



INTERNET ADDICTION AND MENTAL HEALTH COMORBIDITIES AMONG STUDENTS OF THE UNIVERSITY OF PORT HARCOURT, NIGERIA

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Abstract: The study investigated internet addiction and mental health comorbidities among students of the University of Port Harcourt, Nigeria. Three research questions as well as three corresponding hypotheses guided the study. The study used the correlational research design. The population of the study comprised 23,288 students of the University of Port Harcourt, Nigeria. A sample of 286 students from the Faculty of Education were drawn for the study using the purposive sampling technique. Four instruments were used to collect data for this study. They include; Internet Addiction Scale (IAS), Anxiety Scale (AS), Beck's Depression Inventory (BDI) and Insomnia Inventory (II). The instruments were designed on a four point Likert scale of Strongly Agree (SA) =4, Agree (A) =3, Disagree (D) =2, and Strongly Disagree (SD) =1. The Cronbach Alpha reliability was used to establish the internal consistency reliability coefficients of 0.77, 0.97 and 0.69 respectively. Responses to the research questions were analyzed with mean, standard deviation and t-test statistics, while the hypotheses were analyzed with one way analysis of variance and t-test statistics. The findings of the study revealed that anxiety relate significantly to internet addiction among University of Port Harcourt students, whereas insomnia and depression did not. Based on the findings of the study it was recommended among others that school counselors should endeavour to organize periodic seminars and orientation programs to educate students on the effect of internet addiction on their academics and social behaviour.

Keywords: Internet Addiction, Mental Health Comorbidities, Anxiety, Depression and Insomnia.

Introduction

The use of modern technologies is a common feature of today's world. As one of the most widely used of these technologies in the modern world, the internet is playing an increasingly significant role in lives of young people especially among university students (Ali & Marouf, 2012). Obviously life without the internet would be very troublesome and inconvenient. The internet is frequently used for online purchasing, data collection, chatting, communicating with others and so on. The use of

the internet has increased enormously and now it seems that every aspect of our lives has been affected by the internet. Although the internet offers many advantages in this era of global communication, its improper or excessive use can produce many negative consequences (Odaci & Çelik, 2013).

Internet addiction, which is also called excessive internet use, uncontrolled use of the internet, pathological internet use or net addiction, can cause



serious problems at school, social and psychological life of university students (Whang, Lee & Chang, 2003). Internet addiction has been conceptualized as an uncontrollable desire to use the internet (Jelenchick, Becker & Moreno, 2012). It can be described as not being able to set a limit for internet use, going on to use albeit its social or academic damages and feeling an intense anxiety in case of limiting the access to internet (Orsal, Orsal, Unsal, & Ozalp, 2013). Internet addiction is a compulsive, persistent and uncontrollable use of the internet to such a degree that cessation causes severe emotional, mental, or physiological reactions (Qadri, Kurane&Ahmad, 2014). Beard (2005) described internet addiction as an uncontrollable and damaging use of the internet. He further explained that just because a person uses the Internet a lot, watch a lot of YouTube videos, shop online frequently, or logging into social media does not mean the person is suffering from internet addiction. The trouble comes when these activities start to interfere with your daily life. According to Griffiths (2000) internet addiction is regarded as a technological addiction, which refers to a non-chemical (behavioral) addiction that involves human-machine interactions. Pontes and Patrão (2013) stressed that this lack of control over the use of the internet will affect daily activities, the user's psychological, mental and emotional states, his school performance and his social interactions. Young as cited in Hing (2011) classified internet addiction into five different types of behaviors; (1) Cybersexual addiction: the addicts spent a lot of time in adult websites for cybersex and cyberpor, (2) Cyber-relationship addiction: the addicts involved heavily in online relationships, (3) Net compulsions: the addicts exhibited obsessive online gambling and shopping. They are compulsive

online gamblers and shopaholics, (4) Information overload: the addicts displayed compulsive web surfing and database searches, and (5) Computer game addiction: the addicts were obsessive online game players.

