



A double-blind, peer-reviewed, open-access, and an HEC-recognized Y-category Journal

Research Journal of Human and Social Aspects

Web link: <https://rjhsa.com/index.php/rjhsa>

P-ISSN: [3006-9696](https://doi.org/10.71085/rjhsa.04.03.113), E-ISSN: [3006-970X](https://doi.org/10.71085/rjhsa.04.03.113)

Volume 4 Issue 3, 2026, Page Rang: 292-307



Development and validation of Urdu Internet Addiction Scale (UIAS)

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Article information

Article History:

Received: 2026-06-19

Received in revised form:
2026-07-17

Accepted: 2026-07-29

Published Online: 2026-08-12

Keywords:

Internet Addiction;
Unidimensionality; Reliability;
Validity; Urdu Scale.

ABSTRACT

The aim of this study is to develop and validate a novel Internet Addiction Urdu (Cyber Addiction) Scale. For this purpose, an initial pool of 54 items was created based on logical content. For qualitative item analysis, these items were presented to experts in the field, and then 41 items were selected for further evaluation. To conduct quantitative item analysis, an experimental trial was carried out on a sample of (N=350). After data collection, statistical analysis was performed, and it was found that items with a correlation above cutoff point (.30) were retained in the internetAddiction Scale. The final draft of the scale was left with 39 retained items. KMO and Bartlett's sphericity test values was highly significant (.92), indicating that the sample size was sufficient for further analysis. Factor analysis of the Scale revealed a one factor solution. All the items were loading on single factor and explained variance of 29.23%. The initial reliability coefficient was 0.933, while the final reliability coefficient of the scale after item refinement was found to be 0.935. The cutoff score for the scale was determined to be 84, corresponding to the 50th percentile (median). Individuals scoring above this threshold were determined to exhibit patterns of internet addiction.



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Introduction

The increasing popularity of the internet as communication tool has made it a more important part of many people's daily life. Approximately 46% of the world's population is online today, a remarkable increase from less than 1% in 1995, according to data showing a 1000% increase in internet users over the past 15 years (Singh & Paliwal, 2020). While the technology has improved and transformed many aspects of daily life by providing uncommon access to services and information, its overuse has led to an increase in reports of "Internet Addiction" (IA), "Internet Addiction Disorder" (IAD), and "Internet Addiction Syndrome" (IAS). According to the systematic study by Singh and Paliwal (2020), internet addiction is a relatively new and rapidly spreading clinical phenomenon that challenges established health standards.

According to Khudhair (2020) and Singh and Paliwal (2020), IA is essentially a broad term that cover a variety of impulse control issues involving mobile technology and personal computers, characterized by excessive and uncontrolled use that is leading to impairment, stress, and behavioral distress. Furthermore, although IA is becoming increasingly common and widely accepted as a problematic disorder with many similarities to other known disorders, it is still controversial because it has not yet been formally classified within a rigorous psychopathological framework (Christakis, 2010). IA is conceptualized through biopsychosocial processes based on the components model of addiction (Griffiths, 2005). These processes are characterized by specific clinical symptoms: salience (internet becoming the primary activity), withdrawal (unpleasant feelings when offline), tolerance (needing more online time), mood swings (using the internet to feel better), relapse (returning to addiction patterns), and conflict (problems in relationships or at work due to

use) (Kuss et al., 2014). Despite being recognized as a common clinical condition for over 15 years, IA still sparks debate in academic and clinical circles. This is primarily due to disagreements regarding its precise terminology, classification, and diagnostic standards (Pezoa-Jares et al., 2012).

However, modern scientific literature increasingly classifies IA as a possible behavioral addiction that causes anxiety and nervousness despite conscious knowledge of negative consequences (Diotaiuti et al., 2022; Kuss et al., 2014). Indeed, research suggests that this behavioral addiction hijacks neurological reward systems, leading to serious impairments in mental health and lifestyle, and fundamentally altering the individual's nature (Kulshrestha, 2020). Neuroimaging studies show that excessive internet users exhibit biological changes in the prefrontal cortex similar to those observed in substance abuse disorders; this supports this classification (Kurniasanti et al., 2019). These physiological changes in the temporal cortex and ventral striatum impair cognitive functions associated with reasoning and planning, increasing the risk of impulsive behavior and leading to a complete loss of control in internet use. Specifically, when addicts are exposed to cues related to their addiction, fMRI tests have revealed activation in the prefrontal dorsolateral cortex and amygdala (Kurniasanti et al., 2019).

