

Exploring Problematic Use of Mobile Internet in a Nigerian University

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Abstract

The study identified the prevalent ways by which students experience problematic use of mobile internet. It determined the level of problematic use of mobile internet experienced by the undergraduates of the Obafemi Awolowo University, Ile-Ife Nigeria. It also investigated factors that may predict problematic use of mobile internet among the students. The study employs a survey research design to obtain data from 201 undergraduates selected by randomly from faculty colloquiums during the 2012/2013 session. A self-constructed questionnaire comprising items adapted from Demetrovics, Szeredi, and Rózsa (2008) was used to collect data from the respondents. Data collected were analysed using frequency, percentages, Relative significance index, Multiple regression, t-test and ANOVA. The results indicated that the prevalent ways by which students experience problematic use of mobile internet was in terms of feeling tense, irritated, or stressed when they cannot use their mobile internet for several days (RSI = 0.738). 17.9% of the participant experienced no problematic use of mobile internet while 27.4%, 45.3% and 9.5% of the participants have experienced low, high, and debilitating levels of mobile internet respectively. Also, there was no significant difference in the problematic use of mobile internet experienced by students at different academic levels in the university (F = 2.385, p=0.071). The study concluded that tertiary institution students are very susceptible to problematic use of mobile internet.

Keywords: Mobile internet; Problematic use; Internet addiction; Undergraduates; University.

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1. Introduction

The computer and internet are commonly described as the most noticeable of the major breakthroughs in contemporary science and technology. Ofole and Babatunde (2015) described the internet as wired or wireless mode of communication consisting millions of private, public, academic, business, and government networks linked by a broad array of electronic, wireless, and optical networking technologies (Mueller, 2010) through which one can receive and transmit information that can be used for single or multiple purposes. Ogedegbe (2012) opined that the world which appears physically large has been made so closely interwoven by the internet to be considered very small and hence, the reference to it as "global village". However, Oso and Adesua (2017) noted that, although, no one knows exactly how many computers are connected to the internet, the internet is a voluntary network as the constituent computers connected have chosen to do so on their own in order to share and exchange information in a quick and effective manner.

In fact, internet use is spreading rapidly into daily life, and directly affecting people's ideas and behavior as noted by Bashir, Mahmood and Shafique (2008). It is changing the way we live and how we do things. Their impact appears to be most noticeably felt in the areas of communication, entertainment, commerce and education which encourages their attraction to adolescents and other young people. The communication aspect appears to appeal most to young people perhaps because of its inherent ability to enable these young people to communicate with each other, home and abroad and by so doing share each other's ideas, knowledge, experiences, and cultures (Devi & Roy, 2012).

The authors also reported other inherent attracting feature of the internet in acting as a vehicle for resisting social exclusion and gender segregation and as a mechanism for reinforcing pre-existing norms within their newly formed communities. This was recognized by Ofole and Babatunde (2015) especially for youths through instant messaging, internet forums, and social networking. They further reported studies of some students getting addicted to internet due to usage of social networking websites such as Facebook, Twitter, and Badoo, Instagram, 2go as well as the over-use of the internet for gaming; blogging; email, internet pornography or internet shopping. Okwaraji, Aguwa, Onyebueke and Shiweobi-Eze, (2015) opined that many young people are getting compulsive in the way they use the internet. They claimed that this has made some of them to exhibit signs of addictive



behavior that are similar to alcoholism, substance addiction and pathological gambling. Among the young people, research has shown that university students constitute one of the first groups that began to use the internet most prevalently and the first group to experience problems with excessive internet use (Ceyhan, Ceyhan, & Gürcan, 2007).