The symptoms of internet addiction include obsessive thoughts about the internet, tolerance (needs to use the internet with increased amount of time in order to achieve satisfaction), diminished impulse control, inability to cease using the internet, and withdrawal (Davis, 2001). Other symptoms may include being alienated from reality, being irritable, feelings of euphoria when using the computer, inability to prioritize or keep schedules, isolation, boredom with routine tasks, procrastination (Kang & Chae, 2012) . Some physical symptoms of internet addiction include headaches, insomnia, poor nutrition (failing to eat or eating in excessively to avoid being away from the computer), poor personal hygiene (not bathing to stay online), neck pain and dry eyes and other vision problems (Beard, 2005). The prevalence of internet addiction is on the increase especially among university students and may have severe impact of their mental health (Griffiths, 2000). Wang (2001) stressed that internet addiction has the potential of affecting the social, psychological and academic life of students. Internet addiction can affect students' social and cognitive functioning and significantly interfere with their everyday life (Orsal, Orsal, Unsal & Ozalp 2013). They further stressed that internet addiction may be associated with some mental health problems as depression, bipolar disorder, anxiety, obsessive- compulsive disorders, insomnia and low self-esteem. The researchers is thus interested in investigating internet addiction and mental health comorbidities (depression, insomnia, and anxiety), among university of Port



Harcourt students. Depression has been conceptualized as a mental state of mind producing serious mood swings, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration (WHO, 2012). Its impact affects the emotions, ways of thinking, behaviours, physiology and social relationships (Dahle, Knivsberg & Andreassen, 2011). Nie, Hillygus and Erbring (2002) explained that excessive internet use can displace valuable time that people spend with family and friends, which leads to smaller social circles and higher levels of loneliness and stress thus resulting in depression. McKenna and Bargh (2000) also stressed that the overuse of the internet results in a disruption of the normal life of an individual and the people around him, which increases the likelihood of being depressed. Van-Gelder (2005) explained that students who are addicted to the internet are usually dejected, alone, bashful and shy, while having low quality of life and displaying signs of depression. Another comorbid of internet addiction is anxiety. Oladele (2005) sees anxiety as an unpleasant, complex and variable pattern of behaviour which individuals show when reacting to internal (thoughts and feelings) or external (environmental situation) stimuli. Excessive use of the internet or being addicted to the internet is often accompanied by intense nervousness and uncontrollable heart palpitations which aptly describes anxiety (Freeman, 2009). Fitzpatrick (2008) explained that internet addicts are susceptible to anxiety and impulse control disorder. He further stated that internet addiction may result in anxiety when addicts are overly concerned and worried about how they will continue to keep in touch with friends online, surf the net or follow a celebrity when their data finishes or their phone

dies. This anxious state of mind automatically affects the individual's mental wellbeing both psychologically and socially. More so, anxiety may also arise from internet addiction when addicts make fake friends who mask their real identities and defraud their money or mislead them into committing crimes, or when they are being bullied online. This situation is likely to increase the anxiety level of the internet user causing him restlessness and irritability (Morahan-Martin & Schumacher, 2000). There are debates that internet addiction may be linked to insomnia. World Health Organization (1993) described insomnia as a chronic inability to obtain adequate sleep. Karacan and Williams as cited in Murali and George (2007) explained that insomnia is characterized by (1) sleep onset (difficulty in falling asleep), (2) frequent nocturnal awakening (interrupted sleep characterized by frequent awakenings) and (3) early morning awakening (waking up early in the morning and not being able to fall back asleep). They further stressed that internet addicts spend large amount of time on the internet during the day and stay online until late at night, depriving themselves time to sleep. Lee and Chung (2006) stressed that internet overuse has a detrimental effect on students' mental and psychological wellbeing and that results in poor quality of sleep, difficulty being focused during the day. Mohammadi (2012) observed that student who are addicted to the internet often experience insomnia (difficulty falling asleep and parasomnia (abnormal movements, behaviors, emotions, perceptions, and dreams that occur while falling asleep)). Cheung and Wong (2011) maintained that showed that sleeplessness is higher in individuals with internet addiction. They further explained that reduced sleep hours at night as a result of excessive use of the



internet lead to daytime sleepiness in students, which in turn, reduces cognitive, social, psychological, and physical performance in the internet addicted students. Without doubt, internet addiction among students is a major problem which can cause serious health risks, pose academic challenges, abnormal heart rhythms, irritability and sensory disturbances. Although, most students who are addicted to the internet feel that being online helps them reduce tension, frustration, boredom and sometimes help them stay awake all night or increase their mental alertness. However, experiences of some internet addicts have shown that excessive use and spending a lot of time on the internet carries a high price tag which often leads to anxiety, insomnia and depression. Internet addiction interferes with a person's normal life causing the person to spend more time in solitary seclusion and spending less time with real people in their lives which often make others view them as socially awkward. The researchers have also observed that many students who are addicted to the internet usually live in a world of fantasy and cut their presence from the real world. They use the internet as a substitution to real life human connection thus having difficulties establishing real close friendships. It has also been observed that most students who are addicted to the internet often experience mood swings and have difficulties concentrating in class. Major consequence of internet addiction among students are poor academic performance, poor mental health, truancy and increased school dropout. From the foregoing therefore, the researchers are motivated to examine internet addiction and mental health comorbidities among university of Port Harcourt students.

