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Internet addiction and related factors among high school students in Vietnam

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ABSTRACT

Background: Internet addiction has emerged as a widespread concern, particularly among adolescents. Despite this growing issue, there is a scarcity of empirical data regarding the socio-demographic factors of internet addiction among high school students in Vietnam. Therefore, this study aimed to investigate the extent of internet addiction and its associated factors among Vietnamese high school adolescents.

Methods: This analytical cross-sectional study was conducted from February to March 2025 among Vietnamese high school students. Internet addiction was assessed using the Internet Addiction Test – Short Version (IAT-SV), alongside data on demographics, academic performance, and psychosocial factors. Statistical analyses, including independent t-tests, one-way ANOVA, Post-Hoc Test, and multiple linear regression, were applied to explore differences between these variables and internet addiction.

Results: A total of 789 students participated in the study, with a mean IAT-SV score of 28.79 (*SD* = 9.41). Female students (*M* = 29.84) and older students (*M* = 30.24) exhibited significantly higher internet addiction scores. Similar trends were observed among students with a family history of psychological disorders (*M* = 32.48) or smoking addiction (*M* = 31.22). Higher internet addiction scores were also found among students from families with difficult or very difficult economic conditions (*M* = 32.37), those reporting lower levels of happiness (*M* = 33.16), and those who perceived their academic environment negatively (*M* = 33.59). In contrast, lower scores were observed among male and younger students, those without such family histories, from families with moderate economic status, who reported being happy or very happy, and who viewed their academic environment positively. The regression model was statistically significant and accounted for 7.4% of the variance in internet addiction scores. **Conclusion:** Several factors

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are associated with internet addiction. Notably, fostering a supportive academic environment and enhancing students' overall well-being and happiness may contribute to reducing the prevalence of internet addiction. Further research is warranted to explore effective strategies for addressing internet addiction among adolescents.

Key words: internet addiction, happiness level, perception of academic environment, high school students, related factors

Introduction

With the advancement of science and technology, the internet has become an integral part of daily life (1). When used appropriately, it serves as a valuable tool for communication, learning, and entertainment, especially among students who frequently access it both at school and at home (2). However, excessive or uncontrolled internet use can lead to internet addiction. Kurniasanti et al. (2019) defined internet addiction as an individual's inability to control their internet use, a behavioral condition characterized by the inability to control online activities, resulting in distress and functional impairment (3). This condition has been linked to various negative outcomes, including academic decline, social withdrawal, anxiety, and depression (4–10). Therefore, understanding the factors associated with internet addiction is essential for developing effective prevention and intervention strategies (5, 11). Over the past decade, scholarly interest in internet addiction, also referred to as problematic internet use or internet use disorder, has grown significantly (8, 12, 13). Recognized as a behavioral addiction, it shares core features with substance-related disorders, including mood modification, salience, tolerance, withdrawal, conflict, and relapse (14, 15). These behaviors are particularly relevant for high school students, who are in a critical developmental stage and increasingly immersed in digital environments. It is crucial to differentiate internet addiction from related yet distinct phenomena, such as smartphone addiction, which denotes excessive reliance on mobile devices; abstinence symptoms, which entail psychological distress in the absence of internet access; and fear of missing out (FOMO), characterized by compulsive checking behaviors motivated by apprehensions regarding missed online interactions (16–18). Clarifying these distinctions helps ensure that internet addiction is understood as a broader behavioral pattern encompassing various types of online activity, rather than being limited to the use of a specific device or platform. Excessive use of social media (e.g., Facebook®, TikTok®), online gaming, and instant messaging has been linked to problematic internet use and addiction symptoms (19–22). In Vietnam, growing access to digital devices and the internet among adolescents has raised concerns (23, 24). As of 2024, approximately 78% of the Vietnamese population are internet users, with more than 96% of adolescents and young adults owning a smartphone (25). The widespread availability of WIFI, 4G, and emerging 5G networks has further facilitated constant connectivity (26). Most platforms offer free access through mobile data bundles or low-cost promotional subscriptions, encouraging prolonged engagement among adolescents. A study indicates that online gaming and social media, particularly Facebook®, TikTok®, and Instagram®, are the most frequently used platforms and may contribute to internet addiction (27). Despite these concerns, the interaction between individual traits and specific online behaviors among Vietnamese high school students remains underexplored. Numerous studies have shown that male students are generally more prone to internet addiction through gaming and online forums, whereas females are more vulnerable to problematic use of social media and communication platforms (28–32). This sex-based difference highlights the importance of considering both sex and the type of internet activity when assessing addiction risk. Age is also a significant factor, with younger adolescents (12–17 years) more susceptible than older teens or adults (33, 34), likely due to developmental factors such as lower self-regulation, emotional immaturity, and a heightened need for peer connection (35, 36). Residential context further influences internet addiction

