



CO-OCCURRENCE OF APPEARANCE-REJECTION SENSITIVITY AND INTERNET ADDICTION IN AN UNDERGRADUATE POPULATION

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ABSTRACT

The primary aim of this study was to investigate the role of appearance-rejection sensitivity and internet addiction among students of Our Saviour Institute of Science Agriculture and Technology (OSISATECH), Enugu through a cross-sectional survey design by recruiting two hundred and fortyone (241) participants through purposive sampling. The participants' age ranged from 16 to 39 years and they had a mean age of 23.61 years with SD of 3.60. While investigating the study variables, two standardized instruments were employed: the short version of Internet Addiction (s-IAT) and Appearance-Rejection Sensitivity Inventory (ARSI). To arrive at an empirical outcome, two hypotheses were tested using Pearson Product Moment Correlation Coefficient and linear regression. The result indicated that appearance-rejection sensitivity significantly correlated with internet addiction such that students with high appearance-rejection sensitivity reported less internet addiction while students with low appearance-rejection sensitivity reported more Internet addiction. On the other hand, appearance-rejection sensitivity significantly predicted internet addiction. In line with the findings, discussions and policy implications centered on the need for increasing access to effective prevention strategies by talking young people out of Internet addiction through the active involvement in skills acquisitions, entrepreneur and taking their studies seriously so as to redirect the negative energy obtainable in internet addiction.

Keywords: Internet addiction, rejection sensitivity, appearance inadequacy, undergraduates, behavioural problems

Introduction

Internet Addiction (IA) has come to be regarded as a common problem among university students which can negatively affect cognitive functioning, leading to

poor academic performance and possible engagement in hazardous activities that may cause anxiety, stress and depression (Tereshchenko & Kasparov, 2019). University students are especially

susceptible to developing dependence on the Internet, more than most other segments of society. This can be qualified to numerous factors including the following: availability of time; ease of use; the psychological and developmental characteristics of young adulthood; poor or no parental supervision, Internet-dependent courses, and the Internet serving as a way of escape from academic workload and examination anxiety (Fuensanta & José Luis, 2019). Undoubtedly, the Internet user population has increased significantly, especially among young people. According to other contemporary studies, students' daily Internet use varies from fewer than four hours to over eight hours, with the average being four to five hours (Sumaiyah Jamaludin et al., 2018). Typically, students engage in online activities related to studies and work, leisure and entertainment has become a problem for growing number of students, ascending to pathological or addictive Internet use (Li et al., 2015; Kumar & Mondal, 2018).

Studies have indicated that IA is associated with different factors such as insomnia (Younes et al., 2016), attention deficient disorder and hyperactivity symptoms (Seyrek et al., 2017), being sexually inactive (Bhandari et al., 2017), low self-esteem (Younes et al., 2016), failure in academic performance (Bhandari et al., 2017), smoking (Seyrek et al., 2017), and potential addictive personal habits of drinking alcohol or coffee and taking drugs (Frangos et al., 2011). In recent years, researchers have

begun to explore the risk factors of developing IA in order to alleviate some social inadequacies in communication (He et al., 2021; Wang et al., 2021). Essentially, the Internet may be a more advantage zone than reality to compensate for difficulties in their social relationships, relieve anxiety and meet new people (McKenna & Bargh, 2000). Thus, Internet use may provide a chance to escape from these psychological and emotional burdens at some costs (Ko et al., 2015). This is what precipitated the inclusion of appearance-rejection sensitivity (ARS) as one of the predictor variables in the present study. Theorists have argued that appearance-rejection sensitivity is based on life experiences that may cause some individuals to develop more targeted rejection sensitivity biases (Bowker et al., 2012). Factors such as race, gender, and sexual orientation can cause individuals to develop rejection sensitivities.

Although it is common for people to feel dissatisfied with their appearance from time to time, individuals who are sensitive to appearance rejection, or have high ARS may experience appearance concerns that border on excessive preoccupation toward oneself and lead to distress or interference with daily activities (Park, 2007). ARS has to do with the dispositional tendency to anxiously expect, readily perceive, and overreact to rejection of one's physical appearance. Basically, ARS influences how social information about appearance is perceived and processed. People with high ARS frequently notice others'



appearance, compare their attractiveness with others, and feel more alone and rejected when reminded of disliked aspects of their appearance (Park, 2007). High rejection sensitivity makes people afraid of rejection and they may spend a lot of psychological resources to pursuit of support and security for a long time, and they may not have sufficient resources to control their behaviors (Mikulincer & Shaver, 2019). In addition, individuals high in rejection sensitivity have been found to perceive ambiguous cues as rejection more readily than individuals low in rejection sensitivity (Downey et al., 1998).

