ROLE OF PERSONALITY TRAITS AND INTERNET ADDICTION ON INTERPERSONAL RELATIONSHIP QUALITY AMONG UNDERGRADUATES OF UNIVERSITY OF IBADAN, NIGERIA

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ABSTRACT: *Healthy interpersonal relationship helps in healthy functioning. This study examined role of personality traits and internet addiction on interpersonal relationships quality among undergraduates of the University of Ibadan, Nigeria. With 250 samples, the study adopted cross-sectional design, Personality Scale, Internet Addiction Test, Relationship Scale Questionnaire, purposive and convenience sampling techniques. Statistics were independent T-test and multiple regressions analysis at $p < 0.05$. Results showed that personality traits jointly predicted interpersonal relationship quality [$R=0.38$; $R^2 =0.17$; $F (5, 235) = 2.51$; $p < 0.05$], personality traits and internet addiction jointly predicted interpersonal relationship quality [$R= 0.42$; $R^2= 0.0.17$; $F (6,233) =8.15$; $p < 0.05$], and students with low scores in internet addiction reported higher interpersonal relationship quality (Mean= 73.85; SD =13.09) than those with high scores in internet addiction (Mean= 63.46; SD =12.55). Recommendation is for students to reduce their internet addiction habit, so as to improve on quality/healthy relationship.*

KEYWORDS: Personality traits, Internet addiction, Interpersonal relationships, Undergraduates, University of Ibadan.

INTRODUCTION

Interpersonal relationship is the social association, connection or affiliation between two or more people (Roopa &Velumani, 2016). It is a purposive goal (Velmurugan, 2016). Interpersonal relationship is the social link between two or more persons, which does not come by chance. Maxwell (2004) observed that something brings two persons together to make them remain in relationship. These may be common interests like desire, aspiration or a goal. When interpersonal relationship is born from common interest and is fed and nurtured, it grows, but if neglected, it deteriorates and dies. Developing interpersonal relationship is a serious issue that yields dividends to those committed to it.

The scientific study of relationship which evolved during the early 1990s is referred to as 'relationship science', which distinguishes itself from anecdotal evidence or from pseudo-experts by reaching conclusions on data and on objective analysis (Berscheid & Hatfield, 1999). Interpersonal relationship tends to grow and improve gradually as people get to know each other and become closer emotionally, or they gradually deteriorate as people drift apart, move on with their lives and form new relationship with others (Sam, 2019).

One factor that has been implicated as predicting interpersonal relationship between people is personality trait defined as a consistent pattern of thinking, feeling and behaving of individual (American Psychological Association, 2017). The Big Five Factor Model of personality traits of openness to experience, conscientiousness, extraversion, agreeableness, and emotional stability has provided a meaningful theoretical framework for studying the likely traits that lead to the development of interpersonal relationships among people (Ayodele, 2013).

Openness to experience is characterized by individual willingness to try new things, ability to be vulnerable, and the capacity to think outside the box (Lebowitz, 2016a). Individuals high in openness to experience are those who love learning, enjoys the arts, engage in creative

career/hobby, and likes meeting people (Lebowitz, 2016a). People low in openness to experience are those who prefer routine over variety, stick to what he/she knows, and prefer fewer abstract arts and entertainment (Lebowitz, 2016a).

Conscientiousness is described as the tendency to control one's impulses and act in socially acceptable ways, behaviours that facilitate goal-directed behaviour (John & Srivastava, 1999). Conscientious people excel in their ability to delay gratification, work within the rules, and plan and organize effectively. Individual high in conscientiousness are likely to be successful in school and in their careers, excel in leadership positions and be doggedly pursue their goals with determination and forethought (Lebowitz, 2016a). Those low in conscientiousness are much more likely to procrastinate and to be flighty, impetuous, and impulsive.

