



Influence of Locus of Control on Internet Addiction among Kwara State Colleges of Education Students

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ABSTRACT

The study investigated the influence of locus of control on internet addiction among undergraduate students in Kwara State. A descriptive survey design with one research question guided the study. Two hypotheses were formulated and tested in the study. The population comprises all full-time undergraduate students at Kwara State College of Education, Ilorin. The samples consist of 500 full-time undergraduates. The researcher randomly selected 200 males and 300 females undergraduate students. Data were collected using the adopted locus of control scale and internet addiction scale to measure the level of internet addiction among undergraduate students at Kwara State College of Education. The collected data were analyzed using frequency, mean, percentage, standard deviation and t-test. It was revealed that there is a significant difference in the locus of control and internet addiction among Kwara State College of Education students. The result further shows that gender does not affect the internal and external locus of control of the male and female respondents. It was concluded that there is gender influence on the locus of control and internet addiction, while there is no gender influence in the way both internal and external locus of control students are addicted to the internet. It was recommended that strategies and activities that would build students' locus of control and reduce internet addiction be put in place to assist students generally.

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1. INTRODUCTION

The significance of the Internet cannot be overstated because it affects all facets of teaching and learning. An internet connection acts as a conduit for information, education, entertainment and conversation (Amudhan et al., 2021). Three billion individuals were utilizing the Internet to communicate in 2016 despite it being a global network (Abbas et al., 2022). Meates (2020) found that students who used devices like laptops, smartphones, and smartphones from Apple and Android were more likely to use the Internet. Meates (2020) discovered that young Internet addiction is more common than adult addiction. According to Adour in 2020, the greatest educational technologies have been designed to better serve students and promote their involvement in the formal education system. This includes the facilitation of resources on the Internet. Amudhan et al. (2021) assert that since using the internet is a need for daily living, excessive internet use may be harmful to someone who has one or more behavioural issues.

Internet addiction is characterized by an insatiable urge to use the internet, the devaluation of time spent offline, extremely high levels of anxiety and hostility in the event of deprivation and a continual decline in social and family life (Ezeh et al., 2021). Meates (2020) discovered that young Internet addiction is more common than adult addiction. According to Adour in 2020, the greatest educational technologies have been designed to better serve students and promote their involvement in the formal education system. This includes the facilitation of resources on the Internet. Internet addiction is a complicated subject that has been written about, according to Sondhi and Joshi (2021), to help people understand the negative effects that the Internet platform has on human psychology and behaviour. Internet addiction is a risky habit that can be hazardous, stressful or lead to etiquette issues (Davis, 2020).

(Türk-Kurtça and Kocatürk, 2020) The notion that a person has regarding their behaviour and how that behaviour influences how they are rewarded or punished is known as locus of control. It depends on how much the individual thinks they are in control of their reinforcement and how much they think it comes from outside themselves. Someone would have an internal locus of control if they believed that advantages resulted from their actions. On the other hand, if one thinks that advantages result from other people's intervention, it might be seen as an external locus of control. Krampe et al. (2021) and Drago et al. (2018) separated the locus of control into two groups: internal control which may be interpreted as a concept about the outcomes of one's trial that are reliant on what a person does and external control orientation which depicts the events that are out of a person's control. GJoneska et al., (2022) and Wang (2019) hypothesis on internet addiction proposed that locus of control might lead to issues for people managing their daily chores and as a result, can affect how they perceive themselves.

The inclination for a person to see the outcomes of her actions as emanating from her ideas can be linked to behavioural issues. Julian Rotter developed Locus of Control in the 1950s. The degree to which someone has control over their emotions is one potential locus of control. According to Reknes et al. (2019), those with an internal locus of control have complete control over their environment while those with an external locus of control lack many things. (Abdulkareem et al., 2023) claim that a person's perspective on the underlying causes of the events in his or her life constitutes the locus of control. An internal locus of control and an exterior locus of control are the two different kinds of locus of control. Students who felt inadequate had greater barriers to success which may have affected their personalities as well. Characteristics disclose more about a person which is why the

researcher looked into the effect of locus of control on internet addiction in Nigerian students at the Kwara State College of Education.

1.1 Literature Review

There are certain hazards associated with using the internet. According to [Miniwatts \(2020\)](#), the federation saw an increase in internet usage between the year 2000 to 2020 as a result of the increased prominence of technology users in educational institutions throughout the world. It's possible that, as a consequence, social systems' foundations will be strengthened and efforts to mobilize resources like current information, news and instructive movies will be more successful. Accessing a Smartphone or tablet promoted accessing wifi, surfing the internet and visiting social networking sites which in turn fostered internet addicts as claimed ([Sondhi and Joshi, 2021](#)). [Abbas et al. \(2022\)](#) designed an application to give students a user-friendly, portable learning application, providing an entertaining educational environment and making provision for a rich database that contains a variety of course questions and answers to improve students' learning skills. However, it was realized that students were addicted to the Internet.

