (%)
Gender		**Internet access frequency**	
Girl	505 (60.8)	Once or less in a week	85 (10.2)
Boy	326 (39.2)	2-6 days in a week	126 (15.2)
Age		Every day	620 (74.6)
⩽ 15 years	284 (34.2)	**Duration of daily internet usage**	
16-17 years	457 (55)	0-30 min	151 (18.2)
⩾18 years	90 (10.8)	30-59 minutes	124 (14.8)
Grade		1-2 hours	175 (21.1)
Grade 9	234 (28.2)	2-3 hours	146 (17.6)
Grade 10	209 (25.2)	More than three hours	235 (28.3)
Grade 11	203 (24.4)	**Rules/restrictions on home internet use**	
Grade 12	185 (22.3)	Present	262 (31.5)
Mother's status		Absent	569 (68.5)
Alive	822 (98.9)	**Internet access device**	
Dead	9 (1.1)	Smart phone	460 (55.4)
Mother's education		Computer	51 (6.1)
Primary school or less	467 (56.2)	Tablet	7(0.8)
Secondary-high school	341 (41)	Smart phone and computer	183 (22)
University or higher	23 (2.8)	Smart phone and tablet	31 (3.7)
Mother's occupation		Computer and tablet	2 (0.2)
Working	268 (32.3)	All	97 (11.8)
Not working	563 (67.7)	**Place to access the internet**	
Father's status		Home	713 (74)
Alive	801 (96.4)	Internet café	48 (5)
Dead	30 (3.6)	School	38 (3.9)
Father's education		Friend's computer	24 (2.5)
Primary school or less	302 (46.4)	Other	140 (14.6)
Secondary-high school	475 (57.2)	**Purpose of internet use**	
University or higher	54 (6.4)	Using social networking sites	689 (15.2)
Father's occupation		Sending e-mail	147 (3.2)
Working	757 (91.1)	Searching for information	644 (14.2)
Not working	74 (8.9)	Preparing homework or lecture	742 (16.3)
Family's monthly income		Playing online games	263 (5.8)
Low	295 (35.5)	Playing offline games	190 (4.2)
Moderate	300 (36.1)	Chatting	605 (13.3)
High	236 (28.4)	Surfing shopping sites	312 (6.9)
Perceived school success		Making website design	37 (0.8)
Very good	90 (10.8)	Reading the news	199 (4.4)
Average	668 (80.4)	Streaming TV, video or music	663 (14.6)
Bad	73 (8.8)	Other	51 (1.1)

The Relationships of Sociodemographic Characteristics to Internet Usage

Table 2 shows the relationships between sociodemographic variables and internet usage habits. It was statistically determined that the household rules for internet use were less strict among those participants who were comparatively older or were attending higher classes.

Table 2. Relationships Between Sociodemographic Variables and Internet Usage Habits

	Internet Access Frequency			**p**	**Duration of Daily Internet Usage**					**p**	**Rules/Restrictions on The Internet Use at Home**		**p**
Gender	Once a week or less	2-6 days a week	Every day		0-30 min	30 min 1-hour	1-2 hours	2-3 hours	More than three hours		Present	Absent	
Girl	10.3	12.3	77.4	*.247*	20	15.4	19.7	15.8	29.1	*.171*	31.9	68.1	*.785*
Boy	10.1	19.6	70.2		15.3	14.1	23.3	20.2	27.1		31	69	
Age													
⩽ 15 years	12.7	17.2	70.1	*.180*	17.6	18	21.8	19	23.6	*.251*	43	57	***.000***
16-17 years	8.5	13.8	77.7		18.4	13.1	20.4	17.1	31		25.6	74.4	
⩾18 years	11.1	15.6	73.3		18.9	14.4	22.2	15.6	28.9		25.6	74.4	
Grade													
Grade 9	11.7	17.8	70.5	*.359*	17.5	18.8	23.5	18.4	21.8	*.142*	47	53	***.000***
Grade 10	9.6	15.8	74.6		19.1	15.3	15.8	17.7	32.1		30.1	69.9	
Grade 11	7.4	11.3	81.3		17.8	13.8	18.7	18.2	31.5		25.6	74.4	
Grade 12	9.7	14.1	76.2		18.4	10.8	26.5	15.7	28.6		20.0	80.0	
Mother status													
Alive	9.6	15.2	75.2	***.000***	17.6	15	21.3	17.6	28.5	***.015***	31.5	68.5	*.907*
Dead	66.7	11.1	22.2		66.7	11.1	0	11.1	11.1		33.3	66.7	
Mother education													
Primary school or low	13.3	15.6	71.1	*.104*	21.2	16.7	19.5	17.3	25.3	*.071*	27.6	72.4	***.012***
Secondary-high school	10.1	13.7	76.2		16.9	12.0	24.0	18.3	28.8		37.2	62.8	
University or higher	9.7	12	78.3		20.0	16.0	16.0	24.0	24.0		26.1	73.9	
Mother occupation													
Working	7.8	13.4	78.7	*.457*	16.4	11.2	22	16.4	34	*.053*	30.2	69.8	*.577*
Not working	10.4	15	74.6		19	16.7	20.6	18.1	25.6		32.1	67.9	
Father status													
Alive	9.9	14.7	75.4	***.000***	17.7	14.6	21.3	18	28.3	***.000***	31.3	68.7	*.537*
Dead	20	26.7	53.3		30	23.3	13.3	6.7	26.7		36.7	63.3	
Father education													
Primary school or low	14.2	14.2	71.6	*.133*	23.2	16.6	19.5	18.8	21.9	***.018***	27.2	72.8	*.088*
Secondary-high school	10.4	14.8	74.8		14.3	14.3	22.1	17.1	32.2		32.6	67.4	
University or higher	9.1	17.6	73.3		24.1	11.1	20.4	14.8	29.6		39	61	
Father's occupation													
Working	9.5	14	76.5	*.000*	18.0	14.4	20.5	18.2	28.9	*.164*	31.8	68.2	*.541*
Not working	17.6	27	55.4		20.3	20.3	27	10.8	21.6		28.4	71.6	
Family monthly income													
Low	18	18.3	63.7	***.000***	24.7	18	18.6	16.3	22.4	***.000***	33.6	66.4	*.472*
Moderate	7	17.7	75.3		16	16	23	19	26		29	71	
High	4.7	8	87.3		12.7	9.7	21.6	17.4	38.6		32.2	67.8	
Perceived school success													
Very good	13.3	12.2	74.4	.287	26.7	14.4	24.4	14.4	20	***.000***	43.3	56.7	***.045***
Average	9.9	16.3	73.8		18.1	15.9	20.1	18.4	27.5		30.1	69.9	
Bad	9.6	8.2	82.2		8.2	6.8	26.0	13.7	45.2		30.1	69.9	

