TRIGGERS OF INTERNET ADDICTION AND CONTROL MECHANISMS AMONG UNDERGRADUATE STUDENTS OF UNIVERSITY OF EDUCATION, WINNEBA

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ABSTRACT

The Internet's penetration into daily life, rising to pathological Internet use with problems similar to those of other behavioural addictions is of great concern to an increasing number of people. University students are especially susceptible to developing a dependence on the Internet. This study through the lens of general strain theory, and a qualitative case study design critically examined triggers of Internet addiction and control mechanisms among 12 undergraduate students of university of Education, Winneba. From the study, it was evident that the Internet has become an integral part of student's life. The numerous potential benefits of Internet usage notwithstanding, undergraduate students are at high risk of developing Internet addiction. The study found themes such as anxiety, depression, curiosity, boredom, loneliness and academic research as triggers of Internet addiction among students. The study also revealed themes such as self-restraint, awareness creation, administrative restrictions and purposefulness as control mechanisms to evade Internet addiction. It was discovered that in spite of the fact that the Internet helps students positively in many ways, it also impacts them negatively. The study revealed that, it is important to investigate the intensity of Internet addiction among university students. The study concluded that Internet addiction is a vital issue to be attended to immediately. The study recommended to health care professionals and educational counsellors to interact with students on the positive use of the Internet. Also, university counselling centres should create platform where students will be educated on the control mechanisms of Internet addiction such as exercising self-restraint and being purposeful while online.

Keywords: *Triggers, mechanisms, self-restraint, loneliness, depression, restrictions.*

1. INTRODUCTION

The Internet is a world-wide broadcasting capability, a mechanism for information dissemination, and a medium for collaboration and interaction between individuals and their computers without regard for geographical location (Leiner et al., 2009). The Internet, as a facility has become a common good for all, irrespective of a country's level of technological advancement. There are concerns that student's heavier use of the Internet will make them addicted. Internet addiction refers to the excessive, and uncontrollable use of the Internet, which can lead to functional impairment in daily life (Young, 1999, as cited in Lan et al., 2020). In other words, a person who is addicted to the Internet feels compelled to frequent and increasingly use the technology despite the fact that it causes problems in their lives. There is increasing interest and concern about the addictive power of the Internet and its effect particularly on students, adolescents and other young people in society (Chung et al., 2019). Even though the Internet is very useful in student's academic life, it also has a dark side. The rapid increase of Internet accessibility is associated with a rise in Internet addiction, especially among adolescents and young adults with underlying psychological disorders (Al-Shawi et al., 2021). The Internet's penetration into daily life is a serious problem for an increasing number of people, rising to the level of pathological Internet use with problems similar to those of other behavioural addictions (Spada, 2014). University students are especially susceptible to developing a dependence on

the Internet, more than most other segments of society (Zenebe et al., 2021). This can be qualified to numerous factors including availability of time, ease of use, psychological characteristics of young adults and limited or no parental supervision. With the development of society and information technology, the Internet has brought convenience and also some problems, especially for undergraduate students (Liang et al., 2021). University students may be prone to Internet addiction which can affect their physical (Alaca, 2020), mental health (Lam, 2020), academic performance (Fossion et al., 2018) and even generate suicidal ideation (Lu et al., 2020). Even though the availability and use of the Internet among university students is crucial in their academic endeavours, excessive gaming, Internet-based gambling, Internet-based sex, viewing pornography, developing and sustaining intimate online relationships, entertainment and socialising or social networking through different social media platforms increase the odds of Internet addiction among university students (Islam et al., 2018).