The relationship between internet use and academic achievement was examined by [Cheng et al. \(2021\)](#) using data from English Department students at Zarka University. More than 75% of users who used social media for fewer than 10 hours per week saw an improvement in their academic performance. Similar to this, [Kircaburun et al. \(2020\)](#) investigated how people use the Internet for academic and non-academic purposes. In contrast to other students, computer science students spend more time online and there is only a weak association between total internet usage and time spent online specifically for academic objectives. [Tus \(2020\)](#), investigated a non-linear relationship exists between students' excessive usage of social media and their academic performance.

The survey also found that students who use social media excessively suffer from worse marks. The idea of locus of control pertains to a perspective on circumstances that we feel are either outside our control (external control orientation) or the results of our activities that depend on what we do. An individual with an internal locus of control consistently has faith in their actions and sees their accomplishment as something they earned. Anyone whose decisions and efforts dictate their behaviour is said to have an internal locus of control. [Abdulkareem et al. \(2023\)](#) revealed that self-concept and locus of control among undergraduate students as potential predictors of internet addiction. Results showed that among Al-Hikmah undergraduate students, internal and external LOCUS of control and gender substantially predicted internet addiction. Self-concept and locus of control together strongly predict students' internet addiction.

[McPherson and Martin \(2017\)](#) examined how gender influenced the LOCUS of control in a sample of alcohol-dependent individuals. The Multidimensional Health Locus of Control Form-C was given to patients in alcohol addiction treatment centres in the West of Scotland. The internal and external components of locus of control and gender variations in the severity of alcohol dependence were examined using independent t-tests. The internal centre of control of women was higher than that of men. [Chiu et al. \(2013\)](#) investigated a correlative model between Internet addiction and mobile phone addiction. The researchers correlated the two traits and discussed their influence. The study developed the Mobile Phone Addiction Scale and the Internet Addiction Scale for participant surveys and the structural equation model (SEM) to analyze the data. The result indicated that mobile phone addiction and internet addiction are positively related which shows that the female level of internet addiction is high and shows that there is a significant gender difference.

Karimy et al. (2020) studied the impact of gender and physical exercise on internet addiction in medical students. Analytical cross-sectional studies 350 MBBS students at the Army Medical College in Rawalpindi received the Internet Addiction Test Questionnaire. Internet addiction was classified as having no addiction if the total score was 49 or less, moderate addiction when the total score was 50 to 79 and severe addiction when the entire score was 80 to 100. There were 322 individuals with a mean age of 19-27 years, 175 (54.3%) men and 147 (42.7%) females. Males and females had similar levels of overall internet addiction score and frequency of internet addiction (37.7111.9 vs. 38.6314.00, $p = 0.18$ and 25 vs. 29, $p = 0.20$ respectively). However, the total score and frequency of internet addiction were higher in students lacking physical activity as compared to those with regular physical activity.

Liang et al. (2016) examined the gender component of the relationship between Internet addiction and depression. Self-reported questionnaires from 1715 Chinese teenagers in grades 6–8 were used to compile data for a three-wave longitudinal panel. The association between Internet addiction and depression was investigated using cross-lagged structural equation modelling. The mood enhancement theory is supported by the finding that depression in male teenagers substantially predicts eventual Internet addiction which implies that depression is the root cause of Internet addiction. The social displacement theory is supported by the finding that Internet addiction in female teens strongly predicts eventual depression. This finding suggests that Internet addiction causes depression. These findings suggest that gender plays a role in the connection between Internet addiction and sadness. Additionally, it was shown that the Internet usage habits and motives of men and women varied. Compared to women, men were more likely to utilize the Internet for recreational purposes and less likely to do so for informational purposes. Males were more likely than females to use the Internet with friends, even though both sexes were inclined to do it alone. These results imply the need for gender-specific preventive and therapeutic efforts to lessen internet addiction.

Ha and Hwang (2014) investigated gender differences in the relationship between Internet addiction and psychological health among adolescents. The study investigated gender differences in Internet addiction associated with self-rated health, subjective happiness, and depressive symptoms among Korean adolescents aged 12 to 18 years using a nationally representative dataset. Data from 56,086 students (28,712 boys and 27,374 girls) from 400 middle schools and 400 high schools were analyzed. The researchers revealed that 2.8% of the students (3.6% boys and 1.9% girls) were addicted users, and the prevalence of Internet addiction was higher in boys than in girls. In multiple logistic regression analysis, three psychological health indicators, including poor self-rated health, subjective unhappiness, and depressive symptoms, were significantly related to Internet addiction in boys and girls. Girls with emotional difficulties such as subjective unhappiness or depressive symptoms had much higher risks of Internet addiction than boys with similar problems.

