A STUDY ON STRESS AND INTERNET ADDICTION OF MYANMAR UNIVERSITY STUDENTS

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Abstract

Using survey method, a total of 2612 university students were selected by multistage sampling technique. Instruments were Internet Addiction Test (IAT) developed by Young (1989) and Student Stress Inventory (SSI) developed by Mohamed Arip, Kamaruaman, Roslan, Ahmad and Rahman (2015). It was found that Myanmar university students' predominant time for internet usage is night and the most widely used social network is Facebook. Descriptive statistics showed that internet addiction prevalence of Myanmar university students is 28% and stress level is mind. The result of independent sample *t* test showed that internet addiction of Myanmar university students was significantly different by gender, living in dormitory and level of education. Correlation analysis showed that stress and internet addiction was significantly correlated in positive direction. The higher stress they experience, the more internet addiction they may encounter. Therefore, it is hoped that the current study will support to the Myanmar university learning environment by providing the basic information of some risk and protective factors influencing internet addiction prevalence.

Keywords: Stress, Internet Addiction, Academic Stress

Introduction

Internet is a massive computer-linked network system used to access and deliver information globally (Kraut, Patterson, Landmark, Kiesler, Mukophadhyay, & Scherlis, 1998).

Through internet, people got many opportunities, but on the other hand, many negative impacts of internet were also discovered. Among these negative impacts, the threat of internet over-using became a growing concern worldwide (Buchholz, 2009; Fackler, 2008; Janta, 2008; Khasod, 2007). In her study, Dr. Kimberly Young found that this excessive internet use created addicted behaviors on users. So, in 1996, Young introduced the term "addiction" for "internet technology" at the Annual Meeting of the American Psychological Association. Since then, scientific research on "internet addiction" has grown markedly.

According to Young (1996), internet addiction is "a failure of personal impulse control that does not involve external substances". By using pathological gambling as a model, she developed eight criteria for addictive internet use: (1) a pre-occupation with the internet, (2) the need to use the internet for increasing amounts of time, (3) unsuccessful efforts to stop using the internet, (4) mood change when attempting to stop or cut down internet usage, (5) staying online longer than intended, (6) threatening of significant relationships or opportunities due to excessive internet usage, (7) lying about internet use, and (8) using the internet as an escape from problems or seeking to relieve bad mood states.

In Myanmar, the number of internet users is significantly increasing day by day in recent years. Among them, above 80% of them were found to be social networking users (Chris Myers, 2013). Together with growing internet usage, excessive social media using made the public of Myanmar to be worried about internet addiction. However, there is little empirical research on the prevalence of internet addiction in Myanmar. So this research filled this need of internet addiction research in Myanmar.

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Globally, most of the internet addiction researches were conducted on "student groups" because students were found to be the vast majority of those with internet addictions (Lam, Peng, Mai, & Ing, 2009; Milani, Di Blasio, & Osualdella, 2009; Thomas & Martin, 2010; Zboralski, Orzechowska, Talarowska, Darmosz, Janiak, Janiak, & Gałecki, 2009). Among students, many studies found university/college students to be more high risk group for internet addiction (Young & Rogers, 1998; Kandell, 1998; Mafe & Blas, 2006; Nalwa & Anand, 2003; Niemz, Griffiths, & Banyard, 2005).

To know why they become more internet addicts than other age groups, there is an urgent need for educational researchers to find out associated factors of internet addiction tendency among university students.

Therefore, present study was conducted to examine stress, gender, living in dormitory and level of education as the related factors of internet addiction prevalence among Myanmar university students.

Objectives of the Research

The main aim of this study is to examine stress and internet addiction of Myanmar university students. The specific objectives were-

1. To examine stress and internet addiction prevalence of Myanmar university students
2. To investigate the differences in internet addiction of Myanmar university students by gender, living in dormitory and level of education
3. To explore the relationship between stress and internet addiction of Myanmar university students

Definitions of Key Terms

Internet Addiction: Internet addiction is "the overuse of the internet leading to impairment of an individual's psychological state (both mental and emotional), as well as their scholastic, occupational, and social interactions" (Beard & Wolf, 2001).