risk. Urban adolescents typically have greater access to digital technologies, which may elevate their risk, although findings remain mixed (37, 38). Family structure is another key factor. Adolescents in nuclear families with high parental involvement often report lower levels of addiction due to closer supervision and emotional support (39, 40). However, in nuclear families where parents are emotionally unavailable or overworked, feelings of loneliness can drive adolescents toward excessive internet use (41). Support from grandparents or extended family members may help buffer stress (42), though high expectations in extended households may also lead some adolescents to seek escape through the internet (43). Adolescents with a family history of psychological disorders are at heightened risk for internet addiction (28, 42, 44). Research indicates that genetic predisposition, emotional dysregulation, and a lack of familial support contribute to the use of the internet as a coping mechanism (45). For instance, parental depression or anxiety may lead adolescents to turn to online activities to manage their own emotional distress (28). Family economic status also plays a significant, though complex, role in internet addiction. Adolescents from low-income households may use the internet excessively due to limited recreational options and as an escape from financial or emotional stress, despite restricted access (46). In Vietnam, a large number of individuals depend on mobile data or public internet facilities to engage in gaming and online communication (47). Notably, adolescents from higher-income families have easier access to personal devices and high-speed internet, which may increase screen time and risk of addiction, particularly when parental supervision is lacking (47, 48). These patterns emphasize that despite differences in access, both income groups encounter unique risks influenced by their emotional and behavioral contexts (49). In addition, adolescents with problematic internet use often report lower levels of happiness and life satisfaction (7, 50–52), with studies from Vietnam, South Korea, and China indicating that low happiness is both a cause and effect of internet addiction (48, 53). Promoting emotional well-being and addressing psychological distress are therefore critical for effective prevention and intervention. Although numerous studies have explored the prevalence and associated factors of internet addiction worldwide (8, 34, 37), several gaps remain. Much of the existing research has primarily focused on university students or mixed-age adolescent samples (15, 54), with relatively fewer studies examining high school populations specifically. While individual factors such as personality traits, happiness, and mental health outcomes have been widely explored (7, 53), the combined influence of family-related variables (e.g., family structure, psychological history, economic status) and environmental contexts (e.g., urban vs. rural residence) has received limited attention (38). Moreover, although internet addiction has been extensively studied in countries like China, South Korea, and the United States (21, 37), research in Vietnam remains scarce, particularly studies that systematically investigate multiple associated factors within a unified model (41). To address these gaps, the present study aims to identify key personal and environmental factors associated with internet addiction, including sex, age, happiness level, mental health status, family history of psychological disorders, family structure, economic status, and residential area. By examining these variables, the study seeks to improve understanding of the multifactorial nature of internet addiction among Vietnamese adolescents and to inform the development of more targeted prevention and intervention strategies.

Materials and Methods

Recruitment

This study employed an analytical cross-sectional design among Vietnamese high school students, using a convenience sampling approach. Data were collected from upper secondary students in Can Tho City, Vietnam, between February and March 2025.

Inclusion criteria

The sample consisted of grades 10–12 students from two high schools. Only those able to complete the questionnaire with informed assent and parental consent were included.

Exclusion criteria

Students who had discontinued studies, lacked parental consent, had disabilities or severe psychological

conditions, or submitted incomplete questionnaires were excluded.

Data collection

Prior to participant recruitment, formal meetings were held with the principals of selected high schools in Can Tho City to present the study's objectives and obtain institutional approval for student engagement. Students were invited to participate through printed informational materials distributed during recess and extracurricular periods. To ensure transparency and informed participation, explanatory statements were provided to both students and their guardians ten days in advance of data collection. These documents outlined the study's purpose, methodology, ethical safeguards, and available support services. During the scheduled data collection period, members of the research team visited the selected classrooms at prearranged times. At the beginning of each session, students were reminded of the study's aims, their voluntary participation, the right to withdraw at any time, potential risks, and the informed consent process. Following the collection of signed assent and parental consent forms, students completed the survey, administered via Google Forms, within approximately 20 to 25 minutes.

