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## Internet Addiction among University Students: Causes, Consequences, and the Role of Cyber Counseling

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### ABSTRACTS

This study explores the prevalence of internet addiction among undergraduate students in Kwara State and examines the potential effectiveness of cyber counselling in addressing this issue. The paper commences by providing a precise definition of internet addiction, proceeds to assess its prevalence among undergraduates in Kwara State, conducts an in-depth review of existing research on the factors contributing to internet addiction, and outlines the adverse consequences associated with excessive internet use among students. Based on this thorough analysis, the research emphasizes the crucial role that cyber counsellors, professionals trained to offer therapeutic guidance and support for individuals struggling with internet addiction, can play in helping individuals manage their addiction and improve their overall well-being. Furthermore, the study advocates for a collaborative approach, bringing together cyber counsellors, educational institutions, and other relevant organizations, to raise awareness about the risks of internet addiction and to develop initiatives and policies that promote a healthier and more balanced internet usage among student populations.

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## 1. INTRODUCTION

Addiction to the internet is a widespread issue that worries young people especially. These days, the internet is increasingly available in locations like schools, colleges, libraries, and internet cafes. Online activities include finishing homework, playing games, reading and composing emails, and having real-time chats (Machimbarrena et al., 2018). Many children and teenagers have access to the internet and are exposed to it at an early age, according to preliminary studies (Abdulkareem et al., 2023). On a global basis, its user base and size are rapidly growing and developing (Hassan et al., 2023). The advantages of using the internet for keeping in touch with friends, planning trips, managing finances, and meeting educational needs have all been extensively explored (Bello et al., 2023). More than 5 billion people around the world (or 40% of the world's population) utilize the internet, making up 63 percent of all users as of the first quarter of 2022 (Pawlikowska et al., 2022).

The posited that teens can spend upwards of eight hours per day reading through their social media feeds, and to them, this is completely normal (Aalbers et al., 2019). Without stopping to consider whether this behaviour is causing issues in other areas of their lives, they might continue this practice for days or even months (Muraina et al., 2022). They do this for a variety of reasons, including receiving academic support in the form of online tutoring and maintaining contact with their friends and family. Since students use the internet to look for and receive scholarly information, little is known about how well they use this resource (Lamont et al., 2020). proposed that students' information-seeking comes to a halt when they work on their assignment. One of the key elements influencing university students' social and academic lives is their use of the internet. Depending on whether students routinely use the internet for common or academic purposes, the extent of time spent connected has an impact on their scores. Most students use the Internet in "pathologic" ways. Pathological

Excessive usage of the internet can disrupt daily routines, negatively impact relationships with others, cause problems with time management, and even impact one's health. One drawback of the Internet is the possibility of developing an addiction to it, such as via prolonged use. Lack of sleep, tension, depression, mood swings, gambling, and academic dishonesty. The majority of college students who live away from home and take fewer classes run the risk of developing an addiction to the Internet.

A decrease in face-to-face engagement and an increase in virtual interaction might lead to social isolation and despair (Fatema et al., 2020; Fardghassemi & Joffe, 2022). As a result, it has been proposed that a child's excessive internet use (EIU) may trigger the development of compulsive internet use (CIU) or internet addiction, both of which may have unfavourable effects. The term "problematic use of the internet" (PUI) refers to a variety of detrimental behaviours that can be facilitated by the internet, including compulsive online shopping, excessive video gaming, improper use of social media, and online gambling. Overuse of the internet is comparable to overtraining, both of which can be detrimental to one's health. (Darpinian et al., 2022). Excessive exercise is healthy for the body and the soul, but it can also be harmful to the body and the mind. Although the internet may generally be beneficial, as in other spheres of life, having too much of a good thing can cause problems. An effective solution to the overuse issue is nevertheless extremely important for societal economic development, individual career development, national education development, and talent recruitment on a global scale. This is true

regardless of whether it occurs at the level of the family, the school, or the person.

## 2. CONCEPTS OF INTERNET ADDICTION

The contentious nature of internet addiction and the potential emergence of a new form of obsessive behaviour have made it more widely recognized. An excessive or compulsive use of the internet, usually incorporating social networking, gaming, and online shopping, is referred to as internet addiction. It is not currently included as a formal disorder in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), despite being recognized as a behavioural addiction and being researched (Lebni et al., 2020). Neglecting obligations and interpersonal connections, going through withdrawal while not online, and experiencing euphoria when using the internet are all signs of internet addiction. The ease of access to computers and online information has led to a modern condition known as internet addiction (Wang, 2019). On the other hand, maintained that it was an impulse disorder (Kurniasanti et al., 2019). Internet addiction is more common in those who are easily bored, lonely, introverted, depressed, or who have other addictions (Abdulkareem et al., 2023). Particularly; the distinctive features of this problem are similar to those of pathological gambling. With the numerous caveats attached to the use of the internet, there are risks associated with addictive behaviour. Internet addiction can be equated to a gaming habit, which is one of the behavioural addictions and a subset of technological addiction. On the other hand, internet

addicts frequently use the internet more frequently and with greater pleasure. They suffer unfavourable effects from the internet in their relationships with their parents, their health, and their education. They display signs of withdrawal and excessive internet use (Amudhan et al., 2021). Any age or social context can result in the development of an internet addiction, although the majority of research attention has been focused on adolescents since they seem to be especially susceptible to the development of compulsive behaviours. The most common leisure activity today is using the internet (Mathew, 2020).