This problem was particularly much worse in Pakistan by the COVID-19 pandemic, social distancing and quarantine measures made people dependent on digital platforms for social connection, work, and education. As a result, according to telecommunications data, internet usage in the country increased by 15% to 25%, and the trend of internet addiction rapidly increased (Lakhdar et al., 2021). Furthermore, data from around the world during this period confirm that prolonged periods of isolation and the shift to remote digital activities have significantly

increased internet use to addiction levels, with daily usage time and frequency of communication being strong indicators of the likelihood of internet addiction (Şan et al., 2024). Recent research conducted in Pakistan during the pandemic revealed an alarming burden, with 27.3% of the population classified as problematic internet users (PIU) and 11.3% as addicted internet users (AIU) (Lakhtir et al., 2021). Furthermore, there is a strong correlation between this increase in addictive behavior and serious psychosocial problems, such as internet addiction. According to Lakhtir et al. (2021), internet users are five times more likely to report severe stress and three times more likely to experience excessive anxiety. According to systematic reviews, internet addiction is a rapidly growing public health problem in Pakistan that seriously impacts the mental health of young people (Hamza et al., 2025). These findings are also supported by local studies focusing on undergraduate students in Karachi, which confirm the high prevalence of internet addiction such that 30% of students in the sample were classified as addicted. These studies also highlight specific consequences such as anxiety, sleep disturbances, and impaired work and academic performance (Khan et al., 2022).

Beyond pandemic-related variables, the academic performance of Pakistani students is significantly impacted by excessive internet use, which increases academic procrastination (Saleem et al., 2015). Research conducted in several higher education institutions in Pakistan shows a positive correlation between procrastination and internet addiction, with female students generally reporting higher levels of procrastination, while male students exhibit higher levels of addiction. This link demonstrates how uncontrolled internet use severely disrupts daily routines and leads to neglect of academic responsibilities (Saleem et al., 2015). Research has linked numerous risk factors to this phenomenon, ranging

from the use of specific applications such as social networks, online gambling, and gaming, to demographic characteristics such as being an adolescent or young adult (Kuss et al., 2014; Pezoa-Jares et al., 2012). While initial research on these risk factors revealed that demographic characteristics, particularly young age and unique usage patterns, were strong indicators of excessive and potentially addictive internet use, early stereotypes are changing (Soule et al., 2003). Specifically, data refutes the notion that these users differ significantly in terms of gender, wealth, or education level; the most intensive users, defined as those spending 40 hours or more online per week, tend to be significantly younger than the average user (Soule et al., 2003). Contrary to previous misconceptions, experienced users, rather than "beginners," actually spend the most time online, and marital status is also important; internet use decreases as hours spent online increase (Soule et al., 2003). Personality traits are also very important because individuals with high levels of neuroticism, low levels of agreeableness, and low levels of conscientiousness are much more likely to become addicted to technology (Kuss et al., 2014).

As Internet Addiction (IA) has evolved from a specific problem into a global public health crisis, the scientific community has strived to find ways to accurately measure this "modern-day affliction" (Şan et al., 2024). Over 45 different measurement methods have been developed in the last 20 years to identify and measure addictive digital behaviors (Laconi et al., 2014). However, despite the abundance of tools, there is still no "gold standard." Researchers remain divided on whether IA should be treated as a separate behavioral syndrome, an impulse control disorder, or an addiction similar to substance abuse. Consequently, various diagnostic tools exist, each offering a different approach to the subject (Laconi et al., 2014). The Internet Addiction Test (IAT),

developed by Young in 1998, is the best-known and most innovative of these tools. This 20-item test, with 5-point Likert scale ratings, was the first true "benchmark" for the field. It measures how much internet use disrupts daily activities, social interactions, sleep patterns, and productivity. Although translated into many languages, including English, Urdu, Chinese, French, Italian, and Turkish, and boasting high internal consistency ($\alpha = .82$ to $.98$), the IAT is currently under intense criticism (Laconi et al., 2014; Ndasauka et al., 2019). Its factor structure is quite inconsistent, as it was developed in the late 1990s; depending on the cultural community being assessed, studies have shown one to six different sub-factors (Laconi et al., 2014).

These measures have been refined for specific populations through further research. Focusing on Asian university students, Chen et al. developed the Chen Internet Addiction Scale (CIAS) in 2003. This 26-item scale measures five main characteristics, Compulsive Use, Withdrawal, Tolerance, Problems in Interpersonal Relationships/Health, and Problems in Time Management. This scale is measuring these characteristics using a 4-point Likert scale. It has been validated in Arabic, Turkish, and Chinese and has a good reliability rating ($\alpha = .93-.97$) (Laconi et al., 2014). On the other hand, the 14-item Compulsive Internet Use Scale (CIUS), developed by Meerkerk et al. in 2009, offers a more concise method that considers only "loss of control" rather than the amount of time spent online. This scale is available in Dutch, French, and German and exhibits high reliability ($\alpha = .89 - .92$) in distinguishing between conflict and preoccupation indicators (Laconi et al., 2014).