Participants whose parents were alive reported more internet access and a longer duration of daily internet usage. The participants whose mothers were university graduates or higher reported less internet usage rules/restrictions at home than other participants. The participants whose fathers were middle or high school graduates were the ones who spent the most time online. Adolescents with working fathers had higher frequency of internet access than others. Internet access frequency and duration of daily internet usage of high-income participants were found to be higher than it was found in other income groups.

It was observed that those who described their school achievement as bad had longer time spent on the internet, and less internet rules in their home as compared to others.

Descriptive Statistics and Correlations of Measurement Tools

Table 3 shows descriptive data for each scale and its sub-scales. The correlations among research variables are shown in Table 4. There were positive and significant correlations among the variables. Most importantly, cyberbullying sensitivity was determined to be positively correlated with both MPSSS scores and IPAA scores.

Table 3. Descriptive Statistics on Measurement Tools

	Minimum	Maximum	Mean	Standard Deviation	Internal Consistency Coefficient
1. Cyberbullying Sensitivity Scale (CSS)	17	39	32.34	4.80	0.78
2. Multidimensional Perceived Social Support Scale (MPSSS)-Total	21	84	61.73	14.20	0.84
2.1. Family subscale	4	28	22.23	5.63	0.81
2.2. Friend subscale	4	28	21.57	5.73	0.82
2.3. A special person subscale	4	28	17.94	8.08	0.89
3. Inventory of Parent and Peer Attachment (IPPA)					
3.1. Parent Attachment Scale (PAS)	23	84	64.85	12.84	0.81
3.1.1. Trust subscale	8	28	23.26	4.80	0.65
3.1.2. Communication subscale	5	28	20.33	4.99	0.54
3.1.3. Alienation subscale	4	28	21.26	5.66	0.66
3.2. Peer Attachment Scale (PeerAS)	30	84	62.36	10.90	0.72
3.2.1. Trust subscale	9	28	22.69	4.49	0.61
3.2.2. Communication subscale	5	28	18.58	5.58	0.50
3.2.3. Alienation subscale	6	28	21.10	4.95	0.52

Table 4. The Correlations Between Research Variables

Variable	(1)	(2)	(2.1)	(2.2)	(2.3)	(3.1)	(3.1.1)	(3.1.2)	(3.1.3)	(3.2)	(3.2.1)	(3.2.2)	(3.2.3)
1. CSS	1												
2. MPSSS-Total	.14***	1											
2.1. FS	.18**	.69***	1										
2.2. FrS	.08*	.62***	.30***	1									
2.3. SpS	.06	.80***	.31***	.27***	1								
3.1.PAS-Total	.12***	.51***	.70***	.20***	.27***	1							
3.1.1. PT	.10**	.46***	.63***	.20***	.24***	.84***	1						
3.1.2. CP	.13***	.47***	.64***	.19***	.23***	.84***	.62***	1					
3.1.3. AP	.08*	.36***	.50***	.11**	.20***	.82***	.51***	.49***	1				
3.2. PeerAS-Total	.09*	.51***	.32***	.64***	.22***	.38***	.28***	.33***	.34***	1			
3.2.1. PeerT	.09**	.46***	.28***	.62***	.17***	.26***	.26***	.25***	.16***	.82***	1		
3.2.2. CPeer	.07*	.42***	.20***	.57***	.20***	.21***	.16***	.26***	.12**	.78***	.54***	1	
3.2.3. APeer	.05	.32***	.26***	.32***	.15***	.41***	.24***	.26***	.50***	.74***	.40***	.29***	1

