The Relationship between Cyber Bullying/Victimization and Emotional Intelligence in Secondary School Students: Mediator Role of Internet Gaming Disorder*
Ortaokul Öğrencilerinde Siber Zorbalık/Mağduriyetle Duygusal Zekâ Arasındaki İlişkide İnternet Oyun Oynama Bozukluğunun Aracı Rolü

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Abstract

This study was carried out to determine the intermediate role of Internet gaming disorder in the relationship between cyberbullying/victimization and emotional intelligence in secondary school students. The study group was composed of 272 secondary school students, 147 males and 125 females. 45 of them were in the 5th grade, 82 of them were in the 6th grade, 61 of them were in the 7th grade and 84 of them were the 8th-grade students. The data of the study were collected via the Internet Gaming Disorder Scale, the Bar-On Emotional Quotient Inventory Youth Version and the Revised Cyber Bullying/Victimization Inventory-II. In the study, the criterion sampling method, one of the sub-branches of the purposeful sampling method based on non-random sampling was used. In this context, the research data were collected from secondary school students playing Internet games. To test the model related to the Internet gaming disorder, cyberbullying/victimization and emotional quotient, AMOS 16 was used and the Path Analysis was applied. Moreover, the correlations and the descriptive statistics belonging to the variables were calculated via the SPSS 24 program. The relationships between the variables addressed in the study were calculated via the Pearson Correlation coefficient and the prediction levels were determined via the Path Analysis. Moreover, independent samples t-test was used to find out whether the Internet gaming level differed according to gender and class level.

Keywords: Internet gaming disorder, emotional intelligence, cyberbullying, cyber victimization.

Öz

Bu araştırma ortaokul öğrencilerinde siber zorbalık/mağduriyetin, duygusal zekâya etkisinde; internet oyun oynama bozukluğunun aracı rolünü belirlemek amacıyla yapılmıştır. Araştırmanın çalışma grubu, 147'si erkek, 125'ü kız öğrenciden olmak üzere 272 ortaokul öğrencisinden oluşmaktadır. Bu öğrencilerin 45'i 5. sınıf, 82'si 6. sınıf, 61'i 7. sınıf ve 84'ü 8. sınıf öğrencisidir. Çalışmanın verileri İnternet Oyun Oynama Bozukluğu Ölçeği, Bar-On Duygusal Zekâ Ölçeği Çocuk ve Ergen Formu ve Yenilenmiş Siber Zorbalık/Mağduriyet Envanteri-II ile toplanmıştır. Araştırmada örnekleme yöntemlerinden rassal olmayan örnekleme yöntemlerinden amaçsal örnekleme alt dalından oluşan ölçüt örnekleme yöntemi kullanılmıştır. Bu bağlamda araştırma verileri internette oyun oynayan ortaokul öğrencilerinden toplanmıştır. İnternet oyun oynama bozukluğu, siber zorbalık/mağduriyet ve duygusal zekâya ilişkin kurulan modelin test edilebilmesi için AMOS 16 kullanılmış olup Yol Analizi (Path Analysis) uygulanmıştır. Ayrıca değişkenlere ait korelasyonlar ve betimsel istatistikler SPSS 24 ile hesaplanmıştır. Araştırmada ele alınan değişkenler arasındaki ilişkiler Pearson Korelasyon katsayısı ile hesaplanmış, yordama düzeyleri ise Yol Analizi ile yapılmıştır. Ayrıca internet oyun oynama düzeyinin cinsiyete ve sınıf düzeylerine göre farklılaşıp farklılaşmadığı bağımsız örneklem t testi ile incelenmiştir.

Anahtar Kelimeler: İnternet oyun oynama bozukluğu, duygusal zekâ, siber zorbalık, siber mağduriyet.

