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Loneliness, happiness, and interpersonal dependency as correlates of problematic use of social networking sites

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Abstract

As the influence of social networking spreads across young people, it becomes exigent to explore how its problematic use relates to important psychological outcomes such as loneliness, happiness and interpersonal dependency. Three hundred fifty-six undergraduates, 184 =males and 172 = females from a university in southeast Nigeria participated in this study. Their ages ranged from 15 to 32 years (mean age of 20). Four questionnaires that measured each variable were used to collect data, and a correlation design was adopted for the study. Three hypotheses were tested and findings revealed that study variables significantly correlated with problematic use of social networking sites: Loneliness r = .18, p < .01, Happiness r= -.14, p < .01; Interpersonal Dependency r= .32, p <.01 and dimensions of Interpersonal dependency (Emotional reliance r = .31, p < .01; Lack of self-confidence r= .32, p < .01; and Assertion of autonomy r = .11, p < .05 . The discussion focused on the fact that social networking has the potentials of decreasing mental wellbeing and increasing the mental health challenges.
Keywords: Loneliness, Happiness, Interpersonal Dependency, Social Networking Sites

Introduction

Social media applications of the internet have recently changed how people communicate and relate. Smartphones bridged the gap between the offline and online world (Nylander & Larshammar, 2012). Social interactions have progressed from traditional face-to-face contact and phone call communication to virtual reality via the internet. Soci l networking sites (SNS), commonly called social media sites, play integral roles in our everyday lives, especially in the COVID-19 pandemic (Wiederhold, 2020), where it significantly disrupted normal global activities and increased the prevalence of internet addiction (Lin, 2020). Virtual essential roles such as information, entertainment, and connection augment offline reality have come to stay. The interactive capabilities of social media create virtual functional building blocks for individuals, communities or organisations to hold conversations, share ideas, and form relationships, interest groups, and identities (Kietzmann, Hermkens, McCarthy, Silvertre, 2011). Various terms typify the misuse of the internet. They include pathological Internet use (Davis,2001); Internet dependency (Wang, 2001); problematic Internet use (Caplan, 2002; Davis, Besser, & Flett, 2002; Deutrom, Katos, & Ali, 2021), and Internet addiction (Ezoe, & Toda, 2013).

Over a decade, researchers have sought to understand problematic internet use (Young & Rogers, 1998; Morahan-Martin, 2005; Kim, Larose & Peng, 2009). Problematic use of social networking sites (SNS) rose because of the gratification people seek from social media, and the amount of time spent has increased (Chen & Kim, 2013). Popular social networking sites include Tiktok, Facebook, WhatsApp, Instagram, Snapchat, Linkedin, Twitter, Skype, and YouTube. In t e majority world (e.g. Nigeria: Facebook dominated the social media space until recently when Tiktok overtook Facebook as the most popular platform for online self-representation and conversation. (Qiu, Lin,Leung, & Tov, 2012; Xu, 2019; Rach & Peter, 2021). Social networking sites can be general or specific, for example, focusing on particular populations or activities. They all provide a virtual platform where users can "present" themselves, articulate their social networks, and establish or maintain connections with others. (Ellison, Steinfield, and Lampe, 2007).While making relationships and communication more accessible, this technology brought them new risks and problems.

Research evidence suggests that the problematic use of social media has become prevalent among many users and has led to significant behavioural and psychological problems (Wang, Lee & Hua, 2015). Despite these adverse outcomes, the craving for social media tends to be irresistible and extremely strong.

Statement of the Problem

Problematic use of social networking sites (SNS) is a 21st-century phenomenon which constitutes excessive or poorly controlled preoccupations and urges that may lead to impairment or distress and an inability to cope with life's challenges. For some individuals, use patterns can transform into abuse, taking on a compulsive quality. Compulsive use can negatively impact life activities such as work, school and meaningful relationships (Kim, La Rose & Peng, 2009). There is an influence of problematic internet use on sleep patterns. Students who spend more time online may disrupt their sleep-wake schedule significantly. Frequently, internet users experience more sleep disturbances which affect academic performance (Thomée, Eklöf, Gustafsson, Nilsson, & Hagberg, 2007).