Stress: Stress is an uncertain reaction to external and internal factors that means a negative reaction to environmental stimuli (Pargman, 2006).

Materials and Method

Participants of the Study

By using multistage sampling procedure, 2612 (male = 989, female = 1623) university students in Myanmar were chosen. The mean age of respondents of present study was 18.18 years (*SD*=1.419), ranged from 16 to 26.5 years.

Design

In this study, quantitative approach and descriptive survey design was used.

Instrumentation

To collect the desired data for the present study, two standardized psychological tests were used.

To measure stress of Myanmar university students, Student Stress Inventory (SSI) developed by Mohamed Arip, Kamaruaman, Roslan, Ahmad and Rahman (2015) was used. SSI consisted of 40 negative items. It measures 4 subscales of stress: Physical Stress, Interpersonal Relationship Stress, Academic Stress and Environmental Stress. Those who get the score within

122-160 were classified as having severe stress, 81-121 as having moderate stress and those who get score 40-80 as having mild stress.

The Internet Addiction Test (IAT) developed by Young (1998) is composed of 20 items. Present study chose to use modified 6-point Likert scale. The cut-off scores differentiate the users who get the score (0-30) as normal internet users and score (31-49) as mild users, moderate (50-79) and severe internet addiction (80-100).

After translating these inventories to Myanmar version, an expert review was conducted for face and content validity by 14 experts in the field of Educational Psychology from Yangon University of Education and Sagaing University of Education. The necessary changes were done according to their suggestions. And then, pilot testing was conducted with 105 university students from Sagaing University of Education in order to determine the reliability of the instruments. The internal consistencies were 0.875 for Student Stress Inventory (SSI) and 0.892 for Internet Addiction Test (IAT). The administration process for all the inventories approximately took about 20 to 40 minutes.

Findings

In this section, finding of present study were discussed.

Table 1 Internet Usage Behavior among Myanmar University Students

Variables	Frequency	Percentage
Predominant Time for Internet Use		
Morning	17	0.65%
Afternoon	79	3.02%
Evening	223	8.54%
Night	2217	84.88%
Other	76	2.91%
Popularity of Social Network Account among Myanmar University Students		
Facebook	2449	**93.76%**
Google+	1371	**52.49%**
Viber	1233	**47.21%**
You Tube	1221	**46.75%**
Instagram	949	**36.33%**
Twitter	425	**16.27%**
Snapchat	251	**9.61%**
Line	206	**7.89%**
Skype	184	**7.04%**
WeChat	164	**6.28%**
WhatsApp	99	**3.79%**
QQ	51	**1.95%**
Wattpad	**5**	**0.19%**
Sina Weibo	**4**	**0.15%**

To examine stress of university students in Myanmar, descriptive statistics was used. Table 2 showed the results.

Table 2 Descriptive Statistics for Stress of University Students in Myanmar

Variable	Number of Student	Minimum	Maximum	Mean	*SD*
Stress	2612	40	137	68.68	14.69

According to Table 2, the minimum score for stress of university students in Myanmar was 40 and the maximum score was 137. Then, mean score and standard deviation of university students for stress were 68.68 and 14.69. In terms of score analysis and interpretation, SSI suggested those who obtained the score within 122-160 reflects having the severe stress, 81-121 reflects having the moderate stress and those who obtained score 40-80 reflects having mild stress. Mean score for stress of present study (68.68) was between 40 and 80 which reflect having mild stress.

The following table (Table 3) shows the prevalence of internet addiction among Myanmar university students.

Table 3 Prevalence of Internet Addiction among Myanmar University Students

Categories	Frequency	Percentage
Normal Internet Users (0-30)	864	33.08%
Mild Internet Addiction (31-49)	1028	39.36%
Moderate Internet Addiction (50-79)	670	25.65%
Severe Internet Addiction (80-100)	50	1.91%
Total	2612	100%

According to Table 3, it was found that, off the 2612 respondents who fully complete the survey, 720 (27.57%) university students met the criteria of Internet Addiction.