It should be noted that, although, many researchers equated internet addiction with problematic internet use (e.g. Yellowlees and Marks, 2007), some researchers have distinguished problematic use of the internet from internet addiction. For instance, Gmel, Notari and Schneider (2017) opined that problematic Internet use comprises a combination of two main aspects, a cognitive preoccupation (i.e., thoughts about Internet use that are experienced as irresistible) and individual's inability to control their Internet use, which in turn leads to feelings of distress and functional impairment of daily activities. The authors however asserted that on the other hand, Internet addiction represents the Internet use disorder which is an essentially persistent and recurrent Internet usage leading to clinically significant impairment or distress, in which the individual exhibits at least any four of the following criteria for at least 3 months. The criteria include preoccupation with the Internet, that is, the individual must be thinking about Internet use not only while being on the Internet but also during times of being offline, with excessive thoughts about Internet use occurring throughout the day; withdrawal, as manifested by a dysphoric mood, anxiety, irritability, sadness and boredom; Tolerance, as manifested by a marked increase in Internet use required to achieve satisfaction, or reduced satisfaction when using it the same time; Impaired control manifested in unsuccessful attempts to control, cut back or discontinue Internet use with a persistent desire to do so; Continued excessive use of Internet despite knowledge of persistent or recurrent physical, but mostly psychosocial negative consequences (functional impairment); Loss of interests in previous hobbies, entertainment as a direct result of, and with the exception of, Internet use leading to deprived social interactions, loneliness and social isolation; and Use of the Internet to escape or relieve a dysphoric mood (e.g. feelings of helplessness, guilt, anxiety).

It is, therefore, safe to conclude that problematic use of internet can serve as a good warning for preventing internet addiction, to the extent that an early detection may help counsellors and other helping professionals to identify individuals who may likely get addicted if no intervention is applied. It also implies that given the closeness and confidentiality which GSM phones may offer, an individual may easily get addicted to the internet features on their phones (mobile internet – Adebowale, in press) unless early detection of their problematic use is effected and intervention applied. Else, university undergraduates being prepared to constitute the high level manpower required for the economic growth and development of the nation in the nearest future may become susceptible to all negative physiological outcomes of internet addiction, distract them from the goals set for them and rob the nation of its critically needed top level manpower resources.

2. Research Objectives

The objectives of the study were therefore designed to:

- i. determine the prevalent ways by which students experience problematic use of mobile internet.
- ii. determine the level of problematic use of mobile internet experienced by OAU students?
- iii. investigate factors may predict problematic use of mobile internet among OAU students.

3. Research Questions

To achieve the stated objectives the following research questions were raised.

- i. What are the prevalent ways by which students experience problematic use of mobile internet?
- ii. What is the level of problematic use of mobile internet (PIU) experienced by OAU students?
- iii. What factors will predict problematic use of mobile internet among OAU students.

4. Research Hypotheses

Three research hypotheses were also posed to guide the study and they include:

- i. There is no significant difference between male and female students in terms of their experience of problematic use of mobile internet.
- ii. There is no significant difference problematic use of mobile internet experienced by OAU students based on their educational level in the university.
- iii. There is no significant difference problematic use of mobile internet experienced by OAU students based on their entry level into the university.

5. Methodology

The study a descriptive survey research. It set out to collect data from a selected segment of the Obafemi Awolowo University undergraduates regarding their problematic use of mobile internet with the view to generalizing the findings on to the generality of the students which serve as the population for the study. 201 participants were selected by random sampling at the colloquiums of five systematically selected faculties out of the 14 faculties that constitute the university. Each faculty in the university is made to organize a faculty colloquium once a



semester on a given date set by the university and attendance is made compulsory for all the students and staff of each of the faculty. The research assistants administered the instruments at the entry of the venue of the colloquium and in many cases the filled copies were returned as the students were leaving the colloquium venues, while in very few cases, they were requested to be submitted to the faculty secretaries from which they were retrieved later. The instrument for the study was a questionnaire comprising two sections. Section A was used to gather personal data like sex, age, previous educational attainment and current educational level in the university. The other section comprised items adapted from Demetrovics, Szeredi, and Rózsa (2008) were constructed to explore problematic use of mobile internet. The original scale was used to Problematic internet use, but in this study, the items were adapted to specifically focus internet accessed through the mobile phone. Data collected were analysed using frequency, percentages, Relative significance index, Multiple regression, t-test and ANOVA.

