

RESEARCH ARTICLE

Internet Addiction and Its Consequences for English Language Proficiency in Adolescents

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Abstract

The current quantitative study investigated the correlation between internet obsession and English language promotion by analyzing the variables separately. The research is based on recent data from June 2023 to August 2023, collected through cluster sampling from 1500 high school students in China, with a mean age of 15.98 years. The large-scale program interaction (Model 6) of SPSS has been utilized in the study to assess the intervening role of forthcoming synchronization and intellectual squared and found that internet obsession significantly negatively predicted English learning promotion. The results revealed that the internet obsession has a strong correlation with forthcoming synchronization, intellectual squared and English learning promotion. It showed the impact of internet obsession on adolescents' psychological motivation for learning the English language through the Internet. Similarly, the forthcoming synchronization, intellectual squared, and English learning promotion are positively correlated, which reveals the way forward for English language promotion among non-native young people. The research lays the groundwork for further comparative study on the impact of internet obsession on rural and urban high school students in other countries.

KEYWORDS

Internet obsession; Forthcoming synchronization; Intellectual squared; English Learning promotion

1 | INTRODUCTION

The Internet and adolescents are close friends in the modern era. Adolescents' internet obsession is natural, considering that 5.19 billion people used the Internet globally as of July 2023, making up 64.6% of the world's populace. Motivation is the key to success (Ashraf et al., 2018). learning environments, whether they are shaped by both internal structures (such as mentorship and development programs) and external influences (Tian et al., 2025). At the same time, English occupies a central position as the language of the Internet globally. Hence, the relationship between the Internet, adolescents, and English learning is a phenomenon that needs to be studied and analyzed from various perspectives. Although the Internet influences a wide range of people worldwide, regardless of age, young people are particularly drawn to its wonderful, determined, and informative aspects. However, it leads to the issue of "Internet Addiction" when the Internet is used

excessively, interfering with the Internet users' everyday lives.

The Internet shapes the culture of adolescents as they use their phones to connect with friends and access entertainment such as video games. The trend of using the Internet through cell phones and computers has increased screen time for young people. Adolescents spend an average of around seven hours and 22 minutes per day using media that includes computers, video games, and television. A sharp increase in the number of adolescent Internet users has been noticed, pointing to the side effects of excessive Internet stealth. Some of the most significant detrimental effects include loneliness, suicidal behavior, and depression. Interestingly, some researchers traced a similar disorder even a decade ago among individuals who were using the Internet as a source of learning a foreign language.

The anxiety was the demotivating factor that

adversely affected the foreign language learning process through the Internet. Thus, the current study is an attempt to quantitatively explore the trend of internet obsession among adolescents, along with the impact of the obsessed participants on English learning promotion and exploration, using a group-examining data collection method. The study found a negative correlation between internet obsession with forthcoming synchronization, intellectual squared and English learning promotion. It revealed the impact of internet obsession on adolescents' psychological motivation for learning the English language through the Internet. Similarly, the forthcoming synchronization, intellectual squared and English learning promotion are positively correlated, which reveals the way forward for English language promotion among non-native young people. Similar to this, since it offers a planned path for career advancement, efficient planning is essential for guaranteeing performance and progress (Ali et al., 2014).

There are several vital sections in the research report. A writing overview is presented in Part 1, which establishes context and relevance by summarizing pertinent books. This survey is used by the report in Part 2 to verify its authenticity. Part 3 describes the study methodology, while Section 4 addresses the research findings and their consequences. Section 5 concludes by exploring the results and recommending the next actions.

2. Literature Review

About 66% of the population now practices using the most active Web clients (Kumar et al., 2023). In their study of a social anxiety disorder (SAD) among Indian undergraduate students, Goel et al. (2020) found that 93.8% of the research participants were Internet addicted as well, and 15.3% experienced SAD. The connection between SAD and internet addiction (Goel et al., 2020) reflects that internet users are not necessarily free from the potential side effects of internet addiction, even during their pursuit of learning new things through the Internet. The prevalence of 85% of their research participants was Internet addicted in a mild to severe manner (Zenebe et al., 2021). Internet addiction is also connected with amplified involvement in aggressive behavior (Agbaria, 2021). The negative association of internet addiction with self-control (Agbaria, 2021) is an alarming finding for young learners. The situation aggravates further if young internet users find rare support and counseling from their parents. It is pertinent to remember that people of all ages use the Internet today (Nopiana et al., 2022). Teens of Web-dependent parents will be Web users at this age.