To find out gender difference in internet addiction of Myanmar university students by gender, independent sample *t* test was used. The result was shown in Table 4.

Table 4 Results of Independent Samples *t* test for Internet Addiction of Myanmar University Students by Gender

Variable	Gender	*N*	Mean	*SD*	*MD*	*t*	*df*	*p*
Internet Addiction	Male	989	42.29	17.396	4.758	6.801***	2610	0.000
	Female	1623	37.54	17.308				

Note: *** Significance at 0.001 Level.

In Table 4, it was found that the mean score of male university students (42.29) was greater than that of the female university students (37.54) in internet addiction with a mean difference (4.758). Significant difference in internet addiction of Myanmar university students by gender was found at 0.001 level (*t*=6.802, *p*=0.000). So, male university students in Myanmar were found to have higher probability of internet addiction than female ones.

To find out difference in internet addiction of Myanmar university students by live in dormitory, independent sample *t* test was used. The result was shown in Table 5.

Table 5 Results of Independent Samples *t* test for Internet Addiction of Myanmar University Students by Living in Dormitory

Variable	Living in Dormitory	*N*	Mean	*SD*	*MD*	*t*	*df*	*p*
Internet Addiction	Yes	1477	38.57	17.003	-1.786	-2.590*	2610	0.01
	No	1135	40.35	17.064				

Note: * Significance at 0.05 Level.

In Table 5, it was found that the mean score of university students who lived in dormitory (38.57) was lower than that of the university students who did not live in dormitory (40.35) in internet addiction with a mean difference (1.786). Significant difference in internet addiction of Myanmar university students by living in dormitory was found at 0.05 level (*t*=-2.590, *p*=0.01). Therefore, it can be concluded that Myanmar university students who did not live in dormitory had higher probability of internet addiction than those who lived in dormitory.

To find out difference in internet addiction of Myanmar university students by level of education, independent sample *t* test was used. The result was shown in Table 6.

Table 6 Results of Independent Samples *t* test for Internet Addiction of Myanmar University Students by Level of Education

Variable	Education	N	Mean	SD	MD	t	df	p
Internet Addiction	First Year	1324	40.88	17.825	3.127	4.585***	2610	0.000
	Third Year	1288	37.76	17.003				

Note: *** Significance at 0.001 Level.

In Table 6, it was found that the mean score of first year university students (40.88) was greater than that of the third year university students (37.76) in internet addiction with a mean difference (3.127). Significant difference in internet addiction of Myanmar university students by level of education was found at 0.001 level (*t*=4.585, *p*=0.000). So, it can be concluded that first year university students in Myanmar had higher probability of internet addiction than third year ones.

In order to explore the relationship between stress and internet addiction of university students in Myanmar, the Person Product-Moment Correlation was conducted. The result was shown in Table 7.

Table 7 Correlation Matrix between Stress and Internet Addiction

Variable	Stress	Internet Addiction
Stress	-	.360***
Internet Addiction	.360***	-

Note: *** Significance at 0.001 Level.

According to Table 7, it was found statistically significant positive correlation between stress and internet addiction (*r*=.360, *p*= 0.001). So, it can be concluded that the more stress students suffer, the higher the internet addiction level they may encounter.

Discussion and Conclusion

In this section, summary of findings, discussion and suggestions were discussed via specific objectives.

Stress of Myanmar University Students: To examine stress of university students in Myanmar, descriptive statistics was used. It was found that stress level of Myanmar university students was mild. Based on the findings of the present study, some suggestions were discussed for teachers and administrators to reduce their students' stress. Teachers and administrators should

- Help students to develop better study habits and time management skills in order to better cope with balancing their schedules between study, work, and leisure.

Internet Addiction Prevalence of Myanmar University Students: To examine internet addiction prevalence of Myanmar university students, descriptive statistics was used. It was found 27.57% of Myanmar university students met the criteria of Internet Addiction.