Extraverts are described as energetic, participative, gregarious and expansive people (Roos & Kazemi, 2021). Because they tend to be social, assertive and bold in nature, extraverted individuals form and maintain interpersonal relationships at all levels including schools. Individuals high on extraversion enjoy socializing and developing relationships. They are therefore more likely to cultivate social interaction and build new connections. Extraverted individuals feel close to their friends and value those relationships more highly (Roos & Kazemi, 2021).

Agreeable individuals are described as compassionate, flexible, fair, generous and considerate (Goldberg, 1992). They have the tendency to be highly approachable because of their supportive nature and sensitivity. Costa and McCrae (1992) suggested that agreeable people are altruistic, sympathetic, and eager to help others, with an expectation that such behaviour will be reciprocated and the individuals strive for cooperation over competition. Agreeable individuals are predisposed to seek out interpersonally supportive and accepting environments (Barrick, Mount, & Judge, 2002). Agreeable people strive to foster pleasant and harmonics interpersonal relationships and people prefer to be friends with individuals high on

agreeableness because there is less irritation in the friendship (Berry et al., 2000). They like other people more and tend to be liked by others in return.

Emotionally stable individuals are described as confident, controlled, and well-adjusted. They have a tendency to be calm, unemotional and secure (Barrick et al., 2002). These characteristics combined with their positive disposition attract others to emotional stable individuals as a source of support. Emotionally stable individuals are pleasurable to be around because they tend to be happy (Roos & Kazemi, 2021). Emotionally stable individuals are more likely to be liked by others, a basic prerequisite for forming and maintaining interpersonal relationships at school.

Personality traits have been regarded as critical predictors of internet use. People scoring high on narcissism indices tend to be more active on internet (e.g., Facebook). Studies have focused on the Big Five model of personality traits, in which personality assessment is based on the five main dimensions of extraversion (e.g., being talkative), agreeableness (e.g., being sympathetic and warm), conscientiousness (e.g., being organized and prompt), neuroticism (e.g., being nervous and moody), and openness to experience (e.g., being creative and intellectually oriented) (Kozan et al., 2017; Sun, & Wilkinson, 2020). Extraversion, neuroticism, and openness to experience have been shown to be positively associated with the use of Internet (Roos & Kazemi, 2021). People scoring low on conscientiousness are assumed to use internet (social media) cautiously and are negatively associated with the use of social media. Neuroticism is assumed to be positively related to the use of Internet social media because it can be used as a method of seeking support.

The second factor investigated in this study as predictor of interpersonal relationship is internet addiction, loosely defined as an uncontrollable and damaging use of the Internet, and conceptually framed as a compulsive-impulsive phenomenon in the spectrum of impulse-control disorders (Aririgyzoh et al., 2018). Pontes and Griffiths (2017) in a large-scale study with a sample of 1,105 Internet users have empirically conceptualize Internet addiction

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into four distinct domains: (i) escapism and dysfunctional emotional coping, (ii) withdrawal symptoms, (iii) impairments and dysfunctional self-regulation, and (iv) dysfunctional internet-related self-control. Studies have found that Internet addicts experience a number of bio-psychosocial symptoms and consequences (Beutel et al., 2011) that include symptoms associated with substance related addictions (Griffin et al., 2016; Piguet et al., 2015) similar to a set of common defining criteria namely salience, mood modification, tolerance, withdrawal symptoms, conflict, and relapse (Griffiths, 2005).

More specifically, internet addiction has been linked to social anxiety in young adults (Weinstein et al., 2015; Baltaci et al., 2021), lower levels of family functioning, life satisfaction, and problems in family interactions (Wartberg et al., 2014), attention deficit/hyperactivity disorder and depression (Adebusuyi, 2020), higher incidence of substance use, poor emotional well-being and decreased academic performance in adolescents (Rucker et al.,2015), increased academic stress (Jun & Choi, 2015), impulsive behaviors (Reed et al., 2015), introversion (Mclntyre et al., 2015), and higher levels of loneliness and suicide (Alpaslan et al., 2015). All these symptoms tend to affect interpersonal relationship.

