

CORRELATIONAL STUDY OF MOTIVATIONAL ENHANCEMENT AND INTERNET ADDICTION AMONG UNDERGRADUATES OF UNIVERSITY OF IBADAN OYO STATE, NIGERIA

BY

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Abstract

In order to combat the threat of internet addiction among university freshmen, motivational enhancement is essential. Internet addiction has negative multiplier effect on students overall well-being. Thus, the rate at which undergraduates of institutions of higher learning become addicted to the Internet has become alarming and the menace needs prompt attention before it goes awry. The study, therefore, examines the relationship between motivational enhancement and internet addiction among undergraduates of the University of Ibadan, Oyo State, Nigeria. The study used a descriptive research design of correlational type. The population of the study was made up of all undergraduates (15,533) of the University of Ibadan, Oyo State, Nigeria. Krejcie and Morgan (1970) determination of sample size table was used to select 377 students across two faculties (Education and Art). The Internet addiction test, developed by Young (2016) was adopted and the motivational enhancement questionnaire of Herman (1970) was adapted as the study instrument. Using the Pearson's Product Moment Correlation Statistics, three research hypotheses were developed and put to the test. The study's conclusions demonstrated a strong correlation between Internet addiction and motivational enhancement in University of Ibadan undergraduate students in Oyo State, Nigeria. Considering the study's conclusions, it was recommended among others that undergraduates should be properly guided on the efficacy of using the internet for educative purposes. Also, motivational strategies for undergraduates should be devoid of gender bias and the institutions' counsellors should properly guide the students on strategies to adopt for the proper usage of the internet in an attempt to enhance their academic performance.

Keywords: Motivational Enhancement, Internet, Addiction, Undergraduates

Introduction

The Internet's pervasiveness in our daily lives can be attributed to its explosive growth worldwide. With increasing accessibility to the Internet, more people are engaging in online activities such as completing schoolwork, playing games, and communicating with others in real-time (Iluku-Ayoola et al., 2020). The influence of the Internet on our daily lives has been observed by scholars, with Xioa et al. (2022) noting that Internet users are more likely to spend their leisure time online. In addition, Wang et al. (2022) found that a vast majority of teenagers, around 94.8%, are using the Internet, indicating that they consider cyberspace as a real rather than a virtual space. However, as Iluku-Ayoola et al. (2022) pointed out, the Internet can also be misused, leading to internet addiction, which is a global phenomenon. The availability and affordability of high-speed broadband plans have contributed to an increase in Internet addiction cases in Africa, as well (Smith, 2022).

Research studies conducted in Nigeria have observed negative consequences of internet addiction, such as loss of sleep, loneliness, and increased time spent online (Iluku-Ayoola et al., 2020). Therefore, while the Internet has undoubtedly become an integral part of our daily lives, it is important to be mindful of its potential negative effects and to use it responsibly.

But using the internet excessively and without moderation can result in addictive behaviour, which carries serious risks. Internet obsessions, withdrawal symptoms, excessive computer use, and a lack of interest in other activities are among the diagnostic criteria for internet addiction. (Ostovar et al., 2021). The uncontrollable urge to use the internet, devaluation of time spent without it, intense nervousness and aggression in case of deprivation, and deterioration of social and family life are additional characteristics of internet addiction (Ezeh et al., 2021). Internet addiction is comparable to gambling addiction and is a type of behavioural and technology addiction (Amudhan et al., 2021).

Poor impulse control is also associated to internet addiction (Duong et al., 2020). Although many people consider the internet to be a necessary tool, an over-reliance on it can cause issues and harm in day-to-day living. Undergraduate students are becoming more and more likely to be internet addicts, with up to 40% of Nigerian undergraduate students experiencing symptoms of internet addiction (Chen et al., 2003; Owolabi et al., 2016). Effective interventions are necessary to address this growing problem. However, motivational enhancement is a technique that aims to increase an individual's motivation to change their behaviour. This technique has been used effectively in treating substance abuse disorders and internet addiction. Motivational enhancement is a counselling technique that has been used successfully to treat addiction-related disorders (Miller & Rollnick, 2013).