Rationale

While these foreign tools have played a significant role in raising awareness about internet addiction, there is growing

skepticism about their "universal" applicability. Behavioral addictions are tightly bound to or deeply ingrained in the fabric of a society's culture; they do not exist in a vacuum. Symptoms of addiction, such as how a student in Pakistan perceives "social neglect" or "academic failure," are filtered through different cultural values and family systems that are often overlooked by Western-centric tools (Khan et al., 2022). Furthermore, there is a significant difference between the current Generation Z and Alpha generation and the "Desktop Generation" for which the initial scales were created. For today's youth, the internet has gone beyond being merely a tool, creating new types of addiction such as "Social Media Fatigue" and "Fear of Missing Out" (FOMO) that are beyond the scope of scales from 20 years ago (Kulshrestha, 2020).

Given that current research indicates that the factor structures of internet addiction vary greatly across cultures (Laconi et al., 2014), a tool based on a "one-size-fits-all" approach may lead to erroneous results or a lack of reliable diagnostic data in our local context. We cannot rely solely on borrowed frameworks to address the growing problem of internet addiction in Pakistan. This study aims to move beyond borrowed frameworks to truly reflect the digital life experience of Pakistani population by developing a linguistically and culturally accessible tool. To understand the structural validity of internet addiction in local contexts, a nomological network, a statistical model that correlates theoretical concepts of internet addiction with observable personality traits and behaviors that must be constructed (Kuss et al., 2014). Therefore, the aim of this study is to develop a language-friendly and scientifically validated tool that appropriately explore the internet addiction among Pakistani population.

Research Methodology

The goal of the current study was to create and evaluate an indigenous Internet Addiction Scale (IAS) that would accurately reflect the distinctive behavioral patterns and sociocultural triggers of the Pakistani population. This study used a rigorous psychometric approach because conventional Western-centric measures frequently fail to capture the digital lived experiences of Pakistani population. Phase I of the study concentrated on creating qualitative items and refining the content, while Phase II examined the underlying structure of the scale through quantitative means.

Phase I: Item Generation and Qualitative Analysis

The test's development started with a thorough deductive building of test items. Items were created using the logical content method to represent face validity and behaviors that are closely associated with the particular internet dependence constructions. The choice of these items was based on a theoretical approach to guarantee that the scale accurately reflects the cultural complexities and "cohort-specific" behaviors of Pakistani youth. A pool of 54 items were generated on the 20 main characteristics based on internet addiction scale that are work, suffering, anxious, fear, secretive and so on. After initial item writing, a qualitative analysis was carried out by an expert and supervisor in order to exclude the vague and inappropriate items. Difficult items in terms of language were also modified, 4 items were modified from initial thus 41 were retained in the test. After qualitative item analysis, the proposed scale was exposed to quantitative factor analysis and this 41 items draft was selected for an experimental try out.

Phase II: Exploratory Factor Analysis (EFA)

The purpose of this phase was to explore the underlying factor structure as these

constructs were not previously established in this specific indigenous framework.

Sample

A sample of 350 individuals were taken for this study. The sample included 134 males and 216 females. The sample was carefully chosen to represent a wide age range, starting from 15 – 68 years ($M=21.81$; $SD=6.05$) to ensure the representativeness of the population. The sample was selected from different departments of university of Peshawar through convenience sampling.

Instrument

Urdu Internet Addiction Scale

The aim of this study was to develop a culturally appropriate instrument to assess internet addiction within the Pakistani population. Initially, a pool of 54 items was created, and no negative items were retained in the scale. These items were subjected to qualitative evaluation by a psychometrics expert to ensure linguistic clarity and cultural appropriateness. Following this evaluation, 41 items were retained for further analysis. Participants responded to the items using a 5-point Likert scale ranging from 1 ("never") to 5 ("always"). Following quantitative item analysis and factor analysis, items that did not meet the loading criteria were excluded. This refinement process resulted in a final version of the scale consisting of 39 items, all positively expressed, to provide a consistent single-factor solution structure. The Internet Addiction Scale (IAS) demonstrated high internal reliability with a Cronbach alpha coefficient of .935. The factor structure confirms that the scale is a strong and sensitive instrument for measuring digital addiction in the Urdu language. A higher score on the UIAS indicates a higher level of internet addiction.

