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Prevalence and Influencing Factors of Internet Addiction among University Students in China

Chunrong He[1] and Eksiri Niyomsilp[2]

Abstract

This article aimed to explore the influencing factors of university students' Internet addiction and to promote university students to use the Internet scientifically and reasonably. In this study, qualitative research was conducted first. A total of 20 subjects were interviewed face-to-face. Based on the results of the qualitative study, a questionnaire was designed. After that, 419 data were collected and the SEM method was used to evaluate and confirm the results. The results showed that negative emotions played a partial mediating role between stressful life events and Internet addiction. Coping style had a moderating effect on the relationship between stressful life events and negative emotions in the mediation model, and also had a moderating effect on the relationship between negative emotions and Internet addiction, and also had a moderating effect on the relationship between stressful life events and Internet addiction. Self-control played a partial mediating role between the influence of others and Internet addiction. Therefore, it also recommended among others that university students, university educators, social institutions and governments should pay more attention to Internet addiction, effectively prevent them from using the Internet too much, so as to provide guidance for university students to improve the quality of Internet life and mental health.

Keywords: Influencing Factors, Internet Addiction, University Students

Introduction

At present, the Internet has become an indispensable part of our daily life. It is a useful tool can enable us to obtain information and resources. However, issues

[1] PHD Management, School of Management, Shinawatra University E-Mail: Yuyingtang@outlook.co.th
[2] Dr. Management, School of Management, Shinawatra University

related to Internet use are also receiving increasing attention. Internet addiction refers to excessive or poorly controlled Internet use, which can lead to significant social and psychological impairment (Shaw M, 2008). It has been shown to be associated with depression, aggressive behavior, psychiatric symptoms and interpersonal problems in adolescents (Ko CH, 2009; Kawabe K, 2016; Tateno M, 2019). The largest potential group of Internet addicts is university students. After entering the university, university students are more likely to be exposed to Internet activities than before, and the risk of Internet addiction is higher, which is easy to induce Internet addiction (Li YY, 2021). According to the study, 11% of Chinese university students had an Internet addiction. Over the last three years, there has been a slight upward trend in the rate, which eventually stabilized (Shao YJ, 2018).

While Internet addiction is not yet recognized as a disorder, new diagnostic criteria for Internet gaming disorder, a subtype of Internet addiction, have been included and defined as a mental disorder in the DSM-V (the 5th revision of the Diagnostic and Statistical Manual of Mental Disorders) and ICD-11 (the 11th revision of the International Classification of Diseases). This indicates that there is a growing international attention to the Internet (Ndasauka Y, 2019). Due to the severity of the current Internet addiction crisis, people from all walks of life are becoming concerned. This study actively explores the influencing factors of Internet addiction in university students, and provides a basis for effective prevention and treatment of Internet addiction in university students. At present, the distribution of Internet addiction among Chinese adolescents with different occupations is shown in Figure 1.

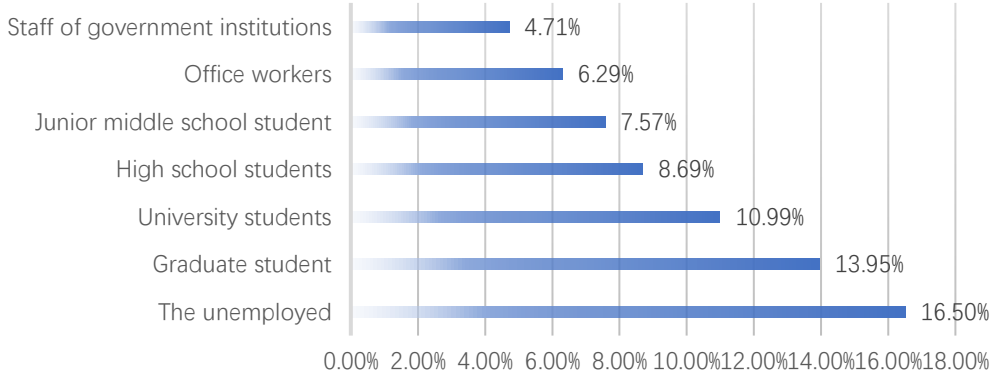

Figure 1 Distribution of Internet Addiction among Adolescents in Different Occupations

Source: Data from the Official Website of China Internet Network Information Center.

Research objective

This article aimed to explore the influencing factors of university students' Internet addiction behavior and analyze the direct effects of stressful life events and influence of others on Internet addiction behavior of university students, the indirect effects through negative emotions and self-control, and the moderating effects of coping style.

Hypotheses of research

The following 11 hypotheses are presented in this study based on an analysis of earlier research and the characteristics of Internet addiction in university students.

H1: There is a significant positive effect of stressful life events on negative emotion.

H2: There is a significant positive effect of negative emotion on Internet addiction.

H3: There is a significant positive effect of stressful life events on Internet addiction.

H4: There is a significant negative effect of influence of others on self-control.

H5: There is a significant negative effect of self-control on Internet addiction.

H6: There is a significant positive effect of influence of others on Internet addiction.

H7: Coping styles moderate the relationship between stressful life events and negative emotion.

H8: Coping styles moderate the relationship between negative emotion and Internet addiction.