Previous studies have found that motivational enhancement can increase an individual's motivation to change their addictive behaviours (Hettema, Steele, & Miller, 2005). Motivational enhancement has been suggested as a potential intervention for reducing internet addiction among adolescents (Cheng & Li, 2014). Motivational interviewing, a type of motivational

enhancement, was found to be successful in lowering internet addiction among Chinese college students in a study by Kuss et al. (2021). Manwong et al. (2018) discovered in another study that motivational interviewing was useful in lowering teenage internet addiction in China. Therefore, the purpose of this study is to ascertain how motivational enhancement affects undergraduate students at the University of Ibadan in Oyo State, Nigeria, in terms of lowering internet addiction.

This study aims to shed light on the relationship between motivational enhancement and online addiction among University of Ibadan freshers. It also provides insights into counselling interventions that can effectively reduce internet addiction in young individuals.

Statement of the Problem

According to a report published by the Internet and Mobile Association of Nigeria on December 5, 2022, Nigeria currently has nearly 84 million internet users, with projections indicating that this number will increase to 117 million by 2027. This significant increase in internet users could potentially result in an increase in the number of individuals who may become vulnerable to internet addiction, especially among young people, particularly university undergraduates. This is brought on by things like having more free time, less parental supervision, and using the internet to get away from the rigors of college life. As a result, juggling their schoolwork and online activities is becoming more and more difficult for students at all educational levels.

Research has revealed that internet addiction is a growing problem among Nigerian adolescents, particularly university undergraduates. A study by Akanbi et al. (2018) found that intensive internet use among undergraduates of Universities in Ilorin metropolis led to new online relationships, increased financial costs, and reduced time spent socializing with others. Additionally, Muraina and Popoola (2022) found that self-concept is a strong indicator of internet addiction in Nigerian undergraduates attending public universities in Oyo State.

Despite efforts by experts to address this problem, internet addiction continues to increase among adolescents, highlighting the need for further research. Therefore, In order to better understand this problem and create efficient remedies, this study is to investigate the correlation between motivational improvement and internet addiction among undergraduates at the University of Ibadan in Oyo State, Nigeria.

Purpose of the Study

The primary goal of the research is to investigate the connection between Internet addiction and motivational enhancement among University of Ibadan undergraduates in Oyo State, Nigeria. This relationship has never been investigated in the setting of Ibadan before. Therefore, the particular goals of this research are to: 1. ascertain the extent of Internet addiction among University of Ibadan undergraduate students in Oyo State, Nigeria.

2. Examine the extent to which University of Ibadan undergraduate students in Oyo State, Nigeria, have improved their motivation.

3. investigate the connection between male undergraduates' motivational enhancement and Internet addiction at the University of Ibadan in Oyo State, Nigeria.

4. Find out if female undergraduates at the University of Ibadan in Oyo State, Nigeria, who are Internet addicts have higher levels of motivation.

Research Questions

What is the level of internet addiction among undergraduates at University of Ibadan, Oyo State, Nigeria?

What is the level of motivational enhancement among undergraduates at University of Ibadan, Oyo State, Nigeria?

Research Hypotheses

The 0.05 threshold of significance was used to design and evaluate the following null hypotheses:

Ho1: There was no significant relationship between motivational enhancement and internet addiction of undergraduate students in University of Ibadan. .

Ho2: There was no significant relationship between motivational enhancement and internet addiction of male undergraduate students in University of Ibadan.

Ho3: There was no significant relationship between motivational enhancement and internet addiction of male undergraduate students in University of Ibadan.