Introduction

Today, traditional games have been replaced by digital games due to such factors as insufficient number of playgrounds. In all age groups, the frequency of digital gaming is on the increase, more frequent particularly in children of primary and secondary school ages. That secondary school students show an intensive interest in and have gradually spent more time on playing games has made it necessary to make more research on the studies in this area (Gentile, 2009: 322; Rideout et al., 2010: 21). Although the first games came onto the market in the 1970's, the use of Internet games became prevalent especially in the early 2000's (Griffiths et al., 2012). However, in Turkey, the use of Internet games has shown a rapid increase in recent years. According to the Turkish Statistical Institute household information technologies use survey 2018, the use of Internet and mobile devices has become prevalent up to a rate of 90 among 6-15-aged children in our country and they are used more frequently with the purpose of playing games (TUİK, 2018). The Internet games, the use of which is gradually becoming prevalent among children, have caused new concepts to appear. Of these, the concept of Internet gaming disorder describes the excessive and uncontrolled use of games.

Internet gaming disorder can be seen in individuals of almost all ages. However, children are the most adversely affected group in terms of age and developmental stages. Children's less developed sense of responsibility compared to adults, their inability to control themselves adequately and their tendency to be directed cause children to be affected more. Gaming disorder affects the individual negatively in physiological, psychological and sociological terms. As a result of gaming disorder, problems such as irregular and inadequate nutrition, sleep problems, musculoskeletal problems, and inadequacy in self-care occur in children (Starcevic et al., 2011). It is emphasized that especially violent digital games are as effective on aggressive behavior as smoking has on lung cancer (Aldrich, 2006: 6). It has been stated that many children are exposed to cyberbullying by others during video games and this increases their anxiety level (Fryling et al., 2015). Exposure to cyberbullying from online games; It causes low self-esteem, rejection of educational gains, school absenteeism, decrease in self-worth, hopelessness and loneliness in individuals (Hilvert-Bruce & Neill, 2020). In general, cyberbullying can produce results that include sudden actions such as depression, anxiety and suicide, and victims of cyberbullying behaviors can also maintain similar emotional effects in the real world (Kwak, Blackburn, & Han, 2015).

When the literature is examined, it is seen that although more than one concept have been used until recently in relation to the problematic gaming behavior such as online game playing addiction (Bekir and Çelik, 2019), digital game playing addiction (Hazar and Hazar, 2017), problematic online game playing addiction (Demetrovics et al., 2012), compulsive game playing addiction (Van Rooij, et al., 2010) and pathological game playing addiction (Gentile et al., 2011), etc., no consensus has been reached fully on a clear concept. Moreover, Young et al., (1999) revealed that the Internet gaming disorder is a special situation developed depending on Internet addiction. However, together with the inclusion of the Internet gaming disorder in the Manual of Mental Disorders-5 (DSM-5), this behavior acquired a formal definition. According to the definition in DSM-5 (2013), the Internet gaming disorder is an Internet gaming behavior which exceeds normal durations and in which a loss of control is observed in gaming at an increasing level in the last one year, there is a need for increasing time for gaming and behavioral and cognitive symptoms including withdrawal symptoms are observed together in a manner which is similar to substance abuse disorder (APA, 2013).

As for cyber-bullying examined within the scope of the study, it was generally defined as all hostile behaviors exhibited deliberately

and repeatedly by a person or a group towards a private or legal body via electronic texts-visuals by using information and communication technologies with the aim of harming others (Arıcak, 2011; Belsey, 2007; Beran and Li, 2005; Kowalksi and Limber, 2007; Patchin and Hinduja, 2006; Ybarra and Mitchell, 2004). Similarly, cyber victimization, too, was defined as a person or a group's being exposed to deliberate and repeated hostile behaviors exhibited via electronic texts and visuals by using information and communication technologies (Arıcak et al., 2012; Brown et al., 2014). Especially in secondary school students, being exposed to cyber bullying has increased more together with the spread of Internet use. Previous studies made in relation to this subject revealed that nearly half of secondary school students had been exposed to cyber bullying/victimization at least once (Arıcak, 2009; Ayas and Horzum, 2012; Aydoğan et al., 2009; Beran and Li, 2005; Beran et al., 2015; Patchin and Hinduja, 2006; Udris, 2015; Vandebosch and Van Cleemput, 2009).

