EMOTIONAL RELIANCE AND LACK OF SELF-CONFIDENCE AS CORRELATES OF PROBLEMATIC MOBILE PHONE USE AMONG UNDERGRADUATES

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Abstract

This study investigated emotional reliance and lack of self-confidence as correlates of problematic mobile phone use among undergraduate. Data was collected from a total sample of 220 undergraduates (117 males and 103 females) students of Nnamdi Azikiwe University Awka and Federal Polytechnic Oko with age range between 17-30 years with a mean of 22.77, range of 13 and standard deviation of 2.97. Problematic mobile phone use questionnaire (PMPUQ), emotional reliance subscale and lack of self-confidence subscale of interpersonal dependency inventory (IDI) were used for data collection. It was a survey design and Pearson Moment Correlation Coefficient was employed for data analysis using Statistical Package for Social Sciences (SPSS 17.0) The findings of this study reveals that there is a positive relationship between emotional reliance and problematic mobile phone use among undergraduates and that lack of self-confidence have a positive significant relationship with problematic mobile. The implication is this study is that is need parents/ teachers as well as policy makers to the regulation of mobile phone use among undergraduates and it calls on psychologist to step up campaign and training on so social skill especially on self-confidence, emotional reliance, assertiveness and self-efficacy. This study recommend that the University, Government agencies, parents, and the general public should embark on awareness campaign to enlighten the public especially the young people on the dangers, or negative effects of mobile phone abuse

Key Words: Emotional reliance; Lack of self-confidence; Problematic mobile phone use.

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I. Introduction

Background to the study

Recent technological development has led to a momentous increase in using mobile technologies. Mobile phones are becoming increasingly pervasive in our lives. To the extent that many people, especially young people find it difficult to stay without their mobile phone. Problematic mobile phone use has increased as mobile phones have advanced from a device set up for communication between persons, to smart phones that offer internet access and permit a wide range of online activities such as social media interaction (Meagher, 2017). Mobile phone use problematic when it becomes disproportionate can be viewed as a mobile phone or smart phone addiction. Billieux, (2012) defines problematic mobile phone use as an inability to regulate one's use of the mobile phone, which has negative consequences in daily life. One may think that mobile phone abuse can't be seen in the light of addiction and therefore classifying mobile phone problem use as one of the behavioural addiction does not meet the criteria for addiction according to the DSM- V. However, research done by Pamuk and Atli (2016) using a population of Afghanistan undergraduates showed that physical withdrawal symptoms associated with substance addiction such as worry, feeling of uneasiness, sleeplessness, loss of appetite are also associated with mobile phone withdrawal from individuals who are addicted to it.

The communications regulator refers to the UK as "Smartphone society": 93% of the population owns a Smartphone, and users spend more time online on their phone (approximately 20 h/week) than using other devices (e.g. laptops and desktop-computers). These recent trends suggest mobiles and the Internet have become intimately intertwined to enable "on-the-go" access to several facilities (i.e. web-browsing, communication, shopping, banking and gaming) (Ofcom, 2016). Fisher-Titus (2018) reported a number of findings from several studies that observed that mobile internet use contribute to developing psychopathological symptoms, such as: a University of Michigan study, found that Facebook use led to a decrease use led to a decrease in happiness and overall life satisfaction, a team Australian researchers conducted two studies and found that compulsive internet use by adolescents leads to poorer mental health and a research from the university of Gothenburg in Sweden found a link between heavy cell phone use in young adults and depressive symptoms, a Swansea University study found that heavy internet users experience psychological symptoms of withdrawal when they stop using it. Despite the many positive outcomes, excessive mobile phone use is now often associated with potentially harmful and/or disturbing behaviours (e.g., symptoms of deregulated use, negative impact on various aspects of daily life such as relationship problems, and work intrusion). For example, the government enacted laws prohibiting the use of the mobile phone on the sidewalks and while crossing a road. In 2014, China experienced staggering record of 47.2 per cent of road accidents were attributed to mobile phone use while driving (Zhou, Yu and Wang, 2016)

Research has recently flourished to explore both positive and negative consequences associated with mobile phone use. According to Harris and Cooper (2019) the greatest contribution to society of mobile phone is improved productivity. Positive outcomes of mobile phone use include the optimization of communication between

individuals and systems, Mobile phone technology also promoted the development and validation of a wide range of health-related and behaviour change interventions and applications that aid such activities as dietary management, smoking cessation, physical activity promotion, and chronic disease management (Billieux, 2012). Fast and effective means of information transfer, increased social awareness, global connectedness, business etc. are also some of the positive benefits of mobile phone use. In their study (Ahmed, Salman, Marlik, Streimikiene, Soomro and Pahi, 2020) observed that, smart phones influence positively student academic performance in Pakistani University.

