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Research Article

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Adapting the internet gaming disorder scale to Turkish culture

Şenel Çıtak [1]

[1] Guidance and Psychological Counselling Department, Ordu University, Ordu, Turkey

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Şenel Çıtak, senelcitak52@gmail.com

ABSTRACT

This study aimed to adapt the 27-item form known as the "Internet Gaming Disorder Scale" to Turkish culture. The sample group consists of 664 middle school, high school, and university students. In addition to the Personal Information Form and the Internet Gaming Disorder Scale (IGDS-27), the Digital Game Addiction Scale (DGAS) was used for scale validity procedures. The value obtained as a result of splitting the test in half operations within the scope of reliability analysis was found to be .88, while the alpha internal consistency coefficient was found to be .94. The correlation between IGDS and DGAS was found to be.78, and the test-retest results were found to be .93. Exploratory (EFA) and confirmatory factor (CFA) analyses were performed to assess the construct validity of the scale. As a result of EFA, a 9-factor structure explaining 76.65% of the total variance was observed. On the other hand, CFA results indicate that the model is consistent with the data. The results of this study demonstrate the validity and reliability of the psychometric properties of IDGS-27 as a measurement tool for assessing internet gaming disorder in Turkish culture.

Introduction

It is well known that children, adolescents, and adults are negatively impacted by their unconscious use of informatics tools and the internet. Excessive and problematic internet use reduces academic self-efficacy, deteriorates eating habits, delays academic goals, and causes a variety of cognitive-behavioral problems (American Psychiatric Association [APA], 2015; Şenorman et al., 2010; Cuma, 2020). Gaming is one of the most common reasons for internet use (TURKSTAT, 2021). Young people, for example, should communicate with their friends and social circles; however, it has been observed that they use the internet and play games excessively. Furthermore, it can be seen that young people are spending more time gaming day by day (Ilgaz, 2015). Since internet games require communication with many people, they bind many people to their computers, change the way people communicate, and encourage luxury consumption habits (Alper et al., 2015). It is observed that adolescents who excessively play online games exhibit aggressive behaviors at school or home, their social lives deteriorate, and they experience feelings such as disengagement and loneliness when they are prohibited from playing online games (Lemmens et al., 2015). Furthermore, since people spend too much time playing internet games, it is seen that they do not meet their basic needs such as nutrition, sleep, and relaxation

(Young, 2009). As a result, it can be stated that adolescents spend the majority of their time in digital environments and suffer from a variety of physical and mental problems as a result of problematic internet use.

Numerous studies have suggested that internet use for gaming is a pathological condition associated with cognitive and social conditions (Griffiths & Hunt, 1998; Griffiths, 2005; King et al., 2013). Studies emphasize that such games negatively affect young people's learning levels and psychosocial and mental development. Griffiths (2018), for example, stated that young people excessively tend to play violent video games (Griffiths, 2018). Also, playing online games has been shown to harm academic achievement, aggression, and violent behavior (Chiu et al., 2004), causing disruptions in people's business and educational lives (Griffiths et al., 2004; Kim et al., 2008). Excessive internet gaming, according to this perspective, impairs people's functionality, and their business and social lives (Kelleci et al., 2009). Adams (2012) claims that game players, game developers, and game critics do not liken excessive computer gaming to other addictions. This is because, according to Adams, addiction is defined as the amount of time spent gaming and the ability to stay in the game (Adams, 2007). Therefore, it is believed that the word "addiction" causes some contradictions because it conveys pathological and positive meanings at the same time. On the other hand, it is recommended that the concepts of addiction be emphasized in terms of pornography and gambling; however, internet addiction and internet gaming behaviors have distinct dynamics (Pontes & Griffiths, 2018; Starcevic, 2013). Consequently, while it is evident that referring to the phenomenon in question as a gaming disorder would be more accurate, it is believed that additional studies are necessary to strengthen the concept's meaning and understand the underlying psychological mechanisms of internet gaming behavior.

Although the prevalence of internet gaming disorder is unclear due to varying questionnaires, criteria, and existing thresholds, it appears to be quite prevalent among 12–20-year-old Asian males. According to the reports particularly from Asian countries, the prevalence of the disease is increasing in China and South Korea, however, it is lower than the prevalence in Europe and North America (APA, 2015). The fact that online games provide the opportunity to interact with many people at the same time (Kiraly et al., 2014), offer a virtual living space (Kuss & Griffiths, 2012), create an important socialization opportunity, provide the opportunity to experience self-perceptions and create a perception of success through games (Calado et al., 2014) shows the necessity of in-depth research on online game playing behavior.