Procedure

During the procedure, Participants were contacted at their workplaces, educational institutions, and homes. After a formal

introduction, the participants were requested for participation along with consent, strictly assuring privacy and confidentiality. The scale is self-administered with instructions printed on the first page. The questionnaires were provided to the participants and

instructed to solve it in as much time as they wanted to take. The researcher remained present to clarify any vague or objectionable statements.

Results

Table 1: *Item Total Correlation of Internet Addiction Scale*

Item No	<i>r</i>	Item No	<i>r</i>	Item No	<i>r</i>
1	.20	16	.50	31	.47
2	.28	17	.47	32	.59
3	.46	18	.54	33	.48
4	.50	19	.53	34	.52
5	.41	20	.43	35	.59
6	.42	21	.54	36	.47
7	.51	22	.38	37	.50
8	.56	23	.45	38	.48
9	.44	24	.47	39	.54
10	.44	25	.55	40	.47
11	.58	26	.33	41	.64
12	.57	27	.42		
13	.57	28	.48		
14	.52	29	.47		
15	.56	30	.51		

Note. *r* = item total correlation,

According to the results, table 1 shows that item number 1 and 2 do not meet the cut point, i.e., .30 therefore they will be

discarded. The remaining 39 items meet the cut point and thus they will be retained in the scale

Table 2: Item Total Correlation of Retained Items of Internet Addiction Scale

Item No	<i>r</i>	Item No	<i>r</i>	Item No	<i>r</i>	Item No	<i>r</i>
3	.46	14	.53	25	.55	36	.47
4	.51	15	.56	26	.32	37	.49
5	.41	16	.50	27	.42	38	.49
6	.41	17	.47	28	.47	39	.55
7	.52	18	.55	29	.46	40	.48
8	.55	19	.53	30	.51	41	.65
9	.44	20	.44	31	.47		
10	.42	21	.54	32	.59		
11	.58	22	.37	33	.48		
12	.57	23	.44	34	.54		
13	.58	24	.46	35	.60		

Table no 3 shows that all the retained items in internet addiction scale, which clearly demonstrate that all 39 items meet the cut

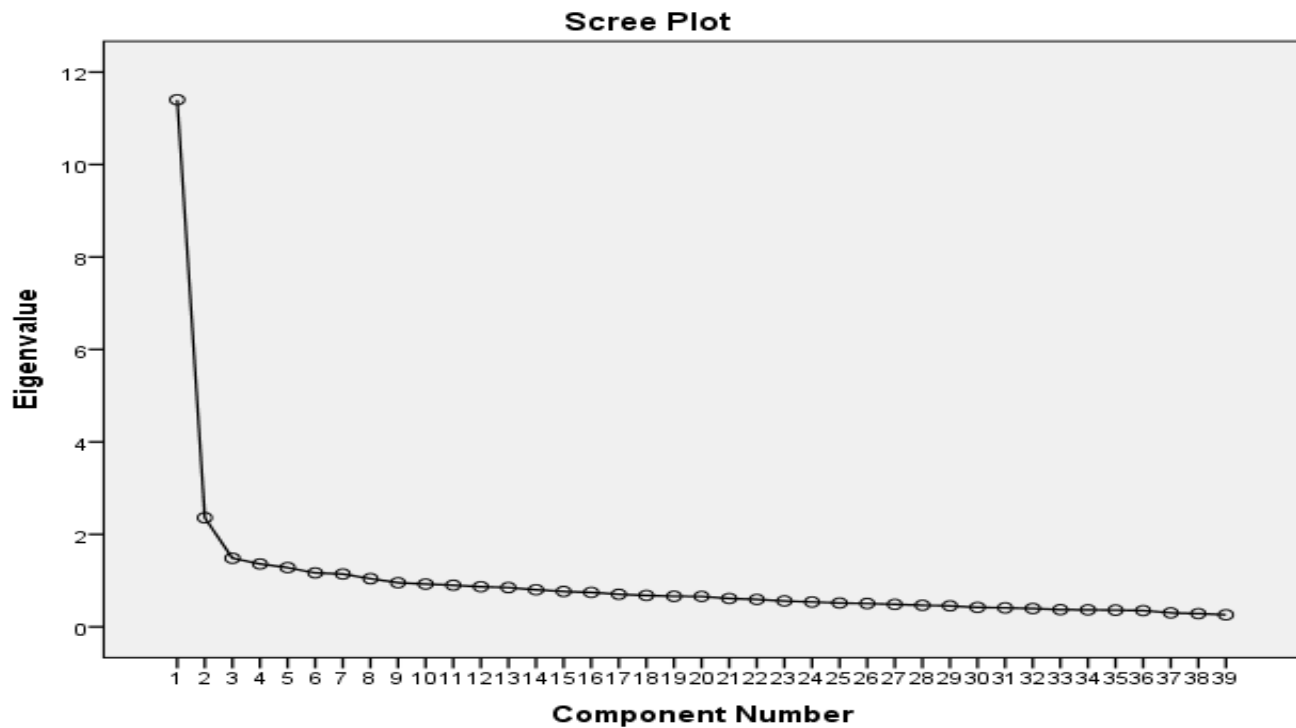
point therefore they were retained in the scale.