4. Results

Research question 1: What are the prevalent ways by which students experience problematic use of mobile internet? To answer this research question, the responses of the selected students constituting the study sample were analyzed descriptively with the view to locating the most prevalent ways by which students experience problematic use of mobile internet. The result is presented in Table 1

Table 1: Prevalent ways by which students experience problematic use of mobile internet

	Table 1: Prevalent ways by which students experience problematic use of mobile internet												
SN	Ways by which students	Alw	vays	Son	netimes	Rar	ely	Nev	er	No		RSI	Rank
	experience problematic		-				-			Res	oonse		
	use of mobile internet	F	%	F	%	F	%	F	%	F	%		
1	How often do you	27	13.4	42	20.9	43	21.4	80	39.8	9	4.5		
	daydream about the												
	Internet on your phone?											0.521	25
2.	How often do you	41	20.4	73	36.3	39	19.4	41	20.4	7	3.5		
	fantasize about your												
	phone Internet, or think												
	about what it would be												
	like to be online with												
	your phone											0.647	9
3.	How often do you feel	49	24.4	82	40.8	43	21.4	20	10.0	7	3.5		
	tense, irritated, or												
	stressed if you cannot use												
	the Internet on your												
	phone											0.706	3
4.	How often do you feel	65	32.3	71	35.3	38	18.9	18	9.0	9	4.5		
	tense, irritated, or												
	stressed if you cannot use												
	your phone Internet for											0.720	1
5.	several days?	41	20.4	<i>C</i> 1	30.3	5.0	27.9	26	17.9	7	2.5	0.738	1
٥.	How often does it happen to you that you feel	41	20.4	61	30.3	56	27.9	36	17.9	7	3.5		
	depressed, moody, or												
	nervous when you are not												
	on the Internet with your												
	phone and these feelings												
	stop once you are back												
	online with your phone											0.638	10
6.	How often do you dream	28	13.9	43	21.4	45	22.4	77	38.3	8	4.0	0.000	
	about your phone							' '	- 3.5				
	Internet?											0.528	24
7.	How often do you neglect	25	12.4	81	40.3	60	29.9	27	13.4	8	4.0		
	household chores to												
	spend more time online												
	through your phone?							<u></u>				0.635	12
8.	How often do you spend	35	17.4	87	43.3	48	23.9	24	11.9	7	3.5		
	time online with your												
	phone when you'd rather												
	sleep?											0.671	7



SN	Ways by which students experience problematic	Alw	vays	Som	etimes	Rar	ely	Nev	er	No Resi	oonse	RSI	Rank
	use of mobile internet	F	%	F	%	F	%	F	%	F	%		
9.	How often do you choose	30	14.9	59	29.4	46	22.9	53	26.4	13	6.5		
<i>y</i> .	to access the Internet through your phone rather than being with	30	11.5		27.1		22.9	33	20.1		0.5		
	your partner?											0.588	19
10.	How often does the use of your phone Internet impair your work or your study?	30	14.9	71	35.3	64	31.8	30	14.9	6	3.0	0.629	13
11	How often do people in	25	12.4	57	28.4	66	32.8	47	23.4	6	3.0	0.027	13
	your life complain about spending too much time online with your phone?		12		2011		52.0	.,	20			0.577	21
12.	How often do you choose	22	10.9	75	37.3	54	26.9	45	22.4	5	2.5		
	the phone Internet rather than going out with somebody to have some fun?											0.594	18
13.	How often do you feel	35	17.4	76	37.8	52	26.9	31	15.4	7	3.5	0.334	16
13.	that you should decrease the amount of time spent online with the phone?	33	17.4	70	37.0	32	20.9	31	13.4	,	3.3	0.648	8
14.	How often does it happen	30	14.9	66	32.8	60	29.9	39	19.4	6	3.0	0.0.0	0
	to you that you wish to decrease the amount of time spent online though your phone but you do												
	not succeed?											0.612	15
15	How often do you try to conceal the amount of time spent online through your phone?	34	16.9	74	36.8	49	24.4	36	17.9	8	4.0	0.637	11
16	How often do you feel	31	15.4	61	30.3	63	31.3	39	19.4	7	3.5	0.057	- 11
	that your phone Internet usage causes problems for you?											0.608	17
17	How often do you find	33	16.4	98	48.8	41	20.4	23	11.4	6	3.0	0.000	17
	that you stay online with your phone longer than you intended?											0.681	6
18	How often do you think	26	12.9	65	32.3	54	26.9	50	24.9	6	3.0		
	that you should ask for help in relation to your Internet use?											0.586	20
19	How often do you start to	35	17.4	60	29.9	55	27.4	45	22.4	6	3.0		
	defend yourself, or conceal reality when someone asks about what you do on the Internet with your phone?											0.609	16
20	How often do you feel	51	25.4	66	32.8	58	28.9	21	10.4	5	2.5	0.009	10
	frustrated when you are unable to purchase mobile data for browsing?	51		33	-2.0		_0.7					0.688	4