Since internet gaming disorder was only recently defined in DSM-5, and a review of the literature, it is necessary to diversify and expand studies on the subject. In other words, it is essential to examine internet gaming behavior from all angles and within the context of relevant psychological, sociological, and cultural factors. Within this scope, the internet gaming disorder scale developed by Lemmens et al. has been adapted to Turkish in 2018 (Evren et al., 2018). Although in Türkiye, numerous studies on digital gaming and internet gaming have been conducted (Arıcak et al., 2018; Çakıroğlu & Soylu 2019; Evren et al., 2018; Horzum et al., 2008), more studies on the risks of internet gaming disorder (addiction, impairment of social life, etc.) with different sample groups is needed on this concept, which has only recently introduced to the literature. Within this context, the "Internet Gaming Disorder Scale" (IGDS-27) created by Lemmens et al. (2015) was aimed to be adapted to Turkish culture. Considering the importance of social inclusion through scale development studies using different sample groups (Ægisdóttir et al., 2008) motivated us to conduct this study. Furthermore, it is believed that testing this scale (which is used to determine the diagnostic criteria in DSM-5) on a variety of scientific studies and cultural variables will improve consistency in the process of internet gaming disorder diagnosis.

This is because DSM-5 suggests conducting advanced studies on internet gaming disorder through various cultural structures, and more supportive studies are required for the clinical diagnosis of internet gaming disorder and the classification of this behavior as a psychological disorder (APA, 2015). Therefore, it is still necessary to adapt and develop internet gaming disorder scales for multicultural countries such as Türkiye (Doğanay & Orhan, 2016). Therefore, it is evident that this study will contribute to the field by addressing the need stated in the DSM-5.

Method

Study group

Since internet gaming behavior is common, especially in adolescents (TURKSTAT, 2016), the sampling method was preferred for this study (Fraenkel et al., 2012; Büyüköztürk et al., 2015). For this aim, 664 (F= %51.5, M= %48.5) middle school, high school, and university students from Trabzon, Samsun, Giresun, Tokat, and Ordu were contacted. The study group consisted of high school (75.8%), middle school (11.3%), undergraduate (9.3%), and associate degree students (3.6%).

Exploratory factor analysis (EFA) was conducted on the original study group. For confirmatory factor analysis (CFA), a random sample group was chosen using the SPSS program. In the sample group, there were 334 participants (Female=46.4%, Male=53.6%) in total. The EFA sample, which ranged in age from 13 to 41, had a mean age of 17 (±2.72), while the CFA sample had a mean age of 17.10. (±2.81).

Data collection tools

Introductory information form

Created by researchers to obtain participants' demographic information. The questions regarding sex, age, educational level, etc. are included.

Internet gaming disorder scale-27 (IGDS-27)

Developed by Lemmens et al. (2015) to assess the level of individuals' online gaming behavior. This scale's original form is a 9-factor 6-point Likert model with 27 items. The scale was applied to 2444 adolescents and adults aged between 13-41 by the researchers. The scale's Alpha values for the single form and Likert form were found to be .94 and .93, respectively. Researchers examined the scale's relationship with the themes of time spent playing games, loneliness, life satisfaction, self-esteem, prosocial behavior, and aggressive behavior and simultaneously tested the scale's validity. According to the adaptation of the scale by Evren, the 27-item form's alpha value was .97, while the 9-item form's alpha value was .93. The KMO value is found to be .97 using the scale's EFA procedures, and the factor structure explains 60% of the variance. For example, the CFA values were stated as X^2 */df=57.45/20=2.87; CFI=0.988; WRMR=0.810; RMSEA=0.080* (Evren et al., 2018). The results of the validity and reliability procedure analyses for the IGDS, which was adapted to Turkish culture, are included in the results section.