Statement of Problem

Healthy interpersonal relationships of the individual provide valuable outcomes of their aims in life (Ayodele & Bello, 2008). The healthier the interpersonal bonding, the more an individual gets adjusted in the society (Ayodele, 2010). This kind of healthy interpersonal relationships may be formed by people who are ready to be in contact with their feelings and desires and similarly by paying attention to others' feelings and wishes (Rosenberg, 2003). When an individual grows up, his social world gets bigger and his social connections become stronger, diverse, and multifaceted, resultantly, he may experience some interpersonal relationship difficulties (Saleem et al., 2014). The university environment confers new challenges to the students necessary in novel techniques of adjustment and learning of new talents to establish and maintain interpersonal relationships (Al-Khatib et al., 2012).   In this process, university students face several problems in their educational, social, and emotional life (Verger et al., 2009). If they fail to adjust to this new environment, they may develop interpersonal relationship difficulties or other issues while affiliating with others (Lange & Couch, 2011). In educational setup, it is predominantly considered that personality traits affect the quality and strengths of interpersonal relationships in a number of ways (Ayodele & Bello, 2008).

Past studies have explored the relationship between personality traits, interpersonal relationships, online social support, and Facebook addiction (e.g., Kumaraswamy, 2015). In such study, interpersonal relationship was used as an independent variable rather than the problem of the study itself. Also, Facebook addiction which is a type of internet addiction, unlike in this research, explores the influence of Internet addiction as whole. Another gap noticed is that studies on interpersonal relationships focus more on work settings instead of among students (Blachnio et al., 2017). Therefore, this study aims to investigate whether personality traits and internet addiction will predict interpersonal relationship among undergraduates of the University of Ibadan, Nigeria.

Research questions

1. Will personality traits of extroversion, neuroticism, openness to experience, agreeableness and conscientiousness jointly and independently predict interpersonal relationship among undergraduates of the University of Ibadan, Nigeria?
2. Will students with high level of internet addiction score lower on interpersonal relationship than those with low level of internet addiction among undergraduates of the University of Ibadan?
3. Will personality traits and internet addiction jointly and independently predict interpersonal relationship among the undergraduates of the University of Ibadan?

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Purpose of the Study
The purpose of the study was to:
1. Establish whether personality traits will significantly predict interpersonal relationship among the undergraduate students of the University of Ibadan, Nigeria.
2. Determine whether internet addiction will significantly predict interpersonal relationship among undergraduates of University of Ibadan.
3. Determine whether personality traits and internet addiction will jointly and independently
4. predict interpersonal relationship among undergraduates of University of Ibadan.

LITERATURE REVIEW

Theoretical Framework
Attachment Theory: This theory was developed by Bowlby (1999). Attachment means an affectional bond or tie between an individual and attachment figure (Bowlby, 1999). It is a deep and lasting bond connecting people across distance and time. Adaptively, attachment enhances survival, especially in infancy when the child is completely dependent on his/her mother and other caregivers. The caregivers' bond with the child encourages them to fulfill the infant's need and thus provides continuation of the species. People do not grow out of this bonding behavior and they continue to benefit throughout their lives from these relationships. This level of attachment and dependability is expected among students if there will be a positive interpersonal relationship. This theory becomes necessary to explain relationships among undergraduates because it takes two or more people to form cliques. A clique cannot exist without "give and take" which is the core of any relationship. Therefore, this theory emphasizes the need for positive interpersonal relationship among undergraduates in other to achieve their goals.

Social Exchange Theory: This theory was proposed by Homans (1958)**.** The theory proposes that social behaviour is the result of an exchange process. It posits that people weigh the potential benefits and risks of social relationships. When the risks outweigh the rewards, people will end or abandon the relationship. It is a 'give and take' concept, although their proportions might vary from one relationship to another. The feeling and emotions need to be reciprocated for a successful and long-lasting relationship. In a relationship, every person has expectations from his/her partner. An individual invests time and energy in relationships only when the individual gets something out of it. This type of interpersonal relationship is necessary for university undergraduates if they are to survive the changes they will pass through in the university and the life outside the university.