Statement of the Problem

Studies have shown that people with high rejection sensitivity may experience problems with self-regulation, making it difficult to resist Internet use (Molavi et al., 2018). And young people with high rejection sensitivity may engage with others on the Internet, including through gaming and social media applications, to avoid the outside world (Weinstein et al., 2016). Going further, multiple studies have found the negative consequences of IA; that is, IA was significantly associated with individual fatigue, depression, anxiety, headache, and other mental and physical health problems (Upadhayay & Guragain, 2017; Chen et al., 2020). These psychosomatic conditions can affect negatively the academic and mentally growth of the students who finds him or herself in such a situation. High levels of IA will seriously affect daily life for both teenagers and adults, such as low

tolerance of stress, and scholastic or occupational impairment (Jun & Choi, 2015). Similarly, research conducted by Farahani *et al.* (2011) also suggest that people with higher rejection sensitivity had a harder time making friends and were more likely to turn to social networking than the normal one, increasing the risk of Internet addiction. Although the Internet can be helpful in many aspects of students' lives, there is also concern that young people spend too much time online which can result to some behavioural inadequacies. Psychological factors that might influence the clinical presentation of addiction include history of insecure attachment, impaired identity development, intrusive or maladaptive thoughts, impaired ability to self-regulate, and limited problem-solving or coping skills are involved in addiction (Eysenck, 1997). In view of the foregoing, this study investigated the influence of ARS on IA among students of Our Saviour Institute of Science Agriculture and Technology (OSISATECH), Enugu, Enugu state.

Objectives of the Study

The general objective of this study is to explore the role of appearance-rejection sensitivity on Internet addiction among an undergraduate sample. Hence, this study will particularly want:

1. To assess the relationship between appearance-rejection sensitivity and Internet addiction among undergraduates.
2. To determine the predictive influence of appearance-rejection

sensitivity on Internet addiction among undergraduates

Literature Review

IA as a new form of addiction has recently received much attention from researchers in sociology, psychology, criminology, psychiatry, and other social science disciplines. Griffiths (2000) considered IA to be a kind of technological addiction, and one in a subset of behavioral addictions due to the following reasons: Saliency (an activity which becomes the most important activity in one's life and dominates one's thinking); Mood modification (subjective experiences as a result of engaging in the particular activity); Tolerance; Withdrawal symptoms; Conflict (conflicts between behavioural addicts and those around the etc.); and Relapse. Several related studies have been conducted in recent times with respect to the variables of interest but none to the best knowledge of the researchers have been conducted with respect to appearance-rejection sensitivity and internet addiction among students in Enugu State. Tao *et al.* (2022) recruiting 1007 participants showed that positive association between inter-parental conflict and adolescent's Internet addiction was partially mediated by rejection sensitivity. Zimmer-Gembeck *et al.* (2023) while enrolling 261 adolescents in a five years survey demonstrated that the most prominent risks for online appearance preoccupation and activity in later adolescence were social in origin. Bowker *et al.* (2012) enrolled 150

students and found appearance- rejection sensitivity to be uniquely related to two types of social anxiety. Zhou *et al.* (2022) in examining academic burnout recruited 1445 nursing students and found that smart-phone addiction was positively associated with academic burnout. Bowker *et al.* (2012) found that appearance-rejection sensitivity from gender domain was tied to conditional peer acceptance, media pressure among adolescent girls, social avoidance, perceived unattractiveness, and body image problems. Maheri *et al.* (2018) in selecting 160 participants found that 49 participants (30.6 %) were at risk of IA; the study also found significant association between attitude with educational degree and the average daily hours of Internet use. Zenebe *et al.* (2021) carried out a study with 603 students and the outcome showed prevalence of IA among the current internet users were high; while others had mental distress, played online games, and reported current alcohol use. Tran *et al.* (2017a) in examining 589 participants found that 20.9% youths were addicted to the Internet, and significant associations between IA and having problems in self-care, lower quality of life and high perceived stress scores were observed.

Hypotheses

1. Appearance-rejection sensitivity will be inversely related to internet addiction among undergraduates of OSISATECH.
2. Appearance-rejection sensitivity will significantly predict internet



addiction among undergraduates of OSISATECH.

Methodology

Research Design: This study utilized a cross-sectional survey design to gather data for the study in investigating the influence of ARS on IA in an undergraduate sample of OSISATECH.