Negative outcomes associated with mobile phone use (particularly excessive and problematic use) have included (but are not restricted to) self-reported dependence and addiction-like symptoms such as sleep interference, loss of appetite, feeling of uneasiness, financial problems dangerous use (phoning while driving) prohibited use (phoning in banned areas) and mobile phone-based aggressive behaviour (Billieux, 2012). Therefore, following the geometric growth of the risk of distraction from mobile phones use with is connected to unintentional injuries ranging from: road traffic accidents or pedestrian injuries and negative effects on perception etc. According to Smith, Schreiber, Saltos, Lichenstein and Lichenstein (2013), the number of mobile phone-related injuries has increased, and more research is required to evaluate the risk caused by mobile phone distraction in all aspects of life. Shuman, Xiaoyan, Fangbiao (2015) maintained that problematic mobile phone use involves negative consequences in daily life. Lee, Kim, Son, Ahn, Kim and Kim (2007) reported that in a Koirea sample 16% of middle school students were addicted to their phones. Halayem, Nouira, Bourgou, Bouden, Othman and Halayem (2010), reported that in Tunisian population 26% of participants suffered from excessive mobile phone use. Lopez-Fernandez, Honrubia-Serrano, Freixa-Blanxart and Gibson (2014) in their study in the United Kingdom found that the prevalence of problematic mobile phone use among 1026 students was 10% with the typical problematic users being adolescents aged 11-14 years. The recent addition of a behavioural addiction category in the most recent edition of the diagnostic manual (DSM-5) (American Psychiatric Association 2013) including Gambling Disorder as first official diagnosis in that category and Internet Gaming Disorder as condition requiring further research to be included in the main manual (Kuss, 2017) suggests other potential behavioural addictions, e.g. mobile phone addiction, may be included in the manual if they lead to clinically significant impairment. Accordingly, using the Bio-psychosocial model of addiction, mobile phone addiction or mobile phone dependence may be considered to fall into the behavioural, addiction, including symptoms of tolerance, withdrawal, conflict, salience and relapse (Griffiths, 2005).

Billieux (2012) proposed factors of problematic mobile phone use which describes four pathways to problematic usage: the impulse pathway (poor self-control/poor emotion regulation) suggesting; the relationship maintenance pathway (obtain reassurance in affective relationships); the extraversion pathway (sociable and outgoing); and the cyber addiction pathway (addiction to online activities). As enthusiastic adopters of new technology, Generation "Y" (young adult) may use their smart phones to cope with everyday stressors (e.g. social situations and relationship problems), and using the phone as coping mechanism can be considered dysfunctional, similar to using the Internet to cope with life problems (Donnelly and Kuss, 2017), potentially leading to symptoms traditionally associated with substance-related addictions (Kuss, 2017).

Another research on excessive Internet use with young individuals that is, both adolescent (Kuss, 2017) and university student samples, has indicated technology use is not necessarily problematic however, the use of particular online applications, for example, gaming (Kuss, 2017) and social networking (Haug, Castro, Kwon, Filler, Kowatsch and Schaub, (2015); Kuss and Griffiths 2017).

Though the DSM-IV-TR and DSM-5 do not include any disorders related to the problematic use of technology but pathological gambling is included in DSM-IV as a diagnosable condition under the category of impulse control disorders not elsewhere classified (Merlo, Stone and Bibbey, 2013) and in DSM-5 as the first "behavioural addiction." Even though pathological gambling does not involve the use of a chemical substance, the similarities between the diagnostic criteria for substance use disorders and pathological gambling are striking. In general terms, both may be described as disorders involving loss of control over a compulsive, time- and resource-consuming behaviour, which persists in the face of adverse consequences, with continued escalation of the behaviour and/or withdrawal symptoms from reduction of the behaviour. Similarly, it was suggested as early as 1982 (that there will be widespread use of mobile phones) that pathological use of technology may exist in the form of "techno-dependence". Further research emphasizing potential behavioural and neurobiological similarities and correlates with recognized addictive behaviours is required before problematic mobile phone use can be considered within the spectrum of behavioural addictions. Second, it was demonstrated that problematic mobile phone use is a heterogeneous and multi-faceted condition. In support of this proposal, a theoretical model was formulated to guide and stimulate future research in the field. In particular, this model emphasizes on the one hand how apparently similar symptoms of mobile phone addiction (exaggerated and deregulated use) can be driven by different pathways underlain by distinct psychological processes, and on the other hand how some psychological factors (impulsivity and extraversion) can lead to various types of PMPU that are not related to addictive use (antisocial and risky use). To conclude, the study of PMPU as a potential psychological disorder or problem is in its infancy, and most of the existing research appears to have been undertaken without a sufficient theoretical rationale (Billiuex, 2012).