1.1 Statement of the Problem

The phenomenon of Internet addiction among students has long been studied (Cao & Su, 2007; Kubey, Lavin & Barrows, 2001; Young, 2004). For example, Kubey et al. (2001) studied Internet addiction and indicated that students have become obsessed with Internet usage and as a result exhibited negative outcomes such as decline in academic performance. Excessive Internet use has emerged as a case to be considered in many countries. Some studies have been conducted which indicates that Internet addiction is prevalent among undergraduate students (Iyitoglu & Celikoz, 2017; Zenebe et al., 2021). Internet addiction is therefore an increasing problem among university students all over the world and this problem could escalate due to the easy access to the Internet and flexible schedules (Abdel-Salam et al., 2019). Inasmuch as there have been studies on Internet addiction among students, recent studies have identified high rates of Internet use among university students (Amoah, 2020; Zenebe et al., 2021; Zhang et al., 2021). Yusuf et al. (2020) conducted quantitative research on Internet addiction and its effect on the academic performance of computer science students at Bayero University. As part of their recommendations for future research, they indicated the need to investigate what drives students to become Internet addicts. Adorjan et al. (2020) on the other hand did a cross-sectional survey of Internet use among university students. Their studies recommended that future research should take a more differentiated look at the various types of Internet use in order to contribute more in terms of accurate diagnoses and prevention. Amoah (2020) also did a preliminary study on Internet addiction among university students in Ghana. His study recommended that future research may be necessary to examine the control mechanisms to evade Internet addiction. Although Yusuf et al. (2020), Adorjan et al. (2020) and Amoah (2020) acknowledged that Internet addiction is prevalent among university students, they based their assertions primarily on the consequences and level of addiction. Thus, they did not examine the triggers of Internet addiction and control mechanisms. It therefore looks like minimal focus has been paid to the triggers of Internet addiction and control mechanisms in spite of significant studies that have been done. My study therefore focused on the triggers of Internet addiction and the control mechanisms among undergraduate students of University of Education, Winneba.

1.2 Objectives of the Study

Internet addiction has become a widespread problem among undergraduate students. Students excessive Internet use is worthy of attention because of its consequences on their academic, mental and physical health. Based on this background, this research study sought to:

1. Investigate triggers of Internet addiction among undergraduate students of University of Education, Winneba.
2. Investigate the control mechanisms that undergraduate students of University of Education, Winneba employ to evade Internet addiction.

1.3 Research Questions

This research study aimed to answer the following questions:

1. What are the triggers of Internet addiction among undergraduate students of University of Education, Winneba?
2. Which control mechanisms do undergraduate students of University of Education, Winneba employ to evade Internet addiction?

2. LITERATURE REVIEW

On a psychological level, some people use the Internet as a reward or coping strategy to overcome emotional crises or dissatisfaction, and such use is not necessarily primarily dysfunctional (Festl et al., 2013). Li et al. (2015) note that stress is a common trigger of intensive Internet use. The rapid growth of the Internet has had a significant impact on psychological studies in understanding the level of stress and increasing interest on Internet addiction. Studies have shown that the potential for a student to experience stress is high as a result of Internet abuse that interferes with one's normal life (Mustafa et al., 2020). Internet addiction among students indirectly decreases their social relationships and increases the likelihood of being alone and becoming stressful. Stress is the physical, emotional and mental response of a person to any change or demand. Stress is part of an individual's life. Agnew (1992) argues that stress, and negative social relationships, can cause negative emotions and then lead to deviant behaviour or addiction to escape negative emotions. Tenzin et al. (2019) also acknowledge that peer pressure is one of the factors that trigger intensive Internet use among university students. In addition, mood and social related obligations are common emotional and situational triggers for many students to engage in intensive Internet use (Li et al., 2015). The negative emotional states resulting from palliative Internet use are related to anger and frustration. Reasons for frustration varies according to feeling guilty due to spending lengthy and unproductive time on the Internet, and being angry with other people's behavior on the Internet.

Most students use the Internet as a functional tool to perform their personal goals in everyday-life such as academic research, interpersonal relationships, entertainment and news sharing. In spite of the fact that the Internet helps students positively in many ways, Internet addiction is an important issue that needs to be addressed. Pejović-Milovančević et al. (2009) assert that Internet addiction has been accepted as a clinical entity with profound negative effect on social, educational and economic functioning among students. With the growth of the Internet over the last two decades, the number of students experiencing massive negative consequences in their lives has also grown extensively (Brand et al., 2014). Consequently, Young (1998) affirms that students who experience loss of control over their Internet use suffer from social problems as well as school and/or work difficulties. One of the consequences of Internet addiction among students is the exhibition of deviant behaviours. Investigating the intensity of Internet addiction among university students help parents and university administrators to intervene appropriately, considering the threats of impaired academic performance, physical, psychological and social wellbeing. There is ardent need to analyse the control mechanisms of Internet addiction among students in order to reduce their impact. Early intervention and identification of those showing signs of problematic Internet use may prevent the development of maladaptive coping responses and addictive behaviour, thus preventing future negative psychosocial consequences.