Some of the reasons given for this excessive internet use among students included the availability of free time, insufficient parental supervision, and the avoidance of academic obligations. It is widely believed that university students are more prone to internet addiction due to psychological and developmental factors that influence adolescents' and young adults' ideas about the reasons behind their experiences and the factors they attribute to success or failure. Online addiction is characterized by an overwhelming need to use the internet, a devaluation of time spent offline, extreme anxiety and hatred in the event of a scarcity, and a steady decline in social and familial relationships. (Chand & Sheth, 2021). Additional signs of internet addiction include obsessive internet use, tolerance, withdrawal symptoms, excessive computer use, and a lack of interest in other things (Chand & Sheth, 2021).

### 2.1. Cybersexual addiction

Internet friendships made through adult chat rooms or cyberporn can lead to addictions to these types of sites;

compulsive internet shopping, day trading, or gambling can lead to addictions to cyber relationships; information overload: perusing the web or databases excessively; Computer addiction can take the shape of compulsive programming or game-playing. "Internet addiction" is a psychosomatic disorder that has been linked to excessive internet usage (Berte & Affouneh, 2021). Teenagers' communication, socialization, friendship formation, and maintenance have all changed significantly as a result of internet use, especially social media. Although there are benefits to living in the digital era, there are also risks. Teenagers today spend the majority of their free time watching screens because they lack the social abilities needed for social development. They are also misplaced in a world of unfair comparisons and online bullying, which breeds feelings of worthlessness and shame. The use of social media networks has no doubt greatly impacted the activities of university students. Who reiterated that the success of interactive web utilization was very much related to the users' attitudes toward social media networks (Eid et al., 2020). Because of this, a lot of students have a tendency to rely a lot on their phones, which will surely result in even more use. Students love their mobile phones because they make it easier for them to communicate with each other and build social networks.

### 2.2. Prevalence of internet addiction among University Undergraduates

Overuse of the internet is now widely acknowledged to be a serious risk to university students. These pupils Many mental health conditions, including anxiety, sadness, stress, low self-esteem,

and poor psychosomatic wellness, are linked to internet addiction (Abdel-Salam et al., 2019). The relationship between undergrads at al-Hikmah University-Ilorin's locus of control and self-concept and their propensity for internet addiction (Abdulkareem et al., 2023). The study used correlation survey research as its approach. The researchers looked at five null hypotheses and five research areas. Utilizing a practical sample methodology, 550 people who frequently use information and communication technology (ICT) and the e-library were selected. Among the tools utilized to collect data from the respondents were the Internet Addiction Scale, the Locus of Control Scale, and the Self-Concept Scale. We used Pearson product-moment correlation (PPMC) and regression analysis to determine the answers to the study questions and the null hypotheses. The results demonstrated that among undergraduate students, self-concept, gender, and internal and external locus of control had a substantial impact on internet addiction. Statistics on internet addiction differ significantly by nation. In a big European study completed in 2019, the prevalence of Internet addiction among people ranged from 7.9% to 22.8% (Tóth et al., 2021). Discovered that 4.4% of young adults in Europe have an Internet addiction (Su et al., 2020). 38% of Korean adolescent boys and girls were found to be at risk for Internet addiction, and 1.6% of them have admitted to having it, according to (Duong & Augustin's, 2020). The prevalence of online addiction among teenagers in El-Minia, Upper Egypt, was 2.6%, whereas the prevalence of potential internet addiction was 18.2% (Nageeb & Al Enzi 2020).

In Kwara State, undergraduate students, (Bello et al., 2023), examined

how locus of control affects internet addiction. A descriptive survey with a single research question was the study's design. Two hypotheses were established and explored in the study. 500 undergraduate students (200 men and 300 women) make up the sample of the population. The selected locus of control scale and the internet addiction scale were used to gather the data. The data were then analysed using frequency, mean percentage, standard deviation, and t-test. Researchers discovered that Kwara State College of Education students differ significantly from other students in terms of locus of control and internet addiction. The outcome also demonstrates that the male and female respondents' loci of control—both internal and external—are unaffected by their gender. In contrast, Saudis are heavier Internet users than people from other countries, with the majority of students at Taif University in Saudi Arabia using the Internet (98.2%), based on a different survey carried out with teens chosen from Cairo, Egypt's private and public schools. Because personal information is easily accessible and readily available online, some individuals have developed harmful behaviours that could hurt a community or other people (Handayani, 2022). In order to attain goals based on users' needs for status, curiosity, independence, pleasure, riches, and other factors that drive user behaviour in the process, users may misdirect themselves through pornography, cybercrime, and decreased physical activity, among other things. According to the researchers, proposed that online hooked activities and cybercrime are on the high side and then concluded in a study that internet

addiction and cybercrime require the attention of psychology (Schell, 2020).