Aim and Objectives of the Study

The study examined internet addiction and mental health comorbidities among students of the University of Port Harcourt, Nigeria. Specifically, the study sought to;

1. Determine the relationship between depression and internet addiction among students of the University of Port Harcourt.
2. Examine the relationship between anxiety and internet addiction among students of the University of Port Harcourt.
3. Find out the relationship between insomnia and internet addiction among students of the University of Port Harcourt.

Research Questions

The following research questions guided the study;

1. To what extent does depression relate to internet addiction among students of the University of Port Harcourt?
2. To what extent does anxiety relate to internet addiction among students of the University of Port Harcourt?
3. To what extent does insomnia relate to internet addiction among students of the University of Port Harcourt?

Hypotheses

The following hypotheses which were tested at 0.05 level of significance guided the study;

1. Depression does not significantly relate to internet addiction among students of the University of Port Harcourt.
2. Anxiety does not significantly relate to internet addiction among students of the University of Port Harcourt.
3. Insomnia does not significantly relate to internet addiction among students of the University of Port Harcourt.



Methodology

The study used the correlational research design. The population of the study comprised 23,288 students of the University of Port Harcourt, Nigeria. A sample of 286 students from the Faculty of Education were drawn for the study using the purposive sampling technique. Four instruments were used to collect data for this study. They include; Internet Addiction Scale (IAS), Anxiety Scale (AS), Beck's Depression Inventory (BDI) and Insomnia Inventory (II). The instruments were designed on a four point Likert scale of Strongly Agree (SA) =4, Agree (A) =3, Disagree (D) =2, and Strongly Disagree (SD) =1. The Cronbach Alpha

reliability was used to establish the internal consistency reliability coefficients of 0.77, 0.97 and 0.69 respectively. Responses to the research questions were analyzed with mean, standard deviation and t-test statistics, while the hypotheses were analyzed with one way analysis of variance and t-test statistics.

Results and Discussion

Research Question 1: To what extent does depression relate to internet addiction among students of the University of Port Harcourt?

Hypothesis 1: Depression does not significantly relate to internet addiction among students of the University of Port Harcourt.

Table 1: Pearson Product Moment analysis on the relationship between depression and internet addiction

Variables	N	Df	r	Sig.	p-value	Decision
Depression	286	284	-.532	0.00	0.05	Null hypothesis rejected
Internet Addiction						

Table 1 showed that the Pearson Product Moment correlation coefficient is -.532. This showed that depression has a high negative relationship with internet addiction among university of Port Harcourt students. The calculated probability

value of 0.00 is less than the critical probability value of 0.05. Therefore, the null hypothesis is rejected. By implication, depression does not significantly relate to internet addiction among students of University of Port Harcourt.

Research Question 2: To what extent does anxiety relate to internet addiction among students of the University of Port Harcourt?

Hypotheses 2: Anxiety does not significantly relate to internet addiction among students of the University of Port Harcourt.

Table 2: Pearson Product Moment analysis on the relationship between anxiety and internet addiction

Variables	N	Df	R	Sig.	p-value	Decision
Anxiety	286	284	1.102	0.084	0.05	Null hypothesis was failed to be rejected
Internet Addiction						



Table 2 showed that the Pearson Product Moment correlation coefficient is 1.102. This showed that anxiety has a very low positive relationship with internet addiction among students of the University of Port Harcourt. The calculated probability value

of 0.084 is greater than the critical probability value of 0.05. Therefore, the null hypothesis is failed to be rejected. By implication, anxiety significantly relate to internet addiction among students of University of Port Harcourt.

Research Question 2: To what extent does insomnia relate to internet addiction among students of the University of Port Harcourt?

Hypothesis 2: Insomnia does not significantly relate to internet addiction among students of the University of Port Harcourt.

