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# Self-Concept as Predictors of Internet Addiction Among Undergraduate Students of Kwara State University, Nigeria

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# A B S T R A C T

This study investigated self-concept as a predictor of internet addiction among Undergraduates at Kwara State University Malete. The objectives of the study were to examine the relationship between self-concept and internet addiction, gender, and the joint relationship among undergraduate students of Kwara State University, Malete. Four hundred University Undergraduates were selected through convenient sampling techniques which were used in sampling participants from their various departments within the school. Pearson Product Moment Correlation and Multiple Regression analysis were used to analyze the data collected. Results revealed that there is a significant relationship between self-concept and internet addiction (r = 0.097 p < 0.05), there is no significant relationship between gender and internet addiction (r = 0.041 p < 0.05), there is a joint relative relationship between self-concept, gender and internet addiction (F2, = 1.92, p < 0.05) predict internet addiction (t = 0.639 p < 0.05) and self-concept statistically predict internet addiction (t =1.656 p<0.05). The study recommends among others that school counsellors and policymakers should organize seminars, workshops, and conferences to sensitize the students to the need to have realistic and objective self-assessment and Self-concept.

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#### **1. INTRODUCTION**

The usefulness of the internet cannot be overemphasized as it is applicable in all areas of teaching and learning. The use of technology has gone a long way in assisting virtually all internet users and interns with quick access to information in all ramifications. According to Amudhan *et al.* (2022), the Internet is a type of technology like mobile phones and television, which offers a channel for communication, education, entertainment, and information. Meates (2020) argued that the use of the internet was promoted among students with the use of technological tools like computers, smartphones, and those made by Apple and Android. Ezeh *et al.* (2021) view internet addiction as 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.

Meates (2020) claimed that teenagers are more likely to become addicted to the internet. Adour (2020) posited that the best educational applications such as internet facilitate resources have been created to serve students better in other to encourage students' participation in structured education. Amudhan *et al.* (2022) posited that the use of the internet is essential in human life and as such the excessive use of the internet could also affect an individual suffering from one behavioral issue or the other. Internet addiction is a multidimensional put-up that is aimed at enhancing individual thought of the brunt of the Internet platform on human psychology and behaviors (Miranda *et al.*, 2022). Internet addiction is a harmful behavior that could be harmful, causes stress in one's personal, life, and could ruin an individual's manners (Cheng *et al.*, 2021). Krampe *et al.* (2021) classified Students that looked down upon themselves have larger restrictions on their success, meanwhile could affect their personalities. An individual's traits tell more about him or herself. The personality of an individual can be traced down to self-concept.

Self-concept can be viewed as a language which could be a complex concept that means how people distinguish themselves and the way they judge and perform their own opinion. Groups also faced extensive inner conflict and differences of opinion in their inability to control their addictive behaviour (Churchill *et al.*, 2020). Self-concept is important in our regular running. It has been seen as the motivating factor in the ways and manners in which we make decisions. Self-concept has a lot to do with our ways of doing. However, the relationship between self-concept and behavior cannot be ignored positing that the important place of our characteristics, traits, abilities, and actions is known as self-concept (Bharathii & Sreedevi, 2016). The researcher further said that self-concept is not innate but is developed or constructed by the individual through interaction with the environment and dazzling on such interaction.

The main aim of this study is to examine self-concept as a determinant of internet addiction among undergraduate students at Kwara State University, Malete. The specific objectives are as follows:

- (i) To examine the relationship between gender and internet addiction among undergraduate students of Kwara State University, Malete.
- (ii) To examine the relationship between self-concept and internet addiction among undergraduate students of Kwara State University, Malete.
- (iii) To determine the joint relationship between gender, self-concept, and internet addiction among undergraduate students of Kwara State University, Malete.

The following null hypotheses were formulated and tested at a 0.05 level of Significance:

- (i) Ho<sub>1</sub>: There is no significant relationship between gender and internet addiction among undergraduate students of Kwara State University, Malete.
- (ii) Ho<sub>2</sub>: There is no significant relationship between self-concept and internet addiction among undergraduate students of Kwara State University, Malete.
- (iii) Ho<sub>3</sub>: There is no significant joint relationship between gender, self-concept, and internet addiction among undergraduate students of Kwara State University, Malete.