A connection between students' grade point averages (GPA) and the typical weekly amount of time spent on social media (Tus, 2020). The study indicated that excessive social media use had a negative impact on students' academic performance since it found a non-linear link between the two variables. Examined how Kwara State University Malete undergraduates thought of themselves as indicators of internet addiction (Hassan et al. 2023). Utilizing practical selection approaches, 400 first-year college students were chosen from among the many departments at the university. The findings of the multiple regression and Pearson Product Moment link analyses of the data indicate that there is a substantial link ( $r = 0.097$ ,  $p 0.05$ ) between internet addiction and self-concept. Additionally, there is a combined relative association ( $F_2 = 1.92$ ,  $p 0.05$ ) between gender, internet addiction, and self-concept. Thus, self-concept statistically predicts internet addiction ( $t = 0.639$ ,  $p 0.05$ ), and self-concept predicts. examined the extent to which students' locus of control and self-perception indicated whether or not they would become addicted to the internet (Bello et al., 2023). To address the research questions and null hypothesis, the data were analysed using regression analysis and Pearson product-moment correlation (PPMC) at the 0.05 level of significance. The findings demonstrated that self-concept, internal and external locus of control, and gender were substantial predictors of online addiction among undergraduate students at Al-Hikmah. Additionally, the combination of self-concept and locus of control significantly predicted students' internet addiction.

the relationship between internet use and academic success among Zarka University's English Department students, over 75% of users who utilized social media for fewer than 10 hours per week reported an improvement in their academic performance (Lopez-Meneses et al. 2020). In a related investigation, examined how people use the internet for both personal and professional goals (Kircaburun et al., 2021). The poll indicates that there is minimal correlation between overall internet usage and the amount of time students spend online for academic purposes, with computer science majors using the internet more frequently than other students. The association, however, between total online time and time spent conducting academic research is small but significant for social science students; it is low for scientific students and is in fact negative. Internet addiction is a serious problem that can negatively affect a person's academic performance, relationships, and overall well-being. In Nigeria, it appears to be a particularly prevalent issue among university undergraduates. This is in agreement with the work carried out in Ibadan, Kwara State, Nigeria, which found that problematic internet usage (PIU) among adolescents was associated with diminished family intimacy, subpar academic performance, loss of attention, as well as internet abuse and risky sexual behaviour by (Afolabi et al., (2022). Among other things, the survey discovered that the majority of study participants' internet access points are at home, followed by colleges and Internet cafés. On average, 40% of the students spent more than five hours a day on the Internet.

Nonetheless, online addiction can lead to a variety of problems, online Addiction Disorder (IDA) being one of

the more prevalent afflictions in the modern era. When someone has Internet addiction disorder (IDA), they may experience negative outcomes and show signs of compulsive behaviour comparable to those of alcoholism, gambling addiction, shopping addiction, or other behaviours. It is now thought that there may be a widespread addiction to it, especially among students attending colleges and universities. With the use of the Mplus causal modelling program, examined the smartphone addiction literature in addition to the lifestyle-routine activities (L-RAT) and self-control (SCT) theories (Herrero et al. 2021). The modelling of data from 2837 Spanish smartphone users, selected as a nationally representative sample, revealed that the predictions of the L-RAT and SCT theories were correct. In addition to L-RAT and SCT projections, it was discovered that smartphone addiction had a big impact on cybercrime victimization. Internet addiction, also known as problematic internet use, is characterized by excessive mental activity about the internet and a need to use it excessively to achieve satisfaction (Mead and Sharp, 2021). This can lead to problems with relationships, work, and education, and individuals with characteristics such as shyness, depression, and low self-esteem may be more prone to developing internet addiction. The use of social media, online games, and online gambling has been linked to internet addiction. Studies have shown that excessive use of these activities can lead to negative consequences such as sleep disturbances, mood changes, and problems with daily functioning (Andreassen et al., 2012; Teke, 2011). Predictions also suggest that internet addiction will become a

significant problem in the future as access to the internet and technology continues to increase.

The Internet is a significant part of college student culture and is often viewed as an important tool for students. It offers many benefits, such as free and unrestricted access, a lack of parental oversight, and the ability to manage personal time. Additionally, it can help alleviate academic stress and social isolation. Research has indicated fluctuations in the incidence of Internet addiction (IA) among teenagers, with Nigeria exhibiting greater rates than European nations. For example, a study in Ibadan, Kwara State, Nigeria, found that 2.6% of undergraduates were problematic internet users and 18.2% were potential problematic users (Uye et al. 2022). Students' emotional expression and online addiction are significantly correlated, as is their emotional consumption of the internet (Ogunwuyi & Omoike, 2020). Furthermore, among university undergraduates in Kwara State, Nigeria, there is a combined effect between locus of control, self-concept, and internet addiction as well as a substantial association between these three variables and internet addiction. These results are in line with those of previous Ibadan research projects (Muraina & Popoola, 2022).

In the same vein, suggests that students who rely heavily on the Internet and have used it for a long time are more likely to be addicted to it (Lin, 2020). Compared to non-addicts, addicts typically spend longer sessions and weeks on the Internet. Internet addiction can be influenced by a number of factors, including stress, worry, and depression as well as feelings of loneliness, self-

worth, and life satisfaction. Addicts to the Internet spend more time on it than studying, and while some studies have found no gender difference, male students are more likely than female students to suffer from Internet addiction. As a result, internet addiction has become more common among college students in recent years. According to studies, college students who heavily rely on technology for their social and academic life are more likely to develop an online addiction (Baturay & Toker, 2019; Sert et al., 2019). Factors such as stress, loneliness, and a lack of social support have also been found to contribute to the development of internet addiction in this population. However, internet addiction is a complex phenomenon that varies across countries, cultures, and population groups. Therefore, the prevalence rate might be different in different locations.