Table 2: Pearson Product Moment correlation on the relationship between insomnia and internet addiction among students of the University of Port Harcourt

Category	N	r	Sig.	Remarks
Insomnia				
Internet Addiction	286	-.036	.268	Not Statistically significant

Table 2 revealed that the Pearson Product correlation coefficient r was calculated to be -0.036 . This showed that there is a negative low relationship between insomnia and internet addiction among students of the University of Port Harcourt. The relationship between insomnia and internet of -0.036 is not statistically significant at 0.268 when compared to the alpha level of 0.05 . Therefore, the null hypothesis of no significant relationship between insomnia and internet addiction was accepted. This thus implies that, insomnia does not significantly relate to internet addiction among students of the University of Port Harcourt.

Summary of Findings

The results obtained after data analysis are summarized below;

1. It was found out that depression does not significantly relate to internet addiction among students of University of Port Harcourt.

2. The findings showed that anxiety significantly relate to internet addiction among students of University of Port Harcourt.
3. It was found out that insomnia does not significantly relate to internet addiction among students of the University of Port Harcourt.

Discussion of Findings

Depression and Internet Addiction

The findings of the study showed that depression does not significantly relate to internet addiction among students of University of Port Harcourt. The null hypothesis of no significant relationship between depression and internet addiction was accepted. The findings of the present study disagrees with an earlier study by Nie, Hillygus and Erbring (2002) who found out that excessive internet use can displace valuable time that people spend with family and friends, which leads to smaller social circles and higher levels of loneliness



and stress resulting in depression. McKenna and Bargh (2000) found out that the overuse of the internet results in a disruption of the normal life of an individual and the people around him, which increases the likelihood of being depressed. Van-Gelder (2005) also found out that students who are addicted to the internet are usually dejected, alone, bashful and shy, while having low quality of life and displaying signs of depression.

Anxiety and Internet Addiction

The findings of the study revealed that anxiety significantly relate to internet addiction among students of University of Port Harcourt. By implication, the null hypothesis of no significant relationship between anxiety and internet addiction was rejected. The findings of the present study is in agreement with an earlier study by Fitzpatrick (2008) who found out that internet addicts are susceptible to anxiety and impulse control disorder. He further stressed that internet addiction results in anxiety when addicts are overly concerned and worried about how they will continue to keep in touch with friends online, surf the net or follow a celebrity when their data finishes or their phone dies. Morahan-Martin and Schumacher (2000) also found out that internet addiction significantly relate to anxiety among university students.

Insomnia and Internet Addiction The finding of the present study showed that insomnia does not significantly relate to internet addiction among students of the University of Port Harcourt. The null hypothesis of no significant relationship between insomnia and internet addiction was accepted. The finding of the present study however disagrees with the study by Lee and Chung (2006) who found out that internet overuse has a detrimental effect on students' psychological well-being and that it results in poor quality of sleep, difficulty being

focused during the day. Mohammadi (2012) found out that students who are addicted to the internet often experience insomnia (difficulty falling asleep and parasomnia (abnormal movements, behaviors, emotions, perceptions, and dreams that occur while falling asleep). Cheung and Wong (2011) also found out that sleeplessness is higher in individuals with internet addiction.

Conclusion

Internet addiction has been conceptualized as a compulsive, persistent and uncontrollable use of the internet to such a degree that cessation causes severe emotional, mental, or physiological reactions. Internet addiction among students is a major problem which can cause serious health risks, pose academic challenges, abnormal heart rhythms, irritability and sensory disturbances. Although, most students who are addicted to the internet feel that being online helps them reduce tension, frustration, boredom and sometimes help them stay awake all night or increase their mental alertness. Experiences of some internet addicts have shown that excessive use and spending a lot of time on the internet carries a high price tag which often leads to anxiety, insomnia and depression. However, this study has showed that insomnia and depression does not significantly relate to internet addiction among University of Port Harcourt students. Further analysis of the result of the study revealed that anxiety significantly relate to internet addiction among University of Port Harcourt students. Therefore by implication, the study has shown that anxiety is a mental health comorbidity of internet addiction.

Recommendations

Based on the findings of the study, the following were recommended;

1. School counselors should endeavour to



organize periodic seminars and orientation programs to educate students on the effect of internet addiction on their academics and social behaviour.

2. Parents and caregivers should regulate their children's use of the internet to prevent them from being addicted.

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