Some Nigerian Universities in recent times have recorded several suicides that went viral on social media due to compulsive sharing behaviour (Ani, 2010; Alabi, Omolabake, Ayinde, & Abdulmalik, 2014; Ogunleye, Azikiwe, Aroso, Tenibiaje, & Damilare, 2019). The internet can produce a dissociating and disinhibiting experience for tertiary students by altering their mood, motivation and academic concentration. Undergraduates typically have flexible living

schedules, own smartphones with Internet access, and freedom from parental interference to live as they like while in school. This freedom allows for frivolities that tend toward virtual engagements, such as cyber-sex (phone sex), sexting, exhibitionism, voyeurism and internet pornography (Matti & Najmul, 2014; Pereyra, 2016). Increased use of such illicit content can influence anti-social behaviour, leading to cyberbullying or cyber-aggression (Yoder, Virden, & Amin, 2005; and Anyaegbunam, 2019).

Further studies reveal that problematic use of social networking sites has become prevalent among university undergraduates who become addicted. Individuals who get addicted to social media may suffer a loss of productivity, feelings of isolation, anxiety, a decline in happiness, and harmful interpersonal dependency that breeds contempt, envy, feelings of hopelessness, a decline in healthy face-to-face relationships and academic performance (Gonul, 2002; Bolukbas, 2003; Ozturk, Odabasioghi, Eraslan, Greny & Kalyoncu, 2007).

Excessive internet use among adults has been associated with failed marriages, unemployment, neglect, and sleep deprivation (Young, 1998). Young's research on problematic internet use (PIU) documented problems which include loss of control, job loss, marital discord, craving, withdrawal, social isolation, academic failure and financial problems. Moreover, spending more than 18 hours online may lead to physical problems such as back pain, eye strain and carpal tunnel syndrome (Young, 1998; Chang & Hung, 2012). This situation is a significant academic and health challenge. Empirical evidence from researchers in Japan and Australia revealed that most young adults who spend too much time on social media experience psychological dysfunctions. Such as substance abuse, unsafe sexual practices, aggressive or self-destructive behaviours, stress, depression, feelings of loneliness and aloofness from their environment (Schumaker, Shea, Monfries, & Groth-Marnat, 1993; and Schultz & Moore, 1998).

Unfortunately, in Africa, Nigeria in particular, as an emerging area in research, there is a dearth of studies to address this current global challenge that is more obtainable among the youth. Therefore, this study tries to understand variables (loneliness, happiness and interpersonal dependency) related to problematic social networking site use among undergraduates in Nnamdi Azikiwe University, Awka, Anambra State, South-East, Nigeria.

Review of Related Literature

Loneliness is a universal emotion, yet it is both complex and unique to each individual. An unpleasant experience occurs when a person's network of social relationships is significantly deficient in quality or quantity (Perlman & Peplau, 1984). A lonely student in a hostel lodge who is homesick or struggling to make friends in school has a different need from a husband whose wife has an unfriendly nagging attitude; or a widow whose husband recently died. There are different shades of academic research on loneliness. While standard definitions describe loneliness as a state of solitude or being alone, loneliness causes people to feel empty, alone and unwanted even amid a crowd of fellow students.

Loneliness varies multi-dimensionally in intensity. Weis (1973) distinguished between "emotional loneliness" and "social loneliness". He d fined emotional loneliness as the absence of close or intimate relationships and defined social loneliness as a lack of social networks. Unde graduates experience this multidimensional nature of emotional or social loneliness. The proliferation of social media platforms has become a way of escaping virtual reality using smartphones, tablets and laptop computers. Personality may mediate or moderate between introverted and extraverted individuals. It is a distressing experience when social relationships are perceived as less in quantity and quality than desired.