In relation to cyber bullying/victimization, various studies were made with such variables as sex (Kowalski and Limber, 2007; Li, 2006; Vandebosch and VanCleemput, 2009; Williams and Guerra, 2007; Arıcak, 2009; Ayas and Horzum, 2012; Erdur-Baker and Kavşut, 2007), academic success (Li, 2006), personality (Çelik et al., 2012; Ekşi, 2012; Corcoran et al., 2012), parental qualities (Olweus, 1993; Duncan, 2004; Flouri and Buchanan, 2003; Ybarra and Mitchell, 2004) and frequency, disorder and addiction of using information and Internet technologies (Jung et al., 2014; Leung and Lee, 2012; Casas et al., 2013; Erdur-Baker and Kavşut, 2007; Wolak et al., 2007; Ybarra and Mitchell, 2004; Zsila et al., 2018).

Studies related to the concept of emotional intelligence, another variable of the present study, were started with Thorndike's social intelligence in the early 1900's and continued by Salovey and Mayer (1990) and finally given shape via Goleman's (1995) studies. In relation to emotional intelligence, the model suggested by Mayer and Salovey (1997), the Bar On model (1997), the model by Goleman (1995) and the model by Cooper and Sawaf (1997) are regarded as the most important models. Many studies were made with the aim of defining emotional intelligence. Of these, the definition of emotional intelligence made by Goleman (2005) as "the ability to motivate oneself, control one's impulses, regulate one's mood, not allow problems to hinder thinking, put oneself in someone else's place and hope" is the commonly accepted definition. In another definition made within the framework of the Bar-On model, the skills of expressing oneself and understanding others, the ability to generate solutions to

problems experienced in relationships established with others were defined as emotional social intelligence (Bar-On, 2006). In a study made by Baroncelli and Ciucci (2014) in relation to emotional intelligence and cyber bullying/victimization, the relationship between emotional intelligence and cyber bullying was examined and it was found that the sub-dimension of emotional intelligence, which is related to the regulation and the use of emotions, predicted cyber bullying significantly in a negative way. In other previous studies, too, it was similarly found that there was a significant negative relationship between emotional intelligence and cyber bullying (Extremera et al., 2018; Ojedokun and Idemudia, 2013). When the literature was examined, it was observed that there was a limited number of studies on emotional intelligence and Internet gaming disorder.

From the point of view of mental health services, it can be said that revealing the determinants of the problem in this area and the variables associated with it is important for the development and implementation of preventive, improving or remedial interventions in that culture. This study is a preliminary study to raise awareness about gaming disorder and related variables and to develop necessary intervention methods. In addition, with the results of this study, educators, psychologists, psychological counselors, etc. both help groups and parents will be conducted for information activities. The purpose of the present study is to look into the intermediate role of Internet gaming disorder in the relationship between cyber bullying/victimization and emotional intelligence in secondary school students. The conceptual model established in the direction of the limited number of variables of the study without specifying the directions of the relationships (positive/negative) was shown in Figure 1 and this model was tested via the path analysis with the aim of finding an answer to the hypothesis.

Hypothesis and Theoretical Model

H1: Internet gaming disorder would mediate the relationship between emotional intelligence and cyber bullying / cyber victim.

H2: There would be a positive relationship between cyber bullying and internet gaming disorder.

H3: There would be a negative relationship between cyber bullying and emotional intelligence.

H4: There would be a positive relationship between internet gaming disorder and emotional intelligence.

H5: There would be a positive relationship between cyber victim and internet gaming disorder.