Literature Review

Motivational enhancement refers to a therapeutic approach aimed at increasing an individual's motivation to change problematic behaviours. When applied to internet addiction, it involves interventions designed to enhance motivation to reduce excessive internet use. Here are some empirical studies that have explored the relationship between motivational enhancement and internet addiction: Kim et al. (2012) explored the efficacy of a combined approach of cognitive-behavioural therapy (CBT) and proportion of treating problematic online game play in adolescents with major depressive disorder. Motivational enhancement techniques may be embedded within the CBT framework. This indicated a relationship between motivational enhancement and internet addiction. A study investigated the relationship between personality traits, interpersonal relationships, online social support, and facebook addiction. It was observed that motivational enhancement could be a relevant factors in understanding how individuals develop addiction to social media platforms (Tang et al., 2018). Choi et al. (2018) posited that motivational enhancement technique may be relevant in addressing impulsivity and compulsivity underlining internet addiction. This was mentioned in a study intended to compare internet

gaming disorder, with gambling disorder and alcoholic use disorder focussing on addressing impulsivity and compulsivity.

Research focusing specifically on the relationship between motivational enhancement and internet addiction among male undergraduates is somewhat limited but emerging. Here are some empirical studies that may be relevant to your inquiry: although not directly focused on motivational enhancement, this study examines the effects of a virtual reality treatment program for online gaming addiction. Motivational enhancement strategies may be considered as part of such treatment programs for male undergraduates struggling with internet addiction (Park et al (2017). Zhou et al. (2019) investigated the relationship between loneliness, smartphone addiction, and motivation among undergraduates. While not specifically focused on internet addiction, the findings may shed light on motivational factors contributing to addictive behaviours among male undergraduates. A meta-analytic study focuses on internet addiction prevalence among medical students, it underscored the importance of understanding internet addiction among college students. Motivational enhancement strategies could be explored as potential interventions in this population (Zhang et al., 2018). A study focused on mobile phone addiction among adolescents, it may provide insights into the relationship between addictive behaviours and motivation among young adults. Male undergraduates may exhibit similar patterns of internet addiction, warranting further investigation into motivational factors (Lee et al., 2018). Choi and Kang (2019) explored the structural relationship among social support, university life adjustment, self-efficacy, and game addiction among male university students. Motivational enhancement strategies may be indirectly related to self-efficacy and addiction behaviours. While these studies may not directly investigate the relationship between motivational enhancement and internet addiction among male undergraduates, they offer valuable insights into related areas and could inform future research in this domain.

Investigations into the relationship between motivational enhancement and internet addiction among female undergraduates are less common in the literature compared to studies on males. However, here are some empirical studies that may provide insights into this relationship: Lee et al. (2018) offered indirect insight into the relationship between addictive behaviour and motivation among young female while focusing on mobile phone addiction among adolescents. A study investigated the effects of internet and smartphone addictions on depression and anxiety. Although not specifically focused on motivational enhancement, understanding these effects among female undergraduates could inform interventions targeting motivational factors (Lee et al., 2010). Chen et al. (2015) though not directly related to motivational enhancement, explored the prevalence and correlates of internet addiction among undergraduate students in Taiwan. Female-specific correlates and motivational factors may be investigated in further research. Alavi et al. (2012) While not specifically focused on female undergraduates, compared behavioural addiction, including internet addiction, with substance addiction. Exploring motivational factors and gender differences could be a valuable avenue for further investigation. Another similar study examined personality traits, interpersonal relationships, online social support, and Facebook addiction, which could provide insights into motivational factors related to internet addiction among female undergraduates. While the direct empirical literature specifically addressing the relationship between motivational enhancement and internet addiction among female undergraduates may be limited, exploring related areas such as addiction

correlates, personality traits, and behavioural addictions can provide valuable insights into potential motivational factors influencing internet addiction in this demographic

Methodology

In order to examine the link between independent variables (motivational enhancement) and dependent variables (internet addiction) among undergraduate students at the University of Ibadan in Oyo State, Nigeria, a descriptive research design of the correlational type was used in this study. The data was meticulously monitored and documented as it happened spontaneously throughout the study period; no modifications were used.