Digital game addiction scale

In this study, Digital Game Addiction Scale (DGAS) was used to ensure the scale validity (Irmak & Erdoğan, 2014). The scale sample consists of 95 high schoolers in İstanbul who have played or continue to play computer or video games in the last six months and are willing to participate in the study. The Cronbach Alpha validity coefficient of the 7-item, 5-point, one-dimensional Likert-type scale is found to be .72. In exploratory factor analysis, the one-dimensional scale explains 56.96% of the total variance, with factor loads ranging from 0.52 to 0.77.

Procedure

The data collection process began after the necessary approvals were obtained from the patients. Within the scope of the study, 1000 research forms were distributed, and 821 were returned. From the 821 scales applied, the forms of individuals who did not play internet games, forms with more than 5% missing data, forms with extreme values and incorrect markings, and forms with more than 5% missing data were excluded. The remaining 664 research form data were analyzed.

Data analysis

The study data were analyzed using IBM SPSS 23 package program. The extreme values determined within the scope of the analysis were excluded, and mean values were assigned to replace missing values less than 5% using the SPSS program, and the data was analyzed over 664 data points. The data results were obtained using descriptive statistics techniques. The Pearson Product-Moment Correlation Coefficient was used to determine the correlation between Turkish and English forms in terms of language validity (PPMCC). The following techniques were used for the validity and reliability analyses of the measurement tool: exploratory factor analysis (EFA), confirmatory factor analysis (CFA), internal consistency, splitting the test in half, parallel forms, and test-retest techniques.

The following goodness-of-fit indices were used to determine model adequacy in CFA analysis processes in the study (Byrne, 2010; Hu & Bentler, 1999): the Chi-Square Goodness Test, the Goodness of Fit Index (GFI), the Adjusted Goodness of Fit Index (AGFI), the Comparative Fit Index (CFI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR) (Bayram, 2013; Byrne, 2010; Doll, et al., 2011; Hu & Bentler, 1999).

Table 1 Fit indices criteria

Fit Indices	Perfect Fit	Acceptable Fit
χ 2 \sd	0⩽ χ 2 \sd ⩽2	2⩽ χ 2 \sd ⩽ 3
GFI	.90⩽ GFI ⩽ 1.00	85⩽ GFI ⩽90
AGFI	.90⩽ AGFI ⩽ 1.00	80⩽ AGFI ⩽90
CFI	.97⩽ CFI ⩽ 1.00	90⩽ CFI ⩽97
RMSEA	0⩽ RMSEA ⩽ .05	.05⩽ RMSEA ⩽ .08
SRMR	0⩽ SRMR ⩽ .05	.05⩽ SRMR ⩽ .10

Results

Language and content validity of the IGDS-27

After obtaining the necessary permissions from the scale's authors, the Turkish text of the scale was created during the data collection process in accordance with the opinions of a foreign language expert, a field expert, and a Turkish language expert. Furthermore, the Turkish form has been updated in accordance with the "Turkish Translate" and "English Back-Translate" created by the authors. The final form was back-translated into English and applied to the study group of 45 people who were fluent in both languages. The Pearson Product-Moment Correlation Coefficient (PPMCC) was used to analyze the correlation between the participants' responses to the Turkish and English forms, and the correlation coefficient between the total scores of the Turkish and English forms was found to be high (r=.78, p.01). When the values between the Turkish-English form are examined, the scale's language validity is quite good.

Construct validity of the IGDS-27

Exploratory factor analysis

The normality test was carried out before the exploratory factor analysis procedures. The coefficients of skewness (1.39) and kurtosis (1.42) obtained from the normality test conducted on the participants' responses, were found to be within the normal range (Field, 2009). When the recommended ratio of approximately five participants per item in scale development and adaptation processes was considered, the sample size for this study was deemed sufficient (DeVellis, 2014).

Initially, exploratory factor analysis was used to test the construct validity of the IGDS-27. Within this context, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Barlett's test of sphericity were used to find out whether the data set is suitable for factor analysis. In these tests, which are indicators of sphericity, it is expected that the KMO value will be greater than .60, whereas the significance level of Barlett's test will be less than .05. The KMO value for IGDS-27 was .93, and the result of Barlett's test of sphericity was significant (X2=10,909.06 sd=351, p.001).