Based on the findings of the present study, some suggestions were discussed for students, teachers and administrators to prevent internet addiction prevalence among Myanmar university students. Students should

- Limit online time

- Try to lessen excessive social network usage

- Regulate sleeping pattern by escaping late night login

- Cope disturbing thoughts about life effectively, not to compensate these thoughts on internet.

Teachers and administrators should

- Encourage social activities and their interests
- Establish Guidance and Counseling Service which is administered by professionally qualified counselor for discussing their internet addiction disorder.

Difference in Internet Addiction by Gender: To analyze gender differences in internet addiction, independent sample *t* test was used and the result revealed that there was significant difference in internet addiction of Myanmar university students by gender. Male university students had higher probability of internet addiction than female ones.

Many previous studies also support the present result. They also found that males involved more in internet addiction than females (Chou et al., 2005; Shaw & Black, 2008; Li et al., 2010; Leung, 2007; Pinar et al., 2017).

This may be because male students tend to solve problems on their own and reluctant to communicate with others for help when facing life stress and negative events. So, males seem to more use the internet for mood management and social compensation. Moreover, in comparing female, online games may be more attractive to male and it may lead to more time suffering on internet.

Based on this finding, there are some suggestions for students to adapt gender difference in internet addiction. Male students should

- Talk to real friends than new relationships with fellow on-line users
- Control their excessive use of online games.

Difference in Internet Addiction by Living in Dormitory: To reveal differences in internet addiction of Myanmar university students by living in dormitory, independent sample *t* test was used and the result revealed that there was significant difference in internet addiction by living in dormitory. Students who are not living in dormitory were found to have higher probability of internet addiction than those who are living in dormitory.

The study of Comert, Ugras and Yukseloglu (2017) also supports the present result.

This may be because hostel-life seems to relief stress of Myanmar university students. Based on this finding, there are some suggestions for students who did not live in dormitory.

They should

- Connect real-world, not live alone at home
- Practice effective stress-coping strategies

Difference in Internet Addiction by Level of Education: To reveal differences in internet addiction of university students by level of education, independent sample *t* test was conducted and it was found that first year university students in Myanmar had greater probability of internet addiction than third year ones.

The study of Alzayyat et al. (2017) also supports the present result.

This may be because first year students seem to possess higher stress and be lower in stress-coping ability than older ones. Based on this finding, there are some suggestions for first year students. They should

- Cope their stress effectively, not to use flight coping
- Get professional help in coping stress if they needed.

Relationship between Stress and Internet Addiction: In order to explore the relationship between stress and internet addiction of university students in Myanmar, the Pearson Product-Moment Correlation was conducted. It was found statistically significant positive correlation between stress and internet addiction. The more stress students suffer, the higher internet addiction level they may encounter.

This finding was consistent with the findings of study conducted by Li et al., (2010).

This may be because, according to General Strain Theory by Agnew (1992), people seem to use one of three coping strategies: Cognitive coping, Behavioral coping and Emotional coping. Among these strategies, those who use emotional coping will not to solve or deny negative feelings, but only try to reduce them, for example by using online for increasing amount of time. So, based on the findings of the present study, to reduce stress and to prevent internet addiction, some suggestions were discussed for students, teachers and administrators. Students should

- Try to balance time between study and social activity
- Stay fit and healthy
- Keep better relationship with peers, teachers and family member
- Practice Mindfulness
- Seek the professional help to discuss their uncontrolled feeling.

Teachers and administrators should

- Practice their students' mindfulness
- Encourage to improve temperamental effortful control to weaken stress
- Provide students guidance and counseling unit as the part of management system so that students can came there to discuss issues affecting them.

In summary, present study found that higher stress, being male students, living in dormitory and having younger age were risk factors of internet addiction prevalence of Myanmar university students. Therefore, it is hoped that the current study will support to the Myanmar university learning environment by providing the basic information for the development of internet addiction prevention and intervention programs.

Acknowledgements

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