

Adaptation, validity and reliability study of the “Internet Addiction Scale for Adolescents” into Albanian

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ABSTRACT

The aim of this study was to verify the dimensions of Internet addiction in Albanian. This study employed “Internet Addiction Scale for Adolescents” to determine internet addiction. The verification of language equivalence, the scale form was administered to 164 university students studying at AAB College Faculty of Psychology and 61 High School students studying at the British School of Kosovo (altogether 245). In addition, the Cronbach Alpha internal reliability coefficient was found to be .828. It was observed that the factor load values of the scale items varied between .56 and .72. The Kaiser-Meyer-Olkin coefficient (KMO) was 0.82 and the Bartlett χ^2 Sphericity value was 605,874 ($p < .000$). In confirmatory factor analysis, it was seen that the one-dimensional structure of the scale provided a good fit. [$\chi^2=63.168$, $df=26$, $\chi^2/df=2.42$ RMSEA=.077, RMR=.069, S-RMR=.049, GFI=.95, AGFI=.91, CFI=.94, NNFI=.90, IFI=.94]. The findings obtained as a result of the validity factor analysis and the reliability of the scale show that the Albanian scale is valid and reliable.

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1. INTRODUCTION

The tool that facilitates our communication and entertainment used all over the world is the internet. Games accessed over the Internet have become necessary actions for the children and adolescents of this period. Most often, this type of excessive internet use is called internet addiction. Many scientists have defined internet addiction and as a result, the concept has gained a wide place in the literature and has been interpreted by many scientists around the world. 'Inter Addiction' is not included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). However, it is included in DSM-V as "Internet Gaming Disorder". DSM-V led to a repeat patient and clinical trial of games with gamers using the internet as a continuous and repetitive use of the same strategy at 12 months for gaming disorders compensated by five more criteria from the same strategy. In addition, these tools used in DSM-V do not only include online gambling games. Use of the Internet necessary for a business or user activity, use of the Internet for entertainment or social purposes, and similarly obscene websites does not include playing games on the Internet [1].

Depending on our age and technological developments, the prevalence rates of internet addiction are intensively researched. Considering its prevalence, it can be said that internet addiction is more common and prevalent among digital natives; however, the problem can affect people of all age groups [2]. To identify pathological internet use among European adolescents. There were 11 European countries included in this

study. The representative sample of the study consists of 11,356 students (4,856 boys and 6,500 girls) in the school. Findings from the crimes of the study showed that the prevalence of pathological internet users was 4.2% of the school population [3]. Conducted a study reporting the prevalence of pathological internet use in a sample of German adolescents and as a result, the prevalence of internet users with pathological internet users was found to be 3.2%. In a study conducted in Greece, another European country, adolescent students aged 12 to 18 years were used as participants to assess the prevalence of internet addiction and a representative sample of 2,200 students was conducted using a randomly stratified method. Internet addiction was evaluated according to eight criteria of Young's Diagnostic Questionnaire [4]. The prevalence of internet addiction among adolescents in Greece is 8.2% [5]. The Internet is available, inexpensive, time-consuming, interactive, and even enjoyable. All these aspects affect the way the internet has become an addiction trigger [6]. It is stated that biological factors play a role in the development of Internet addiction as well as social and psychological factors [7]. As a result, it is claimed that internet addiction is more common among young people who are more talented in technology than adults [8].

A young person who cannot cope with the suffocating aspects of social life, who has intense anxiety about the future, who cannot find support to continue his daily life, who is struggling with identity or relationship problems, surfing the internet can enable him to search for new things. a way to escape from the real world [9]. A previous study revealed that social support from their environment, especially from friends and parents, can protect young adults against internet addiction [10]. Therefore, it can be concluded that the lack of social support may lead individuals to use the internet in a way that negatively affects their lives. In fact, there are other studies that support the same view that individuals use the internet to meet their emotional needs [11]. In addition to social support, self-compassion is thought to be a protective factor against internet addiction [12]. Young people often use the internet in internet cafes and on their phones, mainly because they have access to video games, social media, but there are some who use the internet from home and whose main purpose is to do their homework, watch movies and listen to music, thereby increasing the probability of internet addiction [13].