For instance, stress and anxiety among university students are the ultimate result of the students' poor academic performance after they get negatively affected by Internet-obsessed behavior (Zenebe et al.,

2021). However, banning students or sometimes even limiting young learners from the Internet is not a suitable remedial measure for combating Internet obsession. The advent of the Internet has resulted in a significant transformation in the availability of educational resources, the delivery of instructional materials, the pedagogical approach, and the teacher-student dynamics (Jing, 2013). Moreover, social media has revolutionized the world of communication and social interactions, and it is the youth that occupies the central status in this achievement (Jidda Jidda et al., 2025). Social media in a controlled manner in order to ensure the continuity of their physical activity and sleep (American Psychological Association, 2023).

Promoting English learning among adolescents thus seems a real challenge in the current digital world. Teachers, too, are concerned about students' overuse of information technology when this digital era impacts children's social skills negatively (Seema & Varik-Maasik, 2023). Moreover, internet addiction is not easy to diagnose formally, as it involves the further study of an individual's other psychological disorders and impulse control disorder (The American Psychiatric Association, 2013). A worrisome situation arises from research on the relationship between information technology use and students' learning outcomes (Seema & Varik-Maasik, 2023). The correlation between English and the Internet is also obvious and a proven fact. Therefore, internet sources such as YouTube, Facebook, and other specially designed English learning applications have supported potential English learners from non-native English countries.

According to Syafiq et al. (2021), the students showed improved speaking skills through YouTube English learning material, and the research also concluded that YouTube Videos proved vital in enhancing the students' speaking skills when they used them in their online learning during the COVID-19 pandemic. YouTube is a more enjoyable, adaptable and fascinating source for learning English than a conventional classroom used for the same purpose (Nur & Butarbutar, 2022). In the context of learning through the Internet, learners may face various challenges. It includes administrative, technical, and academic issues among the E-learners (Mohammed, 2020). It affects partners while they are studying English (L2) since mastering a language is a very challenging task in and of itself; the learners succeed only after relying on behavioral and cognitive factors (Zheng et al., 2018). In such a scenario, English learning promotion may halt further in case of ignoring the facts that English as L2 has some real challenges, as well as the Internet has potential harms for the users. It refers to research findings indicating that Internet addiction serves as a defence mechanism to escape real problems, as reflected in the data (included in the preceding part) on the intensive use of the Internet in the present time (Agbaria, 2022).

3 MATERIAL AND METHOD

3.1. Hypothesis Development

H₀₁: The Internet Obsession of teenagers hinders their desire to study English

H₀₂: A future-oriented perspective helps to control the relationship between Internet dependence and motivation to study English.

H₀₃: Scholarly Squared plays a mediating role between online fixation and the desire to study English.

H₀₄: The practice of English as a second language and future-oriented Intellectual Squared are mitigating factors in preventing internet Obsession.

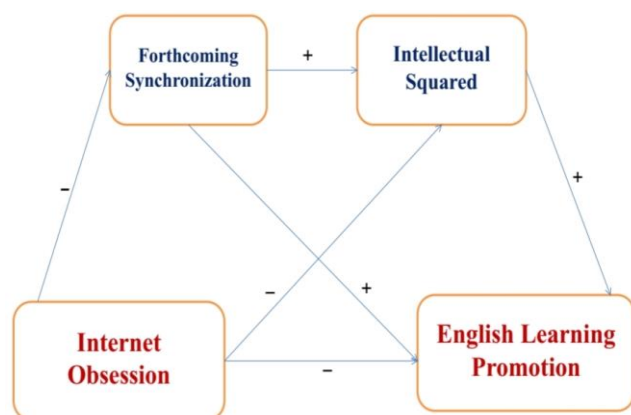


Fig. 1: Demonstrates the research chain intermediate model of the study.

3.2. Research Designs

In June and July 2023, a cluster sampling method was employed to recruit a sample of 1500 high school students from 150 schools in a province in China. The participants were assessed at the matriculation and intermediate class levels. Questionnaires were only considered valid if they exhibited missing values in the main variables, excessive selection of the same response option, or excessive regularity in their responses. This methodology aligns with (Ashraf et al., 2021). After 229 bogus polls were eliminated from the analysis, 1271 significant surveys or an 84.73% legitimate response rate remained as the final example. There were 523 men (41.15%) and 753 women (58.85%) among the members. Regarding where members called home, 423 (33.58%) were in metropolitan areas, while 853 (66.92%) were in rural areas. The average term for the members was 15.98 years (SD = 0.93).

3.2.1. Internet Obsession Scale

The Internet Obsession scale was used, which included three dimensions of Internet craving and tolerance, withdrawal reactions, and negative

consequences, with 16 items on a two-point scale (1= yes, 0 = no). An Internet addiction score of 5 or above indicates a severe fixation, with an α value of 0.78.