H9: Coping styles moderate the relationship between stressful life events and Internet addiction.

H10: Negative emotions mediate the relationship between stressful life events and Internet addiction.

H11: Self-control mediate the relationship between influence of others and Internet addiction.

Conceptual Framework

As shown in Figure 2, the conceptual framework refers to the research on university students' Internet addiction by Li BoRan (2022), Wang Yan (2018) and Yan Qiong (2022).

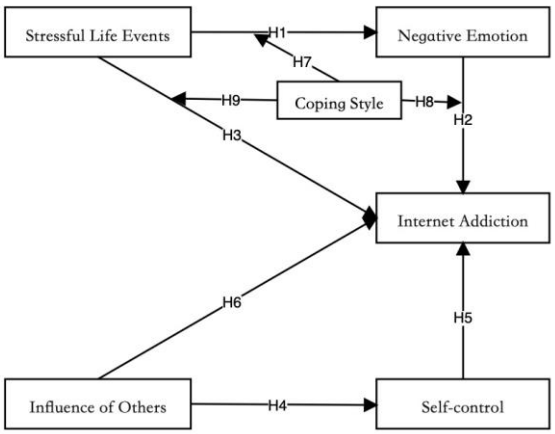

Figure 2 Conceptual Framework

The conceptual model included two independent variables of stressful life events and influence of others; one dependent variable was Internet addiction; two mediating variables, negative emotion and self-control; and one moderating variable was coping style.

Literature Review

By combing the relevant research and theory on Internet addiction of university students at home and abroad, the basic background of this study is clarified, and the theoretical foundation for subsequent research is laid.

The concept of Internet addiction and related research. Internet addiction is a new type of addiction with the wide use of personal computer and the rapid development of the Internet. Internet addiction was described by Zhou Qian et al. as a persistent or recurrent condition of addiction brought on by repeated Internet use and an overwhelming need to use it again (Zhou Qian, 2021). At present, Chinese scholars generally agree that there are seven core symptoms of Internet addiction, such as: salience, tolerance, withdrawal Symptoms, conflict, relapse, mood alteration, craving (Lei Li, 2007). Zhang Yawen found that introversion and neuroticism had good predictive effects on Internet addiction (Zhang Yawen, 2020). Wang Jun found that self-esteem and loneliness could positively predict Internet addiction, and self-esteem could indirectly predict Internet addiction through loneliness (Wang Jun, 2016).

Existing studies on stressful life events have shown that stressful life events are associated with addictive behaviors later in life (Li BoRan, 2022). Empirical studies have shown that stressful life events may prompt individuals to seek escapism, and the Internet provides a virtual space where individuals can temporarily forget the stresses of life. The use of escape mechanisms may become the starting point for Internet addiction, which in turn leads to the development of Internet addiction (Wang Zhengyi, 2020). It can be seen that the likelihood of Internet addiction among students increases with the increase of stressful life events.

Research Methodology

1. Questionnaire development process

The initial version of the questionnaire had two sources of items: literature review and in-depth interviews. The interview outline was designed based on a review of the available literature. According to the research results of Internet addiction theory and practice of university students at home and abroad, an interview outline was formed. The interview outline is shown in Table 1. According to the interview outline, 20 respondents were interviewed in depth in this study. The formal interview outline had five questions. All questions were open-ended, and the content and order of the questions were fixed. However, the questions could be slightly adjusted according to the responses of the respondents to obtain more accurate answers.

The qualitative materials were analyzed using NVivo software. 68 open codes, 28 axial codes, and 6 selective codes were extracted, and these codes were used to construct a conceptual model of the influencing factors of Internet addiction in university students. This model also summarized the key dimensions of influencing factors of university students' Internet addiction. After that, questionnaire survey method was used in the quantitative research stage. In the quantitative research, first of all, the variables in the conceptual model were determined, and the initial questionnaire was designed according to the conceptual model with reference to relevant literature. Then, all items of the scale were sent to five experts for evaluation before the formal questionnaire was formed, and Item-Objective Congruence (IOC) test was conducted. All experts have more than 5 years of experience in the field of

psychology. According to the suggestions, the author further modified and adjusted the questionnaire entries, and avoided misunderstanding or ambiguity. First, 53 university students were predicted, and the preliminary reliability and validity test and exploratory factor analysis were carried out on the collected prediction data to determine the final formal scale.

Finally, the author compiled a 28-item questionnaire on the influencing factors of Internet addiction in university students. There are three primary sections to this questionnaire: The first part is the guide language. In order to grab respondents' attention and gain their cooperation and support, this section primarily presents the investigation's content, goal, and significance as well as the needs and goals of the participants. The second part contains the respondent demographic information, such as gender, grade level, and frequency and duration of Internet use. The third part is the questionnaire of influencing factors of Internet addiction among university students. It mainly measures the user's stressful life events, influence of others, negative emotion, self-control, coping style, Internet addiction. During the measurement, Likert's 5-point scoring method was adopted, and 5 options were set for each measurement item, including "strongly disagree", "disagree", "generally", "agree" and "strongly agree". The respondents checked the corresponding options according to their real feelings and real situations.

