

Locus of Control and Self-Concept as Determinants of Internet Addiction among Public University Undergraduates in Oyo State, Nigeria

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Received: 03 March 2022; Accepted: 04 April 2022; Published: 25 April 2022

Abstract: The study investigated locus of control and self-concept as determinants of internet addiction among public university undergraduates in Oyo State. Four hundred University Undergraduates were selected through stratified random sampling techniques which were used in sampling participants from two selected public universities in Oyo state. To achieve the objectives, the respondents were measured with relevant adopted standardized scales such as the Self-Concept Scale, Locus of Control Scale, and Internet Addiction Scale. Four research hypotheses were tested in the study through Pearson Product Moment Correlation and Multiple Regression analysis. Results showed that there was a significant relationship between locus of control and internet addiction ($r=0.12$; $p<0.05$), there was a significant relationship between self-concept and internet addiction ($r=0.66$; $p<0.05$), there is a joint effect between locus of control, self-concept and internet addiction ($F_{2,397} = 148.020$; $p<0.05$) while locus of control do not statistically predict internet addiction ($t=0.618$, $p>0.05$) and self-concept statistically predict internet addiction ($t=16.942$; $p<0.05$). The study recommends among others that school counselors and policymakers should organize seminars, workshops, and conferences to sensitize the students about the need to have realistic and objective self-assessment and self-concept.

Keywords: Locus of control, Self-concept, Internet addiction, Public university undergraduates

INTRODUCTION

The world is celebrating the use of information technology for the dissemination of information among the benefits include turning the entire world into a “Global village”. The need for the use of the internet in the modern age is as important as life itself. This is because the most important function of the internet is in the dissemination of information in a twinkle of an eye. Usage of mobile technology devices such as phones in addition to computers, however, increases the rate of internet usage and expansion of its coverage which brings about some negative issues (Meates, 2020). Recently, the internet has become an in-built part of the daily lives of people including children and adolescents. The internet is known to serve several purposes in the educational business outfits, recreations and essentially in connecting people through texting, calling, social websites, chat applications, and emails. The Internet has become an essential part of daily life (Akour et al., 2020). Despite the numerous benefits enmeshed in the use of the internet, it also comes with certain risks of addictive behavior.

Internet addiction as argued by (Owoyele & Muraina, 2016) is an uncontrollable desire to use the internet, the devaluation of time spent without connecting to the internet, intense nervousness and aggression in the event of deprivation, and progressive deterioration of social and family life. Internet addiction is a kind of psychological addiction representing the need to be active all the time on the internet (Owoyele & Muraina, 2016). In addition, Amudhan et al. (2021) maintained that Internet addiction is a kind of technology addiction and a behavioral addiction

similar to a gambling habit. Muraina (2021) related internet addiction to poor impulse control. However, internet-addicted people have a desire to spend more time on the internet and get excited while they are using the internet (Sondhi & Joshi, 2020). They use the internet in a compulsive manner and show withdrawal symptoms and admit that internet use negatively affects their lives in areas such as school, health, and parental relationships.

In a study conducted by Tus (2020) on a relationship between the average number of hours that students spent on social media in a week and their Grade Point Average (GPA) it was found that a non-linear relationship between the two factors and concluded that students' studies are negatively affected by the excessive use of social media. Muraina (2021) examined the relationship between the usage of the internet and academic achievement among the students of the English Department at Zarka University. The study found a change in the academic achievement of students, with less than 10 hours per week of usage of social media, by more than 75% of users. A related study by Kircaburun et al. (2021) conducted a study to investigate the usage of the internet for academic and non-academic purposes. The study found that computer science students spend more time on the internet than others and found that the total time spent on the internet is weakly correlated with the time spent online, specifically for academic purposes.

Locus of control is a belief about the outcomes of our actions that are contingent on what we do (internal control orientation) or the events that are outside our personal control (external control orientation) (Muraina, 2021). Locus of control as posited by Ogórek & Biedroń (2020) refers to an individual's personal belief that the events which occur in his or her life are either a result of personal control and effort or outside forces such as fate and luck. The locus of control is a set of beliefs about how one behaves and the relationship of that behavior to how one is rewarded or punished (Muraina, 2018). It is the degree to which a person believes that control of reinforcement is internal versus the degree to which it is external. If one believes that rewards are the results of one's own behavior, this would be an internal locus of control. On the other hand, if one believes that rewards occur as a result of intervention by others, one believes in an external locus of control.