In Edo State, Nigeria, empirical evidence from a quantitative study on WhatsApp consumption where 382 undergraduates participated revealed that users of the WhatsApp social networking app utilise it mainly for affective needs such as chatting and keeping in touch with friends and loved ones; and for socio-integrative needs such as building social network ties (Akinsolosotu, 2016). Students often use social networking sites to either interact with friends, connect for online study, watch movies or discuss severe national issues (Eke, Omekwu, & Odoh, 2014). The social comparison hypothesis explains that utilising the internet to meet new people and contribute to online groups can have positive effects, especially "for those with initially impoverished offline world social resources" (Bessiere, Kiesler, Krant, & Boneva, 2008).

Cherry (2016) noted that people who become lonely crave human contact, but this psychological state of mind makes it difficult to form social connections with other people offline. When people cannot satisfy their urge to interact with others and form social relationships in person, they may become isolated from society and turn to the internet as a substitute (Ayas & Horzum, 2013). The social augmentation hypothesis explains that social communication on the internet amplifies individuals' total social resources by providing an

additional possibility for interaction with others (Biessiere et al., 2008). Evidence from this study suggested that lonely people use Facebook more frequently than those who are not lonely. According to this hypothesis, lonely individuals offline may be motivated to access the internet to find other avenues to communicate with people and use Facebook to augment their social world. (Biessiere et al. 2008). The theory of belongingness explains how loneliness and problematic SNS use correlate. It suggests that people are motivated to establish social connections to fulfill their need for belongingness. People who require social support attempt to fill this need for belongingness through the internet. They may struggle with offline social lives; however, they express themselves freely online and find it easy to interact with friends and strangers more effectively. A situation which ultimately leads to increased isolation and loneliness. Due to the anonymous nature of the internet, unrestricted online initiatives risk making people troublesome online users. As a result, people experience psychological issues such as loneliness and sadness, making them problematic Internet users (Ozgur & Demiralay, 2014).

Yao and Zhong (2014) showed that online social connections with friends and family did not significantly lessen feelings of loneliness compared to offline social interactions. They suggested a worrying vicious cycle between Internet addiction and loneliness. This finding agreed with Davis (2001). He discovered that loneliness leads to problematic internet use, which leads to more loneliness creating a vicious cycle of a negative self-perpetuating spiral. Deut om, Katos, & Ali (2021) also found a positive relationship between problematic internet use and loneliness in their study. Other studies revealed a significant positive correlation between pornography use and loneliness (Yoder, Virden & Amin, 2005; Pereyra,2016). Potentially positive correlates of pornography use include increased sexual knowledge and openness (Weinberg, Williams, Kleiner, & Irizarry, 2010). The opportunity to learn and experiment with sexual knowledge is abundant on social media. Young adults fall prey to such global perpetration daily (Wagstaff & Sulikowski,2022).

In a met-analytical study, researchers discovered evidence which suggested that lonely people use Facebook more frequently than those who are not lonely (Song, Zmyslinki-Seelig, Kim, Drent, Victor, Omori & Allen, 2014). Thus lonely people may use social networking sites to enhance social resources they currently lack offline. As individuals spend longer time online, they may experience difficulties regulating their internet use which could lead to compulsive use (Caplan, 2005). Some researchers found a positive relationship between Facebook use and loneliness (Spraggins, 2009; Pena & Sandlin, 2010). They explained that although

Facebook does provide opportunities for social interaction, online-based social interaction cannot potentially replace the quality of face-to-face interactions.

Another variable of interest in this study is happiness. Being happy is vital in nearly all aspects of life. The term 'happiness' is a concept that is synonymous with well-being, and these two terms are often used interchangeably in daily life. Happ ness has been affiliated with everything from success (Lyubomirsky, Sheldon, & Schkade, 2005), increased earnings (Diener & Biswas-Diener, 2002), and better health (Steptoe, 2019), to long life, or living longer (Koivumaa-Honkanem, 2005). Observation revealed that undergraduate students express happiness on social media, whether real or fake. Such online expressions often tend toward exhibitionism, leading to jealousy and envy (Penard & Mayol, 2015). Research on daily exposure to visual social media posts on Instagram revealed that young women might experience adverse effects on their mood and well-being (Garcia, Bingham & Liu, 2021).