SN	Ways by which students	Alv	vays	Som	etimes	Rar	ely	Nev	Never			RSI	Rank
	experience problematic use of mobile internet	г	0/	Г	0/	Г	0/	E 0/		Response			
		F	%	F	%	F	%	F	%	F	%		
21	How often do you	55	27.4	64	31.8	44	21.9	30	14.9	8	4.0		
	experience anxiety when												
	your data is suddenly												
	exhausted?											0.687	5
22	How often do you feel	52	25.9	84	41.8	46	22.9	13	6.5	6	3.0		
	angry when your phone												
	battery is unable to												
	sustain internet browsing												
	with your phone											0.724	2
23	How often do you cut	24	11.9	79	39.3	63	31.3	30	14.9	5	2.5		
	short your sleep on the												
	account of responding to												
	chats or pings											0.624	14
24	How often do you	17	8.5	64	31.8	57	28.4	57	28.4	6	3.0		
	respond to messages on												
	the bike or on the move											0.553	22
25	How often do you	14	7.0	58	28.9	79	39.3	46	22.9	4	2.0		
	respond to messages												
	during lectures											0.551	23

Table 1 presents the specific ways by which students experience problematic use of mobile internet. It can be seen from the table that the most prevalent ways of experiencing problematic use of mobile internet is feeling tense, irritated, or stressed when they cannot use their mobile internet for several days. Item related to this (item 4) possess the highest RSI value of 0.738. This was experienced always by 32.3% of the respondents, sometimes by another 35.3% and rarely by 18.9%. Only a paltry 9% of the respondents claimed never to have experienced this while 4.5% did not provide any response. This was closely followed by item 22 which indicated that the next most popular way by which the students experience PUMI is feeling angry when their phone batteries could not sustain mobile internet browsing with the another very high RSI value of 0.724. Also 25.9% of the respondents indicated that this happens to them always while 41.8% claimed that it sometimes happens. However, the least popular way by which the students experience problematic use of mobile internet is daydreaming about mobile Internet. This item possesses the lowest RSI value of 0.521 and was reportedly never experienced by 39.8% of the respondents rarely by 21.4% sometimes by 20.9% and always by 13.4% of the respondents.

Research question 2: What is the level of problematic use of mobile internet (PIU) experienced by OAU students?

To answer this research question, the responses of the selected students to each of the items in section B were scored in such a way that an "always" response is scored 3 while a "sometimes" response was scored 2 and a "rarely" response, 1. No score was allotted to a "never" response. The resulting scores were then cumulated and made to constitute a measure of problematic use of mobile internet. On the measure the maximum and minimum scores were 12 and 75 respectively with a mean score of 36.43 with a standard deviation of 16.34. The respondents were then categorized in such a way that those who scored 20 or less on the measure of problematic use of mobile internet were said to experience no problematic use of mobile internet while those who scored 21 to 36 were said to experience low level of problematic use of mobile internet and those who 37 to 56 were regarded as experiencing high level of problematic use of mobile internet. However, those who scored more than 56 on the measure of problematic use of mobile internet were said to be experiencing debilitating level of problematic use of mobile internet. The categories were then analyzed descriptively and the result is presented in Table 2