Table 1 Interview outline

NO	Interview Questions	Source
1	When did you start surfing the Internet for a long time?	Bai Yu, 2005
2	What do you think are the manifestations of Internet addiction?	Li Chaomin, 2012
3	Who do you think is more likely to become an Internet addict?	Xie Xiaojuan, 2022
4	Why do you think Internet addiction occurs?	Bai Yu, 2005
5	How to prevent university students from Internet addiction from individual, family, school and society?	Li Chaomin, 2012

Note. Adopted from Bai Yu, 2005; Li Chaomin, 2012 and Xie Xiaojuan, 2022

2. Population and samples of this research

The target population of this study is all university students in China. Stratified random sampling is used in the sample collection process. Four universities in China were selected for a formal questionnaire survey. With a 95% confidential interval, Yamane's (1973) calculation of sample size yielded 440 samples. According to the weight of the four universities, the sample size of the four universities is 80 students in Shanxi University, 90 students in Chongqing University, 130 students in Henan University and 140 students in Shandong University. A total of 440 questionnaires were collected for this study, and questionnaire data were gathered online using questionnaire star. Among them, 21 questionnaires with the tendency of not answering seriously or incomplete were deleted, and 419 valid questionnaires were obtained. The effective recovery rate was 95.23%.

3. Data collection

The author applied stratified random sampling to collect the data from the samples.

4. Data analysis

In this study, SPSS and AMOS were used for quantitative analysis of data obtained from formal tests, including descriptive statistics, reliability and validity test, confirmatory factor analysis (CFA), and structural Equation Model (SEM).

Result

1. Reliability and validity analysis of Pre-testing

Before the prediction test, IOC test was performed in this study. The results of the IOC test show that the IOC index of the questions is above 0.6, and the IOC index of the final questionnaire meets the acceptable standard. Therefore, the content validity of the measured items can be guaranteed. In this study, the Cronbach's α coefficient of stressful life events was 0.918, the Cronbach's α coefficient of influence of others dimension was 0.842, the Cronbach's α coefficient of negative emotion dimension was 0.795, and the Cronbach's α coefficient of self-control dimension was 0.863, Cronbach's α coefficient of coping style dimension was 0.955 and 0.872 for the Internet addiction dimension. It can be concluded that the study data has a reliability

coefficient value greater than 0.7, indicating a high level of reliability quality that makes the data suitable for additional analysis.

2. Exploratory Factor Analysis (EFA) of Pre-testing

Exploratory factor analysis was used to test the structural validity of the questionnaire. Firstly, KMO test and Bartlett sphericity test were performed on the collected predictive data. The results showed that the KMO value was greater than 0.7 and the P-value of Bartlett spherical test was less than 0.001, indicating that the data were suitable for exploratory factor analysis. Principal component analysis was used to extract the factors with eigenvalues ≥1. The maximum variance method was used to rotate the factor loading matrix orthogonally to obtain the rotated matrix. A factor load of less than 0.4 was excluded, and topics that appeared in the same column in the final factor arrangement were categorized as belonging to the same category. A total of 6 common factors were extracted, and the cumulative variance contribution rate was 75.609%, which was greater than 60%, indicating that the extracted factors had a good effect. See Table 2 for details. A formal questionnaire consisting of 28 items and 6 dimensions (stressful life events 6 questions, negative emotion 4 questions, coping style 7 questions, self-control 3 questions, influence of others 3 questions, Internet addiction 5 questions.) was established.

Table 2 Table of Factor Load Coefficients after Rotation

Items	Factor loading						Communalities
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	
IA1	0.177	0.203	**0.723**	0.058	0.300	0.105	0.699
IA2	0.309	0.113	**0.526**	0.222	0.210	0.392	0.632
IA3	0.078	0.055	**0.759**	0.161	0.240	0.293	0.755
IA4	0.297	0.238	**0.676**	0.047	0.115	0.365	0.75
IA5	0.225	0.174	**0.736**	0.262	0.126	-0.006	0.707
IO1	0.194	0.077	0.185	0.239	**0.783**	0.104	0.759
IO2	0.282	0.036	0.250	-0.065	**0.796**	0.166	0.810

Table 2 Table of Factor Load Coefficients after Rotation

Items	Factor loading						Communalities
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	
IO3	0.214	0.077	0.260	0.046	**0.740**	0.182	0.702
NE1	-0.023	0.351	0.302	**0.692**	-0.114	0.092	0.716
NE2	0.129	0.175	0.051	**0.681**	0.275	0.227	0.641
NE3	-0.018	0.034	0.113	**0.790**	0.105	0.032	0.651
NE4	0.108	0.329	0.099	**0.724**	-0.036	0.095	0.665
SC1	-0.212	-0.275	-0.206	-0.270	-0.387	**-0.606**	0.752
SC2	-0.280	-0.224	-0.244	-0.098	-0.132	**-0.781**	0.825
SC3	-0.247	-0.184	-0.276	-0.179	-0.183	**-0.73**	0.769
CS1	**0.807**	0.162	0.200	0.041	0.179	0.123	0.767
CS2	**0.836**	0.173	-0.001	0.074	0.165	0.179	0.794
CS3	**0.837**	0.130	0.199	0.142	0.164	0.140	0.823
CS4	**0.866**	0.269	0.163	0.096	0.047	0.114	0.873
CS5	**0.773**	0.204	0.145	0.012	0.140	0.372	0.818
CS6	**0.862**	0.048	0.228	-0.017	0.098	-0.095	0.816
CS7	**0.844**	0.149	0.061	0.005	0.199	0.220	0.826
SLE1	0.158	**0.784**	-0.024	0.322	0.303	0.187	0.870
SLE2	0.139	**0.843**	0.136	0.161	0.065	0.257	0.844
SLE3	0.295	**0.667**	0.176	0.220	0.163	0.017	0.638
SLE4	0.310	**0.798**	0.029	0.099	-0.190	0.084	0.787
SLE5	0.276	**0.683**	0.167	0.309	0.108	0.064	0.682
SLE6	0.005	**0.848**	0.252	0.018	0.037	0.129	0.801