Over the past 15 years, psychologists have notably contributed to this discussion by empirically investigating measures of behavioural correlates and determinants of happiness (Stanford Graduate School of Business, 2010). From Positive Psychology, happiness involves both positive feelings, such as ecstasy and comfort, and positive activities with no feeling, such as absorption and engagement (Seligman, 2002). Soci l media provides a platform where individuals express diverse emotions through words, pictures and videos that is both absorbing and engaging to online visitors. Kim and Lee (2011) discovered a link between the number of Facebook friends and enhanced subjective well-being. Researchers indicated a correlation between Facebook use and positive emotions (Ellison et al., 2007; Valenzuela, Park & Kee, 2009).

Most people feel happier when they live with more people. Soci l interactions make people happier. Just as the old saying goes, "the more we are together, the happier we shall be"; "the more, the merrier". One correlation study revealed that students who felt lonely (offline) also felt unhappy, empty, awkward, restless, and bored (Russell, Peplau & Ferguson, 1978). Thus lonely people may use social media to entertain or make themselves happy. Uses and Gratification theory explains how individuals use mass media and other forms of communication to fulfil their needs and want (Rubin, 2002). Soci l media serves to fulfil social interaction and relationship needs and wants.

A longitudinal study revealed that the number of friends in America increased from 2002 to 2007, and heavy internet users had more offline and online friends than light users (Wang & Wellman, 2010). Findings from this study suggested that the growing number of friends in America was linked to the proliferation, popularity, and penetration of social networking sites. The need for more friends and likes drives social media use. Diener, 2013 found out that interpersonal relationships and social capital are strongly associated with happiness. Soci l networking sites (SNS) created new opportunities for connecting to old friends and creating new ones. An unrealistic situation where an individual can have over one thousand friends, known and unknown. This is an unhealthy social connection where most individuals fall into social problems in different dimensions. A sample of 2000 French Facebook users participated in a study investigating the relationship between usage patterns of Facebook, friendships and life satisfaction (Penard & Mayol, 2015). Resu ts showed that Facebook likes are a form of social or peer approbation that reinforces self-esteem. Conversely, individuals who did not receive enough "likes" expressed lower life satisfaction due to envy and frustration, which exposes people to a real-time measure of the strength of their social lies (friendship, social isolation). Tertiary students post pictures in other to gain "likes and comments," which may make them happy when expectations are met or unhappy when a response is poor.

Researchers' findings showed that Facebook uses predicted happiness; however, they also found a negative relationship between Facebook use and happiness (Uysal, Satıcı, & Akın, 2013).In another study, problematic Facebook use negatively predicted happiness among college students but negatively correlated with happiness and problematic Facebook use (Uysal, 2015). Field tests showed that spending long hours and having too many friends on social networking sites can affect people's well-being. However, they further reported that Facebook friends increase life satisfaction but reading showy updates and posts from friends decreased happiness due to social comparison and envious behaviour (Mukesh, Mayo, & Goncalves, 2014). Lower psychological well-being among students is associated with higher Internet addiction rates (Cardak, 2013). In an experiment, young individuals who used Facebook reported lower levels of life satisfaction as they spent more time on the social network site (Kross, Verduyn, Demiralp, Park, Lin et al., 2013). Akin (2012) found that internet addiction is inversely associated with subjective happiness. Among a population of 367 university students, Spraggins (2009) reported that happiness significantly and negatively predicted problematic SNS use.