Problematic mobile phone use is generally conceptualized as a behavioural addiction including the core components of addictive behaviours, such as cognitive salience, loss of control, mood modification, tolerance, withdrawal, conflict, and relapse (Griffiths, 2015). Although many scholars believe that problematic mobile phone use is a behavioural addiction, evidence is still lacking that either confirms or rejects such conceptualization. Indeed, the fact that this condition can be considered as an addiction is to date only supported by exploratory studies relying on self-report data which is collected via convenience samples. More specifically, there is a crucial lack of evidence that similar psychosocial factors such interpersonal relationship are involved in the etiology of problematic mobile phone use compared to other chemical and behavioural addictions. Particular, two key features of addictive behaviours, namely emotional reliance and lack of self confidence, have to date received very limited empirical support in the field of mobile phone problematic use and mobile phone addiction research. Although Billieux (2012) proposed factors of problematic mobile phone use which describes four pathways to problematic usage: the impulse pathway (poor self-control/poor emotion regulation) suggesting that desire to maintain relationship and obtain reassurance in affective relationships. The extraversion pathway, (sociable and outgoing); suggesting and desire to interact with people and exploring activities and gathering experiences which could lead to mastering of person to

person, relationship and cyber addiction pathway, addiction to online activities. Suggesting addiction to online mobile activities such as social media platforms; facebook, tweeter, instagram, and other internet related activities since no known research have linked problematic mobile phone use to emotional reliance and lack of self confidence. This present research is aimed at linking emotional reliance and lack of self confidence to problematic mobile phone use.

Emotional reliance is defined as the tendency to rely on others for emotional satisfaction (Hirschfeld, Klerman, Gough, Barrett, Korchin, Chodoff, 1977). Furthermore, it is all that it sounds like plus considerably more thanks to its implication for happiness Moore (2020). This is to say that it involves depending on other people to get positive emotion as such as joy, happiness, satisfaction and love and when such feelings are not gotten from those whom they rely on, negative emotions such as sadness, anxiety, fear, rejection set in. An unhealthy, maladaptive or immature emotional reliant on people, is referred to cognition or cognitive processes involved in emotional reliance as the perception of the self as relatively powerless and ineffectual, along with the belief that others are powerful and can control the outcome of situations. Emotional reliance otherwise known as emotional dependency happens as soon as a person permit others (like a significant other) to influence their feelings and emotions, and relies on them for happiness, approval, sense of importance and endorsement. Spontaneously, there is some emotional dependency in our relationships, with others, because it makes us need and value each other. The problem begins once a person missed means of nurturing self and worst still, when a person is besieged by emotional distress especially when the individual cannot afford easily needs that can occupy one's mental spaced and absence of it creates: into fear of loss, loneliness or abandonment, which corrupts bonding and make it vulnerable to addiction. Emotional reliance is a psychological concept, which is related to the way people rely on each other. It is complex and ambiguous like many other psychological constructs, and usually referred to the amount of emotional support and comfort which one gains from others. According to Birtchnell (1988), reliance individuals constantly display excessive dependence on others, which causes damage to the interpersonal relations. Moreover, it is a threat to personal well-being.

Lack of self-confidence is the tendency to lack self reliance and to be others directed (Hirschfield et al., 1977). It focuses on the ability to succeed and believe about one's likelihood of succeeding (Ackerman, 2020). Lack of self confidence can be emotionally, physically and psychologically debilitating. Occasionally, almost everyone will experience a brief lapse in confidence, which ties in to self esteem and self image, but others deal with it daily. A negative self image creates fear. Essentially, it seems that people with low self-esteem anticipate failure, which may lead to the extremes of overachieving or underachieving. In most cases need to explain actions is one of the signs of a lack of self confidence. Mistakes happen to everyone, but those who have self confidence issues may feel that they have to give reasons. It is suspected that persons lacking in self confidence mostly seek attention and the approval of others to feel validated, if they feel approved and accepted, then they will feel okay. Not getting that approval or receiving criticism is frustrating and drives the level of self-confidence even lower (Mayne, 2017). People who lack self confidence expect perfection and feel shame when they don't achieve it. They feel that they will please others if they are perfect