Note. Adapted from software SPSS

3. Demographic description of formal questionnaire

279 men made up 66.59% of the gender distribution, while 140 women made up 33.41%. The age group mainly focused on 19-22 years old, accounting for

68.97%, followed by 19 years old, accounting for 23.63%. The overall distribution of grades is more even. The proportion of freshmen is the highest, reaching 27.92%. Sophomore students accounted for 23.39%. The proportion of juniors is 25.06%. The proportion of senior students is 23.63%. In terms of family residence, city students accounted for 51.31% and rural students accounted for 48.69%. In terms of time spent online per day, 3-4 hours accounted for 30.79%, followed by 7 hours above, accounted for 22.67%, then 1-2 hours accounted for 21%, and 5-6 hours accounted for 13.38%. From the perspective of playing online games every day, nearly 40% of the samples are 3-4 hours. A further 31.5% of the samples were 1-2 hours. More than 50% of the sample chose less than 2 hours of online learning every day. The distribution of weekly Internet frequency showed that most of the samples chose to "go online as soon as possible", the proportion was 28.39%.

4. Reliability tests of formal questionnaires

The Cronbach's α coefficient of stressful life events was 0.915 in this study; the Cronbach's α coefficient of influence of others was 0.808; the Cronbach's α coefficient of negative emotion was 0.837; the Cronbach's α coefficient of self-control was 0.856; the Cronbach's α coefficient of coping style was 0.941; and the Cronbach's α coefficient of Internet addiction was 0.863. The formal questionnaire's reliability coefficients are all greater than 0.7, indicating that the research data's reliability is of high quality.

5. Confirmatory Factor Analysis of Data (CFA)

A statistical method called Confirmatory Factor Analysis (CFA) is employed to examine the viability of a proposed factor structure or model. The fitting indexes of this questionnaire were χ^2/df =1.227, RMSEA=0.023, GFI=0.936, CFI=0.989, NFI=0.945, TLI=0.988. The model appears to have had a good fit since all of its fitting indexes came close to meeting the standard. CFA results of the data obtained from the formal investigation with 419 validate questionnaires were shown in Figure 3.

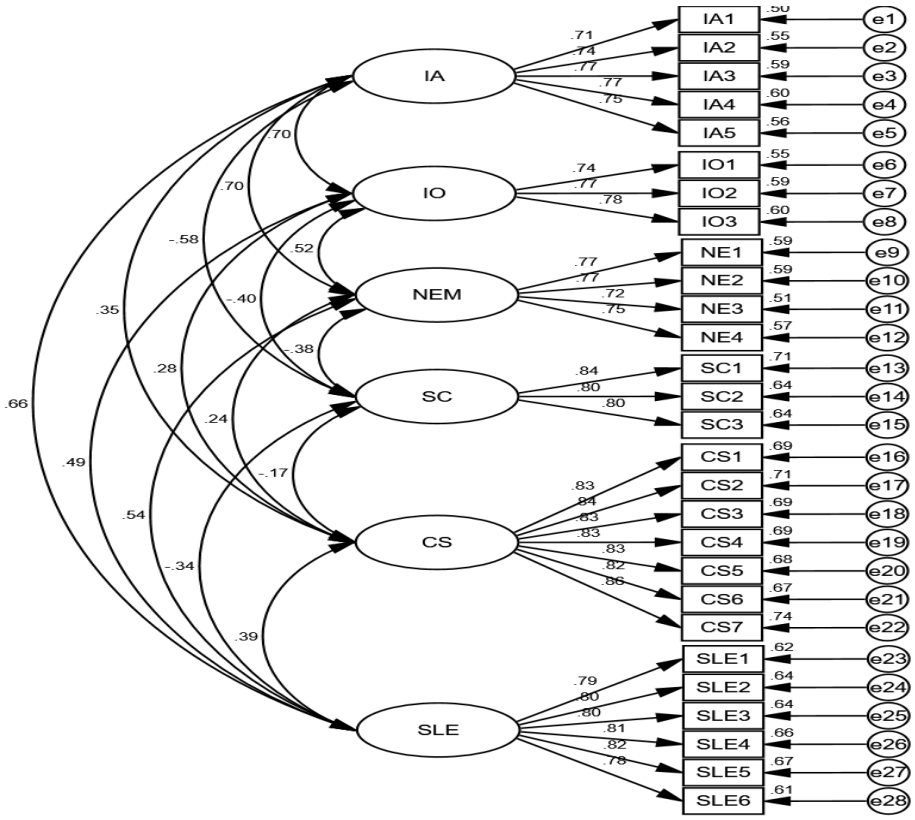

Figure 3 Figure of the confirmatory factor analysis model for the questionnaire

AVE values greater than 0.5 and CR values greater than 0.7 in this analysis's data indicate good convergent validity. In Table 3, the bolded numbers represent the AVE square root values. All factors have AVE square root values greater than the maximum absolute value of the correlation coefficient between factors, indicating good discriminant validity.