**p<.05; **p<.01; ***p<.001*

CSS: Cyberbullying Sensitivity Scale; MPSSS: Multidimensional Perceived Social Support Scale; FS: Family subscale; FrS: Friend subscale; SpS: A special person subscale; PAS: Parent Attachment Scale; PT: Parent trust subscale; CP: Communication with parent subscale; AP: Parental alienation subscale; PeerAS: Peer Attachment Scale; PeerT: Peer trust subscale; CPeer: Communication with peer subscale; APeer: Peer alienation subscale.

Comparison of Research Variables in Terms of Sociodemographic Characteristics and Internet Usage Habits

Independent groups t-test results to determine whether the participants' scale scores change according to sociodemographic variables and internet usage habits are shown in Table 5.

The CSS scores of the girls were found higher than the boys (t=6.17, p<.001). Further, the scores of friend support, total peer attachment, peer trust and peer communication of the girls were found higher than they were found in the boys (t=2.24, p<.05; t=3.36, p<.01; t=2.82, p<.01; t=3.83, p<.001, respectively). On the other hand, the boys had higher parent trust scores than the girls (t=-3.05, p<.01).

Both MPSSS total scores and family support scores of the participants who reportedly had household rules for internet use were found to be significantly higher (t=2.00, p<.05 and t=2.38, p<.05; respectively).

The results of ANOVA performed to determine whether the study variables differed according to sociodemographic characteristics and internet usage habits are shown in Table 6. Post hoc test results are presented below.

Total MPSSS scores, friend support scores, total peer attachment scores and peer trust scores of the 9th grade students were found higher than the scores of the 12th grade students (respectively; p<.05, p<.01, p<.05 and p<.05).

Table 5. Comparison Results of Research Variables in Terms of Sociodemographic Characteristics and Internet Usage Habits By T-Test

	Girls	Boys	*t*	Mother alive	Mother dead	*t*	Father alive	Father dead	*t*	Working mother	Non-working mother	t	Working father	Non-working father	*t*	Internet rule present	Internet rule absent	*t*
CSS	33.2±4.4	31.1±5.1	***6.17******	32.3±4.8	32.9±4.3	*-0.38*	32.3±4.8	32.5±4.7	*-0.18*	32.4±4.80	32.3±4.81	0.03	32.3±4.8	32.6±4.5	*-0.58*	32.6±4.8	32.2±4.8	1.14
MPSSS-Total	61.9±14.2	61.4±14.2	***0.61****	61.8±14.2	59.2±14.2	*0.53*	61.9±14.0	57.2±18.0	*1.42*	61.2±14.3	62.0±14.2	-0.75	61.9±14.0	60.1±16.1	*0.92*	63.2±13.7	61.1±14.4	**2.00***
FS	22.2±5.8	22.3±5.4	*-0.13*	22.2±5.6	21.4±5.7	*0.42*	22.3±5.6	20.3±5.9	*1.79*	21.9±5.8	22.4±5.5	-1.18	22.4±5.5	21.3±6.6	*1.32*	22.9±5.3	21.9±5.7	**2.38***
FrS	21.9±5.6	21.0±5.9	***2.24****	21.6±5.7	21.3±5.9	*0.06*	21.6±5.6	19.9±7.4	*1.25*	21.5±6.1	21.6±5.6	-0.31	21.6±5.7	21.4±6.1	*0.30*	21.7±5.2	21.5±5.9	0.62
SpS	17.8±8.3	18.1±7.8	*-0.45*	17.9±8.1	16.3±8.1	*0.60*	18.0±8.1	16.9±8.6	*0.68*	17.8±8.2	18.0±8.0	-0.26	18.0±8.1	17.5±8.5	*0.51*	18.5±7.6	17.7±8.3	1.46
PAS-Total	64.2±13.4	65.9±11.9	*-1.93*	64.9±12.9	60.4±11.8	*1.13*	65.0±12.8	60.3±13.9	*1.83*	65.4±13.1	64.6±12.7	0.80	65.1±12.6	62.2±14.7	*1.62*	65.6±12.6	64.5±13.0	1.13
PT	22.9±5.1	23.9±4.3	***-3.05****	23.3±4.8	21.2±4.6	*1.35*	23.3±4.7	21.0±5.9	*1.15*	23.5±4.8	23.2±4.8	0.90	23.4±4.8	22.3±5.0	*1.73*	23.5±4.7	23.2±4.9	0.86
CP	20.2±5.2	20.5±4.7	*-0.81*	20.4±5.0	18.7±4.0	*1.24*	20.3±5.0	20.1±4.5	*0.25*	20.5±5.1	20.3±5.0	0.56	20.4±4.9	19.6±5.6	*1.14*	20.7±4.5	20.2±5.2	1.47
AP	21.1±5.7	21.5±5.6	*-1.08*	21.3±5.7	20.6±4.2	*0.50*	21.3±5.6	19.2±6.1	*1.93*	21.4±5.6	21.2±5.7	0.53	21.4±5.5	20.3±6.8	*1.29*	21.4±5.8	21.2±5.6	0.58
PeerAS-Total	63.4±11.0	60.8±10.6	***3.36****	62.3±10.9	66.0±7.3	*-1.49*	62.5±10.9	60.1±10.1	*1.23*	62.0±11.3	62.6±10.7	-0.73	62.4±11.0	62.4±10.2	*-0.01*	62.7±10.3	62.2±11.2	0.65
PeerT	23.0±4.5	22.1±4.5	***2.82****	26.7±4.5	24.0±4.2	*-0.93*	22.7±4.5	21.9±4.7	*0.90*	22.5±5.0	22.8±4.2	-0.83	22.6±4.5	23.2±4.3	*-0.97*	23.0±4.2	22.6±4.6	1.35
CPeer	19.1±4.5	17.8±4.6	***3.83*****	18.6±4.6	19.4±3.3	*-0.80*	18.6±4.6	17.6±4.1	*1.27*	18.4±4.7	18.7±4.5	-0.76	18.6±4.6	18.7±4.3	*-0.15*	18.7±4.1	18.5±4.8	0.53
APeer	21.3±4.9	20.8±5.1	*1.20*	21.1±5.0	22.6±3.4	*1.30*	21.1±5.0	20.6±4.9	*0.61*	21.1±4.8	21.1±5.0	-0.14	21.2±4.9	20.6±5.2	*0.90*	21.0±4.9	21.1±5.0	-0.26