The locus of control can be developed from childhood and it can also be related to parental behavior. Levenson (1997) created a multidimensional scale that is comprised of three independent components, namely, internality, powerful others, and chance, wherein one can regard oneself as internal and yet also believe in the power of luck. Thus, orientation in the locus of control is a conviction about whether the consequences of our activities depend upon what we do (internal control orientation) or on situations outside our own control (external control orientation). Muraina (2021) examined the relationship between internet addiction, academic locus of control, and social self-efficacy. Internet addiction was elaborated positively by external academic locus of control and negatively by social self-efficacy and internal academic locus of control. However, Individuals with an internal locus of control judge outcomes of events to be internally controllable. Externally locus of control is typically credit luck or likelihood for any successes.

Self-concept is an individual's consciousness of himself and is the self-cognition and self-evaluation of his own physical and mental characteristics. Self-concept is the core part of the personality structure, and people's self-cognition may directly affect their individual behaviors (Muraina, 2018). Self-concept can be defined as an individual's evaluation of self that is based on his or her experiences and interpretations of those experiences (Tus, 2020). Self-concept is multifaceted in that people categorize the vast amount of information they have about themselves and relate these categories to one another which is hierarchically arranged with perceptions of behavior at the base moving to inferences about self in sub-areas (such as academic-English, science, history, math), then to inferences about self in general" (Smith, 2019).

Most of the features of addictions such as salience, compulsive use (loss of control), the alleviation of distress, tolerance and withdrawal, mood modification, and the continuation despite negative consequences are growing in Internet addiction too. This is accorded with the findings of Muraina (2018) who found that the locus of control has an influence on social media use among the students. Internet addiction could actually result from another existing disorder like depression,

stress, or self-concept. The relationship between Internet addiction and self-esteem has been investigated in several studies. A study by [Servidio \(2019\)](#) has revealed that personality traits, self-esteem, and psychiatric disorders are associated with Internet addiction.

Self-concept relates to other several self-form such as self-esteem, self-image, ideal self, self-awareness, self-efficacy, and self-actualization. It also relates to personal traits and beliefs. All of these help an individual to have a perfect clutch of which one is. Students with positive academic self-concept feel that with the proper effort, they can do well in their studies whereas the students with negative academic self-concept doubt that they can do well in their studies and will not be able to fare adequately in their academic performance ([Simonsmeier et al., 2020](#)). Social self-concept is how the students believe in their standing among peers. It reflects the students' ability to socialize among themselves and how they relate to other people. Students who think negatively about themselves impose greater limitations on their achievements, whereas [Owoyele and Muraina \(2016\)](#) have found internet addiction and social self-concept to be negatively correlated with poor school performance.

The study was anchored on Distraction-Conflict (DC) theory by Zajonc which is a tenet of the broader Social Facilitation theory ([Sanders, 2003](#)). Distraction Conflict analyzes how individuals work with distractions. This theory surmises that when distractions are present, they create physiological arousal in a person. Initially, distractions help an individual focus and perform better on easy, rudimentary tasks; however, as the tasks become more complex, the individual begins to struggle to manage the distraction and the task at hand ([Sanders, 2003](#)). Distractions can be any stimuli, social or non-social that do not align with the task.

Reasons adduced for this excessive use include available free time, lack of monitoring because of being away from parents, and at times attempts to get away from tough university routines. However, those who suggested its inclusion justified their views on the grounds that Internet addiction itself had negative impacts on the individual's life. Students at all levels of learning now have divided attention to studies, as a result of available opportunities to be harnessed from social media. Whether these opportunities promote studies is a question that needs to be answered. It is on this backdrop that this study examines locus of control and self-concept as determinants of internet addiction among University undergraduates in Oyo State.