Using the Varimax extracting method, Principal Component Analysis was performed to determine the factor structure of IGDS-27. The factor analysis produced a six-factor structure with an eigenvalue greater than one. However, some question items were loaded on multiple factors, while others were not loaded on any factor. To eliminate this problem, the nine-factor structure in the original form was preferred considering the consultation from the PCG and measurement experts. Consequently, all items loading onto a single factor and cross-loadings were eliminated. In addition, the semantic consistency opinion was considered when determining the factor numbers (DeVellis, 2014). The data set explained 76.65% of the total variance and the factor loads were of appropriate weight (>.30) according to the Varimax extracting operation for the IGDS-27's nine-factor structure analysis.

The Turkish form had a similar structure to the original nine-factor form, which had three question items under each factor. The sub-factors had the same names as the original form. The detailed results of the exploratory factor analyses (EFA) conducted within the scope of the construct validity of the IGDS-27 are shown in Table 2.

Table 2 The results of the IGDS-27 factor analysis

Items	Factor Loadings									
	I	II	III	IV	V	VI	VII	VIII	IX	Common Variance
Factor I Escape										
Item 1	90									.83
Item 2	94									.86
Item 3	90									.64
Factor II Conflict										
Item 4		.72								.72
Item 5		.77								.81
Item 6		.95								.76
Factor III Preoccupation										
Item 7			.78							.80
Item 8			.93							.80
Item 9			.80							.77
Factor IV Tolerance										
Item 10				.95						.83
Item 11				.94						.86
Item 12				.80						74

Factor V Displacement										
Item 13					.71					.67
Item 14					.79					.70
Item 15					.63					.63
Factor VI Persistence										
Item 16						.89				.75
Item 17						.99				.78
Item 18						.57				.64
Factor VII Deception										
Item 19							.48			.69
Item 20							.99			.83
Item 21							.98			.80
Factor VIII Withdrawal										
Item 22								.52		.74
Item 23								.90		.64
Item 24								.87		.73
Factor IX Problems										
Item 25									1.0	81
Item 26									60	62
Item 27									40	55
Eigenvalue Variance (%)	40.	8.2	5.5	4.7	4.6	3.8	3.4	3.0	2.8	
Eigenvalue Total Variance (%)										

Scale-related validity

The parallel forms technique was used to test the scale validity of the IGDS-27. The correlations between the IGDS and the Digital Game Addiction Scale (DGAS) were examined, and r=.78 was discovered. These results support the fact that the scale and construct validity of IGDS-27 is high.

Confirmatory factor analysis was performed within the scope of the scale's construct validity to determine the compatibility level of the IGDS-27 in a different sample group. The skewness and kurtosis coefficients (Skewness = -.79, Kurtosis = 1.21) were determined to be within the normal range by the normality test performed on the sample group randomly chosen via the SPSS program and consisting of 334 people.

Confirmatory factor analysis (CFA)

The goodness-of-fit values for the nine-factor structure which were obtained from the sample group chosen to adapt the scale to Turkish culture were found to be χ 2\sd= 2.69 (χ 2= 774.16, sd= 288, p< .001), GFI= .86, AGFI= .82, CFI= .91, RMSEA= .07 and SRMR=.06. When the modification indices for these results were examined, it was discovered that the nine-factor model's goodness-of-fit indices were at an acceptable level. It was found that the modifications between items 20-21 and 10-11 did not significantly contribute to the goodness-of-fit χ 2\sd =2.52 (χ 2=84.95, sd= 31, p< .001), GFI= .87, AGFI= .83, CFI= .92, RMSEA= .07 and SRMR= .06). Therefore, it was decided not to make the modifications. As a result of the CFA and EFA analyses conducted using the study data, it can be said that the 9 factors and 27-item model obtained were compatible with the data. The factor loads for the model are shown in Figure 1.