#### **2. LITERATURE REVIEW**

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. Tus (2020) revealed that on a relationship between the average number of hours that students spent on social media in a week and their Grade Point Average 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 and Popoola (2022) conducted research on Locus of Control and Self-Concept as determinants of Internet Addiction among Public University Postgraduates in Oyo State. A stratified random sampling technique was used to select 400 participants from the selected public Universities in Oyo state. Standardized scales such as the Self-Concept Scale, Locus of Control Scale, and internet Addiction Scale were adopted. Four research hypotheses were tested with Pearson Product Moment Correlation and Multiple Regression analysis. Results showed that there was a significant relationship between locus of control and internet addiction, there was a significant relationship between self-concept and internet addiction, there is a joint effect between locus of control, self-concept, and internet addiction while locus of control does not statistically predict internet addiction and self-concept predict internet addiction (Huang et al., 2019). The result shows that Internet addiction was elaborated certainly by external academic locus of control and negatively by social selfefficacy and internal academic locus of control (Garipağaoğlu & Güloğlu, 2021). McPherson and Martin (2017) reported that gender has no significance on the perception of self-concept and the state of an individual self-concept could determine his / her attitude. The researcher further said that the perception of an individual aid what he becomes in the nearest future. The aspect of self-concept is significant because it indicates that it can be modified or changed.

Marcic and Grum (2011) scientifically examined the gender differences and similarities of self-concept and its components. The researchers examined the concept of gender differences on the instability and contingency of self-esteem. 339 participants aged from 19 to 63 years were examined. The results show that males and females do not differ in independent self-concept and self-esteem (level, stability, or contingency). Significant differences appeared mainly in the interdependent self-concept, which seems to show the effect of fundamental bio-socio-psychological influences. Other significant differences were in one aspect of independent self-concept and one aspect of contingent self-esteem.

Wilgenbusch and Merrell (2019) investigated consolidated research on gender differences in self-concept among children and youth by conducting a systematic meta-analysis of research involving self-concept as a multidimensional phenomenon. The articles included participant samples from 7 nations: the US, Australia, Northern Ireland, South Africa, Finland, Norway, and Canada. Participants ranged from 1st grade through 12th grade. The findings defied stereotypes, several were consistent with previous notions regarding differences in self-concept based on gender. The direction and complexity of these results emphasize the importance of discussing developmental differences in self-concept thoughtfully and carefully and argue against the use of simplistic global generalizations. Kamran *et al.*, (2018) postulated that the improved use of the internet in our daily lives also has negative effects as it was observed on the physical, psychological, and social health of individuals. The researcher also observed that high pervasiveness was found among male students and the habit of snacking while using the internet was found associated with Internet Addictions.

### 3. METHODS

A descriptive research design of correlational and regression type was adopted to determine the prediction of self-concept on internet addiction among undergraduate students in Kwara State. The population for this study was made up of all undergraduate students at Kwara State University. The target populations were made up of both part-time and full-time postgraduate students of Kwara State University. Four faculties for both parttime and full-time students were considered for the study. A convenient sampling technique was used to select ten respondents with both male and female among the part-time and fulltime undergraduate students of Kwara State University. The participants were 400 both parttime and full-time students of Kwara state university undergraduate students. Two (2) instruments were designed to elicit information from the respondents and were subjected to validity and reliability test. The Self-concept Scale developed by Butler and Gasson (2005) consists of 21 items on a five-point Likert scale while the Internet Addiction Test developed by Young (2007) comprises 20 items rated on a 5-point scale was adopted. The researcher employed three research assistant assistants in the administration and collection of the instruments and all data gathered were attended to accordingly. Descriptive statistics 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 Pearson Product Moment Correlation (PPMC) and multiple regressions at a 0.05 level of significance. A simple percentage was used to analyze the demographic data of the respondents. Pearson Product Moment Correlation (PPMC) was used to test hypotheses 1 and 2 while multiple regression analysis was used to test hypothesis 3. The Cronbach's alpha internal reliability score of the scale is 0.81 while Cronbach's alpha coefficient scale was found to be 0.85. The internal consistency of the Internet Addiction Test is = 0.90.