Measurements

The questionnaire had two main sections. The first collected demographic information, including sex, age, school type, grade, previous semester's academic performance, residence, parental education, family medical history (psychological disorders, substance abuse, addiction), family structure, socioeconomic status, perceived happiness, and academic environment perceptions. The second section assessed internet addiction. Young (2009) developed the 20-item Internet Addiction Test (IAT), based on DSM-IV criteria for pathological gambling, to assess problematic internet use (55). The IAT measures behaviors such as impaired control, neglect of responsibilities, and addiction symptoms, and has been validated across various languages and cultures (11). A shorter 12-item version, the Internet Addiction Test – Short Version (IAT-SV), uses a five-point Likert scale (1 = rarely to 5 = always) with scores ranging from 12 to 60; scores above 36 indicate internet addiction (55). The Vietnamese adaptation of the IAT-SV demonstrated good reliability (Cronbach's $\alpha = 0.87$) and a two-factor structure relating to time management/control loss and social concerns. Factor analysis supported its validity (KMO = 0.60; Bartlett's $\chi^2 = 330.64$, $p < 0.01$), with two factors explaining 64.6% of variance (49). Given increasing internet dependency in Vietnam, the IAT-SV is a useful tool for early detection and intervention in adolescents. This study showed strong internal consistency (Cronbach's $\alpha = 0.875$).

Statistical analyses

Incomplete responses were excluded from analysis. Data were analyzed using IBM® SPSS® Statistics version 20.0. Descriptive statistics summarized frequencies, percentages, means, and standard deviations (*SD*) for socio-demographic variables and IAT-SV scores. Independent t-tests, one-way ANOVA, and multiple linear regression identified associations between internet addiction and variables such as age, sex, school type, residence, parental education, family medical history, family structure, economic status, happiness, and academic environment perception.

Ethical considerations

The study received ethical approval from the Ethics Review Board of the University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City, Vietnam (No. 31-24.1431/GXN-XHNV-ĐN&QLKH) and followed the Helsinki Declaration guidelines. Participation was voluntary, with informed consent obtained from both students and their guardians. Data were collected anonymously, confidentiality was maintained, and participants could withdraw at any time without consequences. The survey was designed to minimize psychological discomfort and academic disruption.

Results

A total of 1,050 questionnaires were distributed to high school students, of which 827 were returned,

resulting in a response rate of 78.76%. After excluding 38 incomplete responses, the final analytic sample consisted of 789 students, yielding a completion rate of 95.40%. The mean age was 16.96 years (*SD* = 0.80), ranging from 16 to 20, with 54.6% females and 45.4% males. Most were aged 16 or 17, and the majority attended non-specialized schools (60.3%). By grade, students were nearly evenly distributed across grades 10 to 12. The mean total score on the Internet Addiction-Short Version Scale among the participants was 28.79 (*SD* = 9.41). Among the individual items, the highest mean score was for "Do you feel that you have accessed the Internet more often than you expect?" (*M* = 3.47, *SD* = 1.19), followed by "Find yourself saying 'just a few more minutes' when online?" (*M* = 3.28, *SD* = 1.30). Participants reported moderate levels for behaviors such as "Neglect household chores to spend more time online" (*M* = 2.61, *SD* = 1.24) and "Try to cut down the amount of time you spend online and fail" (*M* = 2.60, *SD* = 1.33). Lower mean scores were observed for items such as "Snap, yell, or act annoyed if someone bothers you while you are online" (*M* = 1.90, *SD* = 1.00) and "Feel preoccupied with the Internet when offline, or fantasize about being online" (*M* = 1.95, *SD* = 1.06). These findings indicate that while high school students showed a moderate overall tendency toward Internet addiction, certain behaviors, especially difficulty controlling Internet use and spending more time online than intended, were more prominent (Table 1). Analysis of demographic characteristics revealed several significant differences in Internet addiction scores among high school students in Table 2. In this, female students (*M* = 29.84, *SD* = 8.76) had significantly higher Internet addiction scores than male students (*M* = 27.53, *SD* = 9.99; p = 0.001). Regarding age, students aged 18–20 years (*M* = 30.24, *SD* = 9.49) showed higher levels of Internet addiction compared to those aged 17 (*M* = 28.63, *SD* = 8.91) and 16 years old (*M* = 27.71, *SD* = 9.72; p = 0.01). No significant difference was found between students from non-specialized and specialized schools (p = 0.129) or between students living in urban and rural areas (p = 0.433). Students who reported a family medical history of psychological diseases (*M* = 32.48, *SD* = 8.54) or smoking addiction (*M* = 31.22, *SD* = 9.34) had significantly higher Internet addiction scores compared to those without such family histories (p = 0.003 and p = 0.001, respectively). No significant difference was observed between students from nuclear and extended families (p = 0.363). Economic status also influenced Internet addiction: students from families with difficult or very difficult economic conditions (*M* = 32.37, *SD* = 10.50) scored higher than those from medium (*M* = 28.43, *SD* = 9.27) or rich/very rich families (*M* = 28.34, *SD* = 9.14; p = 0.001). Furthermore, levels of happiness were associated with Internet addiction, where students who reported