Statement of the problem

In this age of rapid technological advancement, mobile phone have become not just a tool used for communication but an indispensible tool used for varieties of purpose especially, among undergraduates who uses it for various purposes such as sexting, sports betting, chatting, online social media interaction and internet fraud. Mobile phone problematic use has interfered with most people's daily activities alters interpersonal relationships including people's health and happiness. The quest to own a mobile phone in other to stay connected to friends formed through online chat rooms and social media platforms such as, facebook, twitter,instargram,2go,wechat,and baddo have made most young people engage in unruly behaviours such as prostitution ,armed robbery, stealing and pick pocket. Advancement and improved features of mobile phone such as smart phones have made most undergraduates to spend most of their time daily, snapping pictures, playing video games, chatting on social media platforms at the expense of their academic and class room activities. Most undergraduates chat even in the class rooms, library and laboratory. The urge to stay connected to the cyber world have indirectly or directly led to mobile phone problematic use, addiction, compulsive usage, dysfunctional use and misuse. This also have lead to many health problems such as sight problems leading to the use of medicated lens, back ache, chest problems, sleep deprivation, brain tumor, premarital sex which might lead to pregnancy consequently withdrawal from school or abortion which might destroy the womb or even lead to death, Accidents or even death occurs due to chatting or texting while walking on a busy road, while driving an automobile, while cooking in the kitchen. According to phenomenological research, result regarding problematic mobile phone use shows that problematic behaviours such as desperate effort to connect with people, excessive time spent on the mobile phones, losing temper due to mobile phone loses, psychological disorders such as, depression, anxiety and disruption in daily life were reported (Kim, Lee, Lee, Nam and Chung, 2014). This exposes young adults to risky behaviours such as rape, sexting and pornography which also lead to masturbation when the urge is not satisfied, and could also lead to directing such sexual urges towards children (pedophilia) or having sex with animals (bestiality) and inanimate objects such as pillow, chair and other things. Increase of mobile phone use even at the expense of the preoccupation with mobile phone-based communication and interpersonal relation is observed to lead to emotional reliance and low self esteem when the pictures or status one posted are not liked or receiving few comments on ones post which eventually leads to lack of self-confidence (Hong, Fu-Yuan; Chiu, Shao-I.; Huang and Der-Hsiang, 2012).

The observed physical and psychological dependency of peers, roommates, course mates who chat and post pictures while lectures are going on, habitual checking for comments or likes on social media status, pictures and comments and other unruly behaviours' of undergraduates compulsive use of mobile phone, motivated this present study.

Research Questions

i) To what extent will emotional reliance relate with problematic mobile phone use?

ii) To what extent will lack of self confidence relate with problematic mobile phone use.

Purpose of Study

The general purpose of this study is to investigate emotional reliance and lack of self-confidence as correlates of problematic mobile phone use among undergraduate. But specifically to explore:

i) if emotional- reliance will have relationship with problematic mobile phone use.

ii) if lack of self-confidence will have relationship with problematic Mobile phone use.

Relevance of Study

The popularity of cell phones among young people is not unique to Nigeria, but a worldwide phenomenon. The formation of a global youth culture around mobile phones and its problematic use is a growing area of interest in academic and research. Several studies have been conducted on the problem use of mobile phone among young people in different countries across the world such as, Japan, Norway, Finland, USA, and Britain. This study adds to the growing body of research by providing empirical information about the emotional and interpersonal factor associated with problematic mobile phone use among undergraduate in Nigeria.

Hypotheses

The following research hypotheses were formulated to guide the study:

H1: There will be a significant positive relationship between emotional reliance and problematic mobile phone use among undergraduates

H2: There will be a significant positive relationship between lack of self-confidence and problematic mobile phone use among undergraduates

II. METHOD

Participants

A total sample of 220 undergraduates (117 males and 103 females) students of Nnamdi Azikiwe University Awka and Federal Polytechnic Oko participated in the present study. The participants comprises of 50% Unizik students and 50 % Oko students, 76 .4 % are Igbos, 13.0% are Yoruba's, 10.0% are Hausas while .5% are from other tribes in Nigeria.100 % of the participants are mobile phone users, 88 .6% use smart mobile phones that connect to the internet, while 11.4% are not connected to the internet. 57.3% live off-campus while 42.3 % live on-campus. Their age ranged from 17- 30 years with a mean of 22.77, range of 13 and standard deviation of 2.97. All participants were from Nigeria and were selected using mixed sampling method, (Simple random sampling method and convenience sampling method).