3.2.2. English Learning Promotion Scale

It was the Chinese version of the English Learning Promotion Scale, which has 17 items on energy, devotion, and attention that are scored on a 5-point Likert scale. Higher scores indicate more interest in English, with an α value of 0.91.

3.2.3. Consideration of Future Consequences Scale

The updated Chinese version of the Scale for considering potential future effects. It has 15 items, two facets, and a 7-point scale. The study used a mean score, with higher scores indicating more patient synchronization, and the questionnaire's α value was 0.65.

3.2.4. Intellectual Squared Scale

The Intellectual Squared Scale, translated and amended, is utilized. A 7-point Likert scale was employed. Higher scores indicate daily Intellectual Squared usage, with an α value of 0.86 in this research.

3.3. Research Techniques

The study adhered to ethical standards throughout its implementation. Firstly, the Institutional Morality Board of the vital creator's school grants moral approval. Secondly, before data collection, official permissions are obtained from the Director of Education and the Principal of each participating school, in addition to parental consent. The survey was conducted in a classroom setting, and participants completed a comprehensive questionnaire comprising the Adolescent Internet Obsession Scale, the English Learning Promotion Scale, the Forthcoming Synchronization Scale, and the Intellectual Squared Scale, with all items presented in a randomized order. Upon completing the tasks, participants are duly acknowledged and receive modest tokens of appreciation. Descriptive statistics, Pearson correlation analysis, and mediating effects tests were performed on the data using SPSS 25.0 and its macro software PROCESS to study the interrelationships between internet Obsession, English learning Promotion, Forthcoming Synchronization, and Intellectual Squared.

4 | RESULTS AND DISCUSSION

4.1 Common Method Bias Test

Procedures are utilized in the study to prevent

common method bias by emphasizing secrecy and reverse scoring of some measures; post hoc statistical controls are also performed using Harman's one-way test. Ten factors with eigenvalues larger than one were found in an alternating exploratory factor analysis of all 53 items. The first common factor explained 21.06% of the variance, less than the 40% criterion, showing no common method bias.

4.2. Descriptive Statistics

Table 1 demonstrates the results of Internet obsession, English learning promotion, Forthcoming synchronization, and intellectual squared descriptive statistics. Internet obsession was significantly negatively correlated with Forthcoming synchronization, intellectual squared, and English learning Promotion, while Forthcoming synchronization, intellectual squared, and English learning promotion were positively correlated.

4.3. The mediating role of Forthcoming Synchronization and Intellectual Squared

Table 2 demonstrates the findings of Internet Obsession significantly negatively predicted English learning Promotion ($\beta = -0.39$, $p < 0.001$), significantly negatively predicted Forthcoming Synchronization ($\beta = -0.52$, $p < 0.001$), significantly negatively predicted Intellectual Squared ($\beta = -0.51$, $p < 0.01$); Forthcoming Synchronization significantly positively predicted Intellectual Squared ($\beta = 0.44$, $p < 0.001$) and significantly positively predicted English learning

Promotion ($\beta = 0.30$, $p < 0.001$); and Intellectual Squared significantly positively predicted English learning Promotion ($\beta = 0.31$, $p < 0.001$).

Table 1: Descriptive Statistics

Variables	M $\pm$ SD	I	II	III
Internet Obsession	0.37 $\pm$ 0.32			
English learning Promotion	3.01 $\pm$ 0.82	-0.33***		
Forthcoming Synchronization	3.43 $\pm$ 0.65	-0.21***	0.37***	
Intellectual Squared	4.91 $\pm$ 2.01	-0.17***	0.51***	0.41***

Note: *** shows the significant level of $p < 0.001$.

The Bootstrap method for inclination rectification percentiles with 5000 resemblance tests was used to examine the relative influence of Approaching Synchronization and Scholarly Squared. As shown in Table 3 and Figure 2, Forthcoming Synchronization and Intellectual Squared mediated the effect between Internet Obsession and English learning Promotion, with an intervening impact of -0.30, or 40.65% of the total impact, in place. Specifically, the intervening influence was made up of abnormal effects from three different paths:

Internet Obsession $\rightarrow$ Forthcoming Synchronization $\rightarrow$ English learning Promotion (effect value of -0.16); (2) Internet Obsession $\rightarrow$ Intellectual Squared $\rightarrow$ English learning Promotion (effect value of -0.12); (3) Internet Obsession $\rightarrow$ Forthcoming Synchronization $\rightarrow$ Intellectual Squared $\rightarrow$ English learning Promotion (effect value of -0.04), and all three pathways had Bootstrap 95% confidence intervals that did not contain a 0 value, and the mediating effects accounted for 18.78%, 15.73% and 6.07%, respectively.