In a study on adolescents, Machado, *et al.* [14] examined the behaviors that pose a risk in internet use and addiction in adolescents, and as a result of the questionnaire, it was revealed that there is a positive relationship between internet addiction and behavioral problems in adolescents. In another by Sami, *et al.* [15], the effects of sleep disorder and internet addiction on suicidal ideation in adolescents were investigated. As a result of the research, it was observed that adolescents with suicidal ideation had more sleep disorders, internet addiction and depressive symptoms. In addition, according to a study, excessive internet use causes problems in areas such as a safe learning environment, supportive, teacher-oriented behaviors, and school engagement [16]. In research by Taş [17], he said that with regard to psychological symptoms, the symptoms will vary according to gender, parental attitudes and class variables, and are also related to age and time spent on the internet. A study examining the relationship between personality traits and game addiction also stated that there is a relationship between sensitive personality traits and neuroticism [18]. In another study, they revealed that individuals with internet addiction are prone to depression, anxiety and emotional problems. Individuals who are depressed or lonely declare that they feel good only in the online environment and according to them, a world without the Internet would be terrible. Therefore, helpless and lonely people are more likely to be vulnerable to internet addiction [19]. Internet usage rates are close to European rates, suggesting that game rates may be close to European rates. In the light of all this information, we can say that online environments have become a social center in the lives of adolescents, and that adolescents use communication technologies such as social networks and instant messaging more than adults [20].

On the other hand, no study has been found in the literature on internet addiction of individuals in Kosovo. One of the most important reasons for this is that there is no measurement tool in Albanian. In addition, the recent studies on internet addiction, especially with the COVID-19 pandemic, the transition of schools and universities to online education, inevitably led to an increase in children and adolescents' internet addiction, online communication, interest in online games and online education. Adolescents may think of a video game to play during school holidays or at the end of class [21]. The aim of the research was to adapt the Internet Addiction Scale for Adolescents to the Albanian language and Albanian culture; the aim is to bring the internet addiction scale to the literature as a valid and reliable measurement tool.

2. RESEARCH METHOD

2.1. Instrument

The scale "Internet Addiction Scale for Adolescents", the scale contains a single factor structure of approximately 40% (39.902%). The Kaiser-Meyer-Olkin (KMO) value of the scale was .820, and Bartlett's Sphericity test was found as $\chi^2=850.522$, $p=.000$. The factor variances of 9 items of the scale were calculated to be between .300 and .500, and the item factor loads varied between .549 to .708. it was found sufficient for

the fit indices obtained at the end of CFA ($\chi^2/df=1.985$, $RMR=.028$, $GFI=.95$, $AGFI=.91$, $CFI=.93$, and $RMSEA=.068$). validation of the model. In addition, the item-total correlation of the scale was between .428-.588, the test-retest correlation coefficient of the 1-month coefficient was .81, and the t-test results were 27% lower and upper significant for the groups. The scale was developed in a 5-point, Likert type and the answers were "never", "rarely", "sometimes", "often", "always" [22].

2.2. Working group

Appropriate sampling method in the research was used whereas 245 students studying at Kosovo AAB College (freshmen) and British School of Kosovo (high school) participated in the research. The validity and reliability of the studies are based on the data of 245 students whose data can be accessed. Of these students, 174 (71.0%) were female and 71 (29.0%) were male. The ages of the group range from 11 to 18 years. 7 (2.9%) 5 (2.0%) 22 (9.0%) 31 (12.7) 45 (18.4%) 126 (51.4%) participants were aged. In addition, 164 (72.56%) of the students are studying at the Department of Psychology, while 61 (27.44%) are studying at Kosovo AAB College and British School of Kosovo high school.

2.3. Operation

During the adaptation process of the scale to Albanian, the researcher who developed the scale was contacted via e-mail and necessary permissions were obtained for the adaptation of the scale. In the first stage, the Turkish scale form translated into Albanian by a commission consisting of three lectures working in the Turkish department of Prizren University, then these Albanian forms are translated again and the compatibility among the Albanian and Turkish forms reviewed. Later, the Albanian form was examined in terms of meaning and grammar, necessary corrections were made and the final form was obtained. Afterwards, the scale was examined by two faculty members who are experts in the field of measurement and evaluation in the psychology department and necessary changes were made in line with their opinions. Confirmatory factor analysis was used to ensure the validity of the scale. In addition, the gender, age and class levels of the adolescents were determined by using the personal information form in the study.