Mean ± SD*; Student T test: *p<.05; **p<.01; ***p<.001*
CSS: Cyberbullying Sensitivity Scale; MPSSS: Multidimensional Perceived Social Support Scale; FS: Family subscale; FrS: Friend subscale; SpS: A special person subscale; PAS: Parent Attachment Scale; PT: Parent trust subscale; CP: Communication with parent subscale; AP: Parental alienation subscale; PeerAS: Peer Attachment Scale; PeerT: Peer trust subscale; CPeer: Communication with peer subscale; APeer: Peer alienation subscale.

Total MPSSS scores, friend support scores, total peer attachment scores and peer alienation scores of the participants aged 18 years or above were found to be lower than the scores of both the other age groups (for total MPSSS scores, p<.01 and p<.05, respectively; for the friend support scores, p<.01 and p<.05, respectively; for the total peer attachment scores, both p<.01; for peer alienation scores, both p<.05). On the other hand, the participants aged 18 years or above had lower peer trust scores than those aged 15 years or below (p<.05).

Total MPSSS scores, family support scores and special person support scores of the group whose mother was a secondary school or high school graduate were found significantly higher than the scores of other groups (all p<.001). The parental attachment total scores, parent trust scores and parent communication scores of the group whose mothers graduated from secondary school or high school were found higher than the scores of other groups (p<.05, p<.05 and p<.01, respectively). The group whose father was a secondary school or high school graduate had higher total MPSSS and family support scores than other groups (p<.05 and p<.01, respectively).

Table 6. Comparison of Research Variables with ANOVA In Terms of Sociodemographic Characteristics and Internet Usage Habits

	Grade		Age		Mother education groups		Father education groups		Monthly income groups		Perceived school achievement		Internet access frequency		Duration of daily internet usage	
	F	**p**	**F**	**p**	**F**	**p**	**F**	**p**	**F**	**p**	**F**	**p**	**F**	**p**	**F**	**p**
CSS	0.403	*.751*	.534	*.586*	2.715	*0.067*	1.563	*0.210*	6.279	***.002***	2.280	*.103*	0.275	*0.260*	1.369	*0.243*
MPSSS-Total	3.200	***.023***	5.065	***.007***	12.187	***0.000***	4.217	***0.015***	3.555	***.029***	7.937	***.000***	1.393	*0.249*	1.917	*0.065*
FS	2.070	*.103*	1.926	*.146*	10.390	***0.000***	5.099	***0.006***	0.411	*0.693*	9.944	***.000***	1.251	*0.287*	4.692	***0.001***
FrS	5.848	***.001***	8.683	***.000***	1.818	*0.163*	0.906	*0.405*	1.297	*0.274*	.076	*.927*	2.278	*0.103*	2.095	*0.080*
SpS	0.843	*.471*	1.323	*.267*	9.845	***0.000***	1.987	*0.138*	4.566	***.011***	6.873	***.001***	0.177	*0.838*	0.851	*0.493*
PAS-Total	0.216	*.885*	.940	*.391*	4.265	***0.014***	0.914	*0.401*	1.884	*0.153*	7.481	***.001***	1.537	*0.216*	4.923	***0.001***
PT	0.648	*.584*	.805	*.448*	4.140	***0.016***	0.889	*0.412*	0.787	*0.456*	4.216	***.015***	0.712	*0.491*	4.843	***0.001***
CP	0.515	*.672*	.821	*.440*	6.492	***0.002***	2.239	*0.107*	0.041	*0.960*	8.015	***.000***	0.649	*0.523*	5.041	***0.001***
AP	0.064	*.979*	.449	*.638*	0.609	*0.544*	0.117	*0.890*	4.799	***.008***	2.889	*.061*	2.376	*0.094*	2.118	*0.077*
PeerAS-Total	3.199	***.023***	5.650	***.004***	0.450	*0.638*	0.649	*0.523*	2.116	*0.121*	.623	*.536*	1.296	*0.274*	1.154	*0.330*
PeerT	3.277	***.021***	4.059	***.018***	1.494	*0.225*	0.462	*0.630*	1.563	*0.210*	.256	*.774*	2.091	*0.124*	0.794	*0.529*
CPeer	2.195	*.087*	2.834	*.059*	0.099	*0.906*	0.157	*0.854*	1.161	*0.314*	1.624	*.198*	3.628	***.0270***	1.493	*0.202*
APeer	1.423	*.235*	3.708	***.025***	0.171	*0.842*	0.663	*0.515*	2.760	*0.64*	.200	*.819*	0.494	*0.610*	2.860	***.0230***