Above all, it has generally been observed that internet addiction itself has negative impacts on an individual's life. Students at all levels of learning now devote more attention to their studies as a result of the available opportunities to harness social media. Whether these opportunities promote study is a question that needs to be answered. It is against this backdrop that this study examines locus of control as a predictor of internet addiction among university undergraduates in Kwara State.

1.2 Purpose of the Study

The main purpose of this study is to examine locus of control as a determinant of internet addiction among undergraduate students in Kwara State. The specific objectives are as follows:

- 1) To compare the locus of control of male and female students among undergraduate students in Kwara State.
- 2) To compare the level of internet addiction among male and female undergraduate students in Kwara State.

1.3 Research Question

What is the level of internet addiction among undergraduate students in Kwara State?

1.4 Research Hypotheses

The following null hypotheses were formulated and tested at the 0.05 level of significance:
Ho1: There is no significant difference between the locus of control of male and female students among undergraduate students in Kwara State.

Ho2: There is no significant difference in the level of internet addiction among male and female undergraduate students in Kwara State.

2. METHODS

In this study, a descriptive research methodology was used to assess the degree of internet addiction and the prediction of locus of control among undergraduate students at the Kwara State College of Education. All undergraduate students at the Kwara State College of Education made up the study's population. In Kwara State, there are three public institutions of education. The Kwara State Colleges of Education's full-time undergraduate student body made up the target population. 500 full-time undergraduate male and female students from Kwara State Colleges of Education were chosen using a practical sampling technique. Two (2) instruments were adopted to elicit information from the respondents. The researchers employed two research assistants for the administration and collection of the instruments. Descriptive and inferential statistics were used to analyze the collected data. The demographic data of the participants were analyzed using frequency counts, mean, and percentage.

The research hypotheses were tested using a t-test at the 0.05 level of significance. The respondents' demographic information was expressed as a straightforward percentage. Hypotheses were tested using the t-test. Internal locus of control, power from others, and chance were the three locus of control components examined by the 15-item Levenson Locus of Control Scale employed in this study. The items were scored using a true/false scale. Internal locus of control consistency measures at $r = .71$. Other influential people have an internal consistency score of .67, whereas change has a score of .71. The Internet Addiction Test created by Young consists of 20 items that assess mild, moderate, and severe degrees of Internet addiction on a five-point Likert scale (from 0 (not relevant) to 5 (always)). The Internet Addiction Test's internal consistency is $\alpha = 0.90$. The sum of the examinee's evaluations for each of the 20 items makes up the Internet Addiction Scale's overall score. Total scores between 0 and 30 points are thought to represent typical Internet usage; scores

between 31 and 49 suggest a mild level of Internet addiction; scores between 50 and 79 reflect a moderate level; and scores between 80 and 100 indicate a serious reliance on the Internet.

3. RESULTS AND DISCUSSION

3.1 Results

Table 1 shows the percentage of males and females that participated in this study. Male participants were 200 (40.0 %) and female were 300 (60.0 %).

Table 1. Demographic characteristics of the respondents.

Gender	N	Percentage %
Male	200	40.0
Female	300	60.0
Total	500	100.0

Table 2 shows the age range of the participants. Respondents within the age bracket of 15 and 20 of age were 245 (49.0 %). Participants between 21 and 30 were 215 (23.0 %) and those between 30 and above were 40 (8.0%).

Table 2. Age distribution of the participants.

Age Range	N	Percentage %
50-20	245	49.0
20-30	215	43.0
30-above	40	08.0
Total	500	100.0

Table 3 shows the distribution of schools in the Kwara State Colleges of Education. Participants demographic results revealed that 150 (30.0%) represented the schools of art and social science. 150 (30.0%) represented schools of business education. 150 (30.0%) represented the school of vocation. 25 (05.0%) represented schools of technical education, and 25 (05.0%) represented schools of science education.

Table 3. Distribution of schools in Kwara State Colleges of Education.

Name of School	N	Percentage %
School of Art and social science	150	30.0
School of Business Education	150	30.0
School of Vocational Education	150	30.0
School of Technical Education	25	05.0
School of Science Education	25	05.0
Total	100	100.0

Hypothesis One: there is no significant difference between the locus of control of a male and female among undergraduate students of Kwara state colleges of Education.

The result shown in **Table 4** gives a t-calculated value of 2.651. The corresponding critical value is 1.96 at the 0.05 level of significance and 498 degrees of freedom. Since the critical value is lower than 0, the null hypothesis was not accepted. This implies that there is a

significant difference in the locus of control between male and female students among undergraduates at Kwara State College of Education.