H6: There would be a positive relationship between cyber victim and emotional intelligence.
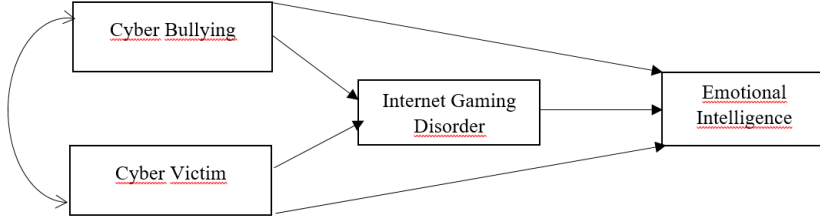
Theoretical Model

Figure 1. Theoretical Model

Method
Participants and Procedure
The research was carried out with the decision of Bursa Uludağ University Social and Human Sciences Publication and Ethics Committee dated 23.10.2020 and numbered 2020-08/7. The study group was composed of secondary school students living in the districts of Izmir and playing Internet games. In the study, the criterion sampling method, one of the sub-branches of the purposeful sampling method, one of the non-random sampling methods, was used. In this context, the study data was collected from the secondary school students playing Internet games. 45 of the participants were the 5th grade, 82 of them were the 6th grade, 61 of them were the 7th grade and 84 of them were the 8th grade students. A total of 272 students, 147 males and 125 females, participated in the study. The study data was collected from the students who wanted to participate in the study voluntarily.

Data Collection Tools
The Internet Gaming Disorder Scale (IGDS): The Internet Gaming Disorder Scale (IGDS-SF) developed by Pontes and Griffiths (2015) and adapted by Arıcak, Dinç and Griffiths (2018) into Turkish is composed of 9 items and a structure with a single factor. The Confirmatory Factor Analysis and fit indices were examined; the chi-square/*sd* was found as 4.79; the TLI value was calculated as 0.87, the CFI value was found as 0.90 and the RMSEA value was determined as 0.09. The factor loads of the items in the questionnaire were between 0.39 and 0.71. the Cronbach's Alpha reliability coefficient was found as 0.82 and the Guttman split-half reliability coefficient was calculated as 0,74. An increasing score is interpreted as an increasing risk of Internet gaming disorder/addiction.

The Bar-On Emotional Quotient Inventory Youth Version (EQ-I (YV): The Bar-On Emotional Quotient Inventory-Youth Version developed by Bar-On and Parker and adapted by Köksal (2007) into Turkish. The Bar-On Emotional Quotient Inventory-Youth Version is composed of 60 items and a structure with 7 factors. The inventory yields a total score. The Cronbach's Alpha reliability coefficient of the inventory was calculated as .88. Since the items numbered 6, 15, 21, 26, 28, 35, 37, 46, 49, 53, 54 and 58 were negative statements, they were scored reversely (Köksal, 2007). A high score to be obtained indicates a high level of emotional intelligence.

The Revised Cyber Bullying/Victimization Inventory-II (RCBI-II): The Revised Cyber Bullying Inventory (RCBI-I) firstly used by Erdur-Baker and Kavşut (2007) was revised again by Topcu and Erdur-Baker (2018) as the second version (RCBI-II). The Revised Cyber Bullying Inventory (RCBI-II) is composed of 10 items and two scoring columns. Participants filling in this inventory evaluate each item twice. It is seen that the cyber bullying DFA fit indices are i $\chi2 = 405.43$, df = 33; CFI = .91, TLI = .88, RMSEA = .07, 90% CI [.07, .08] and SRMR = .04; the cyber victimization DFA fit indices are $\chi2 = 303.22$, df = 33, CFI = .93, TLI = .91, RMSEA = .06, 90% CI [.06, .07] and SRMR=.04. Moreover, in relation to the reliability of the inventory, the internal consistency of the cyber bullying form was found as 0.79 and the internal consistency of the cyber victimization form was calculated as 0,80 (Topçu and Erdur-Baker, 2018). The lowest score to be obtained from the inventory is 10 and the highest score to be obtained is 30. A high score to be obtained indicates a frequent cyber bullying and a frequent cyber victimization.

Analysis of the Data

The data of the study were collected online from the students whose informed consent was obtained. It took them approximately 20 minutes to fill out this form. In this research, in order to test the model established in relation to the Internet gaming disorder, cyberbullying/victimization, and emotional intelligence, AMOS 16 was used and the Path Analysis was applied. Moreover, the correlations and the descriptive statistics related to the variables were calculated via SPSS 24. Structural equation modeling is a statistical approach that reveals causal and reciprocal relationships between observed and latent variables (Schumacker and Lomax, 2004)

Findings

Descriptive Statistics and Correlations

The means, standard deviations and Pearson Correlation Coefficients of the IGD, EQ-i (YV) and RCBI-II scales used in the study were shown in Table 1.