CSS: Cyberbullying Sensitivity Scale; MPSSS: Multidimensional Perceived Social Support Scale; FS: Family subscale; FrS: Friend subscale; SpS: A special person subscale; PAS: Parent Attachment Scale; PT: Parent trust subscale; CP: Communication with parent subscale; AP: Parental alienation subscale; PeerAS: Peer Attachment Scale; PeerT: Peer trust subscale; CPeer: Communication with peer subscale; APeer: Peer alienation subscale.

The CSS score of the low-income group was found significantly higher than the score of the high-income group ($p<.01$). The MPSSS score, special person support score and parent alienation score of the high-income group were found higher than the scores of the moderate-income group ($p<.05$, $p<.05$ and $p<.01$, respectively).

The peer communication scores of the group who had daily internet access were found higher than in those who had less frequent internet access (p<.05).

Family support scores, total parental attachment scores, parent trust scores and parent communication scores of the group who spent more than 3 hours a day on the internet was found significantly lower than the scores of the groups who spent less time on the internet (all p<.01). On the other hand, the group who spent 30 minutes–1 hour daily on the internet had higher peer alienation scores than the group who spent more than 3 hours (p<.01).

Total MPSSS scores, family support scores, special person support scores, total parent attachment scores, parental trust scores and parent communication scores of the group that reported better school achievement were found to be statistically significantly higher than those of other groups.

Variables Predicting Cyberbullying Sensitivity

Table 7 shows the variables predicting cyberbullying sensitivity in the hierarchical regression analysis. The demographic variables to predict the cyberbullying sensitivity were gender and average monthly income. These two demographic variables accounted for 5% of the total variance (F15-815 = 3.769, p<.001). The third variable that predicts the sensitivity to cyberbullying was the family subscale of the MPSSS. Including this variable to the equation increased the total variance explained to 8% (F18-812 = 4.889, p<.001).

Table 7. Variables Predicting Cyberbullying Sensitivity

Variable	B	Beta	R	R^2	Adjusted R^2	F
Grade	.08	.02				
Gender	**-1.89**	**-.19*** **				
Age	.09	.02				
Mother education	-.41	-.05				
Mother status	.48	.01				
Mother occupation	-.31	-.03				
Father education	-.24	-.03	.26	.06	.05.	3.769***
Father status	.32	.01				
Father occupation	.10	.01				
Average monthly income	**-.54**	**-.09***				
Internet access frequency	.42	.06				
Duration of daily internet usage	-.14	-.04				
Rules on home internet use	-.36	-.04				
Perceived school success	.03	.01				
Family support	**.13**	**.16****				
Friend support	.01	.02	.31	.10	.08	4.889***
A special person support	.01	.02				
Parent trust	.01	.01				
Parent communication	.02	.02				
Parent alienation	.01	.00	.31	.10	.07	.104
Peer trust	.02	.02				
Peer communication	-.01	-.01				
Peer alienation	-.02	-.02				

**p<.05; **p<.01; ***p<.001*

DISCUSSION

This study examined the effect of perceived social support and attachment on the adolescents' internet usage habits and cyberbullying sensitivity. It was reported that an increasing use of internet among adolescents led to concerns with respect to an increasing risk of problematic internet use (Boniel-Nissim & Sasson, 2018). In our study, it was determined that 74.6% of students with an average age of 16.3 years used the internet every day and 67% among them used the internet more than 1 hour a day. Since the scores of cyber bullying and cyber victimization increased with an increase in the duration of internet usage (Uludaşdemir et al., 2019; Athanisou et al., 2018), children spending a long time online need to be carefully monitored for these risks.