Instruments

Three instruments were used as the course of this study: Two of the instruments were taken from two

subscales of Interpersonal dependency inventory (IDI), developed by Hirschfeld, Klerman, Gough, Barrett, Korchin, Chodoff, (1977). The subscales are: 1. Emotional reliance subscale for measuring emotional reliance. 2. Lack of self-confidence subscale. Each of the subscales contain 18 items with 4 point likert response pattern ranging from 4 (very characteristics of me), 3 (quite characteristics of me), 2 (somewhat characteristics of me), 1(not characteristics of me). The instruments have direct scoring pattern whereby, Low score means low emotional reliance while high score means high emotional reliance .The developers reported IDI subscale have concurrent validity with some subscale of SCL-90,They also found split half reliability ranging from .72 to. 91. This instrument has been validated for use in Nigeria by Makinde, (1999).

Problematic mobile phone use questionnaire (PMPUQ) developed by Pamuk and Atli (2016) was used to measure problematic mobile phone use, the instrument contains 26 items with 5 likert point response pattern which originally have the following responses ,1(not at all appropriate) 2(rarely appropriate)3(somewhat appropriate) 4 (fairly appropriate) 5(completely appropriate). The instrument have direct scoring pattern whereby High score means problematic mobile phone use while low score means low problematic mobile phone use. The Developer reported cronbachs Alpha of 0.92 and a test retest reliability of 0.85 to ascertain the use of this instrument in Nigeria. The researcher conducted a pilot study using (52) undergraduate sample and a Cronbach's Alpha reliability of .855 and a concurrent validity of .00 (2-tailed) with alcohol use Disorders Identification Test (AUDIT) (WHO, 1982) which have been validated in Nigeria by Adewuwa (2005).

Procedure

Participants were selected using two sampling methods. Simple random sampling was used to select two tertiary institutions (Nnamdi Azikiwe University and Federal Polytechnic Oko) in South-East region of Nigeria. Consequently, two faculties were randomly selected from both institutions; two departments and two classes (academic year 3 and ND 2) were also randomly selected. The research instrument was administered to all the students in the selected classroom before their lectures in each school who first freely and willingly signed the letter of consent to participate in the study. The researcher administered the research instruments (questionnaires) to a total of two hundred and thirty (230) participants. However, it was found that only two hundred and twenty (220) were properly filled. Thus 5% of the questionnaires were not included in the final analysis.

Design and statistics

This is a survey design study and Pearson moment correlation coefficient was employed for data analysis.

III. Result

Table 1: summary table for mean, standard deviation of gender, age, problematic mobile phone use, emotional reliance and lack of self confidence.

Descriptive statistics

	Mean	Std. deviation	N
Gender	1.55	0.53	220
Age	22.77	2.97	220
Problematic mobile phone use	71.95	16.38	220
Emotional reliance	45.02	7.6I	220
Lack of self confidence	42.50	7.33	220

Interpretation

The result from table 1 showed that the mean age and the gender of the participants is 22.77 and 1.55 respectively and the standard deviation is 2.97 and 0.53. The table also shows that the mean of problematic mobile phone use is 71.95 and the standard deviation of 16.38, mean of emotional reliance is 45.02 and standard deviation of 7.61, the mean of lack of self confidence 42.50 and standard deviation of 7.33.

Table 2: Summary table, for emotional reliance and lack of self confidence as correlate of problematic mobile phone use.

Variable	r. cal	p. value	N
Emotional reliance	.386	.000	220
Lack of self-confidence	.315	.000	220

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

Interpretation

The table 2: above revealed a positive significant relationship between emotional reliance and problematic mobile phone use among undergraduate (r.386; P .00,<.05). This means that as undergraduates emotional reliance increases, their problematic mobile phone use also increases and vice versa. Hypothesis 1 was confirmed because

r.386 and p.000 is less than .01 level of significance.

Similarly, it also revealed a positive significant relationship between lack of self confidence and problematic mobile phone use among undergraduates (r-.315; p.00, <.01). Thus, this means that as undergraduate's lack of self confidence increases their problematic mobile phone use also increases, and vice versa. Therefore, hypothesis 2 was confirmed because the r value .315 and p.00< is less than .01 level of significance.

Summary of the findings

From the result shown in the above the table, there is a significant positive correlation between emotional reliance and problematic mobile phone use among undergraduates, therefore the hypothesis which states that there will be a positive significant relationship between emotional reliance and problematic mobile use was accepted. Also, the result showed that, there is a significant positive correlation between lack of self confidence and problematic mobile phone use among undergraduates, thus the hypothesis 2 which states that there is a significant positive relationship between lack of self confidence and problematic mobile phone use was accepted.