The third variable of interest in this study is interpersonal dependency. It is a personality style wherein individuals are predisposed to seek guidance, help, and support from others, even in situations where they can function autonomously and meet challenges independently (Bornstein,1992;1993). It is associated with a desire to get advice, conform to the surrounding environment, and willingness to meet up with other people's requests (Bornstein, 1999). It is an attitudinal belief that a person or group of persons is perhaps socially poor and helpless that he/they cannot help themselves but must depend on assistance from outside.

Researchers in Japan reported that internet addiction is related to students' feelings of loneliness and dependence on their phones. They called this phenomenon mobile phone dependence, signifying individuals' strong attachment to their cell phones (Ezoe & Toda, 2013). Mobi e phone dependence is not just an attachment to a device but with the contacts in the apps. The Needs-Affordances-Features Model of Technology states that people use technology to compensate for their psychological needs (Karahanna, Xu, Xu, & Zhang, 2018).

Interpersonal dependence is similar to the concept of attachment, wherein high scores share ties with insecure attachment (Pincus & Wilson, 2001). High scores on interpersonal dependency by individuals indicate an unhealthy situation. People with this social disposition tend to be more sensitive to peer pressure and less stable in their attitudes and beliefs. They have a more pronounced need for acceptance by others and a tendency to face increased psychological impairment through lower self-esteem, depression, loneliness, and overall emotional dysregulation (Overholser, 1992; Bornstein, 2009). Ties with others impact a person's cognition, motivation, affective reactions, and natural behavioural patterns (Bornstein, Porcerelli, Huprich, & Markova, 2009).

Hirschfield et al.(1977) describe interpersonal dependency in three dimensions: (a) Emotional reliance, which is the tendency to depend on others for one's emotional satisfaction. (b) Lack of self-confidence is the tendency to lack self-reliance and be other-directed. Furthermore, (c) Assertion of autonomy is the tendency to be self-directed. Bornstein et al.'s (2009) description of interpersonal dependency relates to this concept, divided into three dimensions: (a) Healthy dependency, which denotes confidence, autonomy, desire for closeness, and situation-appropriate help-seeking trait. (b) Dysfunctional functioning denotes destructive over-dependence often characterised by a weak self, fear of negative evaluation, and reassurance-seeking behavioural trait. More ver, (c) Dysfunctional detachment denotes fear

of being hurt, being overwhelmed by others, and a consequent need for control over social situations.

Variables that associate with interpersonal dependency include difficulty in doing interpersonal activities with others (Devito & Kubis, 1993); sexual jealousy (Buunk, 1982); insecure appearances in making friendship relations with the opposite gender (Collins & Read, 1990); and sensitivity in making interpersonal relationship (Mashing, O'Neill & Katlin, 1982). Such correlates manifest in social media interactions. Researchers investigated the effect of jealousy and relationship happiness in an online survey among a population of 194 students (56 males and 138 females) at a Dutch University. Findings revealed that individuals' need for popularity predicted jealousy and relationship happiness. High self-esteem was a primary predictor of social networking site use. Individuals compensated for low self–esteem by creating idealised pictures of themselves in this study, while individuals with a high need for popularity reacted with social networking site jealousy (Utz & Beukeboom, 2011). Caplan (2005) posited that as individuals spend increasing time online, they may experience difficulty regulating internet use, which could lead to compulsive use. He further stated that loneliness leads to pathological internet use, which leads to more loneliness, creating a negative self-perpetuating spiral leading to social media dependence. Škaˇ upová & Blinka (2016) reported that individuals with healthy relationship profiles are less likely to develop problematic patterns of online gaming. In consonance with this statement, people who do not expect social interaction or happiness online will be less likely to develop patterns of problematic SNS use.

Hypotheses

H_1- Loneliness will correlate with problematic use of social networking sites among undergraduates at UNIZIK, Awka.

H_2- Happiness will correlate with problematic use of social networking sites among undergraduates at UNIZIK, Awka.

H_3 - Interpersonal dependency will correlate with problematic use of social networking sites among undergraduates at UNIZIK, Awka.