2.1 Theoretical Framework

The General Strain Theory was used by the researchers as the theoretical framework. The theory was initially propounded by Merton (1957) and later expanded by researchers such as Agnew (1992). Merton (1957) argued that strain is a social phenomenon that is caused by the differences between an individual's expectations from self and the opportunities available to fulfil these expectations. Agnew (1992) also postulates that strain results from three types of sources (as cited in Peck, Childs, Jennings & Brady, 2018). The first source of strain is the failure to achieve positively valued goals. The second source of strain involves the real or anticipated removal of positively valued stimuli, including the death or illness of a family member, parental divorce, suspension from school, or loss of a boyfriend or girlfriend (Akers, Sellers, & Jennings, 2016). The third source of strain results from the presentation and inability of youths to legally escape from negative (noxious) stimuli. Strain theorists believe that an individual's inability to escape from negative situations or stimuli or to achieve socially defined expectations using conventional methods can result in deviant behaviours (Jaggers et al., 2014). Deviant behaviours that occur as a result of Internet use, include the same type of deviant activities performed before the inception of the Internet. These activities include: using the Internet for illegal activities that violate statutory laws, inappropriate use defined as a violation of the intended use of the Internet, obscene activities defined as entering a pornographic website or selling pornographic goods on the Internet, and using the Internet to violate copyrights laws (Daniel, 2005). With the use of the Internet, students have advanced to exhibiting other deviant behaviours such as cyberaggression, cyberbullying, trolling, sending unwanted images and online gambling (Tanrikulu & Erdur-Baker, 2021). These students use e-mail, websites, instant messaging, chat-rooms and text messaging to antagonize and intimidate others. The general strain theory is important to the unique challenges faced by people who are addicted to the Internet.

3. METHODS

3.1 Research Approach

This study was conducted using exploratory qualitative case study at the University of Education, Winneba in Ghana. Creswell (2014) notes that if a concept or phenomenon needs to be explored and understood because little research has been done on it, then it merits a qualitative approach. Triggers of Internet addiction and control mechanisms is an area where little research has been done through the qualitative approach (Li et al., 2015).

3.2 Sample

Prior to data collection, ethical approval for the study was granted by the university Research Ethics Committee. Data were collected from 12 students (8 men and 4 women) between June 5th and July 25th, 2022. The participants were undergraduate students of University of Education, Winneba aged between 18 and 23 years old. The participants were selected from the School of Communication and Media Studies, Faculty of Science Education, School of Business Studies and Faculty of Social Science Education. They were selected by employing expert sampling technique. The participants were selected using purposive sampling approach.

3.3 Procedure

For the purpose of triangulation, the study employed interviews and focus group discussions. Relative to the study, the participants were selected for in-depth interviews. Open-ended questions were carefully designed to answer the research questions as well as address the research objectives. The open-ended interview guide thus, generated qualitative and opinion-related information to answer research questions one and two. The interview guide was developed on the basis of concepts from extant literature on triggers of Internet addiction and control mechanisms. The rationale for conducting interviews was to avoid delays in filling and returning questionnaires by participants and also to have access to highly opinionated views as data for the study. The participants were interviewed in a conversational manner within a period of 40 to 45 minutes. The interviews were conducted at a place of convenience of the participants. Data collected were then recorded and transcribed for patterns of themes to emerge. The researchers also took notes so that in the event the recording failed they would rely on it.

The researchers employed two focus group discussions to obtain detailed descriptions on triggers of Internet addiction and control mechanisms among the participants. Participants were allocated to one of two focus groups based on their availability. Ultimately each focus group consisted of 6 participants. The discussions lasted approximately one-hour for each focus group. The focus group discussion guide consisted of 16 open-ended questions. The group discussion guide was developed and refined by the researchers on the basis of the research objectives, and relevant substantive theories. The group discussion was held in a congenial atmosphere, with the researchers' asking series of open-ended questions. This approach helped the participants to answer the questions vividly. Major issues explored in the focus group discussions centred on triggers of Internet addiction and control mechanisms.