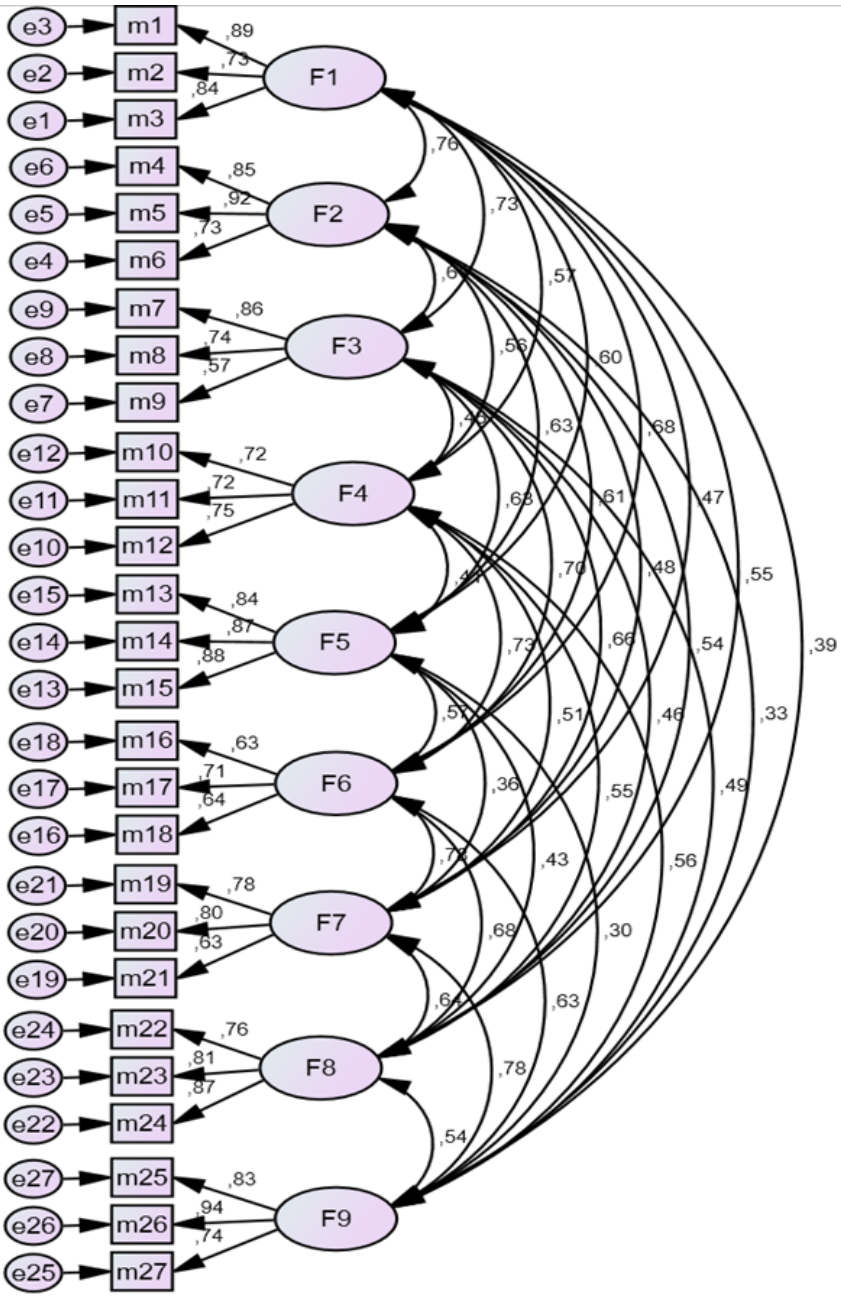

Figure 1 Path Diagram and Factor Loads Aimed at IGDS-27

The reliability analysis of IGDS-27

Within the scope of IGDS reliability studies, the following techniques were used: Cronbach's alpha internal consistency coefficient, test-retest, and splitting the test in half. Data from 77 male and 123 female participants, for a total of 200 participants, were obtained during the test-retest test reliability process. In terms of sex, age, and educational status, this sample group is similar to the original study sample group. The correlation coefficients between the first and last tests of participants at two-week intervals were calculated. The mean scale scores were found to have an elevated level of correlation in the test-retest (r= 0.93, p0.001).

The results obtained from the reliability analysis are presented in Table 3. The internal consistency coefficient of the 27-item scale was found to be .94. When the IGDS was split in half, this value was found to be .85. When we examine the correlation of each item, we see that the values range from .43 to .69. Table 4 summarizes the results of the reliability analysis of nine

sub-dimensions obtained from the factor analysis. The Split Half, Cronbach Alpha, and Test-Retest values obtained from this scale's reliability analysis prove that the test has an elevated level of reliability.