IV. Discussion

The purpose of this study was to examine the correlation between emotional reliance, lack of self confidence and problematic mobile phone use among undergraduates. Two hundred and twenty questionnaires were properly filled and returned and are used for data analysis and testing of two hypotheses formulated in this study. Data were collected using three instruments designed to measure the variables of interest and analyzed using Pearson moment correlation to capture the correlation between the variables of interest. Based on the findings, the researcher found that: hypothesis one which stated that "there will be a significant positive correlation between emotional reliance and problematic mobile phone use among undergraduates" was accepted. This showed that there is a significant positive correlation between emotional reliance and problematic mobile phone use among undergraduates.

Hypothesis 2, which stated that "there will be a significant positive relationship between lack of self confidence and problematic mobile phone use among undergraduates" was accepted, this implies that as lack of self confidence increases in an individual his problematic mobile phone use also increases.

Following the contents of the results of this study in hypothesis I, This finding is in line with Zaheer et al (2017), which reported that there is a significant relationship between personality factors and problematic mobile phone use among undergraduates, this similarity in result could be as a result of the population used in the researches being young people and the statistics used in the reported research work and this present study. Billieux (2012) path way model also offered some useful explanation on how personal factors such as emotions may fuel an individual problematic use of the mobile phone. According to this theory, First pathway, called the impulsive pathway, describes individuals whose mobile phone use is mainly driven by poor self-control and/or maladaptive emotion regulation. This pathway regroups persons who can be characterized by heterogeneous impulsivity profiles,

For example, some of these people cannot delay using the phone when experiencing intense emotions because they lack self-control in such contexts (people with high urgency). In other words emotional reliance which is characterized by compulsion to rely on people for emotional satisfaction is seen as one of the reasons people stay glued to their mobile phone even to the detriment of other areas of their lives thus affecting both their health and interpersonal relationship. The second pathway, called the relationship maintenance pathway, describes individuals who use the mobile phone excessively to obtain reassurance in affective relationships (partner, family, and friends). These individuals are generally characterized by a low level of self-esteem and a high level of neuroticism. For them, dysfunctional use of the mobile phone is postulated to arise from a constant need for reassurance promoted by maladaptive cognitions and/or insecure attachment. This also implies that undergraduates need to maintain constant reassurance in affective relationship with the emotional reliant person leads to their problematic use of the mobile phone trough posting pictures to the loved one including nudes pictures and sexually arousing postures all in a bid to maintain such affective relationship. The presence of smartphones in everyday life may affect social interactions amongst teenagers. Present evidence shows that smartphones are not only decreasing face-to-face social interactions between teenagers, but are also making the youth less likely to talk to adults (Hu, 2017).

The result of the findings of hypothesis 2, is in line with A study conducted by Sánchez-Martínez and Otero (2009) the findings that indicate that no Emotional Dependency exists based on gender and that the most significant factors in order of frequency are: "Affective expression of the partner", "Modification of plans", "Fear of loneliness" and "Anxiety due to separation". This correlation makes sense because people who lack self confidence may be more apt to immerse themselves in technology because it does not require the kind of friendly interactions that real life does. People who lack self confidence have been shown to spend more time online because they use it to avoid physical task where their works or actions will be evaluated by other people. Obviously face-to-face/eye-to-eye contacts have declined because of the excessive growth in shared interactions through social media, mobile video sharing, and digital instant messaging. Essentially, the major worry in this paradigm change is that the youth high development of self-inhibition among youths resulting in their living in strictly digital world, self-isolating individuals, lacking in proper social and emotional development.

Limitations of the study

1) The major limitation of this study is the population used; the participants were students of Nnamdi Azikiwe University and Federal Polytechnic Oko. Hence, the findings from similar investigation or study may or may not confirm the result of the present study.

ii) The investigation of this is carried out with just Nigerian undergraduates who may or may not be the same as the findings in foreign countries with different cultural orientation.

Suggestion for further studies

i) The researcher suggest that an experimental study that aims to develop a remedial program to help mobile phone users to overcome addiction and dysfunctional or problematic use of the mobile phone as well as conduct research to predict factors affecting mobile phone addiction among undergraduates.

ii) Variables like environment, peer pressure, age and psychological variables like psychological isolation, anxiety and self-esteem, academic factors such as examination malpractice and academic achievement should also be considered in similar studies with mobile phone problematic use, the inclusion of such variables in the future studies will help to widen the horizon of the researcher to gain more knowledge.

iii) Other populations such as adolescence, lecturers, parents, older people should also be considered for further investigations because every age and individual have their unique characteristics which might relate with the way they use their mobile phone.