Table 3 Latent Variables Convergent and Discriminative Validity Test

Variables	CR	AVE	IA	IO	NEM	SC	CS	SLE
IA	0.863	0.559	**0.747**					
IO	0.808	0.584	0.699***	**0.764**				
NEM	0.838	0.563	0.699***	0.522***	**0.751**			
SC	0.856	0.665	-0.576***	-0.396***	-0.383***	**0.816**		
CS	0.941	0.697	0.354***	0.281***	0.242***	-0.174**	**0.835**	
SLE	0.915	0.641	0.660***	0.489***	0.537***	-0.341***	0.390***	**0.801**

Note. Adapted from Amos software

6. Structural Equation Model of Data (SEM)

The model fit index was used to assess how well the SEM model fit the actual data. The fitting indexes of this questionnaire were χ^2/df =1.381, RMSEA=0.03, GFI=0.947, CFI=0.985， NFI=0.949， TLI=0.983. Most of the model fitting indexes reached the standard, indicating that the model had good fit. The structural equation model of this study is shown in Figure 4.

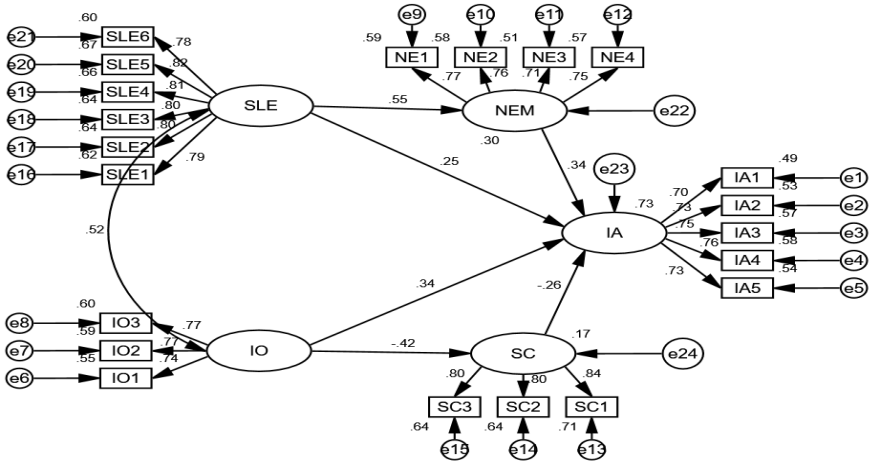

Figure 4 Structural Equation Model Diagram

Mediation Effect. The mediating effect of negative emotions between stressful life events and Internet addiction showed that the regression coefficient of stressful life events on Internet addiction was 0.351[95%CI = (0.228, 0.486), p< 0.001], which was the total effect. The regression coefficient of stressful life events on negative emotions was 0.521, and the regression coefficient of negative emotions on Internet addiction was 0.286. The mediating effect was 0.149[95%CI = (0.079, 0.259), p< 0.001]. The 95% confidence interval did not include 0. This suggested that the mediation effect was valid. The mediating effect accounted for 42.45% of the total effect. After controlling the mediating variable negative emotion, the regression coefficient of stressful life events on Internet addiction was 0.201[95%CI = (0.087, 0.345), p< 0.01], which was a direct effect. Of the total effect, 57.26% was accounted for by the direct effect. It is suggested that negative emotions play a partial mediating role in the relationship between stressful life events and Internet addiction.

The mediating effect of self-control between influence of others and Internet addiction showed that the regression coefficient of influence of others on Internet addiction was 0.411[95% CI= (0.252, 0.583), p< 0.001], which was the total effect. The regression coefficient of influence of others on self-control was -0.530, and the regression coefficient of self-control on Internet addiction was -0.186. The mediating effect was 0.098[95%CI = (0.054, 0.169), p< 0.001]. The 95% confidence interval did not include 0, indicating that the mediation effect was valid. The mediating effect accounted for 23.84% of the total effect. After controlling the mediating variable self-control, the regression coefficient of influence of others on Internet addiction was 0.313[95%CI = (0.161, 0.485), p< 0.001], which was a direct effect. The direct effect accounted for 76.16 % of the total effect. It is suggested that self-control play a partial mediating role in the relationship between influence of others and Internet addiction. Moderating Effect Model Test of Coping Style. The moderating effect of coping style on the relationship between stressful life events and negative emotions. Stressful life events had a significant positive predictive effect on negative emotions (**B**=0.445). The interaction between stressful life events and coping style had a significant positive predictive effect on negative emotion (**B**=0.133). The results indicated that coping style could moderate the predictive effect of stressful life events on negative emotions. This result shows that the interaction term between SLE and CS is significant (t=3.931, p=0.000< 0.05). This means that when SLE affects NE, the moderating variable has a significant difference in the magnitude of influence at different levels. You can see it in Figure 5.