Methods

Participants

Three hundred and fifty-six (356) undergraduates comprising 184 =males and 172=females from a university in southeast Nigeria participated in this study. The ages of the participants ranged from 15 to 32 years (mean age of 20 years). These participants are of Igbo extraction.

Instruments

Loneliness Scale (revised), Russell, Peplau & Cutrona (1980), a 20-item scale, was used to assess loneliness. Participants rated each item on a scale from 1 (Never) to 4 (Often).Items 1,5,6,9,10,15,16,19 and 20 were reversed-scored. The authors reported a Cronbach's Alpha reliability coefficient of .71.

The Subjective Happiness Scale (SHS) (Lyubomirsky & Lepper,1999), also known as General Happiness Scale, was used to measure happiness. SHS is a 4-item semantic format with a 7-point Likert response scale. The possible range of scores on the Subjective Happiness Scale is from 1.0 to 7.0. Item number 4 is reverse scored. The authors reported a Cronbach's alpha reliability coefficient of .80.

Interpersonal Dependency Inventory (IDI) (Hirschfield, Klerman, Gough, Barrett, Korchin & Chodoff, 1977) was used to measure interpersonal dependency dimensions, which include: **Emotional reliance** (18 items)- Tendency to depend on others for one's emotional satisfaction. **Lack of self–confidence (16 items)**- Tendency to lack self-reliance and to be other-directed. **Assertion of autonomy (14 items)** -Tendency to strive to be self-directed. Cronbach alpha coefficients of .73 were obtained for the Emotional Reliance subscale; .62 for the Lack of Self Confidence subscale; .63 for the Assertion of Autonomy subscale; and .81 for the overall Interpersonal Dependency scale.

Modified Generalised Problematic Internet Use Scale (GPIUS) (Caplan, 2002) is a 29-item self-report questionnaire based on Davis's (2001) cognitive behavioural model of Problematic Internet Use (PIU). It measures the prevalence of the cognitive and behavioural model of problematic internet use and the degree to which the problematic use interferes with the individual's functioning in personal, academic and professional areas. Problematic internet use was interchanged with social networking site use by replacing "internet" or

"online" with "social networking sites". For example, the item "when not online, I wonder what is happening online" was modified to 'when not on a social networking site". The scale has a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (Strongly Agree). Scores may range from 29 to 145. The higher the total score, the greater the degree of problematic social networking site use. Reliability analysis indicated high internal consistency with Cronbach alpha coefficient at .90.

Procedure

Instruments assessing Loneliness Scale, Subjective Happiness Scale, Interpersonal Dependency Inventory, and Generalised Problematic Internet Use Scale were packaged into a questionnaire battery. Demographic variables in the questionnaire battery include Age, Gender, Department, Faculty, Number of Social media friends, Religion and membership in social media sites. With informed consent, 400 copies of the survey questionnaire were conveniently administered to undergraduates in 3 faculties in Nnamdi Azikiwe University Awka, Anambra State, South-East Nigeria. Participation in the study was strictly voluntary and anonymous. A response rate of 89% was obtained as 356 questionnaire copies were collected and collated after distribution.

Design and Statistics

The study employed a correlation design, and Pearson Moment Correlation was utilised for data analysis.

RESULTS

The result of the statistical analysis of the data obtained from the study is presented in Tables 1 and 2. Table 1 summarises the mean and standard deviation of the study variables. Table 2 presents the summary of the zero-order correlation coefficient matrix and determinant (r^2) table for Loneliness, Happiness, Interpersonal Dependency, and Problematic social networking site use among undergraduates in Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.