3.4 Data Analysis Procedure

Audiotapes of the interviews and focus group discussions were transcribed verbatim and checked for accuracy by the researchers. No software was used to assist in the coding or transcription of data. The findings of this research were coded and analysed using thematic analysis approach with close reference to the research objectives and research questions. We categorised the data into themes. We coded the various interviews and focus group discussions conducted with the participants. We noted the issues that run through the interviews and focus group discussions and categorised them under various themes. We used the inductive type of thematic analysis (Braun & Clark, 2013) where the researcher does not fit the data into any form of preconceived analysis or pre-existing coding frame. We further interpreted the findings using theories to draw meaning of responses from informants. Direct quotes were also used to support the discussions and interpretations. Pseudonyms were given to participants so that quotes given by the same individual were identifiable. This helped the researchers conceal the identity of the participants. Two overarching themes emerged from the interviews. For each theme, subthemes were also derived. During the process, we organised the codes into main themes and sub-themes. Initially, codes were generated from the research objectives on triggers of Internet addiction and control mechanisms. Then, we reviewed the codes in context, providing labels and definitions reflective of the raw data. Further, in accordance with DeCuir-Gunby et al. (2011) recommendations, the second round of coding was conducted on the level of meaning via a data-driven method, which enables codes to be developed on the sentence and paragraph level. In this round of coding, we checked whether any new theme or sub-theme could be identified.

4. RESULTS AND DISCUSSIONS

Data obtained have been reduced into themes. These earlier works include triggers of Internet addiction and control mechanisms employed by students. Specific codes were used to label respondents so as to ensure their anonymity. This helped the researchers to protect the research participants, developed trust with them, promote the integrity of research and guard against misconduct and impropriety. The following are the codes used for the respective participants: Interview Participant (IP) and Focus Group Participant (FGP). Two primary themes were identified, each with particular nuance represented through subthemes.

4.1 Theme 1: Triggers of Internet Addiction

The study revealed six overarching subthemes that trigger students' use of the Internet. The qualitative findings which include anxiety, depression, curiosity, boredom, loneliness and academic research demonstrated negative emotions and situational triggers for many students to engage in intensive use of the Internet.

4.1.1 Anxiety

Results of the study showed that prolonged use of the Internet create situations which causes anxiety and distress among students. This affects their physical, psychological, economic, social, family, and personal relationships. The study showed that students who suffer from anxiety often have a great deal of trouble communicating and interacting with others in a healthy, positive, and meaningful way. One participant remarked as follows:

> "On a psychological level, anxiety drives me to be on the Internet. Anxiety is a natural response to stress. It is a feeling of fear or apprehension about what is to come. So, when I am anxious, about anything, I visit the Internet as a way of releasing the stress." (FGP).

In recent times, disorders resulting from anxiety have become one of the most important issues for psychologists, psychiatrists, and behavioural science experts. Other participants indicated that they frequently use social media as a way of managing their anxiety. While some participants reported updating their status constantly, others reported checking others status. One participant said this:

> "I visit WhatsApp platforms to check on some WhatsApp messages and also update my status. I engage
in   things that will make me have fun. Sometimes I visit WhatsApp platforms when anxiety sets in. So, I just visit to release stress. Yea, that's what I do on WhatsApp." (IP)

The use of WhatsApp enables students to elevate their anxiety. Some of the WhatsApp messages are funny. When students watch them, they become happy and have fun.

4.1.2 Depression

Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. The results of the study showed that students who were depressed usually engaged in online activities as a way of getting rid of these psychological characteristics. Some of the participants indicated that when they feel anxious, lose focus, irritable and in deep sorrow, they visit the Internet. The study revealed that pathological use of the Internet has become an emerging mental health issue among undergraduate students in Ghana. Some of the indicators of these pathological Internet use are failure to eat for long period, little sleep, and limited physical activity. One participant said this:

> "When a student is depressed, you easily realise it through conversation. Such a person does not communicate anything meaningful. Anytime he/she speaks, you will see that his language is all about the Internet. This will have negative effect on the person." (FGP)

Strong dependence on the Internet is associated with the elimination of the individual from the real world which in turn reduces happiness and social interaction. The user's mind engages in ineffective imaginations which would have no outcome but depression.