Recommendations

In line with the findings of the study, the researcher recommend that school administration through the help of social and school psychologist, should help manage and balance the interpersonal relationship factor and self - reliance factor in other to curb the tendency for mobile phone problem use in the school, homes and the society at large which will help individuals to be better and functional persons in the society, and function effectively in whatever they do. We also recommend development of counseling programs and symposia where experts can raise the awareness among undergraduates on how to use their mobile phone and avoid the negative resulting problem use.

Implications of the study

This study has revealed that emotional reliance and lack of self confidence correlated strongly with problematic mobile phone use among undergraduates. Thus the finding has implication on: Interpersonal relationship, social relationship and education; because it is relevant to social psychologists, lecturers, University educational policy makers in Nigeria as it will help them to become aware of the need to device strategy, make policies or implement already existing policies on the regulation of mobile phone use among undergraduates .

The findings of this study have capacity to motivate further researchers to focus on more specific areas of the self, such as self–esteem, self-efficacy, emotion and perception. This will provide knowledge that will help professionals develop information that will help undergraduates reduce their problem use of mobile phone. This study has also provided information that will help undergraduates to increase their knowledge about the relationship their self confidence and interpersonal relationship have with their problem mobile phone use.

V. Conclusion

This study assessed emotional reliance and lack of self confidence as correlates problem of problematic mobile phone use among undergraduates. The findings of this study revealed that emotional reliance and lack of self confidence are significantly related to problematic mobile phone use. This shows that emotional factor of interpersonal relationship and self factor of confidence relates with problematic mobile phone use, therefore the researcher's advice that people who rely on other people for emotional satisfaction should reduce their use of the mobile phone to avoid negative effects of mobile phone problem use. Finally undergraduates, society and the school

at large are encouraged to consider the recommendations offered in this research work with a view to adopting them, to structure the mobile phone problem use awareness in the society effectively.

Compliance with ethical guidelines

Competing interests

The authors declare that they have competing interests.

REFERENCES

1. Ackerman, C. (2020).12 Tips for building self-confidence and self-belief. Positiven Psychology.com. *Assessed 25/7/2020*

2. Adewuwa, A.O., (2005). Validation of the Alcohol use Disorders Identification Test (AUDIT) as a Screening Tool for Alcohol-Related Problems among Nigerian University Students. *Alcohol and Alcoholism*, vol. 40, issue 6. 2005, 575-577. https://doi.org/10.1093/alcalc/agh197.

3. Ahmed, R., Salman, F., Marlik, S., Streimikiene, D., Soomro, R., & Pahi, M (2020). Smart phone and academic performance of University students: a mediation and moderation analysis. *MDPI Journals/Sustainability 12,1*

4. American Psychiatric Association (2013). Diagnostic and statistical manual of mental disorders (5th ed). Washington, DC: American Psychiatric Association

5. Birtchnell, J (1988). Defining dependence. *British Journal of Medical Psychology, 61, 2*

6. Billieux, J. (2012). Problematic use of the mobile phone: A literature review and a pathways model. *Current Psychiatry Reviews, 8*, 299–307. *doi:10.2174/157340012803520522.*

7. Fisher-Titus (2018). The effects of Technology on Mental Health. Health Living Blog,www.fishertitus.org/health

8. Donnelly, E. & Kuss D. (2017). Depression among users of social networking sites (SNSs): the role of SNS addiction and increased usage. Psychology DOI:10.19104/japm.2016.107 Corpus ID: 59026822.

9. Griffiths M. D (2005). A "Components" Model of Addiction Within a Biopsychosocial Framework. *Journal of Substance Use*, 10((4)):191–197.

10. Griffith, M. (2015). Current addiction report. *Electronic Media, 44 (2),* 175 – 196.

11. Halayem, S, Nouira, O., Bourgou, S, Bouden, A., Othman, S & Halayem, M (2010) The mobile: a new addiction upon adolescents. Tunis Med. 88 (8): 593-6

12. Harris, A & Cooper, M (2019). Moble phone: impacts, challenges, and predictions. *Human behaviour and emerging technologies, 1,1*

13. Haug, S., Castro, R.P., Kwon, M., Filler, A., Kowatsch, T. & Schaub, M.P., (2015). Smartphone use and smartphone addiction among young people in Switzerland. *Journal of Behavioural Addictions.* 4(4): 299–307. doi: 10.1556/2006.4.2015.037. PMCID: PMC4712764 PMID: 26690625

14. Hirschfeld, R M Klerman, G L Gough, H G Barrett, J Korchin, S J Chodoff, P. (1977). A Measure of Interpersonal Dependency. *Journal of Personality Assessment.* 41(6):610-8. doi: 10.1207/s15327752jpa4106_6. PMID: 592089.