The main aim of this study is to examine locus of control and self-concept as determinants of internet addiction among public university undergraduate students in Oyo State. The specific objectives are as follows: (i) to determine the relationship between locus of control and internet addiction among public university undergraduate students in Oyo State, Nigeria; (ii) to examine the relationship between self-concept and internet addiction among public university undergraduate students in Oyo State, Nigeria. The following null hypotheses were formulated and tested at 0.05 level of significance; H_{01} : there is no significant relationship between locus of control and internet addiction among public university undergraduate students in Oyo State, Nigeria; H_{02} : there is no significant relationship between self-concept and internet addiction among public university undergraduate students in Oyo State, Nigeria.

METHODOLOGY

In this research, a descriptive research design of correlational and regression type was adopted to determine the prediction of independent variables (locus of control and self-concept) on the dependent variable (internet addiction) among public university undergraduate students in Oyo State without manipulations. Also, locus of control was classified into internal and external while self-concept and internet addiction were classified into low and high. However, it is carefully observed and recorded information as it naturally occurred at the time this study was conducted. The target population for this study was made up of all public university undergraduate students in Oyo State. In Oyo state, there are four (4) public universities in Oyo State. A multi-stage sampling technique was used for the study. The first stage involved the use of a simple random sampling technique to select two universities. The second stage witnessed the selection of two faculties and 5 departments from each sampled school. 20 students were sampled in each university through

balloting and this cut across different genders. Overall, four hundred public university undergraduate students were drawn for the study.

The instrument adopted for this study is a questionnaire on the following scales:

Locus of Control Scale

Levenson (1997) Locus of Control Scale was used for this study which contained 15 items, and measures three components of locus of control, especially internal locus of control, power from others, and chance. 4 items of the scale plus 15 points measure internal locus of control, the 4 other items of the scale plus 15 points measure powerful from others, and the last 7 items plus 15 points measure chance. A true or false scale was used in rating the items. The internal consistency of the internal locus of control is $r=.71$. The internal consistency of powerful others is $a=.67$ and the internal consistency of change is $a= 0.71$.

Self-Concept Scale

The Self-concept Scale, developed by Butler & Gasson (2005), consists of 21 items rated on a true or false scale. The minimum and maximum scores for this scale range from 20 to 100. The Cronbach's alpha internal reliability score on the scale is 0.81. In the present study, Cronbach's alpha coefficient was calculated, and the internal reliability score of the scale was found to be 0.85.

Internet Addiction Scale

The Internet Addiction Test, developed by Young (2016), comprises 10 items rated on a five-point Likert scale (from 1 - not at all, to 5 – always), that measures the mild, moderate, and severe level of Internet Addiction. On the basis of the total score obtained on the test, the individual is placed into one of three categories: average online user (under 20) who has a full control of his or her usage; experiences occasional or frequent problems because of excessive Internet use (20-40); or has significant problems because of Internet use (40 above). The internal consistency of the Internet Addiction Test is $a = 0.90$.

Validity of the instrumentation is the degree to which the instrument measures what is meant to measure. In establishing the face and content validity of the instrument, the draft copy of the instrument was shown to two lecturers in the Department of Educational Management and Counselling, Faculty of Education, Al-Hikmah University, Ilorin to ascertain its validity. All corrections and suggestions were strictly adhered to and a final copy was used for data collection. After the content and face validity of the instruments, a pilot study was conducted with 20 undergraduates in Kwara State University, Ilorin that were not part of the sampled population. Twenty copies of the instruments were administered to them and the data collected from the pilot study were analyzed with the use of SPSS Cronbach's Alpha to check the reliability index in order to ensure that they are consistent in measuring what they were designed to measure. It gave a 0.76 reliability value which was considered appropriate for this study. A letter of introduction from the Head of the Department in my school was submitted to the Registrar of each university. The instruments were administered to the respondents on the day approved by the school authorities for the exercise during regularly scheduled class periods. The researcher was assisted by two research assistants in the administration and collection of the instruments. In each of the selected schools, the administration and collection of instruments were done on the same day of administration. 389 instruments administered were retrieved and valid for analysis while 11 were invalid representing 97%.

In analyzing the collected data, a simple percentage was used for the demographic data of the respondents. Pearson Product Moment Correlation (PPMC) was used to test hypotheses 1 and 2.