### 4. RESULTS AND DISCUSSION

This section describes the demographic characteristics of the respondents using frequency counts and percentages as illustrated in **Tables 1** and **2**.

**Table 3** shows that there is no significant relationship between gender and internet addiction among undergraduate students of Kwara State University, Malete (r = 0.041; p>0.05). Hence, the hypothesis was accepted. This means that gender is not a significant determinant factor of internet addiction among KWASU students.

**Table 4** shows that there is no significant relationship between self-concept and internet addiction among undergraduate students of Kwara State University, Malete (r = 0.097; p>0.05). Hence, the hypothesis was accepted. This means that self-concept is not a significant determinant factor of internet addiction among KWASU students.

**Table 5** shows that the independent variables when pulled together have a significant effect on internet addiction among undergraduate students of Kwara State University, Malate. The value of R (adjusted) = 0.004 and R2 (adjusted) = 0.011.

Table 1. Frequency and percentage distribution showing the gender of the respondents.

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male   | 133       | 44.3           |
| Female | 167       | 55.7           |
| Total  | 300       | 100            |

Table 2. Frequency and percentage distribution showing faculties of the respondents.

| Faculties                | Frequency | Percentage (%) |  |  |
|--------------------------|-----------|----------------|--|--|
| Education                | 85        | 28.3           |  |  |
| Management science       | 81        | 27.0           |  |  |
| Pure and applied science | 81        | 27.0           |  |  |
| Art and social science   | 53        | 17.7           |  |  |
| Total                    | 300       | 100            |  |  |

**Table 3.** There is no significant relationship between gender and internet addiction amongundergraduate students of Kwara State University, Malete.

| Variable           | $\overline{\mathbf{X}}$ | SD    | Df  | Ν   | r     | Р     | Decision |
|--------------------|-------------------------|-------|-----|-----|-------|-------|----------|
| Gender             | 1.557                   | 0.498 | 200 | 300 | 0.041 | 0.478 | Accortad |
| Internet addiction | 65.987                  | 9.109 | 298 | 300 | 0.041 | 0.478 | Accepted |

**Table 4.** There is no significant relationship between self-concept and internet addictionamong undergraduate students of Kwara State University, Malete.

| Variable           | $\overline{\mathbf{X}}$ | SD     | Df  | Ν   | r     | Р     | Decision |
|--------------------|-------------------------|--------|-----|-----|-------|-------|----------|
| Self-concept       | 36.250                  | 19.373 | 200 | 300 | 097   | 0.092 | Accontod |
| Internet addiction | 65.987                  | 9.109  | 298 | 300 | J 097 | 0.092 | Accepted |

**Table 5.** There is no significant joint relationship between gender, self-concept, and internetaddiction among undergraduate students of Kwara State University, Malete.

| Model | R     | R R Square Adjusted R Square |       | Std. Error of the Estimate |  |  |
|-------|-------|------------------------------|-------|----------------------------|--|--|
| 1     | 0.104 | 0.011                        | 0.004 | 9.09012                    |  |  |

**Table 6** shows analysis of variance performed on the multiple regressions yielded an Fratio value of 1.626 was found to be significant at 0.05 levels. This further showed that the independent variables account for 87.6% of the prediction of internet addiction among undergraduate students of Kwara State University, Malate.