4.1.3 Curiosity

The study revealed that widespread use of the Internet among university students have contributed to increased curiosity about what type of online activities students engage in. Curiosity is a powerful motivator of behaviour initiated at exploring actions to resolve uncertainty. It has been considered the basic instinct, an innate mechanism that enable students to explore the Internet. The results of the study revealed that curiosity triggers students desire to be on the Internet. The study revealed that students are curious to visit social media sites for fun and engage in other social interactions. This is evident in their quest to seek for information about popular artistes or friends on social media in terms of up-to-date post including photographs. One of the reasons why students are curious to use the Internet is due to the availability of social networks such as Twitter and Facebook. One of the participants said this:

> "Sometimes I am curious to visit the Internet. I remember one time when I was in Senior High School. We were taught reproduction. So, I tried to actually know what it entails. So, curiosity also sometimes make me go there to look at certain things. And sometimes too, I feel like I want to have fun. Like I want to talk to people. People that I've seen for long. I go there to check up on them, we talk, we share a lot of ideas and stuffs." (IP 11)

However, when students are curious online, they waste precious time which leads to Internet addiction.

4.1.4 Boredom

Findings from the study revealed that boredom is a common trigger of Internet addiction among students. Boredom is significantly associated with Internet addiction and Internet-related functional impairment among university students. Regardless of the level of the emotion, most participants noted that particular feelings and moods triggered desires to engage in specific Internet activities. Participants discussed the Internet as their primary strategy for coping with boredom. Others seemed to link the Internet to specific type of boredom relief such as laughing, connecting with others, and information retrieval. Some of the participants noted that whenever they were bored, and stressed, they just got online to relax. One participant said this:

> "Sometimes when I am bored, I just switch on my data and start viewing some friend's status." (FGP)

For other participants, the Internet is a means of relief any time boredom arose due to easy access on mobile devices with data bundles. One participant said this:

> "When I am bored, I always want to log on to the Internet using my mobile phone. Some of my friends always post comic status. I watch them to release stress." (IP 1).

Some participants had the immediate desire to engage in different activities on the Internet such as browsing social media sites when feeling bored. Participants who had boredom susceptibility, impulsivity, and novelty/sensation seeking temperaments were at elevated risk for addictive behaviours. Thus, it is intriguing that many students in this study reported Internet use as a primary means of coping with boredom. One participant said this:

> "I visit my WhatsApp platforms to check on some WhatsApp messages and status just to have fun when I am bored. Sometimes I go there to release stress because others have their status very funny. So, I just sometimes watch to release stress when bored." (FGP)

4.1.5 Loneliness

Loneliness is a subjective psychological feeling or experience that occur when an individual senses lack of satisfactory interpersonal relationships and a gap between his or her desired and actual levels of communication. The results of the study showed that loneliness is one of the main antecedents of Internet addiction alongside feelings of anxiety, depression and boredom among students. One participant said this:

> "I think what triggers Internet addiction is loneliness because when you are alone and bored, you feel like visiting other social media platforms to see what is going on. So immediately you log on to these platforms and start chatting, you become glue to the Internet. So, I think that has also caused the addiction." (IP 6)

Internet use can displace valuable time that people spend with family and friends. This increases their level of loneliness.

4.1.6 Academic Research

Findings from the study revealed that academic research is one of the triggers of Internet addiction. The nature of students' studies requires that they visit the Internet frequently for their academic work. A respondent commented as follows:

> "I visit the Internet often for my academic research. With the introduction of the learning management system, I visit the Internet to access quizzes and other tutorials related to my academic study. I also use the Internet to submit my assignments." (IP)

Findings of the study revealed that with the advent of the Internet on university campuses, students have additional tools to access information that could broaden their horizons and improve their academic performance. Students visit the Internet to access library catalogs, bibliographic databases and other academic resources in text and graphics. A participant said this:

> "I visit the electronic library through the Internet to search for information concerning my programme of study." (FGP)

The study revealed that the Internet has given a new approach to education where students do not only depend on their lecturers for tutorials but also engage in online academic research.

4.2 Theme 2: Control Mechanisms

Four subthemes were identified among participants' strategic approaches to controlling the use of the Internet: self-restraint, awareness creation, administrative restriction and purposefulness.

4.2.1 Self-restraint

The study revealed that students with higher levels of self-restraint have habits that align with their long-term goals and increases their habit for studying. The need for self-restraint while on the Internet is important. Most participants indicated that students must exercise self-restraint when engaging in online activities. One participant said this:

> "I will say that students are the master planners of their own lives. I will entreat my fellow students to exercise self-restraint when engaging in online activities. Those who are into betting, for me emotionally and psychosocially it affects them and I feel students should actually eschew them. And I know sometimes it is habitual so it's difficult. I will advise my fellow students that if it has become a habit and doing away with it becomes a problem, then anytime the feelings or emotions arise, they should eschew them and actually look for those stuffs which could be educationally beneficial." (FGP 2)

Findings of the study revealed that self-restraint involves the regulation of behaviours, thoughts, and emotions, as well as modifying or inhibiting socially undesirable tendencies. This is exhibited through limiting Internet use to include minimal social interaction, focus on the need to use the Internet for school assignments and research, and limiting Internet gaming.