2.4. Data collection and analysis

After obtaining the necessary permissions to apply the scale, the students were informed about the subject and then collected using pencil and paper form. It took 10-20 minutes for the participants to fill out the scale questions. After examining the collected data, the missing student data were removed and marked the same question more than once and analysis was performed with the data of 245 students, which can be used. The analysis of the obtained data processed with SPSS 25 software and Amos 25 software. In terms of the validity of the scale, analytical validation factor analysis was performed to ensure the structure. Furthermore, convergence and discriminatory validity were examined. Cronbach's alpha internal consistency coefficient was calculated for the reliability of the scale. Table 1 presents the correlation coefficients of the linguistic equivalence comparison of the Internet addiction scale. When the findings in Table 1 are examined, it can be seen that all correlations between Turkish and Albanian items are significant (r value range is .320 to .527, $p<.005$) and positive [23]. These findings can be interpreted as the answers given by the participants to the Turkish and Albanian items of the scale show parallelism in terms of equivalence.

Table 1. Internet addiction scale factor analysis results and item total correlations

Item no	Indicator
1	.404
2	.410
3	.462
4	.320
5	.527
6	.350
7	.453
8	.423
9	.482

3. RESULTS AND DISCUSSION

In this study, an attempt was made to adapt the Internet addiction scale for adolescents to Albanian language. For this purpose, exploratory factor analysis, confirmatory factor analysis and reliability analysis studies were carried out.

3.1. Findings of confirmatory factor analysis and reliability

The scale consists of a single factor and nine items. To confirm the agreement between the expected structure of the scale and the observed structure, confirmatory factor analysis (CFA) was conducted with data collected from 245 undergraduate students at AAB College, freshmen studying Psychology, and final year students from British High School of Kosovo. Analysis was carried out with the Amos 25 software. The Cronbach Alpha internal consistency coefficient was found to be .828. It is seen that the factor load values of the scale items vary between .56 and .72. The Cronbach's alpha internal consistency coefficient between .80 and 1.00 indicates that the scale is quite reliable [24], [25]. The Kaiser-Meyer-Olkin (KMO) coefficient was .86 and the Bartlett Test of Sphericity χ^2 value was 605.874 ($p < .000$). In this study, the KMO was .86 and the sample was found to be good for factor analysis [26]. In confirmatory factor analysis, it was seen that the one-dimensional structure of the scale fit well [$\chi^2=63.168$, $df=26$, $\chi^2/df=2.43$ RMSEA=.077, S-RMR=.049, RMR=.069, AGFI=.91, GFI=.95, CFI=.94, NNFI=.90, IFI=.94]. Since RMSEA and SRMR values are below .08 and TLI and CFI values are above .90, it is seen that the observed structure of the scale is compatible with the expected structure at an acceptable level, that is, it has an acceptable level of construct validity [27].

3.2. Confirmatory factor analysis

First-level confirmatory factor analysis was performed to determine whether the single-factor structure of the Internet Addiction Scale (İBÖ-IAS) could be confirmed in a sample of adolescents. The path diagram of the scale is given in Figure 1.

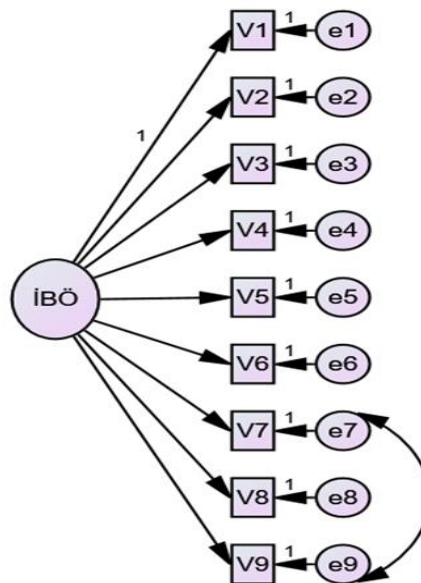


Figure 1. Path diagram of internet addiction

When Figure 1 is examined, it is seen that a modification has been made between the 7th item and the 9th item. As a result of the modification, it is seen that the fit indices fit well. The fit indices show that the single-factor structure of the scale provides a good fit. In this study, Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett's, Sphericity test were used to test the suitability of the data for factor analysis. In our study, the KMO value was .82 and the Bartlett's Test χ^2 value was found to be 850.522 and the sample was found to be good for factor analysis [28].

4. CONCLUSION

The research found that the "Internet Addiction Scale Developed for Adolescents" adapted into Albanian is a reliable and valid measurement tool. Since the developed scale was prepared in line with the online game addiction criteria in DSM 5, it covers the diagnostic criteria related to behavioral addictions. The scale has a single factor and consists of nine items, indicating that the high scores to be obtained from the scale are at the level of internet addiction. In addition, the scale can be answered in 10-20 minutes.

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