Hypotheses
1. Personality traits will jointly and independently predict interpersonal relationship among undergraduates of the University of Ibadan, Nigeria.
2. Undergraduates of University of Ibadan with high level of internet addiction will score lower on interpersonal relationship than those with low level of internet addiction.
3. Personality traits and internet addiction will jointly and independently predict interpersonal relationship among the undergraduate students of the University of Ibadan.

METHOD

Participants: The study sampled 241 undergraduate students of the University of Ibadan, Nigeria. The sample consisted of 112 (46.5%) males and 129 (53.5%) females. The age range was between 16 and 35 years (Mean = 22.5; SD = 7.6). Two hundred and five (85.1%) participants were Christians and 36 (14.9%) were Muslims. The level/year of study ranged between 100 and 600 level. Students in 100 level were 109 students, 200 level were 61 students, 300 level were 22 students, 400 level were 24 students, 500 level were 4 students, and 600 level were 21students. Four Nigerian ethnic groups were represented in the data: Yoruba (78.4%), Hausa (5.4%), Igbo (13.3%), and Edo (2.9%).

Instruments: One of the instruments used in the study was **Interpersonal Relationship Scale.** This was developed by Griffin and Bartholomew

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(1994). It is a-30 item relationship scale questionnaire (RSQ) that is scored on a 5-point Likert's scale ranging from 1 = Not at all like me to 5 = Very like me. The RSQ's Cronbach alpha in the present study was = 0.73. Another instrument was the **Ten-Item Personality Inventory (TIPI) Scale,** developed by Gosling et al., (2003). It measures the five personality traits (extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience) on a 5- point Likert's format with the responses from 'Strongly disagree' (1) to 'Strongly agree' (5). The scale has good psychometric properties across many studies. The Cronbach alpha in this study is 0.72. The third instrument was **Internet Addiction Test (IAT)** developed by Young (1998)**.** It consists of 20 items that measure mild, moderate, and severe level of Internet addiction. The items are answered using a 5-point Likert's format ranges from 0 'Does not apply', 1 'Rarely', 2 'Occasionally', 3 'Frequently', 4 'Often', 5 'Always'. For the adopted scale, Cronbach alpha was 0.86. Demographic data of age, gender, religious background, level of study, and ethnic background were also collected.

Procedure The researchers visited the selected faculties during the period when students were at the faculties for their respective lectures (from 8 AM to 5PM). They were asked to spare few minutes of their time to participate in the study. They were asked to fill the questionnaire as truthful as possible. Informed consents were verbally obtained from the participants before the questionnaires were given to them to complete. The process of filling the questionnaire took a maximum of seven minutes. However, no time limit was imposed on the participants. A total of 250 questionnaires were distributed, 241 were properly filled while 9 questionnaires were improperly filled and were discarded. The study was carried out in the University of Ibadan, Nigeria. The population of study was all the undergraduates of the University of Ibadan. The researchers first purposively selected five faculties (Social Sciences, Education, Agriculture, Art and Law), then adopted cluster random sampling for the faculties, and finally used convenience sampling technique for the distribution of questionnaires to the participants. The researchers administered 250 questionnaires to the undergraduate students of the University of Ibadan from across the five faculties selected for the study.

Design and Statistics: The study adopted cross-sectional design. This was because the participants were sampled across various natural clusters and distributions. Multiple regression was used to analyze the collected data. This was because the study aimed at predicting the role of personality and internet addiction on interpersonal relationship. Another statistics used was the Independent t-test. It is because the study tested participants who are low or high in interpersonal relations.

RESULTS

Hypothesis one states that personality traits will jointly and independently predict interpersonal relationship among undergraduates of the University of Ibadan, Nigeria. This was tested using multiple regressions analysis and the result is presented in Table 1.