All undergraduate students registered in the University of Ibadan, which has multiple faculties and departments, made up the population of the study. The target population are all students in the two selected faculties of the institution. The University of Ibadan is one of the oldest and most prestigious universities in Nigeria, with a diverse student population from different parts of the country and beyond. As of the 2021/2022 academic session, the University has 13 faculties and 90 departments offering various undergraduate courses and the departments cover a wide range of disciplines. The total population of all undergraduate students in the faculties and Arts and Education of the university were 15,533.

Sources: Data collected from the Registrar of the University (2021/2022 session).

Convenient sampling technique was used to select the participants of the study. Participants were selected among the overall targeted 15,533 students using krejcie and Morgan sampling table and the score yielded 377 as the sample size (Krejcie & Morgan 1970, as cited in Kakumbi & Phiri, 2022). Thus, a total of three hundred and seventy-seven 377 undergraduates from the faculties of Arts and Education of the university were drawn as the sample size for this study. Participants consisted of 377 students, 31.3% of which were male, and 68.7% were female. Participants of this study were full-time students across all levels in the Faculties of Education and Art.

Two scales combined as an instrument were used for this study; one is an adopted scale while the second is an adapted scale as indicated below; Young (2016) created the Internet Addiction Test, which consists of 10 items that are scored on a five-point Likert scale (ranging from 1: never to 5: always). The minimum and maximum obtainable scores of the scale are 10 and 50. The range of the scores was 40. To determine the mild, moderate, and severe stages of internet addiction, the range of the scores was divided into three. Then, a score between 10 and 23 represents low internet addiction, a score between 24 and 37 represent moderate internet addiction and a score between 38 and 50 represents the severe internet addiction.

The Motivational Enhancement Questionnaire (MEQ) was adapted from The Achievement Motivation Scale developed by Herman in 1970. The 15-item measure was designed to evaluate University of Ibadan undergraduate students' motivational enhancement. A modified five-point scale served as the foundation for MEQ. Each item has five ratings: 1 for never, 2 for seldom, 3 for occasionally, 4 for mostly, and 5 for always. In the motivational

enhancement scale, a score between 15 and 35 represents low motivational enhancement, a score between 36 and 55 represents moderate motivational enhancement and a score between 56 and 75 represents high motivational enhancement.

In establishing the face and content validity of the instrument, a draft copy of the instrument was shown to two lecturers in the Department of Educational Management and counselling at Al-Hikmah University, Ilorin; additionally, one specialist in the field of Educational Research, Measurement and Evaluation at Al-Hikmah University, Ilorin; University of Ilorin, and University of Ibadan, Oyo State. These experts are in cadres of Senior Lecturers, Readers and Professors. Comments, observations, corrections and suggestions made by the experts were effected accordingly before the final draft of the instruments to ascertain its validity. All corrections and suggestions were strictly adhered to and the final copy was used for data collection.

Following the content and face validity of the instruments, a pilot study was carried out with thirty undergraduates at Kwara State University, Ilorin who were not part of the selected population. Split-half method was adopted. The scale was administered once to the selected respondents. The score of each respondent was split into two halves (through odd item scoring and even item scoring). These two sets of scores were correlated to determine the reliability coefficient of the scale. This returns the reliability coefficients of 0.76 and 0.79 which were considered appropriate for this study.

To ensure proper access to the respondents, a letter of introduction from the Head of the researcher's department was submitted to the Head of each department in the University. The instruments were then administered to the respondents on the day approved by the Head of the Department during regularly scheduled class periods. To ensure efficient data collection, the researcher was assisted by four research assistants in the administration and collection of the instruments. The administration and collection of instruments were conducted in each selected department. Out of the 400 instruments administered, 386 were retrieved and considered valid for analysis, representing a response rate of 97%.

Data analysis was done using the Statistical Package of Social Sciences (SPSS) version 20. The research questions of this study were answered by establishing the frequencies and percentages of the respondents in each of the stages of internet addiction and motivational enhancement. The hypotheses were tested using Pearson's Product Moment Correlation (PPMC).