### **2.3. Factors influencing internet addiction and the outcome of its excessive use**

Globally, internet usage has greatly increased in recent years. With over 3 billion users accessing it every day, the internet has had a huge impact on the daily lives of many individuals, especially young people. In Nigeria, there are currently 143.6 million active internet subscribers, per (Alabi and Olaoye, 2022). Young adults between the ages of 18 and 24 account for the majority of mobile phone connections in a given community. Because of their increased access to and flexibility with the internet, this group—particularly students—may be more likely to acquire an online addiction. The Internet offers many educational benefits, such as access to a vast amount of information, the ability to connect with others in educational settings, and

improved communication between teachers and students. It also enables online learning, which can provide more flexible and accessible education for people around the world (Li, 2022). However, excessive use of the internet and internet addiction can have negative effects on an adolescent's physical, mental, and social well-being. These negative outcomes may include poor performance in school, social isolation, and a disruption of psychosocial development. It is important for parents and caregivers to monitor internet usage and set appropriate boundaries and guidelines to ensure healthy internet habits. Students' growing reliance on the Internet might be caused by a number of things. These include having free time, being able to use the Internet easily, the psychological and developmental traits of early adulthood, having little to no parental supervision, and being expected to utilize the Internet for projects and tasks for school (Rahmatullah et al., 2022). Internet addiction (IA) has been linked to various factors, including socio-demographic factors such as a younger age and male gender, as well as reasons for internet use such as seeking new friendships and relationships online, using the internet less for coursework or assignments, visiting pornographic sites, and playing online games. These factors include spending more time on the internet, having constant access to the internet, and the method by which a person accesses the internet (e.g., mobile device vs. desktop computer). However, individuals who spend more time on the internet and have constant access to it may be more likely to develop IA, as well as those who primarily access the internet through mobile devices.

Furthermore, research has indicated that impulsivity and sensation-seeking

are two personality factors that may raise the risk of IA (Dodig Hundric et al., 2023; Xu et al., 2019). However, it's important to note that IA is a complex behavior with multiple contributing factors, and no single factor can fully explain the development of IA. IA can be problematic and can lead to negative consequences. Internet addiction can have negative effects on an individual's mental health and well-being. This may be associated with depression, anxiety, sleep problems, shyness, social anxiety, and suicidal thoughts, particularly in adolescents. In the same vein, excessive internet addiction (IA) can lead to a range of negative outcomes, both clinically and in terms of substance use. These include insomnia, attention deficit disorder and hyperactivity symptoms, decreased sexual activity, low self-esteem, poor academic performance, smoking, and the development of potentially addictive habits such as drinking alcohol or coffee and taking drugs (Jeong et al., 2020). Additionally, internet addiction can contribute to the worsening of pre-existing mental health conditions. It is important for individuals who may be struggling with internet addiction to seek help from a mental health professional who can provide guidance and support for addressing both the addiction and underlying mental health issues.

#### 2.4. Cyber counselling

Cyber therapy is a sort of therapy that is delivered online using email, instant messaging, video conferencing, and other digital communication technologies. It is also known as online therapy or e-

therapy (Abdallah Altarawneh & Awwad Alomoush, 2022). It eliminates the need for people to leave their homes to travel to a physical location in order to receive counseling services. Because it provides ease and accessibility for people who would not have access to conventional in-person counseling services, cyber therapy is growing in popularity. Indeed, there has been a lot of interest in and recognition of online/cyber therapy as a viable delivery method for counseling. Studies on depression, anxiety, and stress have shown that online counseling can be equally as effective as in-person counseling (Thomas et al., 2021; Novella, Ng, and Samuolis, 2022; Matsumoto, Hamatani, and Shimizu, 2021). Additionally, the availability of online therapy can benefit those who reside in remote or rural areas with limited access to face-to-face counseling services. It has also been shown to be advantageous in that it provides anonymity, which may be useful for those who don't feel comfortable seeking assistance in person or who don't want others to know they are receiving therapy.

For those with hectic schedules or who find it challenging to take time out of work or other commitments to attend in-person therapy sessions, the flexibility and convenience provided by online counseling can be helpful. It can be a beneficial instrument for delivering mental health treatments to a larger community and is regarded as a feasible alternative to conventional in-person therapy with its own benefits (Fernandez et al., 2021). Cyber counseling, or e-therapy, raises several ethical concerns. One of the main concerns is competence, as online counselors may not have the same level of training or experience as in-

person counselors (Earle & Freddolino, 2022). Informed consent is also a concern, as clients may not fully understand the risks and limitations of online counseling. Privacy and security are also major issues, as sensitive information may be vulnerable to hacking or unauthorized access (Stoll, Müller, & Trachsel, 2020). It's important for practitioners in the field to be aware of these concerns and to take appropriate measures to address them, such as using secure communication platforms and obtaining informed consent from clients. Access to technology is a major barrier for some individuals who may benefit from online counseling. Not everyone has access to reliable internet access or a suitable device to participate in online counseling sessions. Additionally, some individuals may not have the necessary technological skills or literacy to navigate online platforms and communicate with a counselor. This can create a digital divide where certain individuals are unable to access online counseling services, despite them being a viable option for their mental health needs.