Table 3: KMO and Bartlett's Test of Sphericity for Internet Addiction Scale

KMO	Bartlett's test	Df	P
.92	4923.596	741	.000

The results in Table 4 indicate that Bartlett's Test of Sphericity was significant, and the Kaiser-Meyer- Olkin (KMO) measure of sampling adequacy was 0.92, which is close

to 1. The values above show that the data was sufficient enough for conducting factor analysis.

Figure 1: *Scree Plot of Internet Addiction Scale*

The scree plot clearly shows a dominant single factor loading on the internet addiction scale.

Table 4: *Eigen Value and Percentage of Variance Explained by Internet Addiction Scale Based on Single Factor Solution*

Factors	Eigen value	% of variance	Cumulative %
1	11.40	29.23	29.23

Table 5 shows the Eigen value, percentage of variance and cumulative percentages that is extracted on the basis of fixed number of factors i-e 1 (based on the number of factors shown in scree plot). The factor loading on

the scale is explaining 29.23% of variance with Eigen value 11.40. This shows that the internet addiction scale is single factor solution.

Table 5: *Factor Loadings of internet addiction scale with Direct Oblimin Rotation*

IA scale items	Factor loading
3 may intenet par gehri dosti karny may purjosh rehta/rehti hun.	.50
4 facebookkay zyada istimal karny ki waja say apnu ghar walon ko nazar andaz karti/karta hun.	.55
5 internet par zyada online rehny ki waja say mery school/college ka kaam reh jata hay.	.44
6 internet ki ghar moojudgi may mujy baychaini mehsoos hoti hay.	.43
7 mujy internet par naye dost banana achy lagty hain.	.56
8 mery ghar waly shikayat karty hain k may zyada waqat online chatting may guzar deta/deti hun.	.58
9 mujy facebook ka istemal pasand hay.	.48
10 aghar internet na ho to meri zindagi boht baymaza ho jaeyegi.	.45
11 may internet ki waja say ghar k or baqi kamo ko nazar andaz karta/karti hun.	.62
12 zyada facebook k istemal say meri zindagi mutasir ho rahi hay.	.61
13 internet kay istemal say dusro ko mujsay kafi sikayaat rehti hain	.61
14 mujy ghussa ata hay jab koi mujy online chatting say roky.	.57
15 internet kay zyada istemal ki waja say may apny ghar walo say zyada bat nahi kar sakti/sakta.	.60
16 may zyada waqat rishtedaroon k sath guzarny k bajaye whatsapp par guzarti/guzarta hun.	.52
17 may facebook par thori thori baad apa status dekhta/dekhti hun.	.50
18 facebook say offline hony ki surat may mujy bechani mehsoos hoti hay.	.59
19 internet kzyada istemal ki waja say may choti choti bataon par chir jata/jati hun.	.56
20 internet par de gai ghalat maloomat ki waja say mery mizaaj may shaki pan aa gaya hay	.48
21 may internet ko apny ghar walo par targeeh deti/deta hun.	.59
22 internet k istemaal say maay kuch der k liye may apny baqi paresshaniyan bhool jati/jata hun.	.40
23 school/college imtehanaat k doraan b may internet ka zyada istemal karti karta hun	.47
24 internet ka istemal na kar kay may akela mehsoos karta/karti hun.	.49
25 mab may apny ghar walo k sath tafreeh k liye bagir jaun to tab b meri tawajah mobile ki taraf hoti hay.	.58
26 mujy online rehty huye waqt ka andaza nahi hota.	.34