Results

Research Question 1:

What is the level of Motivational Enhancement of Undergraduate at University of Ibadan Oyo State, Nigeria?

Table 1

Table Showing the scores of the Participants on Motivational Enhancement Scale

Level	Range of Score	Frequencies	Percentages
Low	10 - 23	52	13.47
Moderate	24 - 37	62	16.06
High	38 - 50	272	70.47

Table 1 shows the result obtained from answering research question one. From the table, it is shown that 52 respondents which represents 13.47% were in the low category of the motivational enhancement, 62 respondents which represents 16.06 were in the moderate category, while 272 respondents which represents 70.47 were in the high category. Since the majority of the participants 272 (70.47%) were in the high category, the level of motivational enhancement of the respondents was high.

Research Question Two

What is the level of Internet Addiction of Undergraduate at University of Ibadan Oyo State, Nigeria?

Table 2

Table Showing the scores of the Participants on Internet Addiction Scale

Level	Range of Score	Frequencies	Percentages
Low	15 - 35	77	19.95
Moderate	36 - 55	198	51.3
High	56 - 75	111	28.76

Table 2 shows the result obtained from answering research question two. From the table, it is shown that 77 respondents which represents 19.95% were in the low category of the motivational enhancement, 198 respondents which represents 51.3% were in the moderate category, while 111 respondents which represents 28.76% were in the high category. Since the majority of the participants 198 (51.3%) were in the moderate category, the level of motivational enhancement of the respondents was moderate.

Hypothesis One

There is no significant relationship between ME and IA among undergraduates at University of Ibadan, Oyo State, Nigeria.

Table 3

PPMC Table Showing the Correlation between Motivational Enhancement (ME) and Internet Addiction (IA) among undergraduates at University of Ibadan, Oyo State, Nigeria.

Variable	No	Mean	St. Dev	Df	r. Cal.	Sig.	Remarks
ME	377	50.58	14.13	384	0.58	0.00	**
IA	377	33.65	9.22				

** (Significant at 0.01 critical region)

Table 3 shows the results obtained from hypothesis one. From the table, it is shown that r. calculated is 0.58, degree of freedom is 384 and Significance is 0.00. Since the significance level is less than 0.05, the null hypothesis was rejected. Therefore, there was a significant relationship between motivational enhancement and internet addiction of undergraduate students in the University of Ibadan in Oyo State, Nigeria.

Hypothesis Two

There is no significant relationship between Motivational Enhancement (ME) and Internet Addiction (IA) among male undergraduates at University of Ibadan, Oyo State, Nigeria.

Table 4

PPMC Table Showing the Correlation between Motivational Enhancement (ME) and Internet Addiction (IA) among male undergraduates at University of Ibadan, Oyo State, Nigeria.

Variable	No	Mean	St. Dev	Df	r. Cal.	Sig.	Remarks
Male ME	118	49.31	14.44	116	0.98	0.01	**
Male IA	118	33.09	9.32				

** (Significant at 0.05 critical region)

Table 4 shows the results obtained from hypothesis two. From the table, it is shown that r calculated is 0.98, degree of freedom is 116 and Significance is 0.01. Since the significance level is less than 0.05, the null hypothesis is rejected. Then, there is a significant correlation between Internet addiction and motivational enhancement among male undergraduates at University of Ibadan, Oyo State, Nigeria.

Hypothesis Three

There is no significant correlation between Internet addiction and motivational enhancement among female undergraduates at University of Ibadan, Oyo State, Nigeria.

Table 5

PPMC Table Showing the Correlation between Internet Addiction and Motivational Enhancement among Female Undergraduates in University of Ibadan, Oyo State, Nigeria.