Table 1: Summary of multiple regressions analysis showing personality traits as predictors of interpersonal relationship

Criterion	Predictors	β	t	p	R	R^2	F	p
	Extroversion	-05	-71	>.05				
	Agreeableness	.06	.77	>.05				
Interpersonal	Conscientiousness	-.03	-.45	>.05	.38	.17	2.51	<.05
Relationship	Neuroticism	-.18	-2.41	<.05				
	Openness	.01	.18	>.05				

Table 1 presents result of the joint and independent predictors of personality traits (extroversion, neuroticism, openness to experience, agreeableness and conscientiousness) on interpersonal relationship among the University of Ibadan undergraduates. It is shown that personality traits jointly predicted interpersonal relationship [R = .38; R^2 = .17; F (5,

235) = 2.51; P < .05]. Collectively, personality traits accounted for 17% variance in interpersonal relationship. However, it is only neuroticism (β = -.18; t = -2.41; P <.05) that independently predicted interpersonal relationship among the undergraduates.

Hypothesis two states that undergraduates of University of Ibadan with high level of internet addiction will score lower on interpersonal relationship than those with low level of internet addiction. This hypothesis was tested using t-test for independent means and the result is presented in Table 2.

Table 2: Summary of T-test for independent samples showing influence of Internet addiction on interpersonal relationship

Dependent	Internet Addiction	N	Mean	SD	df	t	P
Interpersonal Relationship	High	118	63.46	12.55	238	5.80	< 0.05
	Low	122	73.85	13.09			

Table 2 presents the result of the means difference between internet addiction and interpersonal relationship among the University of Ibadan undergraduates. It is shown that there exists significant difference between internet addiction and interpersonal relationship among the participants [t (238) = 5.80; P < 0.05]. Furthermore, participants with low level of internet addiction reported higher on interpersonal relationship (Mean = 73.85; SD = 13.09) than those with high level of internet addiction (Mean = 63.46; SD = 12.35). The hypothesis was confirmed.

Hypothesis three states that personality traits and internet addiction will jointly and independently predict interpersonal relationship among the undergraduate students of the University of Ibadan. This was tested using multiple regressions analysis and the result is presented in Table 3.

Table 3: Summary of multiple regressions analysis showing personality traits and Internet addiction as predictors of interpersonal relationship

Criterion	Predictors	β	t	P	R	R^2	F	P
Interpersonal relationship	Extroversion		-.02	-.25	>.05			
	Agreeableness	.01	.21	>.05				
	Conscientiousness	-.05	-.68	>.05	.42	.17	8.15	<0.05
	Neuroticism		-.16	2.23	<.05			
	Openness		-.01	-.05	>.05			
	Internet addiction		-.39	-6.34	<.05			

Table 3 presents the results of the joint and independent predictors of personality traits and Internet addiction on interpersonal relationship among the University of Ibadan undergraduates. It is revealed that personality traits and internet addiction jointly predicted interpersonal relationship [R = 0.42; R^2 = .17; F (6, 233) = 8.15; P < 0.05]. Collectively, personality traits and internet addiction accounted for about 17% variance in interpersonal relationship. However, only neuroticism (β = -.16; t = -2.23; P <.05) and internet addiction (β = -.39; t = -6.34; P <.05) independently predicted interpersonal relationship among the University of Ibadan undergraduates thus confirming the stated hypothesis.

DISCUSSION

Hypothesis one that states undergraduates of University of Ibadan with high level of internet addiction will score lower on interpersonal relationship than those with low level of internet addiction was partially confirmed. Although, it accounted for about 17% variance in interpersonal relationship, it was only neuroticism that had significant independent prediction on interpersonal relationship among the participants. Several studies have asserted that the Big Five-Factor Model (i.e. extroversion, openness to experience, agreeableness, conscientiousness and neuroticism) of personality trait offers a significant theoretical framework that

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proposes the possibility that specific personality attributes play a vital role in making the interpersonal relationships strong or weak (Barrick, et al., 2002). Also, Ayodele and Bello (2008) noted that in educational environment, it is considered that personality traits affect the quality and strength of students' interpersonal relationships in different ways.