27	class k doran b may mobile istemaal karny ki zaroort mehsoos karti/karta hun.	.45
28	aghar rozana mayinternet istemal na karun to besukooni mehsoos karti/karta hun.	.50
29	zyada internet istemal karny say meri neend puri nahi hoti.	.49
30	may ghar walo say chupati/chupata hun k may kitni der say online hun.	.55
31	may bahir ghoomny phirny say zyada online rehny ko targeeh deti/deta hun.	.51
32	internet par offline hoty hi mera dubara online hony ko dil karta hay.	.62
33	internet k zyada istemal say meri parhai buri tarha mutasir hoti hay.	.51
34	internet par zyada der online rehny say muhy khany peenyka hoosh nahi rehta.	.58
35	internet k zyada istemal say meri rozmarra k kaam buri tarha mutasir hoty hain.	.63
36	internet k zyada istemal say may apny waqt ko sahi tareeqay say taqssem nahi kar pati/pata hun.	.51
37	jis jaghy internet ki sahoorat na ho wahan may zyada der tak rehna pasand nahi karta/karti.	.51
38	internet par meri doston ki tadaad zayada or asal zindagi may kam hoti ja rahi hay.	.53
39	internet k zyada istemal say meri sehat mutasir ho rahi hay.	.58
40	internet k zyada istemal say meri fardh ibadaat mutasir hoti hay.	.52
41	internet k zyada istemal say may apny zimadariyan waqt par puri nahi ar pati/pata.	.68

Note: $N = 350$. The extraction was carried out using Principal Component Analysis with Direct Oblimin rotation.

Table 5 show the single factor loadings of the Internet Addiction scale items. All the 39 items (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41) exceed the cut point of .30 with factor loadings in the range of .34 to .68.

Table 6: Mean, Standard Deviation, Range and Alpha reliability of Urdu Internet Addiction Scale

Scales	No of items	<i>M</i>	<i>SD</i>	Range	Cronbach's α
IA	39	98.45	26.526	41-195	0.93

Note. IA= internet addiction scale.

As shown in the table above the scale manifests strong reliability (0.93) indicating that the scale is a reliable measure of internet addiction and yields dependable findings.

Discussion

The primary purpose of this study was to establish and validate a culturally and linguistically relevant scale for evaluating

internet addiction among Pakistani population. While several scales are available globally to assess digital dependency with pretty good psychometric properties but the concern that arises with these measures is that they have been developed within western framework with different socio-cultural background, patterns and dynamics which may not fully capture the same

construct in our culture / population (Pakistani population) that has different socio-cultural context. To address this, gap the scale was developed using logical content approach, we begin with a comprehensive conceptual definition of internet addiction that integrates both its behavioral and psychological dimensions.

A thorough in-depth review of literature was conducted to pinpoint key domains of internet addiction for item generation of the scale. Initially a pool of 54 items was generated on 20 main characteristics based on internet addiction scale that are work, suffering, anxious, fear secretive and so on. After initial item writing, a qualitative analysis was carried out by an expert and supervisor in order to exclude vague and inappropriate items that are not relevant to Pakistani culture. Difficult items in term of language were modified; 4 items were modified from initial. Thus 41 items were retained in the test. After this, the retained items were subjected to quantitative analysis. Item total correlation was conducted to make sure all the retained items contribute to the scale construct as shown in table 01. Items (i.e., item 1 and 2) having correlation value less than the cut point .30 were extracted from the scale as it does not meet the criteria. The rest of the items having correlation value more than .30 were remained in the scale for further analysis as shown in table 02. Thus 39 items were retained in the scale for further factor analysis.

Principal component analysis (PCA) was conducted on the remaining 39 items with Direct Oblimin Rotation to determine the factor structure of the scale. The value of KMO (Kaiser-Meyer-Olkin) was .92 which is closer to 1 and is greater than .70 which is the cut point as shown in table 3. This shows significant value which means that the sample taken for this scale was sufficient enough to be carried out for factor analysis. Bartlett's test value as also highly significant ($P<.001$) indicated that the data was suitable

for factor analysis. Initially factors with eigenvalue greater than 1 was considered for extraction. The initial run extracted two factors with eigenvalues greater than 1 but a closer look at the factor solution showed no comprehensive loadings of items on the two separate factors. This observation was further confirmed by the scree plot in figure 1, which revealed a single factor clearly indicating that the scale was leaning toward a one factor solution. Consequently, the analysis was re-run by setting the factor extraction to a fixed number of 1 (fixed factor solution) to ensure the exact factor structure. The results in Table 5 confirmed that the internet addiction scale is uni-dimensional by extracting single factor with eigenvalue greater than 1 i.e., 11.40 which was explaining 29.23% of the variance. Table 5 shows all the 39 items loading on the scale with values greater than .30. After analyzing the factor structure of the scale, the Cronbach's alpha reliability of the scale was computed to ensure the internal consistency of the scale, shown in table 6. Initially, the scale showed a high reliability of .933. However, in the factor analysis, items 1 and 2 failed to meet the .30 threshold and were removed from the scale as they loaded below .30. After this removal, reliability was recalculated and showed a Cronbach's alpha value of .935 as shown in table 6. The change from .933 to .935 is a subtle difference, but the removal of these unloaded items from the scale was necessary. This final Cronbach's alpha value demonstrates that the internet addiction scale is quite reliable and a robust tool for assessing digital behavior.