4.2.2 Awareness Creation

The amount of time that a student spends on the Internet is a crucial factor which increases risk of Internet addiction. Students who are addicted to the Internet struggle to control their behaviours and often experience great despair over their consistent failure to escape their addictive behaviours because of their continuous exposure to the Internet on campus. Participants noted that awareness should be created among the undergraduate students by the university administration about the disadvantages of the excessive use of the Internet and encouraging students to use the Internet for academic research and gathering scientific information. The study revealed that awareness should be created among the students to improve reduction in the occurrence of Internet addictive behaviour. One participant said this:

> "The University has a role to play. They can create awareness by organizing seminars on the consequences of using the Internet. This will actually help students to be abreast with the possible ways of using the Internet for academic purposes." (IP 9)

Some participants said that prevention and intervention measures should be implemented at universities to raise awareness of students about Internet addiction as well as its associated factors and to improve mental health for Internet addicted students.

4.2.3 Administrative Restrictions

Results of the study revealed that students have the opportunity to visit several sites while they are online. The Internet can be a bad tool for higher academic achievement if its use is not restricted. Controlling the use of Internet in the university helps in decreasing the prevalence of Internet addiction among students. Findings of the study revealed that administrative restrictions of the Internet on university campus is crucial considering the negative effects on students. A participant commented as follows:

> "The university administration has a role to play. They should actually make some restrictions to some sites which does not provide information on education. They should make restrictions on them." (FGP 12)

Considering the negative impacts of Internet addiction such as social isolation, emotional instability, mental health and decline in academic performance, there is the ardent need for university administration to regularise the use of the Internet on campus.

4.2.4 Purposefulness

In spite of the obvious advantages of the Internet to students, the amount of time spent by university students online might be a cause for concern. Results of the study indicates that when students become purposeful whilst online, it helps them from being addicted to the Internet. One of the participants indicated as follows:

> "When I am on the Internet, I should be true to the purpose of which I logged on. I need to be disciplined and have a positive mindset specifically on my academic research. If not purposeful, I will end up visiting other unwanted sites." (IP 7)

Purpose is a forward-looking directionality and an intention to do something. Having a sense of purpose while online is fundamental to student's academic achievements. There is the need for students to make good use of the Internet by being selective to contents which relates to their academic research. One of the participants commented as follows:

> "As a student, I should be the chief controller of the Internet. The Internet should not control me. This means that when I am online, I will only search for contents which relates to my studies. I will cancel all updates and pop-ups which has nothing to do with my academic research. If I am not purposeful, I will end up watching pornographic films and other videos which will distract my attention." (IP 10)

This means that students should focus on their aims while online. Some participants indicated that students must be purposeful when engaging in online activities. This is evident from the fact that students can tumble into major depression when their online study blips off the screen forever or they experience withdrawal when they try to quit their online habit.

4.3 Discussion

The qualitative findings which include anxiety, depression, curiosity, boredom, loneliness and academic research demonstrated negative emotions and situational triggers for many students to engage in intensive use of the Internet. Unfortunately, use of the Internet as a coping strategy for negative psychological states may also perpetuate these states in the long-term. This affirms Festl et al. (2013) view that on a psychological level, some people use the Internet as a reward or coping strategy to overcome emotional crises or dissatisfaction. Research suggests that use of the Internet may be similar to self-medication with alcohol and other psychoactive drugs (Gómez-Galán et al., 2020; Kim et al., 2020). Theorists have suggested that problematic Internet use is a palliative coping mechanism for negative affective states and mental distress (Jaggers et al., 2014). For students in this study, the negative emotional states resulted from palliative Internet use. Students intensive use of the Internet both contributed to and exacerbated negative emotional states. The study revealed that students who were affected by intensive Internet use also exhibits deviant behaviours. This confirms the view of general strain theorists (Agnew, 1992) that individual's inability to escape from negative situations or stimuli or to achieve socially defined expectations using conventional methods result in deviant behaviours. Tanrikulu and Erdur-Baker (2021) support the above view that through the use of the Internet, students have advanced to exhibiting other deviant behaviours such as cyberaggression, cyberbullying, trolling, sending unwanted images and online gambling. The study showed that students use the Internet to seek solace from the triggers of Internet addiction and escape.