Table 3 The results of IGDS-27 reliability analysis

Factor	Internal Consistency (Cronbach Alpha)	Split Half	Test-Retest
IGDS-27	.94	.88	.93

Table 4 The results of IGDS-27's sub-dimensions' reliability analysis

Factors	Cronbach Alfa	Split Half	Test-Retest
Escape	.86	.85	.92
Conflict	.88	.91	.93
Preoccupation	.88	.91	.93
Tolerance	.78	.79	.90
Displacement	.91	.92	.94
Persistence	.70	.73	.84
Deception	.81	.86	.91
Withdrawal	.84	.86	.90
Problems	.84	.89	.94

Conclusion and discussion

The psychometric values of the Internet Gaming Disorder Scale-27 (Lemmens et al., 2015), which was developed to identify the stimuli of and diagnose internet gaming disorder which is considered one of the subjects requiring further investigation in the DSM-5, was tested on the sample group consisting of individuals living in the Black Sea Region. Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and scale validity studies were performed during the scale validity operations. In the reliability operations, statistical methods such as internal consistency, halving the test, and retesting were used. For example, throughout the scale validity period, the values of DGAS (Irmak & Erdoğan, 2014) were examined and a significant correlation was found (r=.780) between the scales. Similarly, the scale validity (r=.403) was found to be of good value in the study of Evren et al. (2017). Thus, the IGDS was found to have strong scale validity from this perspective.

A six-factor structure with an eigenvalue greater than 1% was discovered in the exploratory factor analysis conducted as part of the study of adaptation to Turkish culture. Following the removal of items loaded on no or multiple factors (0.30) in the analysis (Osborne et al., 2008; Çokluk et al., 2018), and obtaining expert opinions, the scale was forced to have a nine-factor structure. In addition, semantic consistency was considered when deciding on a nine-factor structure (DeVellis, 2014). While the scale's six-factor scale could explain 66.63% of the total variance, it was observed that the nine-factor scale could explain 76.65%. These results are interpreted as positive indicators of the IGDS scale's construct validity.

The CFA results' values for IGDS-27's long version were found to be (χ 2\sd =2.52 (χ 2=84.95, sd= 31, p< .001), GFI= .86, AGFI= .82, CFI = .91, RMSEA= .06. In the scale's original version (IGDS-27) (Lemmens et al., 2015), the CFA values were found to be (χ 2= 112.240, p=<0.001, CFI=0.988, WRMR=0.810, RMSEA=0.080). These values clearly show that the 27-item model for the Turkish sample is compatible with the data. These values and the original scale's values are similar. According to the goodness-of-fit values obtained from CFA results for this model, obtaining a nine-factor structure similar to the original scale will be advantageous for this scale. The Cronbach's Alpha value obtained from the internal consistency operations performed as part of the scale's reliability analyses was discovered to be. 94 as in the original form. When halving the

test and test-retest values, the scale's other reliability operations were examined, and it was found that r=.88 and r=.93, respectively. These results demonstrate that the scale's reliability values are high (Şencan, 2005).

It was found that the validity and reliability results of the study of adapting the IGDS-27 to Turkish culture were similar to the results of the original scale. The study's sample size, scope, and findings indicate that the IGDS-27 adaptation process to Turkish culture produced satisfactory values. In terms of reliability and validity, the adaptation to the Turkish culture study's obtained scale values is consistent with the original scale study. In this study, it was determined that the cultural sensitivity, usability, and generalizability of the Turkish culture adapted IGDS scale were all high (Deniz, 2017; Hambleton, 1996). It can be said that the IGDS has a strong structure based on the validity and reliability values obtained from the sample group of individuals from various regions of the same country. Clearly, this culturally sensitive scale will significantly contribute to the detection of internet gaming disorder, which is considered a major problem today (APA, 2015; Griffiths, 2018; Pontes & Griffiths, 2014), determining its prevalence, and developing intervention programs (Denizci Nazlıgül et al., 2018).

In this study, Turkish culture-adapted IGDS-27, was applied to adolescents to determine levels of problematic internet gaming behaviors. Our study included adolescents and adults from various educational institutions ranging from middle school to university. However, the following features are regarded as limitations: The scale was not used on people who had been diagnosed with internet gaming disorder, and the sample group only included people from five provinces in Turkey, Black Sea Region. More advanced studies in a broader geographical structure and culture are recommended to increase the generalizability and cultural sensitivity of the scale.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

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Appendix 1

Twenty-seven ıtems for the ınternet gaming disorder scale

(İnternette oyun oynama bozukluğu ölçeği)