Table 1. Distribution of Internet Addiction- Short Version Scale *(n* = 789)

Internet Addiction- Short Version Scale Items	***M***	***SD***
Total scale	28.79	9.41
Do you feel that you have accessed to the Internet more often than you expect?	3.47	1.19
Find yourself saying "just a few more minutes" when online?	3.28	1.30
Neglect household chores to spend more time online?	2.61	1.24
Try to cut down the amount of time you spend online and fail	2.60	1.33
Grades or school work suffers because of the amount of time you spend online?	2.10	1.18
Lose sleep due to late night logins	2.26	1.29
Choose to spend more time online over going out with others	2.05	1.12
Try to hide how long you've been online?	2.12	1.35
Snap, yell, or act annoyed if someone bothers you while you are online?	1.90	1.00
Depressed, moody, nervous when you are offline, which goes away once you are back online	2.05	1.13
Feel preoccupied with the Internet when offline, or fantasize about being online	1.95	1.06
Become defensive or secretive when anyone asks you what you do online	2.39	1.26

Table 2. The Differences between Demographic Characteristics and Internet Addiction (n = 789)

Characteristics	***M* ± *SD***	***p***	***MD* ± *SE***	**95% CI**
Sex[a]				
Female	29.84 ± 8.76	**0.001**		
Male	27.53 ± 9.99			
Age brackets[b]				
18-20 years old[1]	30.24 ± 9.49	**0.01**	2.53 ± 0.84[1-3**]	0.51 – 4.55
17 years old[2]	28.63 ± 8.91			
16 years old[3]	27.71 ± 9.72			
Type of school[a]				
Non-specialized school	28.39 ± 9.75	0.129		
Specialized school	29.41 ± 8.84			
Residence[a]				
Urban areas	28.65 ± 9.44	0.433		
Rural areas	26.30 ± 5.85			
Medical history from family members about psychological diseases[a]				
Yes	32.48 ± 8.54	**0.003**		
No	28.53 ± 9.41			
Medical history from family members about smoking addiction[a]				
Yes	31.22 ± 9.34	**0.001**		
No	28.25 ± 9.34			
Family scale[a]				
Nuclear family	28.52 ± 9.32	0.363		
Extended family	29.13 ± 9.51			
Economic status of family[b]				
Difficult and very difficult[1]	32.37 ± 10.50	**0.001**	3.93 ± 1.16[1-2**]	1.15 – 6.72
Medium[2]	28.43 ± 9.27		4.03 ± 1.13[1-3**]	1.31 – 6.74
Rich and very rich[3]	28.34 ± 9.14			
Levels of happiness[b]				
Less and not happy[1]	33.16 ± 11.36	**0.001**	3.76 ± 1.43[1-2*]	0.34 – 7.19
Normal[2]	29.40 ± 9.07		5.25 ± 1.39[1-3**]	1.91 – 8.58
Happy and very happy[3]	27.92 ± 9.23			
Perception of academic environment[b]				
Negative and very negative[1]	33.59 ± 12.83	**< 0.001**	4.20 ± 1.32[1-2**]	1.04 – 7.36
Normal[2]	29.39 ± 9.32		5.93 ± 1.29[1-3***]	2.83 – 9.03
Positive and very positive[3]	27.66 ± 8.64			

[a] Independent sample T-test; [b] One-Way Anova and Bonferroni in Post-Hoc Test; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