Limitation and Suggestion

While the current study offers a statistically robust basis for assessing internet addiction, it is important to acknowledge its limitations. First, self-report methods were used in data collection, which are often prone to social acceptability bias. It is possible that participants hide their actual internet use or neglected the signs of addiction to appear

more socially "acceptable." Including objective data, such as screen time records, to support self-report findings would be beneficial for future studies. Furthermore, while the sample size of 350 individuals is sufficient for the psychometric validity of the scale but, the participants were predominantly selected from a specific geographic region specifically from Peshawar, Khyber Pakhtunkhwa (KP). This limits the generalizability of the findings to the broader Pakistani population therefore the findings cannot be extrapolated. Future studies should target a more diverse, multi-city sample including individuals from different socioeconomic backgrounds and age groups, and examine whether digital habits vary across different financial or regional strata. Finally, the possibility of random responses, where participants may give inconsistent answers due to survey fatigue, cannot be entirely ruled out. To improve data quality in future studies, researchers might consider adding "attention control" questions to encourage higher participation or conducting the survey in more controlled environments. A significant limitation of the current scale is that all end items are positively worded. While this keeps

the instrument simple, it increases the risk of confirmation bias, such as the participant habitually choosing "Always" or "Often" without fully evaluating each statement. To strengthen the accuracy of the scale, future research should include reverse-coded items. Including "negative" statements would act as a cognitive control, forcing participants to pay close attention and provide more honest, high-quality data.

Conclusion

This study successfully developed and validated the Internet Addiction Scale (IAS) in Urdu by constructing a robust one-dimensional structure through rigorous factor analysis. The scale demonstrated excellent internal consistency with a final reliability coefficient of .935, proving it to be a highly reliable tool for measuring digital addiction. These findings highlight the usefulness of the IAS as a culturally sensitive and psychometrically strong instrument specifically adapted to the Pakistani context. Providing a reliable method for assessing internet use patterns, this scale enables psychologists, educators, and public health researchers to generate data that is both locally relevant and globally comparable.

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Declaration of Conflicting Interest

The author declared no potential conflicts of interest with respect to research.

Funding Statement

No funding is received for this project.

Appendix

یہ سوال نامہ آپ کے انٹرنیٹ کے استعمال سے مطابق ہے۔ نیچے دئے گئے سوالات کو غور سے پڑھیں اور جو خانہ آپ کے انٹرنیٹ کے استعمال سے مطابقت رکھتا ہے اس پر (✓) کا نشان لگائیں۔