Geçtiğimiz yıl boyunca ...	Hiç	Yılda 1 ile 4 defa arası	Yılda 5 ile 11 defa arası	Ayda 1 ile 3 defa arası	Haftada 1 defa veya daha fazla	Her gün veya neredeyse her gün
1. Okulda ya da işteyken herhangi bir oyunu sürekli düşündüğünüz zamanlar oldu mu?	0	1	2	3	4	5
2. Düşünebildiğiniz tek şeyin bir oyunu oynayabilme anı olduğu zamanlar var mıydı?	0	1	2	3	4	5
3. Kafanızı sürekli bir oyuna taktığınız zamanlar oldu mu?	0	1	2	3	4	5
4. Oyun oynamaya daha uzun süre devam etme ihtiyacı hissetiniz mi?	0	1	2	3	4	5
5. Daha sık oyun oynama ihtiyacı hissettiniz mi?	0	1	2	3	4	5
6. Daha fazla oyun oynama istediğiniz nedeniyle tatmin olamadığınızı hissettiğiniz oldu mu?	0	1	2	3	4	5
7. Oyun oynayamadığınız zaman kendinizi gergin ya da huzursuz hissettiğiniz oldu mu?	0	1	2	3	4	5
8. Oyun oynayamadığınız zaman kendinizi kızgın ya da engellenmiş hissettiğiniz oldu mu?	0	1	2	3	4	5
9. Oyun oynayamadığınız zaman kendinizi acınacak halde hissettiğiniz oldu mu?	0	1	2	3	4	5
10. Daha az oyun oynamak istediğiniz halde bunu başaramadığınız oldu mu?	0	1	2	3	4	5
11. Daha az oyun oynamağı denediğiniz halde bunu başaramadığınız oldu mu?	0	1	2	3	4	5
12. Çevrenizdeki kişiler sürekli olarak daha az oyun oynamanızı söylemesine rağmen, oyun oynadığınız zamanı azaltamadığınız oldu mu?	0	1	2	3	4	5
13. Problemlerinizi unutmak için oyun oynadınız mı?	0	1	2	3	4	5
14. Rahatsız edici şeyleri düşünmemek için oyun oynadınız mı?	0	1	2	3	4	5
15. Olumsuz duygulardan kaçınmak için oyun oynadınız mı?	0	1	2	3	4	5
16. Oyun oynayabilmek için işinizi veya okulunuzu ihmal ettiğiniz oldu mu?	0	1	2	3	4	5
17. Gece geç saatlere kadar ya da sabaha kadar oyun oynadığınız oldu mu?	0	1	2	3	4	5
18. Oyun oynama davranışınızın sonuçları hakkında başkalarıyla tartıştınız mı?	0	1	2	3	4	5
19. Oyun oynadığınız süre hakkında ailenize veya eşinize yalan söylediğiniz oldu mu?	0	1	2	3	4	5
20. Oyun oynamak için harcadığınız süreyi çevrenizdeki kişilerden gizlediğiniz oldu mu?	0	1	2	3	4	5
21. Başkalarından gizli oyun oynadınız oldu mu?	0	1	2	3	4	5
22. Oyun oynamaya imkan sağlamak için arkadaşlarınızla, eşinizle veya ailenizle daha az zaman geçirdiğiniz oldu mu?	0	1	2	3	4	5
23. İstediğiniz tek şey oyun oynamak olduğu için hobilerinize veya diğer aktivitelerinize olan ilginizi kaybettiğiniz oldu mu?	0	1	2	3	4	5
24. Oyun oynayabilmek için diğer aktivitelerinizi (arkadaşlarla vakit geçirmek, hobiler ya da spor faaliyetleri gibi) ihmal ettiğiniz oldu mu?	0	1	2	3	4	5
25. Oyun oynama alışkanlığınız yüzünden iş yerinde ya da okulda ciddi problemler yaşadınız mı?	0	1	2	3	4	5
26. Oyun oynama alışkanlığınız yüzünden ailenizle, arkadaşlarınızla ya da eşinizle ciddi anlaşmazlıklar yaşadınız mı?	0	1	2	3	4	5
27. Oyun oynama alışkanlığınız yüzünden önemli bir arkadaşlığı veya ilişkiyi tehlikeye attığınız ya da bitirdiğiniz oldu mu?	0	1	2	3	4	5