Table 2: Level of problematic use of mobile internet among OAU students

•	Frequency	Percent
No PIU	36	17.9
Low level of PIU	55	27.4
High level of PIU	91	45.3
Debilitating level of PIU	19	9.5
Total	201	100.0

Table 2 shows the distribution of the respondents across different levels of problematic use of mobile internet. It can be seen from the table that most of the respondents were found to experience high level while 9.5 were found to experience debilitating level of problematic use of mobile internet. Only 17.9% of the respondents demonstrated no problematic use.



Research question 3: What factors will predict problematic use of mobile internet among OAU students.

To answer this research question, the students' scores on problematic use of mobile internet were subjected Linear regression as the dependent variable while each of sex, age, current educational level in the university, number of handsets they possess, frequency of mobile internet use, frequency of daily connection to mobile internet and duration of connection to mobile internet as the predictor variables. The result is presented in Table 3

Table 3: Factors predicting problematic use of mobile internet among OAU students.

Predictors	R	R	Adjusted R	F	P
		Square	Square		
Sex	0.199	0.039	0.035	8.180	0.005
Age	0.038	0.001	-0.004	0.288	0.592
Current educational level in the university	0.094	0.009	0.004	1.708	0.193
Number of handsets they possess	0.061	0.004	-0.002	0.701	0.403
frequency of mobile internet use	0.162	0.026	0.021	5.381	0.021
frequency of daily connection to mobile internet	0.300	0.090	0.085	19.661	0.000
duration of connection to mobile internet	0.161	0.026	0.021	5.304	0.022

Table 3 shows the factors that predict problematic use of mobile internet among OAU students. It can be seen from the table, factors like age (F = 0.288, p > .05), current educational level on the university (F = 1.708, p > .05) and number of handsets possessed by the individual are not significant predictors of problematic use of mobile internet among the students under study. However, factors like sex (F = 8.180, p < .05), frequency of mobile internet use (F = 5.381, P < .05), frequency of connection daily (F = 19.661, P < .05) and duration of connection to mobile internet (F = 5.304, P < .05) are significant predictors of mobile internet. The table also indicated that the frequency of daily connection to mobile internet appears to be the factor that significantly explains the largest obtainable variance (8.5%, P < .05) in Problematic use of mobile internet. This is closely followed by sex of the respondents (3.5%), frequency of mobile internet use (2.1%) and duration of connection to mobile internet (2.1%).

Hypothesis 1: There is no significant difference between male and female students in terms of their experience of problematic use of mobile internet.

To test this hypothesis, the students' scores on the measure of problematic use of mobile internet was subjected to a test of difference via independent samples t-test. The result is presented in Table 4

Table 4: Difference in male and female students' experiences of problematic use of mobile internet

Sex	N	Mean	Std. Deviation	t	df	P
Male	85	40.2118	15.67611	2.860	199	0.005
Female	116	33.6552	16.32821	2.800	199	0.003

Table 4 shows the difference between male and female students' experiences of problematic use of mobile internet. It can be seen that the test indicated a significance in the differences in the problematic use of mobile internet experienced by male and female students (t = 2.86, p = 0.05). It also indicated that male students experienced significantly greater problematic use of mobile internet (mean = 40.21) than their female counterparts (Mean = 33.65). Therefore, the null hypothesis is rejected.

Hypothesis 2: There is no significant difference problematic use of mobile internet experienced by OAU students on the basis of their educational level in the university.

To test this hypothesis, the students' scores on the measure of problematic use of mobile internet was subjected to a test of difference via one-way Analysis of Variance (ANOVA) using their educational level in the university as the differentiating variable. The result is presented in Table 5.