Table 1. *The Correlation Analysis Result related to the Relationships between the Internet Gaming Disorder Level and the Cyber Bullying/Victimization and Emotional Intelligence Levels in Secondary School Students*

	1	2	3	4
Internet Gaming Disorder	.86			
Cyber Bullying	.31**	.82		
Cyber Victimization	**.16****	**.61****	.71	
Emotional Intelligence	**-.22***	**-.24****	**-.13***	.85
$\bar{x}$	18.00	14.45	14.36	171.48
SS	7.19	4.45	5.60	20.82

*= $p<.05$, **= $p<.01$ Note: C.Alpha values are included in the diagonal values.

As it is seen in Table 1, there is a relationship between the secondary school students' Internet gaming disorder levels and their cyber bullying/victimization and emotional intelligence levels. It is observed that the Internet gaming disorder levels are positively related with cyber bullying ($r=.31$) and cyber victimization ($r=.16$) and negatively related with the variable of emotional intelligence ($r=-.22$). Moreover, a high level of relationship was found between cyber victimization and cyber bullying ($r=.61$). What is more, it is possible to state that the variable of emotional intelligence is negatively related with the variable of Internet gaming disorder ($r=-.22$), cyber bullying ($r=-.24$) and cyber victimization ($r=-.13$).

In the study, if the Internet gaming disorder levels differed significantly according to gender in the secondary school students was examined via independent samples t test and the obtained finding was presented in Table 2.

Tablo 2. *The t-test Result related to if the Internet Gaming Disorder Level Differed according to Gender in Secondary School Student*

	Levene Testi		T-Testi					95% Confidence Interval	
	F	*Sig.*	*t*	Sd	*p*	Average Difference	SE	Low	High
Internet Gaming Disorder	3.084	.080	4.48	243.218	.000	-3.79750	.84607	5.46323	2.13176

As a result of the t-test presented in Table 2, it was observed that the Internet gaming disorder level differed significantly in the secondary school students according to gender ($p<.01$) and the male students' Internet gaming disorder levels were higher (Male $\bar{x}= 20.05$, Female $\bar{x}= 16.25$). In the study, if the Internet gaming disorder levels differed significantly in the secondary school students according to the class levels was analyzed via the One-Way Analysis of Variance test and the reached finding was presented in Table 3.

Tablo 3.
One Way Variance Analysis Result

Levene test	p	Variance source	Total of Squares	sd	Average of Squares	F	p
		Between groups	137.070	3	45.690		
.657	.579	In-group	13893.926	268	234.408	.881	.451
		Total	14030.996	271			

When Table 3 was examined, it was observed that the Internet gaming disorder level did not differ significantly according to the class levels in the secondary school students ($F= 0.881$, $p>.05$).

Path Analysis

It was aimed to examine the intermediate role of the Internet gaming disorder in the relationship between cyber bullying/victimization and emotional intelligence in the secondary school students. In this context, the AMOS 16 and the SPSS 24 programs were used. In the AMOS program, the Path Analysis was used; in the SPSS program, the Pearson Correlation and the One-Way Analysis of Variance test was used. In the projected model, all the variables were defined as observed variables. According to Bayram (2010), the analysis results indicate that the model fitted well with the data set ($p<.01$; NFI = .99; RFI = .99; IFI = 1.00, TLI =1.00, CFI =1.00; SRMR = .0115; RMSEA = .000). Moreover, when the variables were examined in order, it was observed that the obtained result answered the research question sufficiently in terms of bigness and directions of the relationships. The model including the standardized path coefficients was shown in Figure 2.
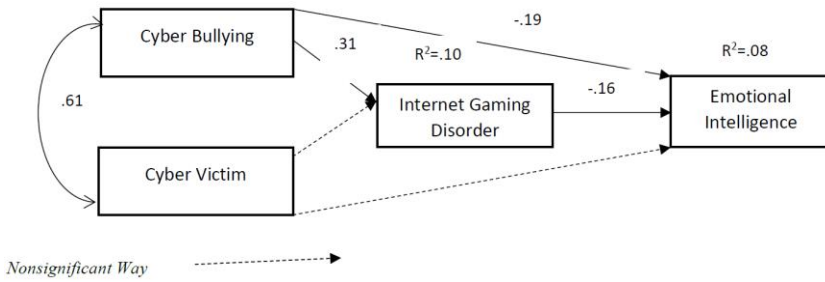
Figure 2. The Standardized Conceptual Model Indicating the Intermediate Role of Internet Gaming Disorder in the Relationship between Cyber Bullying/Victimization and Emotional Intelligence in Secondary School Students