In spite of the aforementioned challenges, cyber counseling has been found to be effective in treating a variety of mental health issues. That online counseling can be just as effective as in-person therapy for conditions such as depression, panic disorder, social anxiety, post-traumatic stress disorder, and eating disorders (Thomas et al. 2021). This is because online counseling is flexible and convenient. It enables people to receive therapy from the comfort of their homes, which is especially advantageous for those who find it difficult to access traditional in-person therapy (Stoll, Müller, and Trachsel 2020). Posited that there are unique ethical

considerations when engaging in cyber counseling, such as:

- 1) Worker/Practitioner Competence: Providers must be adequately trained and competent in the use of technology and have the necessary skills to provide effective online counseling.
- 2) Confidentiality: Providers must take steps to ensure that client information is kept confidential, such as using secure communication methods and properly storing client information.
- 3) Technological Difficulties: Providers must have a plan in place to deal with any technical difficulties that may arise during a session. They should also be able to communicate with clients about these issues and provide a plan of action to continue the session.
- 4) Informed Consent: Providers need to ensure that clients understand the risks and benefits of online counseling, including the limits of confidentiality and how to protect their privacy.
- 5) Identify Verification: Providers need to verify the identity of the clients to ensure that the person on the other end of the session is who they claim to be.

It is important for providers to stay informed about the laws and regulations regarding online counseling in their jurisdiction and to adhere to professional ethical guidelines.

## 2.5. Theoretical Review

This paper is premised on the General Strain Theory (GST) propounded, which is a sociological theory that explains how negative experiences, or strains, can lead to

deviant behavior (Robert Agnew, 1992). GST posits that individuals who experience negative events, such as failure to achieve goals, loss of positive stimuli, or exposure to negative stimuli, will experience negative emotions such as anger, frustration, and disappointment. These negative emotions can lead to deviant behaviors such as crime, delinquency, and substance abuse as a means of coping with the strain (Baek et al., 2019). GST also suggests that individuals who are exposed to more strains or who lack the means to cope with them are more likely to engage in deviant behavior. According to GST, people may engage in these behaviors in an effort to manage or lessen the unpleasant emotions brought on by stress. According to the notion, when people are under pressure or under stress, they could feel a sense of pressure and frustration, which can result in unpleasant emotions like anger, anxiety, or sadness. It may also make pre-existing mental health issues worse. Individuals may resort to unlawful or deviant actions, such as substance misuse or addiction, as a strategy to cope with these unfavorable emotions. The idea holds that people may use the internet as a coping technique when they are under stress at work or in their personal relationships, which can eventually develop to addiction. This makes the theory relevant to the study. When someone develops an internet addiction, they may lose access to a source of uplifting stimuli like knowledge or social support, which can result in uncomfortable feelings and a vicious cycle of addiction.

## 2.6. Internet Addiction among University Undergraduates in Kwara State: Implications for Cyber Counselling

The use of cognitive behavior by counseling psychologists is important in assisting students who are already addicted to identify and change irrational, externally oriented thoughts and beliefs that led them to believe that factors outside of their control caused them to be addicted to the internet. It's important to instill personal accountability in children. Moreover, behavioral scientists can conduct seminars, workshops, and conferences to inform youth about the value of having an accurate and realistic self-image (Abdulkareem et al., 2023). Family counseling might also be advantageous for students who are internet addicts since it can help them connect with others who are experiencing the same issues, which frequently motivates them. Self-help groups can be a good resource for knowledge and data. The emphasis on the degree of influence that parental attitudes and behaviors have on youths, there is a significant need for family-centered therapy to address kids' internet addiction in general (Enright et al., 2020). The development, implementation, and evaluation of family interventions would also be guided by a conceptual framework that social workers and educators would build. The counselor should also work to raise awareness among young people about the negative effects of excessive internet use. The counselor could also put the students in touch with self-help groups that could

help the client. School counselors must respond to recognized evolving social issues that put students at risk for illness, in addition to directly assisting students who are having difficulties in their academic, personal, social, and/or career pursuits (Mustapha & Muhammed, 2017).

The difficulties in treating IA in students, however, include acknowledging the problem and getting past the addiction's denial (Major, 2019). Additionally, he advised beginning identification and prevention programs, particularly in educational settings where this duty rests on administration and student support staff like school counselors. To optimize the efficiency of preventative intervention initiatives, a coordinated team effort is required to gradually increase public awareness of the issue. Through leadership initiatives like workshops and faculty seminars, school counselors could take the lead in learning about IA and problematic Internet use in their school and community. School counselors, administrators, instructors, staff, and parents should have quick access to information on the signs of IA and referral providers. Periodic parent training sessions as well as staff in-services for teachers and school personnel should be offered. These gatherings ought to include fundamental knowledge about IA, a discussion of warning indicators, a quick assessment, and resources, both local and online. In conclusion, excessive Internet use among university students in Kwara State, Nigeria, can be detrimental to both

physical and mental well-being and academic success.

### 3. CONCLUSION

It is abundantly obvious from the aforementioned that students utilize social media for communication, socialization, entertainment, information searching and sharing, education, surveillance, and self-expression. There is evidence that student internet addiction has a negative influence on their social interactions, mental health, and academic achievement. Neglecting obligations, concentration on irrelevant activities and spending excessive amounts of time online, as well as going through withdrawal symptoms when not utilizing the internet are all signs of internet addiction. Cyber counsellors are experts with training who offer treatment and support to people with internet addiction. To assist people in controlling their addiction and enhancing their general wellbeing, they may employ a range of strategies, such as cognitive-behavioural therapy. Cyber counsellors may be very beneficial in solving this issue by educating children about the dangers of excessive internet use and providing support to those who might be struggling with addiction. A component of this can be the creation of coping mechanisms for restricting internet use. In order to have a beneficial impact on the student body at their schools, internet addiction can be treated with broad collaborative services involving the school counsellor, the administration, faculty and staff, and parents. These services also employ empirically proven proactive methods and treatments to shield students with Internet addiction from issues that could jeopardize their chances of academic success, social and

personal development, and career advancement.