Table 5: Difference in students' experiences of problematic use of mobile internet based on their educational level in the university

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1871.474	3	623.825	2.385	.071
Within Groups	48645.979	186	261.538		
Total	50517.453	189			

Table 5 shows the difference in students' experiences of problematic use of mobile internet based on their level in the university. It can be seen that the test indicated that there was significant difference in the problematic use of mobile internet experienced by students at different levels in the university (F = 2.385, p = 0.071). Hence, the null hypothesis is upheld.

Hypothesis 3: There is no significant difference problematic use of mobile internet experienced by OAU students based on their entry level into the university.

To test this hypothesis, the students' scores on the measure of problematic use of mobile internet was subjected to a test of difference via one-way Analysis of Variance (ANOVA) using their entry level into the university as the differentiating variable. The result is presented in table....



Table 5: Difference in students' experiences of problematic use of mobile internet on the basis of their entry level into the university

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2234.665	3	744.888	2.828	0.040
Within Groups	47416.444	180	263.425		
Total	49651.109	183			

Table 5 shows the difference in students' experiences of problematic use of mobile internet on the basis of their entry level into the university. It can be seen that the test indicated a significant difference in the problematic use of mobile internet experienced by students with different entry levels into the university (F = 2.828, p = 0.04). Therefore, the null hypothesis is rejected. To trace the source of difference a multiple comparison posthohoc test was conducted via Tukey HSD and the result is presented in Table 6.

Table 6: Multiple comparison test of difference in problematic use of mobile internet among OAU student on the basis of their entry level into the university

(I)	Previous	(J) Previous	Mean	Std.	Sig.	95% Confider	nce Interval
educational a	attainment	educational attainment	Difference	Error		Lower	Upper
			(I-J)			Bound	Bound
		OND	-11.30620*	4.32177	.047	-22.5134	0990
SSCE		NCE	-5.76370	3.57080	.373	-15.0235	3.4961
		First degree	-1.07703	3.63176	.991	-10.4949	8.3408
		SSCE	11.30620*	4.32177	.047	.0990	22.5134
OND		NCE	5.54250	5.19625	.710	-7.9324	19.0174
		First degree	10.22917	5.23833	.210	-3.3548	23.8132
		SSCE	5.76370	3.57080	.373	-3.4961	15.0235
NCE		OND	-5.54250	5.19625	.710	-19.0174	7.9324
		First degree	4.68667	4.63821	.744	-7.3411	16.7144
		SSCE	1.07703	3.63176	.991	-8.3408	10.4949
First degree		OND	-10.22917	5.23833	.210	-23.8132	3.3548
		NCE	-4.68667	4.63821	.744	-16.7144	7.3411
4. 751	1:00						

*. The mean difference is significant at the 0.05 level.

Table 6 shows the multiple comparison test of difference in problematic use of mobile internet among OAU student on the basis of their entry level into the university. It can be seen that the only difference obtained was between students who enter through SSCE (Secondary school certificate of education and those who were admitted through OND (Ordinary national diploma) with a mean difference of 11.30 which is significant at 0.05 level of significance. This means that students admitted through OND experience greater problematic of mobile internet in comparison with their SSCE counterparts.

6. Discussion

Research has documented the possibility of Nigerian undergraduates engaging in overuse, or worse still, problematic use of the internet. For instance, Babalola, Ekundayo, Agiobu-Kemmer and Ayenibiowo (2017) hinted on possibility of undergraduates of the university under study overusing the internet in a study of the time the students spend on the internet and its influence on internet addiction.