Table 4. there is no significant difference between the locus of control of a male and female among undergraduate students of Kwara state colleges of Education.

Variable	Gender	N	Mean	SD	Df	t-cal	t-crit	Remark
Locus	Male	200	25.45	14.05	498	2.651	1.96	H0 Rejected
Pf control	Female	300	27.20	15.97				

Hypothesis Two: there is no significant difference between the level of internet addiction of males and females among undergraduate students of Kwara State Colleges of Education.

Table 5 reveals the result of Hypothesis 2, which stated that there is no significant difference between the level of internet addiction among male and female undergraduate students at Kwara State Colleges of Education. The result shown in **Table 5** gives a t-calculated value of 1.610. The corresponding critical value is 1.96 at 0.05 levels of significance and 498 degrees of great freedom. However, the null hypothesis was retained. This implies that there is no significant difference in the level of self-esteem between male and female married postgraduate students in Kwara State.

Table 5. there is no significant difference between the level of internet addiction of males and females among undergraduate students of Kwara State Colleges of Education.

Variable	Gender	N	Mean	SD	Df	t-cal.	t-crit	Remark
Internet	Male	200	82.45	7.39	498	1.610	1.96	H0 Accepted
Addiction	Female	300	82.20	8.75				

3.2 Discussion

Five hundred undergraduate students of Kwara State Colleges of Education were considered for this study, of whom 40.0% were male and 60.0% were female. The age range of the participants falls between 15 and above. The result of the first hypothesis, which stated that there is no significant difference between the LOCUS of control of males and females, was not accepted, and these findings align with [McPherson and Martin \(2017\)](#), who submitted that women showed a higher internal centre of control than men did. Women also scored significantly higher on the locus of control scale than men did. Compared to women, men relied more on "chance" and "doctors".

The findings are also in line with the study of [Abdulkareem et al. \(2023\)](#), who reported that gender significantly influences the locus of control of undergraduate students at Alhikmah University. Similarly, [Ha and Hwang \(2014\)](#) in their findings also revealed that there were significant differences in the level of internet addiction between male and female adolescents. It negates the study of [Reknes et al. \(2019\)](#), who posited that a person with an internal locus of control has complete control over their surroundings, but people with an external locus of control are bereft of a lot of things, and gender has little or no significant relationship to their perceptions.

The result of Hypothesis 2 showed that there is no significant difference between internet addiction among male and female students. The result corroborates the findings of [Simcharoen, et al. \(2018\)](#), who submitted that the total internet addiction score and

frequency of internet addiction were similar between males and females (37.7111.9 vs. 38.6314.00, $p = 0.18$, and 25 vs. 29, $p = 0.20$), which implies that there is no significant difference in the level of internet addiction based on students gender. The result, on the other hand, negates the findings of [Chiu et al. \(2013\)](#), whose result indicated that mobile phone addiction and internet addiction are positively related and female college students score higher than male ones in the aspect of mobile addiction, which shows that female levels of internet addiction are high and revealed that there is a significant gender difference.

The result was also not in line with the finding of [Kim and Ko. \(2020\)](#), who posited that gender has significant differences in internet gaming disorder (IGD) and social media addiction among European and Indian students. Furthermore, [Liang et al. \(2016\)](#) study that explored the role of gender in the association between Internet addiction and depression also indicated that the relationship between Internet addiction and depression depends on gender. The researchers then revealed that males and females exhibit different behavioural patterns and motivations for Internet usage.

Males were more likely to use the Internet for pleasure and less likely to surf the Internet to search for information, compared with females. Although both males and females were prone to surfing the Internet alone, males were more likely to go online with friends compared with females. [Ha and Hwang \(2014\)](#) looked at gender differences in the relationship between Internet addiction and psychological health in adolescents and discovered that 2.8% of the students (3.6% of the boys and 1.9% of the girls) used the Internet regularly. Boys were more likely than girls to be addicted to Internet users. This suggests that the degree of internet addiction is significantly influenced by gender.

4. CONCLUSION

The study examined the Locus of control and internet addiction among undergraduates at Kwara State College of Education, Nigeria. Internet addiction has been observed to be prevalent among students. It was thereby concluded that the locus of control among male and female students differs as gender influences the locus of control of male and female undergraduate students at Kwara State College of Education, Nigeria. Gender has no significant difference in the addiction to the internet among undergraduate students at Kwara State College of Education. In summary, (i) there is a significant difference between the locus of control of male and female students among undergraduates at Kwara State College of Education. (ii) There is no significant difference in the level of internet addiction among male and female undergraduates at Kwara State Colleges of Education.

AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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