## SUGGESTIONS

The paper suggests that:

- 1) Cyber counsellors should be knowledgeable of the likelihood of internet addiction among their clients as well as the unique problems that may develop for college students. These issues include procrastination, poor time management, and social isolation.
- 2) Internet addiction-related psychological and emotional issues, such as stress, anxiety, and

depression, should be identified and addressed by students with the assistance of certified cyber counsellors.

- 3) Cyber therapists should collaborate with educational institutions and other organizations to spread knowledge about the dangers of internet addiction and to create plans and guidelines that will encourage students to use the internet in a responsible and healthy manner.

## REFERENCES

- Aalbers, G., McNally, R. J., Heeren, A., De Wit, S., & Fried, E. I. (2019). Social media and depression symptoms: A network perspective. *Journal of Experimental Psychology: General*, 148(8), 1454
- Abdallah Altarawneh, A. M., & Awwad Alomoush, R. A. (2022). The reality of e-counseling services in the light of digital learning from the point of view of teachers in Jordan. *Education and Information Technologies*, 1-20.
- Abdel-Salam, D. M., Alrowaili, H. I., Albedaiwi, H. K., Alessa, A. I., & Alfayyadh, H. A. (2019). Prevalence of Internet addiction and its associated factors among female students at Jouf University, Saudi Arabia. *Journal of the Egyptian Public Health Association*, 94(1), 1-8.
- Abdulkareem, H. B., Bello, J. B., & Salami, T. A. (2023). Self-concept and locus of control as internet addiction predictors among undergraduate students. *ASEAN Journal of Educational Research and Technology*, 2(3), 179-188.
- Abdulkareem, H. B., Hassan, A. A., & Suleiman, A. (2023). Personality traits as a correlate of adult education students' study habits. *Indonesian Journal of Multidisciplinary Research*, 3(2), 203-218.

- Afolabi, A. A., Ilesanmi, O. S., & Adebayo, A. M. (2022). Prevalence and Pattern of Internet Addiction Among Adolescents in Ibadan, Nigeria: A Cross-Sectional Study. *Cureus*, 14(2), 10-22.
- Alabi, A. W., & Olaoye, F. O. (2022). The Effect of Technology Adoption on Financial Inclusion: A Cross-Country Panel Analysis between China and Nigeria *European Journal of Business and Management Research*, 7(2), 1-11.
- Amudhan, S., Prakasha, H., Mahapatra, P., Burma, A. D., Mishra, V., Sharma, M. K., & Rao, G. N. (2021). Technology addiction among school-going adolescents in India: epidemiological analysis from a cluster survey for strengthening adolescent health programs at district level. *Journal of Public Health*.
- Baek, H., Roberts, A. M., Seepersad, R., & Swartz, K. (2019). Examining negative emotions as mediators between exposures to family violence and bullying: A gendered perspective. *Journal of School Violence*, 18(3), 440-454.
- Baturay, M. H., & Toker, S. (2019). Internet addiction among college students: some causes and effects. *Education and Information Technologies*, 24(5), 2863-2885.
- Bello, J. B., Abdulkareem, H. B., Hassan, A. A., Ogo-oluwa, A. A., & Abubakar, A. O. Influence of Locus of Control on Internet Addiction among Kwara State Colleges of Education Students. *Jurnal Pendidikan Multimedia (Edsence)*, 5(1), 11-20.
- Berte, D. Z., Mahamid, F. A., & Affouneh, S. (2021). Internet addiction and perceived self-efficacy among university students. *International Journal of Mental Health and Addiction*, 19(1), 162-176.
- Bhardwaj, V. K. (2018) Internet addiction, loneliness, and academic performance among secondary school students. *International Journal of Education and Management Studies*, 8(1), 76-80.
- Chand, P., & Sheth, S. (2021). 9 Assessment for Pathological Internet Use ("Internet Addiction"). *Cyberpsychiatry*, 121.
- Cheng, Y. S., Ko, H. C., Sun, C. K., & Yeh, P. Y. (2021). The relationship between delay discounting and Internet addiction: a systematic review and meta-analysis. *Addictive Behaviors*, 114, 106751.
- Darpanian, S., Sterling, W., & Aggarwal, S. (2022). *Raising Body Positive Teens: A Parent's Guide to Diet-Free Living, Exercise, and Body Image*. Jessica Kingsley Publishers