Consequently, this study attempts to explore the prevalent ways by which students experience problematic use of internet with specific reference to that which is obtainable through their mobile phones commonly termed mobile internet. The result indicated that that the prevalent indication of such problematic use of mobile internet was in terms of "feeling tense, irritated or stressed when they cannot use their mobile internet for several days" which was found to be experienced always by about one-third of the respondents and sometimes by another one-third. This is one of the indications of obsession described by Moore, Howard & Buchwald (2015) as an important factor in internet addiction. Another indication of the problematic use was "feeling angry when their phone batteries could not sustain mobile internet browsing". These are important ways by which literature has identified problematic use of the internet in terms of internet addiction (e.g. Demetrovics, Szeredi & Rózsa, 2008; Knabb & Pelletier, 2014). It also found that the least popular way by which the students experience problematic use of mobile internet is daydreaming about mobile Internet. Moore, Howard & Buchwald (2015) describe this as one of the indicators of neglect, another factor in Problematic Internet Use (PIU) in the study conducted by Demetrovics et al, (2008). It is by the mere fact that students are not demonstrating all the indicators to debilitating levels that delimited the description of the condition to Problematic use, else, it would have been described as internet addiction.

The study also found that a substantial percentage (9.5%) experienced debilitating levels of problematic use of mobile internet while other considerable percentage were found to possess very high levels. These two groups may be susceptible to developing serious internet addiction and dependency if other aspects defining internet



addiction develops as a result of the delayed or complete lack of intervention. Gmel, Notari and Schneider (2017) opined that Internet addiction is an essentially persistent and recurrent Internet usage leading to clinically significant impairment or distress, in which the individual exhibits at least any four of the earlier listed criteria for at least 3 months.

Further, the result of testing the first hypothesis indicated that male students experienced significantly greater problematic use of mobile internet than their female counterparts. This finding agrees with Odaci and Cikrikci (2014) in their study of problematic internet use in terms of gender among undergraduates of Karadeniz Technical University and Artvin Coruh University in Turkey. They found that males had higher mean problematic internet use scores than females. They also reported many studies with similar research finding that males are more problematic internet users than females such as Cao & Su, 2007; Ceyhan & Ceyhan, 2008; Odaci & Kalkan, 2010; and Yang & Tung, 2007). Another study that suggested that females were more problematic internet users was also raised, that is, Odaci & Celik, 2012 while those that reported no significant difference according to gender were mentioned to include Hardie & Tee, 2007; Jang et al., 2008; Kim et al., 2006; Odaci, 2011 and Subrahmanyam & Lin, 2007. The author suggested that the identified variation in the results obtain could be attributed to different forms of measurement or cultural differences.

Another factor that was found to influence the problematic use of mobile internet as indicated by the respondents was their entry level into the university. The results indicated a significant difference in the problematic use of mobile internet experienced by students with different entry levels into the university. Essentially, the only difference obtained was between students who enter through SSCE (Secondary School Certificate of Education) and those who were admitted through OND (Ordinary National Diploma). While those admitted through OND goes directly into Year two (Direct Entry), those admitted by SSCE goes into Part one. Students admitted through OND were found to experience greater problematic use of mobile internet in comparison with their SSCE counterparts.

Since problematic use of internet can serve as a warning sign for internet addiction, the need arises to study factors that can predict the occurrence of problematic use of mobile internet with the view to design programmes that can be used to prevent such occurrence. The result indicated that the frequency of daily connection to mobile internet, sex of the respondents, frequency of mobile internet use and duration of connection to mobile internet were found to be significant predictors of problematic use of mobile internet. Apart from sex of the respondents, the three other factors are related to the time the respondents spend on the mobile internet. And the result is in line with the findings of Babalola, Ekundayo, Agiobu-Kemmer and Ayenibiowo (2017). They found also in agreement with Omoyi, & Momoh (2013) that Internet dependency among students was positively correlated with the amount of time spent on the internet.

7. Conclusion and Recommendation

The study concluded that tertiary institution students are highly susceptible to problematic use of mobile internet, and it is a warning sign for the more destructive internet addiction that would be exhibited among students. Counsellors need to focus more on male students, those who have attended other tertiary institutions and were admitted by direct entry and those who may possess more than one handset, for counselling and guidance on healthy use of mobile internet. Factors like frequency of assessing internet and time spent on it were found to be significant predictors of the condition. Consequently, counselling researchers need to incorporate these into any guidance programme of therapy that may be instituted to help students from graduating from problematic use of mobile internet to internet addiction.

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