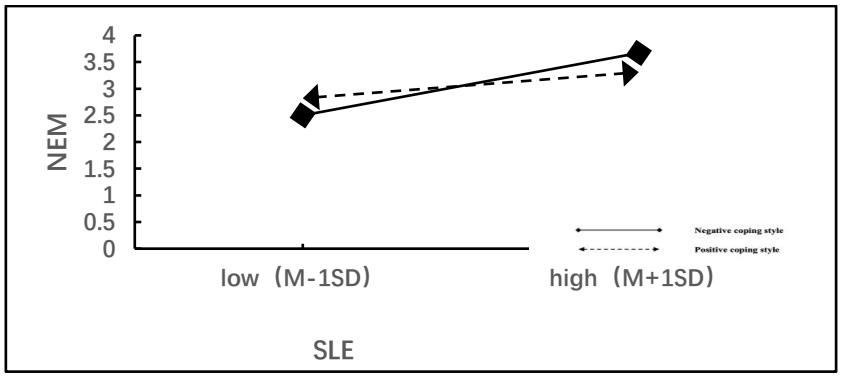

Figure 5 Simple Slope Plot of the Moderating Effect of Coping Style on the Relationship Between Stressful Life Events and Negative Emotion

The moderating effect of coping style on the relationship between stressful life events and Internet addiction. Stressful life events had a significant positive predictive effect on Internet addiction (B=0.534). The interaction between stressful life events and coping style had a significant positive predictive effect on Internet addiction (B=0.196). The results suggested that coping style may moderate the predictive effect of stressful life events on Internet addiction. This result shows that the interaction term between SLE and CS is significant (t=6.695, p=0.000< 0.05). This means that when SLE affects IA, the moderating variable has a significant difference in the magnitude of influence at different levels. You can see it in Figure 6.

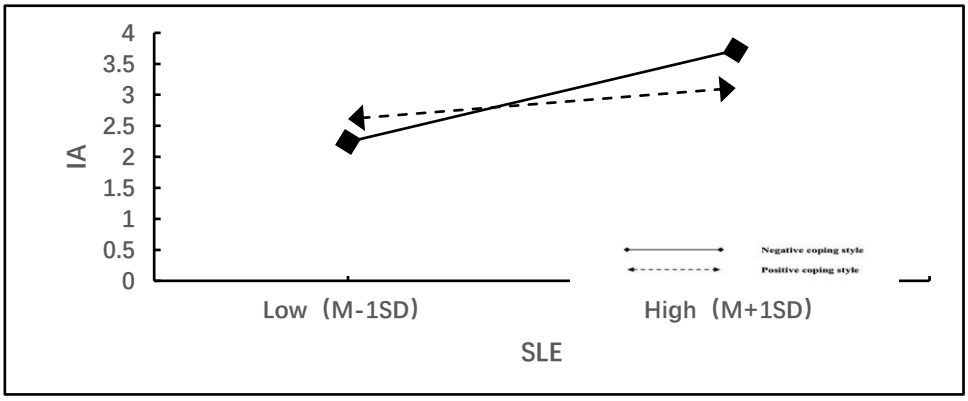

Figure 6 Simple Slope Plot of the Moderating Effect of Coping Style on the Relationship Between Stressful Life Events and Internet Addiction

The moderating effect of coping style on the relationship between negative emotions and Internet addiction. Negative emotion had a significant positive predictive effect on Internet addiction (B=0.586). The interaction between negative emotions and coping style had a significant positive predictive effect on Internet addiction (B=0.179). The results indicated that coping style could moderate the predictive effect of negative emotions on Internet addiction. This result shows that the interaction term between NEM and CS is significant (t=5.875, p=0.000< 0.05). This means that when affects IA, the moderating variable has a significant difference in the magnitude of influence at different levels. You can see it in Figure 7.

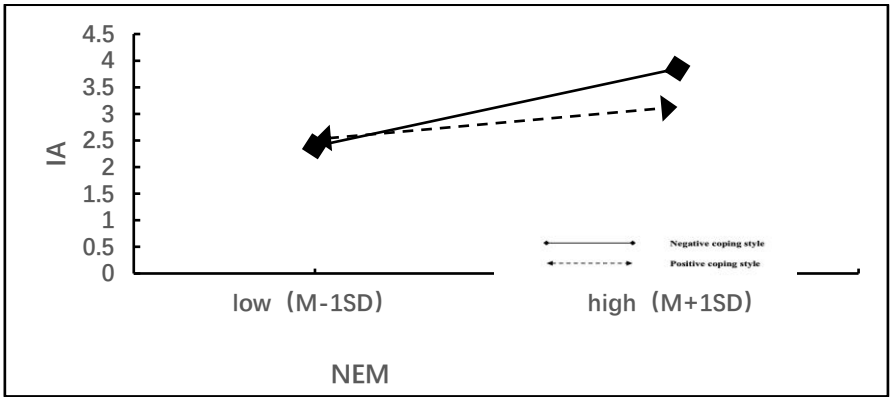

Figure 7 Simple Slope Plot of the Moderating Effect of Coping Style on the Relationship Between Negative Emotions and Internet Addiction