- Dodig Hundric, D., Lotar Rihtaric, M., Mandić, S., & Ricijaš, N. (2023). The Mediating Effect of Danger Invulnerability in the Relationship Between Sensation Seeking and Gambling Among University Students. *Journal of Gambling Studies*, 1–17.
- Duong, X. L., Liaw, S. Y., & Augustin, J. L. P. M. (2020). How has Internet addiction been tracked over the last decade? A literature review and 3C paradigm for future research. *International Journal of Preventive Medicine*, 11.
- Earle, M. J., & Freddolino, P. P. (2022). Meeting the practice challenges of COVID-19: MSW students' perceptions of e-therapy and the therapeutic alliance. *Clinical Social Work Journal*, 50(1), 76–85.
- Eid, M., Nusairat, N., Alkailani, M., & Al-Ghadeer, H. (2020). Internet users' attitudes towards social media advertisements: The role of advertisement design and users' motives. *Management Science Letters*, 10(10), 2361-2370.
- Enright, G., Allman-Farinelli, M., & Redfern, J. (2020). Effectiveness of family-based behavior change interventions on obesity-related behavior change in children: a realist synthesis. *International Journal of Environmental Research and Public Health*, 17(11), 4099.
- Enright, G., Allman-Farinelli, M., & Redfern, J. (2020). Effectiveness of family-based behavior change interventions on obesity-related behavior change in children: a realist synthesis. *International Journal of Environmental Research and Public Health*, 17(11), 4099.
- Fardghassemi, S., & Joffe, H. (2022). The causes of loneliness: The perspective of young adults in London's most deprived areas. *Plos one*, 17(4), e0264638.
- Fatema, K., Nasreen, S., Parvez, M. S., & Rahaman, M. A. (2020). Impact of using the Internet on students: A sociological analysis at Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj, Bangladesh. *Open Journal of Social Sciences*, 8(12), 71–83.
- Fernandez, E., Woldgabreal, Y., Day, A., Pham, T., Gleich, B., & Aboujaoude, E. (2021). Live psychotherapy by video versus in-person: A meta-analysis of efficacy and its relationship to types and targets of treatment. *Clinical Psychology & Psychotherapy*, 28(6), 1535–1549.
- Hassan, A. A., & Abdulkareem, H. B. (2023). Common 21st-Century Social Vices Among the Youth. *ASEAN Journal of Community and Special Needs Education*, 2(1), 35–44.

- Hassan, A. A., Abdulkareem, H. B., & Suleiman, A. (2023). Self-concept as a predictor of internet addiction among undergraduate students at Kwara State University, Nigeria. *ASEAN Journal of Educational Research and Technology*, 3(1), 1–8.
- Hassan, A. A., Abdulkareem, H. B., & Suleiman, A. (2023). Self-concept as a predictor of internet addiction among undergraduate students at Kwara State University, Nigeria. *ASEAN Journal of Educational Research and Technology*, 3(1), 1–8.
- Herrero, J., Torres, A., Vivas, P., Hidalgo, A., Rodríguez, F. J., & Urueña, A. (2021). Smartphone addiction and cybercrime victimization in the context of lifestyle routine activities and self-control theories: The user's dual vulnerability model of cybercrime victimization. *International journal of environmental research and public health*, 18(7), 3763
- Jeong, B., Lee, J. Y., Kim, B. M., Park, E., Kwon, J. G., Kim, D. J.,... & Lee, D. (2020). Associations of personality and clinical characteristics with excessive Internet and smartphone use in adolescents: A structural equation modeling approach. *Addictive behaviors*, 110, 106485
- Kircaburun, K., Yurdagül, C., Kuss, D., Emirtekin, E., & Griffiths, M. D. (2020). Problematic mukbang watching and its relationship to disordered eating and internet addiction: a pilot study among emerging adult mukbang watchers. *International Journal of Mental Health and Addiction*, 1–10.
- Kurniasanti, K. S., Assandi, P., Ismail, R. I., Nasrun, M. W. S., & Wiguna, T. (2019). Internet addiction: a new addiction? *Medical Journal of Indonesia*, 28(1), 82–91.
- Lamont, G. J., Weaver, K. D., Figueiredo, R., Mercer, K., Jonahs, A., Love, H. A.,... & Al-Hammoud, R. (2020). Information-seeking behavior among first-year engineering students and the impacts of pedagogical intervention in 2020, *ASEE Virtual Annual Conference Content Access*
- Lebni, J. Y., Toghroli, R., Abbas, J., Nejhaddadgar, N., Salahshoor, M. R., Mansourian, M.,... & Ziapour, A. (2020). A study of internet addiction and its effects on mental health: A study based on Iranian university students. *Journal of Education and Health Promotion*, 9.
- Li, D. (2022). The Shift to Online Classes During the COVID-19 Pandemic: Benefits, Challenges, and Required Improvements from the Students' Perspective. *Electronic Journal of E-Learning*, 20(1), 1–18.
- Lin, M. P. (2020). The prevalence of internet addiction during the COVID-19 outbreak and its risk factors among junior high school students in Taiwan. *International journal of environmental research and public health*, 17(22), 8547