Firstly, the effects of various variables on the internet usage habits have been discussed. It is known that the education level of parents has an important effect in preventing cyber problems and problematic internet use in adolescents (Laftman et al., 2013; Athaniosou et al., 2018). In our study, it was found that the father's working status and a higher income level of the family were positively associated to the increased frequency of internet access and to the increased average daily internet usage time. The fact that families with higher socioeconomic status have easy access to internet and digital technologies can facilitate their guidance in this regard.

Rules regarding internet use at home and providing parental control are important in preventing problematic internet use (Elsaesser et al., 2017). However, it was determined that 68.5% of our study population did not have internet rules or restrictions at home and it was also found that household rules/restrictions on internet use decreased with an increase in the age and class of the participants. It was further found that participants with highly educated mothers experienced fewer internet usage rules/restrictions at home. Our results were in line with previous studies suggesting that parents with low socioeconomic and educational attainment are highly ambivalent and anxious about digital media and have a more restrictive attitude towards digital devices (Livingstone et al., 2015).

Previous research shows that cyberbullies generally have lower academic performance (Tokunaga, 2010; Guo & Wang, 2020). In our study, we found that those with lower school achievement were spending more time on the internet and had less internet rules at home, and that these children had lower social support and attachment scores. This may show the effect of an inadequate parental support along with lower academic achievement on the problematic internet use and thus on the cyberbullying risk.

According to previous studies, a healthy parent-child attachment is effective in preventing problematic internet use, and in fact, the time spent on the internet reportedly decreases as the time the students spend with their family members increases (Lei & Wu, 2007; Elsaesser et al., 2017). Boniel-Nissim & Sasson (2018) indicated that poor parent-child communication increased problematic internet use behaviors. As an important finding in our study, it was observed that students who showed more attachment to their parents and had family support were spending less time on the internet. This shows the importance of family support and secure connection in preventing problematic internet use. On the other hand, the low peer communication and high peer alienation scores of the students who accessed the internet less

frequently in our study pointed out the importance of internet in establishing peer relationships. As a matter of fact, it is seen today that it is almost a necessity for adolescents to maintain social relations with their friends over the internet (Kowalski et al., 2014, Gorrese & Ruggieri, 2012).

Secondly, those variables with an effect on cyberbullying sensitivity have been discussed. As an important finding, adolescents in our study had high sensitivity scores against cyberbullying, indicating that individuals were aware of cyberbullying. In a study examining the differences between countries in terms of perceived violence of cyberbullying through various scenarios, it was found that Turkish students perceived all scenarios more severely than those adolescents in other countries (Palladino et al., 2017). The authors of that study argued that due to the recent increase in awareness of cyberbullying, Turkish students have developed a higher sensitivity to threats such as cyberbullying.

In line with previous studies (Aktürk, 2015; Gündüz et al., 2021, Şentürk & Bayat, 2016), female students had higher cyberbullying sensitivity scores than males in our study. The high sensitivity of girls to cyberbullying can be explained by their previous experiences of cyberbullying and by the fact that they are warned by their parents more frequently about the dangers of the cyber world.

Furthermore, adolescents with low socioeconomic levels had both lower family support and attachment scores in our study, in compliance with previous studies (Saylor & Leach, 2009), However, these adolescents were found to be more susceptible to cyberbullying. In this context, the family income was found to be an important variable that predicts the cyberbullying sensitivity. Inadequate family support, poor family relationships and limited internet access may be observed in students from lower socioeconomic levels, and the risk of getting their already-limited internet access blocked by their families in case of any problems in the internet environment may cause these students to be more careful.

Parental support and good relationships with parents and friends are one of the factors that prevent adolescents from becoming victims of cyberbullying and play a role in solving the problem in adolescents exposed to cyberbullying (Elsaesser et al., 2017, Boniel-Nissim & Sasson, 2018, Hellfeldt et al., 2020). Similarly, positive correlations were found in our study between social support and cyberbullying sensitivity and parental attachment, and the family support subscale was identified as an important variable that predicts cyberbullying sensitivity. Strong attachment to parents is of great importance in preventing pathological internet use and reducing the risk of cyberbullying.

Healthy relationships of adolescents not only with their families, but also with their peers reduce the risks of bullying, whereas cyberbullying victims mostly seek social support from their peers (Burton et al., 2013; Livingstone et al., 2015). In our study, adolescents who were strongly attached to their peers had high cyberbullying sensitivity. This finding shows the importance of healthy relationships with peers and of friend support in preventing and coping with cyberbullying.

Limitations: This study has some limitations. First, a cross-sectional study was conducted. It was therefore only possible to measure the study variables at a given time and their evolution could not be followed. Second, the study included only the students from a single city, and the

findings obtained reflected only the personal views of this sample. Future research should be conducted to investigate cyber bullying sensitivity in a larger population with different socioeconomical characteristics.