Conclusion and Discussion

1. Influencing factors of university students' Internet addiction. The results of this study showed that stressful life events, influence of others, negative emotion, and self-control were important influencing factors of Internet addiction in university students, which was basically consistent with previous studies (Wang Zhengyi, 2020; Ren Xinyu,2017; Wang Yan, 2018; Liu Lu, 2023). Internet addiction of university students is a complex problem, and its formation is affected by both internal and external factors. Internal factors mainly involve individual traits and psychological characteristics, while external factors include social environment, family, peer pressure, academic pressure and other aspects (Xie Xiaojuan, 2022). In this study, stressful life events and influence of others were external causes, while negative emotion, self-control and coping style were internal causes.

2. The relationship between stressful life events, negative emotions, influence of others, self-control and Internet addiction in university students. The results of this study show that negative emotions play a partial mediating role between stressful life events and Internet addiction. When university students face stressful life events, they may produce various emotions, including positive emotions and negative emotions. If these emotions are negative emotions, such as anxiety, depression, loneliness, depression, etc. These emotions will prompt them to seek ways to relieve, and the Internet becomes an outlet to escape these emotions for a while. Therefore, when university students face stressful life events, negative emotions are a key mediating

factor leading to Internet addiction (Wang Zhengyi, 2020). Self-control plays a partial mediating role between the influence of others and Internet addiction. Individual self-control plays a key role in combating the external temptations of Internet addiction. When the surrounding environment has an inducing effect on university students, individuals with good self-control ability are more able to resist these temptations and control their Internet use behavior (Ren Xinyu, 2017).

3.The moderating effect of coping style on Internet addiction behavior of university students. The results suggest that coping styles modulate the direct path of influence of stressful life events on Internet addiction. At the same time, it also moderates the mediating pathway of the influence of stressful life events on Internet addiction through negative emotions, and plays a moderating role in both the first and second half pathways of the mediating model. Individuals with more positive coping styles have less impact of stressful life events on Internet addiction, which was also obtained the same conclusion in previous studies (Xiao Yiling, 2019). Individuals who adopt more negative coping styles have more impact on negative emotions caused by stressful life events. Individuals who adopt more positive coping styles have less impact of stressful life events on negative emotions, which has also been concluded in previous studies (Tang Haibo, 2013). The more negative coping styles, the greater the impact of negative emotions on Internet addiction. Individuals who adopt more positive coping styles have less impact of negative emotions on Internet addiction, which was also obtained the same conclusion in previous studies (Sun Jing, 2009).

Recommendation

Based on the above research conclusions, some suggestions are put forward for university students, university educators, social institutions and governments.

Recommendations for university students. In order to prevent and alleviate the addiction of university students to the Internet, the author puts forward the following suggestions from the perspective of students themselves. University students can improve their self-regulation ability of stress, learn their emotional management skills, cultivate positive ways of coping with problems, and improve their self-control level.

Recommendations for university educators. In view of the prevention and management of Internet addiction disorder of university students, the education management of universities should play the role of supervisor and guarantee. University educators should let university students understand the true nature of the Internet, adhere to the combination of online and offline education, and strengthen the education of university students' mental health. In order to realize the combination of strict management and quality service, the dormitory management department usually needs to increase the education and management of students' electricity network. The network management center should introduce advanced network management technology. Strengthening the construction and management of campus network culture can help university students focus their attention, spend more time on campus and avoid being addicted to the Internet.

Recommendations for social institutions and governments. Internet addiction of university students is a complex social problem. Society provides great material conditions and intellectual support for university students to become talents. Therefore, it has a unique effect to optimize the out-of-school support management system and improve the comprehensive social management ability to treat Internet addiction.

This study designed a questionnaire of influencing factors of university students' Internet addiction behavior. Using qualitative and quantitative research methods, this study constructs a conceptual model of the influence mechanism of Internet addiction in university students, and expounds the relationship between stressful life events, negative emotion, coping styles, influence of others, self-control and Internet addiction.

References

Bai Yu, Fan Fumin.(2005). Revision and application of Internet dependence measurement tools for college students. **Psychological Development and Education**, (04),99-104. doi:CNKI:SUN:XLFZ.0.2005-04-018.

Kawabe, K., Horiuchi, F., Ochi, M., Oka, Y., & Ueno, S. I. (2016). Internet addiction:

Prevalence and relation with mental states in adolescents. **Psychiatry and clinical neurosciences**, *70*(9), 405-412.

Ko, C. H., Yen, J. Y., Liu, S. C., Huang, C. F., Yen, C. F. (2009). The associations between aggressive behaviors and internet addiction and online activities in adolescents. **The Journal of adolescent health : official publication of the Society for Adolescent Medicine**, *44*(6), 598–605. https:// doi.org/ 10.1016/ j.jadohealth.2008.11.011.