- López-Meneses, E., Sirignano, F. M., Vázquez-Cano, E., & Ramírez-Hurtado, J. M. (2020). University students' digital competence in three areas of the DigCom 2.1 model: A comparative study at three European universities. *Australasian Journal of Educational Technology*, 36(3), 69–88.
- Lubis, M., & Handayani, D. O. D. (2022). The relationship between personal data protection and internet addiction: cybercrime, pornography, and reduced physical activity. *Procedia Computer Science*, 197, 151–161.
- Machimbarrena, J. M., Calvete, E., Fernández-González, L., Álvarez-Bardón, A., Álvarez-Fernández, L., & González-Cabrera, J. (2018). Internet risks: An overview of victimization in cyberbullying, cyber dating abuse, sexting, online grooming, and problematic internet use. *international journal of environmental research and public health*, 15(11), 2471
- Mathew, P. (2020). Impact of problematic internet use on the self-esteem of adolescents in the selected school, Kerala, India. *Archives of Psychiatric Nursing*, 34(3), 122-128
- Matsumoto, K., Hamatani, S., & Shimizu, E. (2021). Effectiveness of videoconference-delivered cognitive behavioral therapy for adults with psychiatric disorders: a systematic and meta-analytic review. *Journal of medical Internet research*, 23(12), e31293.
- Mead, D., & Sharpe, M. (2021). Aligning the “Manifesto for a European Research Network into Problematic Usage of the Internet” with the Diverse Needs of the Professional and Consumer Communities Affected by Problematic Usage of Pornography. *Internet and Smartphone Use-Related Addiction Health Problems: Treatment, Education, and Research*, 17, 379
- Muraina, K. O., & Popoola, B. O. (2022). Locus of Control and Self-Concept as Determinants of Internet Addiction among Public University Undergraduates in Kwara State, Nigeria. *Journal of Digital Learning and Education*, 2(1), 51–58.
- Mustapha, M. L. A., & Muhammed, S. A. (2017). Prevalence and forms of internet addiction among youths in Kwara State, Nigeria
- Nageeb, S. M., & Al Enzi, N. M. M. (2020). The Effect of Internet Addiction on Executive Functions and Communication Skills among University Nursing Students. *International journal of nursing didactics*, 10(02), 11–26.
- Novella, J. K., Ng, K. M., & Samuolis, J. (2022). A comparison of online and in-person counseling outcomes using solution-focused brief therapy for college students with anxiety. *Journal of American College Health*, 70(4), 1161–1168.

- Ogunwuyi, B. O., & Omoike, A. (2020). Emotional intelligence and internet addiction among students at the university. *Journal of Educational Review*, 2(6), 18–29
- Omiunu, O. G. (2017) Paradoxical Modeling of the Negative Uses of ICT and Their Implications among Secondary School Students in Oyo State, Nigeria: A Phenomenographical Analysis Towards a Grounded Theory. *Library Philosophy and Practice*, 1.
- Pawlikowska, A., Szuster, E., Kostrzewska, P., Mandera, A., Biernikiewicz, M., Sobieszcańska, M., & Kałka, D. (2022). Internet Addiction and Polish Women's Sexual Functioning: The Role of Social Media, Online Pornography, and Game Use during the COVID-19 Pandemic—Online Surveys Based on FSFI and BSMAS Questionnaires. *International Journal of Environmental Research and Public Health*, 19(13), 8193
- Rahmatullah, A. S., Mulyasa, E., Syahrani, S., Pongpalilu, F., & Putri, R. E. (2022). Digital Era 4.0: The Contribution to Education and Student Psychology. *Linguistics and Culture Review*, 6, 89–107.
- Schell, B. (2020). Internet addiction and cybercrime. *The Palgrave handbook of international cybercrime and cyberdeviance*, 679–703.
- Stoll, J., Müller, J. A., & Trachsel, M. (2020). Ethical issues in online psychotherapy: A narrative review. *Frontiers in Psychiatry*, 10, 993.
- Su, W., Han, X., Yu, H., Wu, Y., & Potenza, M. N. (2020). Do men become addicted to internet gaming and women to social media? A meta-analysis examining gender-related differences in specific internet addictions. *Computers in Human Behavior*, 113, 106480.
- Thomas, N., McDonald, C., de Boer, K., Brand, R. M., Nedeljkovic, M., & Seabrook, L. (2021). Review of the current empirical literature on using videoconferencing to deliver individual psychotherapies to adults with mental health problems *Psychology and Psychotherapy: Theory, Research, and Practice*, 94(3), 854–883.
- Thomas, N., McDonald, C., de Boer, K., Brand, R. M., Nedeljkovic, M., & Seabrook, L. (2021). Review of the current empirical literature on using videoconferencing to deliver individual psychotherapies to adults with mental health problems *Psychology and Psychotherapy: Theory, Research, and Practice*, 94(3), 854–883.
- Tóth, G., Kapus, K., Hesszenberger, D., Pohl, M., Kósa, G., Kiss, J.,... & Feher, G. (2021). Prevalence and risk factors of internet addiction among Hungarian high school teachers. *Life*, 11(3), 194.

- Tus, J. (2020). Self-Concept, Self-Esteem, Self-Efficacy, and Academic Performance of the Senior High School Students *International Journal of Research Culture Society*, 4(10), 45–59.
- Uye, E. E., Abiahu, K. C., Ikechukwu, D. S., & Olapegba, P. O. (2022). Role of personality traits and internet addiction on interpersonal relationship quality among undergraduates at the University of Ibadan, Nigeria *Journal of Psychology and Behavioural Disciplines*, COOU, 2(2)
- Wang, W. C. (2019). Exploring the relationship among free-time management, leisure boredom, and internet addiction in undergraduates in Taiwan. *Psychological reports*, 122(5), 1651–1665
- Xu, S., Luo, L., Xiao, Z., Zhao, K., Wang, H., Wang, C., & Rao, H. (2019). High-sensation seeking is associated with behavioral and neural insensitivity to increased negative outcomes during decision-making under uncertainty. *Cognitive, Affective, and Behavioral Neuroscience*, 19(6), 1352–1363.