being less or not happy (M = 33.16, SD = 11.36) had higher scores than those who felt happy or very happy (M = 27.92, SD = 9.23; p = 0.001). Finally, perception of the academic environment was significantly related to Internet addiction, with students perceiving a negative or very negative academic environment (M = 33.59, SD = 12.83) showing the highest scores (p < 0.001). A multiple linear regression was conducted to examine factors associated with internet addiction scores among high school students in Table 3. The overall model was statistically significant and explained approximately 7.4% of the variance in internet addiction scores. Female students had significantly higher internet addiction scores than male students (B = -1.750, SE = 0.674, t = -2.595, 95% CI = -3.073 to -0.426, p < 0.05). Students attending specialized schools had higher internet addiction scores compared to those in non-specialized schools (B = 1.719, SE = 0.749, t = 2.296, 95% CI = 0.249 - 3.188, p < 0.05). Students with a family history of smoking addiction had significantly higher internet addiction scores (B = -2.738, SE = 0.937, t = -2.923, 95% CI = -4.578 to -0.899, p < 0.01). Students from more economically disadvantaged families had higher levels of internet addiction (B = -1.259, SE = 0.472, t = -2.667, 95% CI = -2.186 to -0.332, p < 0.01). Students who perceived their school environment more negatively had significantly higher internet addiction scores (B = 1.171, SE = 0.408, t = 2.871, 95% CI = 0.370, 1.972, p < 0.01).

Discussion

This study provides an overview of internet addiction among high school students in the Mekong Delta region of Vietnam, highlighting both the overall distribution of internet addiction and the factors associated with internet addiction. The findings suggest that although internet use is prevalent among students, it has not reached a severe or clinically pathological level in the majority of cases. Several individual and contextual factors, including sex, age, family background, economic status, happiness level, and perception of the academic environment, were found to be significantly related to internet addiction. These results align with previous studies emphasizing that adolescent internet addiction arises from a complex interplay of personal, familial, and school-related factors (56, 57). To contextualize these associations, it is important to examine the overall level and key features of internet addiction among the surveyed students.

Internet addiction

The mean total score on the IAT-SV among the surveyed high school students was 28.79, indicating a moderate tendency toward problematic internet use. This relatively high mean score suggests that many adolescents in the sample are at risk of developing

Table 3. Multiple Linear Regression between Internet Addiction and Related Factors (n = 789)

Internet Addiction	B	Standard Error	t	Adjusted R^2	95% CI
Sex (Female – Male)	-1.750	0.674	-2.595*	0.074	-3.073 – -0.426
Type of school (Non-specialized –Specialized school)	1.719	0.749	2.296*		0.249 – 3.188
Medical family of smoking addiction (Yes – No)	-2.738	0.937	-2.923**		-4.578 – -0.899
Economic status (Difficult and very difficult – Medium – Rich and very rich)	-1.259	0.472	-2.667**		-2.186 – -0.332
Perception of school environment (Positive and very positive – Normal – Negative and very negative)	1.171	0.408	2.871**		0.370 - 1.972

B = Unstandardized Coefficients; R^2 = R-square; * p < 0.05; ** p < 0.01.

unhealthy internet use patterns, even if they do not yet meet the threshold for clinical internet addiction. Compared to previous studies, this finding is consistent with those reported in other countries among adolescents. For instance, the large multi-country meta-analysis of Cheng & Li (2014) found the average internet addiction score across adolescents globally to fall in the moderate range, with slight regional variations, where Asian countries generally had higher scores than Western countries (58). This suggests a potential slight increase in internet addiction severity over recent years, possibly reflecting the rapid expansion of digital device access and the lingering effects of online schooling during and after the COVID-19 pandemic. When considering individual item responses, the results further illuminate the specific aspects of internet use contributing to elevated overall scores. Students reported the highest mean score for the item "Do you feel that you have accessed the internet more often than you expect?", followed by "Find yourself saying 'just a few more minutes' when online". These responses suggest that time management difficulties and cognitive preoccupation with the internet are the most prominent features of problematic use among students. Similar patterns were reported by Su et al. (2019), where the tendency to underestimate online time was a key marker of internet addiction among adolescents (31). Conversely, lower mean scores were found for emotional and behavioral symptoms such as "Nap, yell, or act annoyed if someone bothers you while you are online" and "Feel preoccupied with the internet when offline," and "Grades or school work suffers because of the amount of time you spend online". This suggests that, while students may frequently overuse the internet, the emotional and functional impairments associated with addiction may not yet be fully developed in this population. Such findings are consistent with the early or moderate stages of internet addiction, where compulsive engagement is evident but its impact on daily functioning remains limited (59). Interestingly, the relatively low score for academic impairment contrasts with studies from Western countries, such as in the United States and Europe, where declines in academic performance often emerge as early warning signs of excessive internet use (33).