When the parameter predictions are examined in this model, it is observed that there is a positive and strong relationship (correlation) between cyber bullying and cyber victimization (r=.61) in the secondary school students. Moreover, it was found that cyber bullying predicted the variable of Internet gaming disorder (β =.31) well, but the variable of cyber victimization did not predict the Internet gaming disorder. When we look into the direct prediction power of the variable of cyber bullying, it is observed that it predicts the variable of emotional intelligence (β =-.19) negatively, but when we look into its indirect prediction power, it is seen that it does not predict Internet gaming disorder (IGD). In similar to the literature, the Internet gaming disorder (Kircaburun et al., 2020), another variable of ours, predicts the variable of emotional intelligence negatively (β =-.16).

Conclusion

This study was carried out with the aim of examining the intermediate role of Internet gaming disorder in the relationship between cyber bullying/victimization and emotional intelligence in secondary school students. In the direction of this purpose, a model was suggested and tested. The fit indices, regression and variance values related to the suggested model were examined and modifications were made in the model in the direction the obtained values. The model obtained as a result of the modifications was re-tested and the presence of explanatory relationships between the variables was verified as a result of the variance analysis. It was observed that there was a strong positive relationship (correlation) between cyber bullying and cyber victimization in the secondary school students. Moreover, it was found that cyber bullying predicted the variable of Internet gaming disorder

well, but the variable of cyber victimization did not predict the Internet gaming disorder. When we looked into the direct predicting power of cyber bullying, it was seen that it predicted the variable of emotional intelligence negatively; when we looked into its indirect predicting power, it was seen that it did not predict the Internet gaming disorder. However, the variable of Internet gaming disorder predicted the variable of emotional intelligence negatively.

In the study, it was seen that the Internet gaming disorder predicted emotional intelligence negatively. It is possible to state that this result is similar to the ones mentioned in the literature (Beranuy et al., 2009; Che et al., 2017; Herodotou et al., 2011; Torres-Rodríguez et al., 2019). All of these studies indicated that emotional intelligence predicted Internet gaming disorder. Moreover, in the content of the program aiming to prevent gaming disorder in adolescents (PIPATIC) developed by Torres-Rodríguez et al. (2019) in recent years, too, emotional intelligence is included. In this direction, the emotional intelligence to be developed in the secondary school students with middle and high levels of Internet gaming disorder (Goleman, 1998) might decrease Internet gaming disorder or have an effect on obsessive gaming levels.

As a result of this study, it was seen that there was positive relationship between cyber victimization and cyber bullying in the secondary school students. This result is similar to the ones mentioned in the literature (Simsek et al., 2019; Yang, 2012). It is stated that the variable of cyber bullying/victimization is very common among secondary school students (Baştürk Akça et al., 2015) and creates negative emotions in students (Peker, 2015). In the study, it was found that there was a negative relationship between cyber bullying and emotional intelligence, which was similar to the results of previous studies (Baroncelli and Ciucci, 2014; Elipe et al., 2015; Extremera et al., 2018; Kokkinos and Kipritsi, 2012; Ojedokun and Idemudia, 2013). It can be concluded that the people having been exposed to cyber victimization before, at the same time, are possibly cyber victims.