Lei Li, Yang Yang. (2007). Development and verification of adolescent Pathological Internet Use Scale. **Acta Psychologica Sinica**, (04),688-696. Doi: CNKI: SUN: XLXB.0.2007-04-016.

Li BoRan, Xiong Ruoyu, Peng Peng, Jia Liping, and Lu Guohua.(2022). The influence of stressful life events on Internet addiction in adolescents: a moderated mediation model. **Chinese journal of health psychology**, (07), 1087-1092. Doi: 10.13342 / j.carol carroll nki CJHP. 2022.07.026.

Li Chaomin. (2012). **The college students' Internet addiction causes and prevention and cure method system research** (Ph.D. Thesis, central south university).https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFD1214&filename=101247 4973.nh.

Li, Y. Y., Sun, Y., Meng, S. Q., Bao, Y. P., Cheng, J. L., Chang, X. W., ... & Shi, J. (2021). Internet addiction increases in the general population during COVID‐19: Evidence from China. **The American journal on addictions**, *30*(4), 389-397.

Liu Lu, Zhao LianHui, Song ChanXu, Yu Haoqing, Zhang Shuo, Xiao Han & Yan Nan. (2023). A survey on the relationship between Internet addiction and self-control among college students. **Journal of Shenyang Medical College**, (05),475-478. doi:10.16753/j.cnki.1008-2344.2023.05.006.

Ndasauka, Y., Pitafi, A., & Kayange, G. M. (2019). Psychometric properties of Young's internet Addiction Test (IAT) in Urdu language. **Asian journal of Psychiatry**, *40*, 39-44.

Ren Xinyu. (2017). The influence of college students' peer relationship on Internet addiction: the mediating effect of core self-evaluation. **Psychological techniques and applications**, (09), 521-529. The doi: 10.16842 / j.carol carroll nki issn2095-5588.2017.09.002.

Shao, YJ., Zheng, T., Wang, Yq. *et al.* (2018).Internet addiction detection rate among college students in the People's Republic of China: a meta-analysis. **Child Adolesc Psychiatry Ment Health** 12, 25. https://doi.org/10.1186/s13034-018-0231-6.

Shaw, M., & Black, D. W. (2008). Internet addiction: definition, assessment, epidemiology and clinical management. **CNS drugs**, *22*, 353-365.

Sun Jing, Li Yan, Pan Deng, Zhang Jianrui, Hu Qiaoyun, Li Hao.(2009). Relationship between Internet addiction and coping styles and emotional disorders in college students. **Chinese Journal of Public Health**, (09),1041-1042. doi:CNKI:SUN:ZGGW.0.2009-09-013.

Tateno, M., Teo, A. R., Ukai, W., Kanazawa, J., Katsuki, R., Kubo, H., & Kato, T. A. (2019). Internet addiction, smartphone addiction, and hikikomori trait in Japanese young adult: Social isolation and social network. **Frontiers in psychiatry**, *10*, 455.

Wang Jun, Li Dianxia.(2016). Research on the relationship between Internet addiction, coping style, loneliness and self-esteem of college students. **Journal of Anhui University of Technology** (Social Sciences Edition)(01),96-98+103. doi:CNKI:SUN:AHSK.0.2016-01-033.

Wang Yan, Chen Jing, Lei Wei & Zhang Tao. (2018). The impact of Internet addiction and sleep quality on negative emotions among college students during summer vacation. **Sichuan Mental Health**, (01),51-56. Doi: CNKI :SUN:WANT.0.2018-01-013.

Wang Zhengyi (2020). **College students stress life events and anxiety and the relationship between Internet addiction research** (a master's degree thesis, university of the Yangtze river). https: // kns. cnki. net/ KCMS/ detail/detail.aspx?dbname=CMFD202101&filenam e=1020085190.nh.

Xiao Yiling.(2019). The influence of life events on Internet addiction among college students: the mediating effect of coping styles. **Farm Staff Officer**, (01),172-173. doi:CNKI:SUN:NJCM.0.2019-01-158.

Xie Xiaojuan & Liu Liwei.(2022). The influencing factors of Internet addiction disorder among college students. **Chinese Journal of Coal Industry Medicine**, (05),547-552. doi:CNKI:SUN:ZMGY.0.2022-05-022.

Yamane, T. (1973). **Statistics: An Introductory Analysis**. (3rd Edition). Harper & Row Ltd., New York.

Yan Qiong, Yang Yanting, Qi Yue, Qi Wenjuan, Yang Dongling & Luo Chunyan.(2022). The change trend of Internet addiction among adolescents in Shanghai from 2004 to 2019. **Chinese School Health**, (08),1193-1197. doi:10.16835/j.cnki.1000-9817.2022.08.017.

Zhang Yawen, Wang Yi, Qu Wen, Li Na, Chang Zhicheng , Dong Man.(2020). The relationship between short video and Internet addiction and personality traits of college students. **Chinese journal of health psychology**, (09), 1418-1422. The doi: 10.13342 / j.carol carroll nki CJHP. 2020.09.031.

Zhou Qian. (2021). **The college students' pressure events, time management and study on the relationship between the Internet addiction tendency.** (a master's degree thesis, central south university for nationalities). https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202301&filename=1021700266.nh.