In spite of the fact that the Internet helps students positively in many ways, Internet addiction is an important issue that needs to be addressed. Pejović-Milovančević et al. (2009) assert that Internet addiction has been accepted as a

clinical entity with profound negative effect on social, educational and economic functioning among students. With the growth of the Internet over the last two decades, the number of students experiencing massive negative consequences in their lives has also grown extensively (Brand, Young & Laier, 2014). Investigating the intensity of Internet addiction among university students help parents and university administrators to intervene appropriately, considering the threats of impaired academic performance, physical, psychological and social wellbeing. There is ardent need to analyse the control mechanisms of Internet addiction among students in order to reduce their impact. Early intervention and identification of those showing signs of problematic Internet use may prevent the development of maladaptive coping responses and addictive behaviour, thus preventing future negative psychosocial consequences.

4.4 Limitations

The findings and discussion of this study should be considered with its strengths and limitations. The study set out to examine the triggers of Internet addiction and control mechanisms among undergraduate students of University of Education, Winneba. Like any other clinical disorder, Internet addiction requires both quantitative and qualitative assessment to determine if a person is addicted to the Internet. Given the rapid proliferation of the Internet, the study attempted to examine the triggers of Internet addiction and control mechanisms using only qualitative research approach. Quantitative research test and appreciate the degree of disorder as well as the causal relationship between the disorder and its effect on an individual. On the other hand, Qualitative research appreciates people's opinion about the disorder and determine whether an individual is actually addicted or not. Thus, qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. Using only qualitative research approach for the study does not pave way to ascertain the degree of disorder and the causal relationship with the heavy users of the Internet. In addition, using 12 participants to represent the entire University student population did not provide fair representation for the study. However, since qualitative studies are not about large numbers but concerned with garnering an in-depth understanding of a phenomenon, the sample size gave a fair representation of how Internet addiction fares on the university campus, though not enough. Nevertheless, these limitations did not take away the credibility of the study, as it has implications for further studies.

4.5 Recommendations

In the last decade, the use of the Internet has increased considerably, with Internet addiction becoming a severe public health concern around the world (Facts, 2015). Internet addiction ruins lives by causing neurological complications, psychological disturbances, and social problems. Given that university students are susceptible to Internet addiction due to their heavy usage, the study therefore recommends that there should be frequent seminars and other educational fora that sensitises students on the need to adopt safe practices while online. Some of these safe online practices are: keeping sensitive information private, avoiding interacting with strangers, zero tolerance of cyberbullying and avoiding clicking on suspicious links. With regard to students' online activities, the study found that themes such as anxiety, depression, boredom, loneliness and academic research act as key triggers for online addiction among students. Health care professionals as well as university management should probe for maladaptive patterns of Internet use. Additionally, there may be useful ways of leveraging Internet to decrease stigma of stress, depression and loneliness and identify individuals at risk. Owing to the fact that the Internet has become an integrated component of human interaction, it is important for health care professionals and educational counsellors interacting with students to recognize the important balance on the positive use of the Internet. Considering the seriousness of Internet addiction and its increasing incidence, university counselling centres should create the platform where students will be educated on the control mechanisms of Internet addiction such as exercising self-restraint and being purposeful while online. Others could include administrative restrictions that university may apply in order to control excessive use of the Internet among students. This could be done through the development of seminars designed to increase awareness among students on the ramifications of Internet abuse on campus.

4.6 Conclusions

This study examined triggers of Internet addiction and control mechanisms among undergraduate students of University of Education, Winneba. From the study, it is evident that the Internet has become an integral part of student's life. The numerous potential benefits of Internet usage notwithstanding, undergraduate students are at high risk of developing Internet addiction. The Internet has been found to have a very strong impact on university students, especially in the areas of anxiety, stress and depression. This affects students' academic, psychological, social and family life. Internet addiction is associated with obsessive compulsive symptoms and interpersonal sensitivity. The study highlights the need for more clinical studies focusing on psychiatric or psychological

symptoms. It concludes that Internet addiction is a vital issue that requires attention and immediate remediation because of its possible consequences on university students.

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