15. Hong, Fu-Yuan; Chiu, Shao-I.; Huang, Der-Hsiang (2012). "A model of the relationship between psychological characteristics, mobile phone addiction and use of mobile phones by Taiwanese university female students". *Computers in Human Behavior.* **28** (6): 2152–2159. doi:10.1016/j.chb.2012.06.020. ISSN 0747-5632

16. Kim, EJ, Lee, Y., Lee, J., Nam, JK & Chung, Y (2014). Development of Korean Smartphone Addiction Proneness Scale for youth. *PloS ONE, 9, (5). E97920.*

17. Kuss, D. & Griffiths, M.D., (2017). Social Networking Sites and Addiction: Ten Lessons Learned. *International Journal of Environmental Research and Public Health 14(3), DOI: 10.3390/ijerph14030311.*

18. Kuss, D. (2017). Mobile Technology and Social Media: The "Extensions of Man" in the 21st Century. *Human Development*; 60:141-143 https://doi.org/10.1159/000479842

19. Lee, H., Kim, MS., Son, HK., Ahn, S., Kim, JS & Kim, YH (2007). Discriminating power of socio-demographic and psychological variables on addictive use of cellular phones among middle school students. *Taehan Kanho Hakhoe Ch, 37 (6); 957-65*

20. Lopez-Fernandez, O., Honrubia-Serrano, L., Freixa-Blanxart, M & Gibson, W (2014). Problematic mobile phone ues in British adolescents. *Cyberpsychol Behav Soc Netw, 17 (2) 91-8*

21. Makinde, B (1999). The sex role, orientation and interpersonal dependency behaviours. *Unpublished M.Sc. Research project, Department of Psychology, University of Lagos, Nigeria.*

22. Mayne, D., (2017). Lack of self-confidence. Retrieved from *www.livestrong.com.*

23. Meagher, P (2017) Regulatory Framework for Digital Financial Services in Cote d'lvoire: A Diagnostic Study. Wrking Paper. Washington, DC,: CGAP.

24. Merlo, L.J., Stone, A.M., & Bibbey A. (2013). Measuring Problematic Mobile Phone Use: Development and Preliminary Psychometric Properties of the PUMP Scale. *Journal of Addiction* / 2013 / ID 912807 | https://doi.org/10.1155/2013/912807.

25. Moore, C (2020). What is self-reliance and how to develop it. Positive Psychology ,com April 2020, *Accessed 25/7/20*

26. OfCom (2016).Communications Market Report 2016. Making communicatios work for everyone.www,ofcom.org.uk/opendata

27. Sánchez-Martínez M, & Otero A. (2009). Factors associated with cell phone use in adolescents in the community of Madrid (Spain). *Cyberpsychol Behav* 2009; 12:131https://www.researchgate.net/publication/299518749_Development_of_a_Problematic_Mobile_Phone _Use_Scale_for_university_students_validity_and_reliability_study_Universite_Ogrencileri_icin_Problemli_ Cep_Telefonu_Kullanim_Olcegi'nin_Gelistirilmesi_Gecerli [accessed Jun 19 2020].

28. Saltos, DC., Lichenstein, KM., Saltos A, and Lichenstein, SB & Lichenstein, R (2013), Ambulatory cell phone injuries in the United States: an emerging national concern. *J Safety Res; 47: 19-23*

29. Shuman, T., Xiaoyan, W., & Fangbiao, T (2015). Interations of problematic mobile phone use and psychological symptoms with unintentional injuries: a school-based sample of Chinese adolescents. *BMC Public Health, 16, 88*

30. Pamuk, M. & Atli, A., (2016). Development of a Problematic Mobile Phone Use Scale for university students: validity and reliability study. *The Journal of Psychiatry and Neurological Sciences*.; *29: 49-59DOI: 10.5350/DAJPN2016290105*

31. Zaheer, H., Mark, O & David, S (2017).An investigation into problematic smartphone use: The role of narcissism, anxiety and personality factors. *Journal of behavioural addictions, 6 (3), 378-386*

32. Zhou, R., Yu, M., Wang, X (2016). Why do drivers use mobile phones while driving? The contribution of compensatory beliefs. *PloS ONE 11(8) e0160288, doi:10,1371/Journal pone 0160288*