Conclusion: A higher cyberbullying sensitivity in adolescents of our study reflects that the students perceive their online exposure to bullying behaviors as a threat, even if they spend a lot of time on the internet. It was observed that the students' internet usage habits are affected by various sociodemographic characteristics and these features may cause differences in cyberbullying sensitivity, social support, and parental and peer attachment status. The fact that adolescents with higher perceived social support and strong attachment to parents and peers spent less time on the internet and had higher sensitivity to cyberbullying points out the importance of social support and attachment in preventing cyberbullying. Positive attachment between parents and adolescents and perceived strong social support from family and friends will reduce problematic internet use among adolescents and thus the risk of cyberbullying. Therefore, in order for the cyber bullying prevention strategies to become effective, they should encompass multiple systems such as the family, the peers, and the school.

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REFERENCES

Aktürk, A. O. (2015). Analysis of cyberbullying sensitivity levels of high school students and their perceived social support levels. *Interactive Technology and Smart Education, 12*(1), 44-61. https://doi.org/10.1108/ITSE-07-2014-0016

Ang, R. P. (2015). Adolescent cyberbullying: A review of characteristics, prevention and intervention strategies. *Aggression and Violent Behavior, 25,* 35-42. http://dx.doi.org/10.1016/j.avb.2015.07.011

Armsden, G. B., & Greenberg, M. T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence, 16,* 427-454.

Athanasiou, K., Melegkovits, E., Andrie, E. K., Magoulas, C., Tzavara, C. K., … Tsitsika A. K. (2018). Cross-national aspects of cyberbullying victimization among 14-17-year-old adolescents across seven European countries. *BMC Public Health, 18,* 800. https://doi.org/10.1186/s12889-018-5682-4

Bannink, R., Broeren, S., van de Looij–Jansen, P. M., de Waart, F. G., & Raat, H. (2014). Cyber and traditional bullying victimization as a risk factor for mental health problems and suicidal ideation in adolescents. *Plus One*, *9*(4), e94026. http://doi.org/10.1371/journal.pone.0094026

Bayraktar, F., Sayıl, M. & Kumru A. (2009). Liseli ergenler ve üniversiteli gençlerde benlik saygısı: ebeveyn ve akrana bağlanma, empati ve psikolojik uyum değişkenlerinin rolü. *Türk Psikoloji Dergisi, 24*(63), 48-63.

Boniel-Nissim, M., & Sasson, H. (2018). Bullying victimization and poor relationships with parents as risk factors of problematic internet use in adolescence. *Computers in Human Behavior*, *88*, 176-183. https://doi.org/10.1016/j.chb.2018.05.041

Burton, K. A., Florell, D., & Wygant, D. B. (2013). The role of peer attachment and normative beliefs about aggression on traditional bullying and cyberbullying. *Psychology in the Schools*, *50*(2), 103-115. https://doi.org/10.1002/pits.21663

Cassidy, W., Faucher, C., & Jackson, M. (2013). Cyberbullying among youth: a comprehensive review of current international research and its implications and application to policy and practice. *School Psychology International*, *34*, 575-612. https://doi.org/10.1177/0143034313479697

Eker, D, Arkar, H., & Yaldız, H. (2001). Factorial structure, validity, and reliability of Revised Form of the Multidimensional Scale of Perceived Social Support. *Türk Psikiyatri Dergisi, 12*(1), 17-25.

Elsaesser, C., Russell, B., Ohannessian, C. M., & Patton, D. (2017). Parenting in a digital age: A review of parents' role in preventing adolescent cyberbullying. *Aggression and Violent Behavior*, *35*, 62-72. http://dx.doi.org/10.1016/j.avb.2017.06.004

Espelage, D. L., & Hong, J. S. (2017). Cyberbullying prevention and intervention efforts: Current knowledge and future directions. *The Canadian Journal of Psychiatry*, *62*(6), 374-380. https://doi.org/10.1177/0706743716684793

Field, T. (2018). Cyberbullying: A narrative review. *Journal of Addiction Research & Therapy*, *2*, 10-27. https://dx.doi.org/10.29328/journal.jatr.1001007

Foody, M., McGuire, L., Kuldas, S., & O'Higgins Norman, J. (2019). Friendship quality and gender differences in association with cyberbullying involvement and psychological well-being. *Frontiers in Psychology*, *10*, 1723. https://doi:10.3389/fpsyg.2019.01723

Gorrese, A., & Ruggieri, R. (2012). Peer attachment: A meta-analytic review of gender and age differences and associations with parent attachment. *Journal of Youth and Adolescence*, *41*(5), 650-672. https://doi.org/10.1007/s10964-012-9759-6

Günaydın, G., Selçuk, E., Sümer, N., & Uysal, A. (2005). The Psychometric evaluation of the short form of Inventory of Parent and Peer Attachment. *Türk Psikoloji Yazıları, 8*, 13-23.