The second hypothesis states that undergraduates of University of Ibadan with high level of internet addiction will score lower on interpersonal relationship than those with low level of internet addiction. Undergraduates with low level of internet addiction reported higher on interpersonal relationship than those with high level of Internet addiction. This confirms the findings that internet addiction can destroy people in every facet in life if not properly handle, and people are finding themselves invariably and unwittingly chained by the shackles of the addictive elements of the internet (Kumaraswamy, 2015; Kayis et al., 2016). While time spent online can be hugely productive, compulsive Internet use can interfere with daily life, work, and relationships. Many cross-sectional studies (Andreassen et al., 2013; Alpaslan et al., 2015; Aboujaoude, 2017; Andreassen, Pallesen, & Griffiths, 2017) have found that internet addiction have adversely affected people lifestyle-related factors in adolescents such as their interpersonal relationship and social functioning. The internet has long been not only a medium allowing sharing information in text or graphic form or a medium providing "chat" and e-mail based on a text. Today, in connection with the internet constantly increasing development of technical means (e.g. parameters and data), networks offer a wider range of options for developing interactive communication (Boase et al., 2006). The strong integration between social networking and the internet

represents a new Copernican revolution for web-net users. Most of them choose to use social media platforms for regulating their personal and interpersonal relationships, communications and sociability with peers (Odaci & Cikrikci, 2014).

The final hypothesis states that personality traits and internet addiction will jointly and independently predict interpersonal relationship among the undergraduates of the University of Ibadan was tested using multiple regressions analysis. The results indicated that personality traits and internet addiction had significant joint influence on interpersonal relationship. Collectively, personality traits and internet addiction accounted for about 17% variance in interpersonal relationship. However, it was only neuroticism and internet addiction that had significant independent influence on interpersonal relationship among University of Ibadan undergraduates. This finding supported the finding that socialization is one of the magnets behind the addictive power of the internet (Kozan et al., 2017; Sun, & Wilkinson, 2020). Some other significant results show that more extroverted students are less internet-addicted than their less extroverted counterparts. Extroverts prefer social and face-to-face interaction with others (Roos & Kazemi, 2021).

Conclusion

Based on the finding of this study, the following conclusion are drawn. Personality traits were significant joint predictors of interpersonal relationship among University of Ibadan students. However, only neuroticism was significant and negative predictor of interpersonal relationship. Again, internet addiction was a significant predictor of interpersonal relationship among University of Ibadan undergraduates. Participants with low internet addiction were found to report higher on interpersonal

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relationship than those with high level of internet addiction. Lastly, when personality traits were combined, personality traits and internet addiction were better predictors of interpersonal relationship. However, only neuroticism and internet addiction were independent predictors of interpersonal relationship among University of Ibadan undergraduates.

Recommendations

The following recommendations were made from the study:

1. First, since neuroticism was a significant and negative predictor of interpersonal relationship among University of Ibadan undergraduates, it is therefore suggested that University management should profile the personality traits of incoming students. This will assist the school to identify those who are prone to developing psychological issues stemming from their quality of interpersonal relationship.
2. Second, that school management should come up with more social activities and recreational centres that will assist students interact well with others on the campus.
3. Third, since internet addiction was found to be a significant determinant of interpersonal relationship, seminars and counseling units need to be set up in different units on the campus to counsel students on the pros and cons of internet addiction or misused. This will assist in encouraging more of interpersonal relationship among students.

Suggestions for Further Studies:

1. Finally, more studies should be carried out on other psychological (e.g., self-esteem, locus of control, etc) and social factors (family, friends, social capital, etc) that could contribute to interpersonal relationship among the university students.

Limitations

There were some limitations during the course of this study.

1. The study used questionnaire for data collection which is subjected to response bias.
2. Only five faculties and 250 students were used in the study which hinders generalization of the findings to other institutions of learning.
3. All these shortcomings should be taken into considerations in further studies.

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