Study Area: The study was conducted at Our Saviour Institute of Science Agriculture and Technology (OSISATECH), Enugu. Enugu state has 17 local government areas (LGAs); Aninri, Awgu, Enugu East, Enugu North, Enugu South, Ezeagu, Igbo-Etiti, Igbo-Eze North, Igbo-Eze South, Isi-uzo, Nkanu East, Nkanu West, Nsukka, Oji-River, Udenu, Udi and Uzo-uwani.

Study Population: Population of this study are students of OSISATECH. Therefore, the inclusion criteria were that participants must be students of the tertiary institution.

Sample and Sampling Techniques: The study was carried out in two phases: the pilot study conducted to revalidate the instrument; while the second phase was the main study. Purposive sampling technique was then adopted to recruit the participants. Participants of this study consisted of two hundred and forty-one (241) students selected at different classrooms and public places within the institution. Out of the 241, ninety-seven (97) were males; while one hundred and forty-four (144) were females. Participants' ages were between 16 and

39 years, with mean age of 23.61 years and SD of 3.60. Students residing alone off-campus were 118 (48.9%) while students living with others within the school hostel were 123 (51.1%). Their year of study showed that students in Year 1 were 10 (4.1%), those in Year 2 were 20 (8.3%), Year 3 were 42 (17.4%), those in Year 4 were 107 (44.4%), while those in Year 5 or have spent extra year were 62 (25.7%).

Instruments for Data Collection

Two validated instruments was utilized in this study, and they are: Internet Addiction (s-IAT) and Appearance-Rejection Sensitivity Inventory (ARSI). However, the questionnaires utilized in this study were divided into three (3) sections: Section A, B and C. Section A comprises of demographic variables such as gender, age, level of study, and living location of students. Section B comprised of the short version of Internet Addiction Test (s-IAT) developed by Pawlikowski *et al.* (2013). Section C comprised of the Appearance-Rejection Sensitivity Inventory (ARSI) developed by Park (2013).

Internet Addiction: In order to assess IA, the short version of Internet Addiction (s-IAT) which demonstrates sound psychometric properties and represents the key diagnostic criteria of IA was utilised. The s-IAT was developed by Pawlikowski *et al.* (2013) to assess IA and later revalidated by Tran *et al.* (2017b). The s-IAT consists of 12 items rated on a 5-point Likert scale ranging from 1 (rarely) to 5 (always).

Total score of the s- IAT ranges from 12 to 60 and represents the degree of IA (Pawlikowski et al., 2013). The researcher considered the cut-off point of 36 to classify a participant as suffering from IA (Zhang et al., 2017). The Cronbach's alpha of s-IAT was 0.87 (Tran et al., 2017a). However, Cronbach's alpha value of 0.78 in the present study was obtained.

Appearance-Rejection Sensitivity (ARS): Appearance-Rejection Sensitivity (ARS) was measured using the Appearance-Rejection Sensitivity Inventory (ARSI) developed by Park (2013). The ARSI is a 10-item version of the original 15-item questionnaire and takes approximately 5-10 minutes to complete. The instrument contains 10 scenarios in which individuals might anxiously expect to be rejected based on their appearance (Park, 2013). Participants rated their rejection concerns according to a 6-point Likert-type scale. ARS was calculated by multiplying the degree of anxious concern by the degree of rejection expectation for each situation. Overall Appearance-Rejection Sensitivity scores were then calculated by computing a mean of the 10 scores. The ARSI has high internal consistency Cronbach's alpha = 0.90 (Park et. al, 2009). However, Cronbach's alpha for the present study was 0.87 indicating a very high internal consistency

Method of Data Analysis

In testing the study hypotheses, inferential and descriptive statistics was utilized for analysis via the IBM SPSS

Statistics version 23.0; thereafter, some statistical tolls from the software such as descriptive statistics (i.e., mean, standard deviation, and frequencies) were employed to analyze demographic data. Thereafter, Pearson correlations and linear regression were employed to test the study hypotheses.

Ethical Considerations

Each participant was approached and was informed of their rights as participants as well as purpose of the research. Consent to participate in the research was sought for, while those that agreed to participate were administered copies of the questionnaire. Institutional approval was also obtained from the Research and Ethics Department of OSISATECH.

Results

Hypothesis One: Appearance-rejection sensitivity will be inversely related to internet addiction among undergraduates of OSISATECH. This was tested using Pearson correlations coefficient and summary of results presented in Table 1.

Table 1: Summary table of Pearson correlations coefficient showing relationships between assertiveness between appearance-rejection sensitivity and internet addiction.