Gündüz, Ş., Akgün, F., & Özgür, H. (2021). Determination of secondary school students' levels of sensitivity towards cyberbullying and cyberbullying behaviour. *Participatory Educational Research*, *8*(1), 70-89. https://doi.org/10.17275/per.21.4.8.1

Guo, S. (2016). A meta-analysis of the predictors of cyberbullying perpetration and victimization. *Psychology in the Schools*, *53*(4), 432-453. https://doi.org/10.1002/pits.21914

Guo, S., Liu, J., & Wang, J. (2020). Cyberbullying roles among adolescents: A social-ecological theory perspective. *Journal of School Violence*, *20*(2), 167-181. https://doi.org/10.1080/15388220.2020.1862674

Hellfeldt, K., López-Romero, L., & Andershed, H. (2020). Cyberbullying and psychological well-being in young adolescence: The potential protective mediation effects of social support from family, friends, and teachers. *Int. J. Environ. Res. Public Health*, *17*, 45. http://doi:10.3390/ijerph17010045

Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research*, *14*(3), 206-221. https://doi.org/10.1080/13811118.2010.494133

Jimenez, R. (2019). Multiple victimization (bullying and cyberbullying) in primary education in Spain from a gender perspective. *Multidisciplinary Journal of Educational Research*, *9*(2), 169-192. https://doi.org/10.4471/remie.2019.4272

Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and metaanalysis of cyberbullying research among youth. *Psychological Bulletin, 140*, 1073-1137. https://doi.org/10.1037/a0035618

Krahé, B., Möller, I., Berger, A., & Felber, J. (2011). Repression versus sensitization in response to media violence as predictors of cognitive avoidance and vigilance. *Journal of Personality*, *79*(1), 165-190. https://doi.org/10.1111/j.1467-6494.2010.00674.x

Laftman, S. B., Modin, B., & Östberg, V. (2013). Cyberbullying and subjective health: A large-scale study of students in Stockholm, Sweden. *Children and Youth Services Review, 35*, 112-119. https://doi.org/10.1016/j.childyouth.2012.10.020

Lei L., & Wu Y. (2007). Adolescents' Paternal Attachment and Internet Use. *CyberPsychology & Behavior*, *10*(5), 633-639. https://doi.org/10.1089/cpb.2007.9976

Livingstone, S., Mascheroni, G., Dreier, M., Chaudron, S., & Lagae, K. (2015). *How parents of young children manage digital devices at home: The role of income, education and parental style*. EU Kids Online, LSE.

Palladino, B. E., Menesini, E., Nocentini, A., Luik, P., Naruskov, K., Ucanok, Z., Dogan, A., Schultze-Krumbholz, A., Hess, M., & Scheithauer, H. (2017). Perceived severity of cyberbullying: Differences and similarities across four countries. *Frontiers in Psychology*, *8*, 1524. https://doi.org/10.3389/fpsyg.2017.01524

Patchin, J. W. (2019). *Cyberbullying data.* Cyberbullying Research Center. https://cyberbullying.org/2019-cyberbullying-data

Reyna, V. F., & Farley, F. (2006). Risk and rationality in adolescent decision making: implications for theory, practice, and public policy. *Psychological Science in the Public Interest*, *7*, 1-44. https://doi.org/10.1111/j.1529-1006.2006.00026.x

Ronis, S., & Slaunwhite, A. (2019). Gender and geographic predictors of cyberbullying victimization, perpetration, and coping modalities among youth. *Canadian Journal of School Psychology, 34*, 3-21. https://doi.org/10.1177/0829573517734029

Saylor, C. F., & Leach, J. B. (2009). Perceived bullying and social support in students accessing special inclusion programming. *Journal of Developmental and Physical Disabilities*, *21*, 69-80. https://doi.org/10.1007/s10882-008-9126-4

Şentürk, Ş., & Bayat, S. (2016). Internet usage habits and cyberbullying related opinions of secondary school students. *Universal Journal of Educational Research*, *4*(5), 1103-1110. https://doi.org/10.13189/ujer.2016.040520

Tanrıkulu, T., Kınay, H., & Arıcak, O. T. (2013). Cyberbullying Sensibility Scale: Validity and reliability study. *Trakya Üniversitesi Eğitim Fakültesi Dergisi, 3*(1), 38-47.

Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, *26*(3), 277-287. http://doi:10.1016/j.chb.2009.11.014

Uludasdemir, D., & Kucuk, S. (2019). Cyber bullying experiences of adolescents and parental awareness: Turkish example. *Journal of Pediatric Nursing, 44*, e84-e90. https://doi.org/10.1016/j.pedn.2018.11.006

Vaillancourt, T., Faris, R., & Mishna, F. (2017). Cyberbullying in children and youth: Implications for health and clinical practice. *Canadian Journal of Psychiatry*, *62*(6), 368-373. https://doi/10.1177/0706743716684791

Vijayakumar, N., de Macks, Z. O., Shirtcliff, E. A., & Pfeifer J. H. (2018). Puberty and the human brain: Insights into adolescent development. *Neuroscience and Biobehavioral Reviews*, *92*, 417-436. https://doi.org/10.1016/j.neubiorev.2018.06.004

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, *52*(1), 30-41. https://doi.org/10.1207/s15327752jpa5201_2