Differences between demographic characteristics and internet addiction

In this study, female students reported significantly higher internet addiction scores than male students. This result is consistent with previous research by Durkee et al. (2012), who found that adolescent girls in several European countries were more vulnerable to problematic internet use compared to boys (60). In contrast, some studies, including those by Cao & Su (2006), Su et al. (2019) in China, and Nguyen et al. (2021) in Vietnam, have reported higher internet addiction rates among males (31, 43, 61). This discrepancy might be explained by differences in types of online activities preferred by sex, such as social networking for females and gaming for males (15). Regarding age, older students (18–20 years) exhibited higher internet addiction levels than younger ones, aligning with the findings of Kormas et al. (2011) and Tran et al. (2022), who showed that older adolescents tend to have more autonomy, access to devices, and time online, increasing their risk for internet addiction (41, 62). This could also be linked to academic stressors related to university entrance exams, which are particularly competitive in Vietnam (63, 64). No significant difference was found between students from specialized and non-specialized schools or between urban and rural residents. This finding contrasts with the earlier study of Smahel et al. (2012), which suggested urban adolescents were more at risk due to easier internet access (65). This can be explained in the context of increasing urbanization in the Mekong Delta region. This strong development has helped students in all regions have equal access to social networks. In Vietnam, most areas are covered by the internet. Therefore, students' geographic location does not appear to affect their ability to access the internet. In addition, students in specialized and non-specialized schools do not show significant differences in the level of internet addiction. This is understandable because high school students are often under a lot of pressure in studying, leading them to turn to social networks and games as a way to relax and reduce stress. Family medical history was found to be a significant factor. In particular, students with family members who had psychological disorders or smoking addiction had higher internet addiction scores. This result supports previous findings by Lam (2014),

emphasizing that genetic vulnerabilities and shared environmental factors contribute to addictive behaviors, including internet addiction (66). Economic status also played a role. Specifically, students from families with difficult or very difficult economic conditions had higher internet addiction scores compared to those from medium or wealthy backgrounds. This finding is similar to results reported by Mak et al. (2014) in Hong Kong, suggesting that economic hardship may lead adolescents to seek escape through excessive internet use (67). In terms of psychological factors, students who reported feeling "less happy" or "not happy" exhibited the highest internet addiction scores. This supports the theory that lower subjective well-being increases vulnerability to internet addiction (68). It also mirrors findings by Nguyen et al. (2023) in Vietnamese high school students, who reported a significant association between unhappiness and problematic internet use (27). Finally, perception of the academic environment was strongly associated with internet addiction. Students who perceived their academic environment as negative reported significantly higher internet addiction scores. This result resonates with studies by Tokunaga (2017), indicating that school stress and dissatisfaction may drive adolescents to seek relief through the internet (69). Awareness of internet addiction and access to mental health support in schools remain limited, pointing to the urgent need for prevention programs and further research tailored to this population. Recent studies indicate a notable prevalence of internet addiction among Vietnamese adolescents. For instance, a study conducted in the southern area of Vietnam during the COVID-19 pandemic reported that approximately 32.7% of adolescents exhibited at least three indicators of internet addiction (27). Another study found that 21.2% of young Vietnamese suffered from internet addiction, with those affected experiencing significant impairments in daily functioning and mental health (49). These findings underscore the growing concern of internet addiction among Vietnamese youths and the need for targeted interventions.

Strengths and Limitations

This study has several strengths. First, it is one of the few studies conducted in Vietnam that investigates internet addiction among high school students using a relatively large sample size (n = 789) from both specialized and non-specialized schools. This enhances the generalizability of the findings to adolescents in the southern region of Vietnam. Additionally, this study comprehensively explored multiple demographic, familial, and psychological factors, offering a broader understanding of the correlates of internet addiction in adolescents. Despite the valuable insights, this study has several limitations. First, the study employed a cross-sectional design, which limits the ability to infer causal relationships between internet addiction and associated factors. Second, the use of self-reported questionnaires may introduce social desirability bias or recall bias, potentially affecting the accuracy of the responses. Third, the study sample was limited to students in specific areas of southern Vietnam, so the results may not be fully generalizable to adolescents in other regions. In addition, information on other behavioral addictions, such as substance use or smoking, was not collected. The study also lacked standardized psychiatric measures assessing sleep, anxiety, or depression, which may act as causes or effects of internet addiction. Finally, potential factors such as parental monitoring, peer influence, and personality traits were not assessed and could be considered in future studies.

Conclusions

The study found that internet addiction among Vietnamese adolescents is associated by multiple factors, including female, older age, family history of addiction, lower economic status, reduced happiness, and negative academic perceptions. These results suggest that both personal vulnerabilities and environmental stressors contribute to problematic internet use, highlighting the need for targeted, context-specific prevention and intervention strategies.

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