RESULTS AND DISCUSSION

Research Hypotheses

H₀: There is no significant relationship between locus of control and internet addiction among public university undergraduates in Oyo State, Nigeria

Table 1. Pearson Correlation Coefficient showing the relationship between locus of control and internet addiction among University undergraduates in Oyo State

Variable	Mean	Std. Deviation	N	r	sig.	Decision
Internet Addiction	37.78	8.76	389	.115*	0.023	H ₀ Rejected
Locus of Control	32.69	3.19	389			

* Correlation is significant at the 0.05 level (2-tailed).

Table 1 above showed that there was a significant relationship between internet addiction and locus of control (37.78, 8.76) and (32.69, 3.19) respectively. It was also indicated that there was a significant relationship between locus of control and internet addiction ($r=0.115$; $p<0.05$). The implication of this showed that locus of control has a significant influence on internet addiction among public university undergraduates in Oyo state. This finding aligns with the earlier studies carried out by Muraina (2021) on Shyness and Locus of Control as Predictors of Internet Addiction and Internet Use. An exploratory study was used to examine the potential influences of personality variables, such as shyness and locus of control, online experiences, and demographics on Internet addiction. Results indicated that the higher the tendency of one to be addicted to the Internet, the shier the person is, the less faith the person has, the firmer belief the person holds in the irresistible power of others, and the higher trust the person places on chances in determining his or her own course of life. Results indicated that a large proportion of students reported feelings of dissociation and symptoms of tolerance, withdrawal, and escape. Moreover, frequent interpersonal and academic conflicts and physical health-threatening risks related to problems with Internet use were found. While men reported more Internet-related problems overall, women were more likely to attempt to cut back or stop their Internet use. A significant positive correlation between external locus of control and problem Internet use was found.

Ho₂: There is no significant relationship between self-concept and internet addiction among public university undergraduates in Oyo State, Nigeria

Table 2. Pearson Correlation Coefficient showing the relationship between self-concept and internet addiction among University undergraduates in Oyo State

Model	Mean	Std. Deviation	N	R	Sig.	decision
Internet Addiction	37.78	8.76	389	.658	.000	H ₀ Rejected
Self-Concept	37.29	5.23	389			

** Correlation is significant at the 0.01 level (2-tailed).

As indicated in Table 2, there was a significant relationship between internet addiction and self-concept (37.78, 8.76) and (37.29, 5.23) respectively. It was also indicated that there was a significant relationship between locus of control and internet addiction ($r=0.658$; $p<0.05$). The implication of this showed that self-concept has a significant influence on internet addiction among public university undergraduates in Oyo state. This finding is in tune with the works of Akhter (2013) whose study aimed to identify the relationship between Internet addiction and self-concept among university students. The sample consisted of 359 students of both genders. The generated results displayed the existence of a positive relationship between internet addiction and self-concept among students. The findings also match with the results of the study carried out by Owoyele & Muraina (2016) on the role of self-concept and emotional maturity in excessive internet usage. The present study focuses on determining the difference among the levels of emotional maturity and self-concept of low, moderate, and high users of the internet. The results showed that low internet

users will have lower emotional instability, lower chances of personality disintegration, and lower self-concept. Moderate users were seen to be having a positive correlation between Emotional instability and Personality Disintegration and a negative correlation with respect to self-concept and High users of the Internet were seen to be having Higher Emotional Instability, Lower personality Disintegration, and Low self-concept. In alignment with the aforementioned, Leménager et. al, (2018) on the impact of self-concept stress and internet usage control on the internet.

CONCLUSION

It is a known fact that the whole world revolves around the pivot of technological advancement, particularly, information and communication technology. Every technological advance comes with its negative side, most especially when misused or abused. The study examines locus of control and self-concept as predictors of internet addiction among public university undergraduates in Oyo state, Nigeria. It then concludes from the above results and discussion that the level of internet addiction among university undergraduates in Oyo state is mild. Analysis of data established a significant relationship between locus of control, self-concept, and internet addiction while the relationship between the two independent variables (self-concept and locus of control) predicts the level of internet addiction among public university undergraduates in Oyo state, Nigeria.

RECOMMENDATIONS

Based on the findings, the following recommendations were made:

- i. School administrators and policymakers should organize seminars, workshops and conferences to sensitize the students about the need to have realistic and objective self-assessment and self-concept.
- ii. School counselors should organize awareness campaigns to educate the youth about the debilitating effects of excessive internet usage.

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