In the path analysis applied between cyber victimization, another variable of the study, and emotional intelligence, no relationship was found. It was seen in the literature that there was a limited number of studies on emotional intelligence and cyber victimization (Extremera et al., 2018), but there were some studies on peer bullying and victimization (Sezen and Murat, 2018; Kırat, 2019). Moreover, since cyber victims are able to prevent and prohibit cyber bullies, it might be for this reason that no significant results were found. In furtherance of this thought, Beltrán-Catalán et al., (2018) found in

their study that face-to-face victimization was the most common victimization. Cyber victimization was the rarest type. Moreover, according to another finding of the study, the individuals having been exposed to cyber victimization were, at the same time, the people having experienced face-to-face victimization.

It is seen that there is a positive high relationship between cyber bullying and Internet gaming disorder. Although no studies were found on the relationship between the mentioned two variables, it was seen that cyber bullying was highly correlated with such behavioral disorders (Çetinkaya, 2013) as Internet addiction (Cinar et al., 2017; Çakır et al., 2016; Chang et al., 2015; Eksi, 2012; Frangos et al., 2010; Stodt et al., 2016), problematic Internet use (Kırcaburun and Bastug, 2016; Navarro et al., 2013) and smart phone addiction (Qudah et al., 2019). Internet addiction was defined as killing a lot of time on the Internet and the inability to control oneself (Chak and Leung, 2004). However, Internet gaming disorder is defined as playing games obsessively with others in a virtual environment via accessing the Internet through computers or tablets (Bekir, 2018). When these definitions are evaluated, it can be stated that they have a lot in common and differ according to the type of occupation. Moreover, in another previous study, a very high level of relationship was found between Internet gaming disorder and problematic Internet use (Van Rooij et al., 2010; Altınışık, 2021). In this context, in similar to the result mentioned in the literature that cyber bullying predicted Internet addiction, in this study, too, cyber bullying might have predicted Internet gaming disorder and indicated a positive relationship. When it was evaluated in terms of gender, it was observed that the male students played online games more frequently than their female counterparts and differed from them. This finding was similar to the ones mentioned in the literature (Bekir and Yıldırım, 2018; Bekir and Çelik, 2019; Bekir, 2018; Ko et al., 2005; McInroy and Mishna, 2017). It was also found that playing Internet games was positively correlated with aggressiveness (Kim et al., 2008; Mehroof and Griffiths, 2010), but it was negatively correlated with controlling oneself (Kim et al., 2008). Studies in Turkey also give similar results (Bekir and Yıldırım, 2018; Mustafaoğlu and Yasacı, 2018).

This study has some limitations which need taking into account. Firstly, the study was carried out only with Turkish students and a certain sample group and at schools. It was made only at secondary school level. Moreover, since Turkey has many cultural characteristics, the study's having been made only in a certain region is another limitation. Although the term of Internet gaming disorder has newly

started to be used in the literature, it is seen that many different terms such as online gaming addiction, Internet gaming addiction, game addiction, online games were used in the past; however, all of them are related to the same concept. For this reason, it is difficult to make a literature review. Moreover, although this variable was replaced by Internet Gaming Disorder in the last edition of DSM (DSM5), it is still used with a lot of different names. It is seen that there are translations of similar inventories between Turkey and another country. A comparison can be made between the results of this study and those of other countries.

As a result of the study, it was observed that there was a strong positive relationship between Internet gaming and cyber bullying and cyber victimization in the secondary school students. Moreover, it was also found that cyber bullying predicted the variable of Internet gaming disorder, but the variable of cyber victimization did not predict Internet gaming disorder. However, when we looked into the direct predicting power of cyber bullying, it was seen that it predicted the variable of emotional intelligence negatively; when we looked into its indirect predicting power, it was seen that it did not predict the Internet gaming disorder. In similar to the literature, Internet gaming disorder, another variable of ours, predicted the variable of emotional intelligence negatively. In this context, when the great effect of these variables on secondary school students and these students' psychological and physiological developments are taken into consideration, it is possible to state that these variables are very important in terms of getting to know them.

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Additional Statement/ Ek Beyan