نمبر شمار	ثائٹل	کبھی نہیں	بہت کم	بعض اوقات	اکثر اوقات	ہمیشہ
1.	میں انٹرنیٹ پر زیادہ دیر تک Online رہتی / رہتا ہوں۔					
2.	میں رات کو سونے سے پہلے اور صبح آنکھ کھلتے ہی اپنا فیس بک اور واٹس اپ چیک کرتی / کرتا ہوں۔					
3.	میں انٹرنیٹ پر گہری دوستی کرنے میں پُر جوش رہتی / رہتا ہوں۔					
4.	فیس بک زیادہ استعمال کرنے کی وجہ سے میں اپنے گھر والوں کو نظر انداز کرتی / کرتا ہوں۔					
5.	انٹرنیٹ پر زیادہ دیر Online رہنے کی وجہ سے میرے سکول کالج کا کام رہ جاتا ہے۔					
6.	انٹرنیٹ کی غیر موجودگی میں مجھے بے چینی محسوس ہوتی ہے۔					
7.	مجھے انٹرنیٹ پر نئے دوست بنانا اچھا لگتا ہے۔					
8.	میرے گھر والے شکایت کرتے ہیں کہ میں زیادہ وقت Online chatting میں گزار دیتی / دیتا ہوں۔					
9.	مجھے فیس بک کا استعمال پسند ہے۔					
10.	اگر انٹرنیٹ نہ ہو تو میری زندگی بہت بے مزہ ہو جائے گی۔					
11.	میں انٹرنیٹ کی وجہ سے گھر کے اور باقی کاموں کو نظر انداز کرتی / کرتا ہوں۔					
12.	زیادہ فیس بک کے استعمال سے میری زندگی متاثر ہو رہی ہے۔					
13.	انٹرنیٹ کے استعمال سے دوسروں کو مجھ سے کافی شکایات رہتی ہیں۔					
14.	مجھے غصہ آتا ہے جب کوئی مجھے Online chatting سے روکے۔					
15.	انٹرنیٹ کے زیادہ استعمال کی وجہ سے میں اپنے گھر والوں سے زیادہ بات نہیں کر سکتی / سکتا۔					
16.	میں زیادہ وقت رشتہ داروں کے ساتھ گزارنے کی بجائے واٹس ایپ پر گزارتی / گزارتا ہوں۔					
17.	میں فیس بک پر تھوڑی تھوڑی دیر بعد اپنا Status دیکھتا دیکھتی ہوں۔					
18.	فیس بک سے Offline ہونے کی صورت میں مجھے بے چینی محسوس ہوتی ہے۔					
19.	انٹرنیٹ کے زیادہ استعمال کی وجہ سے میں چھوٹی چھوٹی باتوں پر چھڑ جاتی / جاتا ہوں۔					
20.	انٹرنیٹ پر دی گئی غلط معلومات کی وجہ سے میرے مزاج میں شکی پن آ گیا ہے۔					
21.	میں انٹرنیٹ کو اپنے گھر والوں پر ترجیح دیتی دیتا ہوں۔					
22.	انٹرنیٹ کے استعمال کے میں کچھ دیر کے لئے اپنی باتیں پریشانیاں بھول جاتی / جاتا ہوں۔					
23.	سکول کالج امتحانات کے دوران بھی میں انٹرنیٹ کا زیادہ استعمال کرتی / کرتا ہوں۔					

24. انٹرنیٹ کا استعمال نہ کر کے میں اکیلا محسوس کرتی / کرتا ہوں۔
25. جب میں اپنے گھر والوں کے ساتھ تفریح کے لئے باہر جاؤں تو تب بھی میری توجہ موبائل کی طرف ہوتی ہے۔
26. مجھے Online رہتے ہوئے وقت کا اندازہ نہیں ہوتا ۔
27. کلاس کے دوران بھی میں موبائل استعمال کرنے کی ضرورت محسوس کرتی / کرتا ہوں ۔
28. اگر روزانہ میں انٹرنیٹ استعمال نہ کروں تو بے سکون محسوس کرتی / کرتا ہوں ۔
29. زیادہ انٹرنیٹ استعمال کرنے سے میری نیند پوری نہیں ہوتی۔
30. میں گھر والوں سے چھپاتی / چھپاتا ہوں کہ میں کتنی دیر سے Online ہوں۔
31. میں باہر گھومنے پھرنے سے زیادہ Online رہنے کو ترجیح دیتی / دیتا ہوں ۔
32. انٹرنیٹ پر Offline ہوتے ہی میرا دوبارہ Online ہونے کو دل کرتا ہے۔
33. انٹرنیٹ کے زیادہ استعمال سے میری پڑھائی بری طرح متاثر ہوتی ہے۔
34. انٹرنیٹ پر زیادہ دیر Online رہنے سے مجھے کھانے پینے کا ہوش نہیں رہتا۔
35. انٹرنیٹ کے زیادہ استعمال سے میری روزمرہ کے کام بُری طرح متاثر ہوتے ہیں۔
36. انٹرنیٹ کے زیادہ استعمال سے میں اپنے وقت کو صحیح طریقے سے تقسیم نہیں کر پاتی / پاتا۔
37. جس جگہ انٹرنیٹ کی سہولت نہ ہو وہاں میں زیادہ دیر تک رہنا پسند نہیں کرتی / کرتا۔
38. انٹرنیٹ پر میرے دوستوں کی تعداد زیادہ اور اصل زندگی میں کم ہوتی جا رہی ہے۔
39. انٹرنیٹ کے زیادہ استعمال سے میری صحت متاثر ہو رہی ہے۔
40. انٹرنیٹ کے زیادہ استعمال سے میری فرض عبادات متاثر ہوتی ہیں۔
41. انٹرنیٹ کے زیادہ استعمال سے میں اپنی ذمہ داریاں وقت پر پوری نہیں کر پاتی / پاتا۔

Note: 1. Use of the scale is permitted provided proper credit is given to the above work.

2. The first two items got deleted after quantitative item analysis, rest of the items from item number 3 to 41 should be used in future studies.
3. There is no reverse coded item in the scale.