Variables	Sig.	r
Appearance-Rejection Sensitivity	1	-.146
Internet Addiction	<0.05	241



Results presented in Table 1 reveals that appearance-rejection sensitivity was negatively or inversely related to internet addiction $r(241) = -.15, p < 0.05$. This relationship though significant cannot explain causation. That is, it is not certain which construct is the cause of the other. Hence, the first hypothesis which states that appearance-rejection sensitivity will be inversely related to internet addiction among undergraduates of OSISATECH was confirmed. In other words, high appearance-rejection sensitivity result to

low level of internet addiction and vice versa.

Hypothesis Two: Appearance-rejection sensitivity will significantly predict internet addiction among undergraduates of OSISATECH. This was tested using independent t-test and summary of results is presented in Table 2.

Table 2 Summary of linear regressions showing the predictive influence of appearance-rejection sensitivity on internet addiction.

NB: $AR^2 = 0.017$.

Predictor	B	t	Sig.	R	R ²	F	P
Constant	45.33	29.35	<0.05				
Appearance-Rejection Sensitivity	-.15	-2.28	<0.05	.146	.021	5.19	<0.05

Results presented in Table 2 indicates that appearance-rejection rendered a coefficient of multiple correlation (R) of 0.146 and multiple correlation square (R²) of 0.021. This shows that 2.1% of the variance in internet addiction was accounted for by the effects of appearance-rejection sensitivity. In addition, the result also indicates that appearance-rejection sensitivity was an independent predictor of internet addiction ($\beta = -.15; t = -2.28; p < 0.05$). Therefore, the second hypothesis which states that appearance-rejection sensitivity will significantly predict internet addiction among undergraduates of OSISATECH was confirmed.

Discussion

The focus of this study was to assess the relationship of appearance-rejection sensitivity and internet addiction on one hand; and the predictive influence of appearance-rejection sensitivity on internet addiction on the other hand. The first hypothesis which stated that appearance-rejection sensitivity will be inversely related to internet addiction among students was confirmed.

The result showed that appearance-rejection sensitivity is connected to the use of Internet. This finding is consistent with the findings of Zimmer-Gembeck *et al.* (2022) who demonstrated that the most prominent risks for online

appearance preoccupation and activity were social in origin with regards to appearance-related conversations with friends. A possible explanation of this finding is that when an undergraduates' appearance-rejection sensitivity is within the limit that do not affect their day to day life, they tend to have more confidence to engage in social conversations which is more today within the Internet space and that probably may lead to addiction when it is not controlled. But when reverse is the case and they their appearance-rejection sensitivity is high, their self-esteem may be affected and they will try as much as they can to avoid any avenue that will expose them to further rejection.

The second hypothesis which states that appearance-rejection sensitivity will significantly predict internet addiction among students was also accepted. This implies that appearance-rejection sensitivity contributed significantly to Internet addiction. This finding is consistent with the findings of Zhou *et al.* (2022) who found that smart-phone addiction was positively associated with academic burnout another negative construct like appearance-rejection sensitivity. An explanation can be predicated on the fact that when an individual's behavior towards exploring and understand themselves or what they already know about themselves, this may propel them indulge in Internet use more or less depending on the degree of personal adjustment.

Policy Implications

In order to increase the chance of reducing or preventing Internet addiction among undergraduates so as to guarantee the seamless development of students in our tertiary institutions, there is urgent need for massive sensitization among undergraduates by non-governmental organization, related government ministries that handle youths development issues and other concerned institutions and individuals for them to understand the gravity or danger the behavioural disposition of young people can expose them with regards to high appearance-rejection sensitivity and the impact it can have on their Internet use which can lead to behavioural addiction and other psychological problems that can affect their well-being, academic pursuits and life in general. The outcome of this study will also enable the university community to strategize on ways of creating more awareness with issues regarding student's activities using the Internet and ways to positively engage students socially and emotionally.

Limitations of the Study

In the course of this study, the researcher encountered some challenges which will serve as limitations:

1. First, most of the participants complained about the number of items in the questionnaire and that something should be done about it to reduce it subsequently.
2. Another factor was the self-report instruments used to gather data on variables of interest. That is, one



cannot rule out the possibility of bias in participant's responses.

Suggestions for Further Study

Future studies should consider using instruments with fewer items because most young people are not patient enough and their attention span is short that is why most 21st generation apps are structured in such a brief way to get the patronage of young people. In addition, future studies should employ the use of interviews or experimental studies so as to get a more balanced qualitative finding.

Recommendations

After taking a good consideration of findings, the following recommendations were suggested:

1. Creating gaming and outdoor events that will mentally engage undergraduates and reduce their time with the Internet.
2. Organizing family and friends time which can play critical roles in motivating individuals with Internet addiction problems to opt for mentoring and counseling.
3. Also, family and positive friends' social support and encouragement can be helpful to properly redirect this behavioural problem.

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