**Table 6.** ANOVA joint contribution of contributions of independent variables (gender andself-concept) to the prediction of internet addiction.

| Model |            | Sum of Square | Df  | Mean Square | F     | Sig.  |
|-------|------------|---------------|-----|-------------|-------|-------|
|       | Regression | 268.743       | 2   | 134.371     | 1.626 | 0.198 |
| 1     | Residual   | 24541.204     | 297 | 82.630      |       |       |
|       | Total      | 24809.947     | 299 |             |       |       |

**Table 7** shows that the independent variable made does not significantly contribute to the prediction of internet addiction among undergraduate students of KWASU. In terms of the

magnitude of contribution, gender made the most significant contribution (Beta = 0.045; t = 0.639; p > 0.05) as it is less than the value gotten from self-concept to the prediction and internet addiction (Beta = 0.096; t = 1.656; p > 0.05).

| Model                  | Unstandardiz       | Unstandardized Coefficients |       | t      | Sig.  |
|------------------------|--------------------|-----------------------------|-------|--------|-------|
|                        | В                  | Std. Error                  | Beta  |        |       |
| (Constant)             | 68.670             | 1.952                       |       | 35.173 | 0.000 |
| Gender                 | 0.045              | 1.057                       | 0.037 | 0.639  | 0.099 |
| Self-concept           | 0.676              | 0.027                       | 0.096 | 1.656  | 0.523 |
| a. Dependent Variable: | Internet Addiction |                             |       |        |       |

**Table 7.** Relative contribution of independent variables to the prediction.

The first research hypothesis tested a significant relationship between gender and internet addiction among undergraduate students at Kwara State University, Malete. The mean and standard deviation of the gender indicated that it has no significant relationship with students' internet addiction (r = 0.041, p 0.05). This finding is consistent with previous research reported that gender has no significance on the perception of self-concept and that the state of an individual self-concept could determine his/her attitude (Callaghan & Papageorgiou, 2015). Similarly, Marcic and Grum (2011) found that gender has no significant impact on self-concept perception and that an individual's self-concept state can that males and females do not differ in independent self-concept, self-esteem (level, stability, or contingency) neither influences his or her attitude. This result is contrary to Kamran *et al.*, (2018) who revealed that high pervasiveness was found among male students and the habit of snacking while using the internet was found associated with Internet Addictions.

The second research hypothesis tested a significant relationship between self-concept and internet addiction among undergraduate students at Kwara State University, Malete. The mean and standard deviation of the gender indicated that it has no significant relationship with students' internet addiction (r = 0.097; p>0.05). This finding negates the previous research of Kamran *et al.*, (2018) reported that the improved use of the internet in our daily lives also has negative effects as it was observed on the physical, psychological, and social health of individuals.

The third hypothesis was tested with no significant joint relationship between genders, self-concept, and internet addiction among undergraduate students of Kwara State University, Malete. Analysis indicated that there was no significant joint relationship between gender, self-concept, and internet addiction among undergraduate students of Kwara State University, Malete. (r = 0.639; p < 0.05). This finding is in tune with Muthuri and Arasa (2017) who submitted that there is sig shortage of studies on the influence of self-concept and gender on overall self-concept among private Universities in Kenya. The findings of this study also contradicted the research of Muraina and Popoola (2022) who affirmed there was a significant relationship between self-concept and internet addiction (r = 0.66; p < 0.05) and that there was a joint effect between locus of control, self-concept and internet addiction  $^397 = 148.020$ ; p < 0.05) while locus of control do not statistically predict internet addiction (t =16.942; p < 0.05).

#### **5. CONCLUSION**

It is well recognized that the development of technology, particularly information and communication technology, serves as the pivot around which the entire world revolves. Each

new technological development has a downside, especially when it is overused or misused. Among undergraduates at Kwara State University in Kwara State, the study looks at selfconcept as a predictor of internet addiction. The conclusion drawn from the debate and results discussed above is that Kwara state's university students have a slight internet addiction. The analysis revealed a substantial correlation between self-perception and online addiction, and self-perception also predicts the degree of internet addiction among Kwara State University undergraduates.

Based on the findings, the following recommendations were made:

- (i) School administrators and policymakers should host conferences, workshops, and seminars to educate students on the value of having realistic, objective assessments of themselves.
- (ii) School counselors should coordinate awareness efforts to inform children and teenagers about the harmful consequences of excessive internet use.

# 6. 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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