Table 2: Demonstrates the results of Bootstrap and other model

Variables	Forthcoming Synchronization						Intellectual Squared				English learning Promotion								
	β		Boot t		Bootstrap 95% CI		β		Boot t		Bootstrap 95% CI		β		Boot t		Bootstrap 95% CI		
		SE		LLCI	ULCI				SE		LLCI	ULCI				SE		LLCI	ULCI
Constant	3.71	0.05	126.12***	3.5	3.7	4.03	0.32	17.03***	3.56	4.32	1.06	0.16	8.05***	0.82	2.03				
Internet Obsession	-0.52	0.04	-7.02***	-0.82	-0.41	-0.51	0.21	-3.52**	-0.82	-0.18	-0.39	0.11	-5.05***	-0.82	-0.31				
Forthcoming Synchronization						0.44	0.08	5.99***	0.31	0.65	0.34	0.04	8.03***	0.33	0.37				
Intellectual Squared											0.39	0.07	15.07***	0.33	0.34				
R2		0.08					0.03					0.32***							
F		41.07***					27.04***					127.98***							

Note: Significance of P-values are indicated by *** and **** for $p < 0.001$ and $p < 0.01$ levels.

Table 3: Analysis of mediating effects of Forthcoming Synchronization and Intellectual Squared

Paths	Significance	Boots-SE	Bootstrap 95% CI		Virtual or Mediation Value
			Boots-LLCI	Boots-ULCI	
Entire Values	-0.29	0.09	-0.45	-0.31	42.13%
Internet Obsession $\rightarrow$ English learning Promotion	-0.41	0.13	-0.91	-0.43	61.03%
Internet Obsession $\rightarrow$ Forthcoming Synchronization $\rightarrow$ English learning Promotion	-0.19	0.07	-0.32	-0.05	20.05%
Internet Obsession $\rightarrow$ Intellectual Squared $\rightarrow$ English learning Promotion	-0.16	0.05	-0.31	-0.09	16.45%
Internet Obsession $\rightarrow$ Forthcoming Synchronization $\rightarrow$ Intellectual Squared $\rightarrow$ English learning Promotion	-0.08	0.03	-0.06	-0.05	7.04%

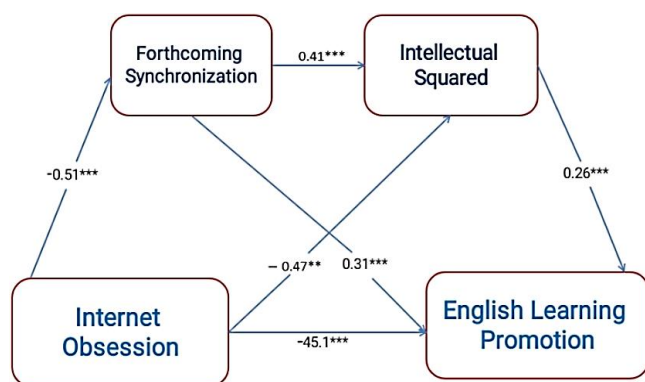


Fig. 2: Associations between Internet obsession and English learning promotion.

5. Conclusions

The study reflects the recently much-discussed concern of excessive use of the internet by youth. The study's investigation of the correlation between internet obsession and English language promotion has found that the internet and the English language are closely connected, and this crucial association has some complications for present-day adolescents because Internet obsession significantly negatively predicts English language promotion. The earlier research on this issue, as reviewed in the present study, has mainly focused on the English language learning efforts of young people and the effects of Internet usage, or the use and role of the Internet in learning English as a second language. However, the present research has combined the topic of Internet obsession and English language learning by exploring the relationship between the impact of the internet and the opportunity to learn and promote the English language. It has, therefore, been found that Internet obsession was significantly negatively correlated with Forthcoming synchronization, intellectual squared, and English learning promotion. At the same time, Forthcoming Synchronization, intellectual squared, and English learning promotion were positively correlated.

5.1. Future Research Suggestions

Researchers should investigate cognitive and psychosocial factors, family and peer influences, and the role of emerging technologies. Socioeconomic factors, online education, and diagnostic tools should also be examined. Additionally, researchers should explore the impact on academic performance, mental health, and gender differences. Public policies and educational programs addressing internet addiction and promoting language proficiency need evaluation. Comparative research with other language skills is valuable for a broader perspective.

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