Variable	No	Mean	St. Dev	Df	r. Cal.	Sig.	Remarks
Female ME	259	51.61	13.81	257	0.53	0.00	**
Female IA	259	33.09	9.32				

** (Significant at 0.05 critical region)

Table 5 shows the results obtained from hypothesis three. From the table, it is shown that r calculated is 0.99, degree of freedom is 257 and Significance is 0.01. Since the significance level is less than 0.05, the null hypothesis is rejected. So therefore, Internet addiction and motivational enhancement are significantly correlated among female undergraduates at the University of Ibadan, Oyo State, Nigeria.

Discussion

The University of Ibadan's undergraduate students had a moderate level of Internet addiction and a moderate level of motivational enhancement. The results of the study of motivational enhancement which is in tandem with the study of Akinade et al. (2021) which revealed that undergraduates would perform better and excel well if motivation comes from within. Also, this finding supports the study conducted by Tus (2020) which investigated the relationship between the average number of hours spent on social media per week and the Grade Point Average (GPA) of students. Tus found that excessive use of social media negatively affects students' academic performance, suggesting a non-linear relationship between the two variables.

Similarly, Cheng et al. (2021) examined the impact of Internet usage on academic achievement among English Department students at Zarka University and found that students who used social media for less than 10 hours per week and were internally motivated had a significant development in educational routine by over 75%. Previous research has indicated that an overindulgence in social media and the internet may have an adverse effect on scholastic achievement. This emphasizes the necessity of developing efficient strategies to control students' addiction to the internet.

A substantial association was discovered between the two variables after investigating the relationship between Internet addiction and motivational enhancement among college students. This result is in line with earlier studies by Reed and Reay (2015), Ganji et al. (2016), Demir and Kultu (2018), AlGhamidi (2008), and Ganji et al. (2016) which reported significant effects of motivational enhancement therapy on Internet addiction among University student; their findings revealed that Students who are addicted to the internet spend a lot of time on social media, which might make it difficult for them to study and get ready for assignments. Consequently, excessive Internet usage may negatively impact students' academic performance and decrease their motivation to study. Although the Internet is widely easily reached to all and sundry, People who have more free time are more likely to acquire Internet addiction tendencies, while self-motivated individuals have a propensity to achieve greatly academically.

There were statistically significant variations between male and female undergraduates when the association between motivated enhancement and gender was analyzed, with females showing higher levels of motivational enhancement. These results align with a previous study by Sayegh et al. (2021) which reported that females are generally more motivated than males when it comes to academic achievement; it was revealed that females exert more effort and dedication towards achieving their academic goals when motivated, leading to higher academic performance and better grades.

Several limitations of this study should be considered. Firstly, the study was conducted on a specific population of undergraduates at the University of Ibadan, Oyo State and therefore, the generalization of findings to other populations may be limited. Future studies should include diverse populations to obtain a more comprehensive understanding of the study variables. Secondly, the data collection method used in this study was solely quantitative, which may have limited the exploration of more in-depth insights into the experiences and perspectives of the participants. Future studies could consider using mixed-method or qualitative approaches to obtain a more nuanced understanding of the study variables. Thirdly, this study only considered gender as demographic variables. Future studies should consider other demographic variables such as age, family background, and socio-economic status to provide a more comprehensive analysis of the factors that contribute to motivational enhancement and Internet addiction among university students.

Conclusion

This study concluded that there was a significant relationship between motivational enhancement and internet addiction among the undergraduate students of University of Ibadan and this relationship remained the same irrespective of the gender of the participants.

Recommendations

The study's conclusions led to the following recommendations being made:

Undergraduates should receive appropriate guidance regarding the value of using the internet for educative purposes.

Motivational strategies for undergraduates should be devoid of gender bias

Institutions' counsellors should properly guide the students on strategies to adopt for the proper usage of the internet in an attempt to enhance their academic performance.

More research on the connection between Internet addiction and other psychological factors is advised in order to obtain a more thorough grasp of the current situation. Programs for protection and treatment can then be created using this knowledge to combat Internet addiction and its harmful effects.

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