Table 1: Summary mean Table for study variables

Variables	No. of items	Mean	Standard deviation	N

Loneliness	20	42.76	7.34	356
Subjective Happiness	4	21.98	4.61	356
Emotional Reliance	18	47.83	8.42	356
Lack of Self Confidence	16	38.36	6.58	356
Assertion of Autonomy	14	34.40	6.26	356
Overall Interpersonal Dependency	48	120.60	16.66	356
Problematic SNS use	29	106.29	31.38	356

Table 1 presents the summary mean table for critical variables in this study. Loneliness has a mean value of 42.76 and a standard deviation of 7.34. Subjective happiness has a mean value of 21.98 and a standard deviation of 4.61. Emotional reliance has a mean value of 47.83 and a standard deviation of 8.42. Lack of confidence has a mean score of 38.36 and a standard deviation of 6.58. Assertion of autonomy has a mean value of 34.40 and a standard value of 6.26. Overall interpersonal dependency has the highest mean value of 120.60 and a standard deviation value of 16.66. Problematic social networking site use has the second highest mean value of 106.29 and a standard deviation value of 31.38

Table 2: Zero-Order Correlation Coefficient Matrix Table and Determinant (r^2) for study variables among Unizik, Awka Campus undergraduates.

S/No	Variables	1	2	3	4	5	6	7
1	Loneliness	1						
2	Happiness	-.38**	1					
3	Emotional Reliance	.06	-.04	1				
4	Lack of Self Confidence	.19**	-.07	.60**	1			
5	Assertion of Autonomy	.17**	-.04	.20**	.43**	1		
6	Interpersonal Dependency	.17**	-.04	.81**	.86**	.65**	1	
7	Problematic SNS use	.19**	-.14**	.31**	.32**	.11 *	.32**	1

** Correlation is significant at P < 0.01 (2 – tailed)
*   Correlation is significant at P < 0.05 (2- tailed)

Table 2 presents a summary of zero-order correlation coefficients of study variables: loneliness, happiness, emotional reliance, lack of self-confidence, the assertion of autonomy, interpersonal dependency, and problematic social networking site use. A Pearson correlation coefficient was computed to assess the linear relationship between loneliness and problematic SNS use. There was a positive significant correlation between the two variables, $r = .19$, $p < .01$ and coefficient determinant (r^2) of 3.61% .It implies that as an individual's feeling of loneliness increases, the tendency for him/her to engage in problematic SNS use also increases. Hypothesis 1 states that there will be a significant correlation between loneliness and problematic SNS use among undergraduates at UNIZIK is hereby confirmed.

To assess the linear relationship between happiness and problematic SNS use, a significant negative correlation between the two variables, $r = -.14$, $p < .01$ and coefficient determinant (r^2) of -1.96%. This indicates that as an individual's feelings of happiness increase, the tendency for him to engage in problematic SNS use decreases. Hypothesis 2 states that there will be a significant correlation between loneliness and problematic SNS use among undergraduates at UNIZIK is hereby confirmed.

 Assessment of the linear relationship between interpersonal dependency and problematic SNS use indicated a positive correlation between the two variables, $r = .32$, $p < .01$ and coefficient determinant (r^2) of 10.24%. This indicates that as interpersonal dependency increases, problematic SNS use also increases among individuals. Hypothesis 3 states that there will be a significant correlation between interpersonal dependency and problematic SNS use among undergraduates at UNIZIK, Awka, is hereby confirmed.

A Pearson correlation coefficient was computed to assess the linear relationship between the dimensions of interpersonal dependency (emotional reliance, lack of self-confidence & assertion of autonomy) and problematic SNS use. There was a positive correlation between the three subscale dimensions and problematic SNS use, emotional reliance $r = .31$, $p < .01$, coefficient determinant (r^2) of 9.61%; Lack of self confidence $r = .32$, $p < .01$, coefficient determinant (r^2) of 10.24%; assertion of autonomy, $r = .11$, $p = .05$, and coefficient determinant of 1.21%. This indicates that as emotional reliance, lack of self-confidence, and assertion of autonomy increase, problematic social networking sites also increase among undergraduates. Hypothesis 4 states that there will be a significant correlation between dimensions of interpersonal dependency and problematic social networking site use among undergraduates is hereby confirmed.

Discussion and Conclusion

The relationship between loneliness, happiness, interpersonal dependency, and its dimensions (emotional reliance, lack of self-confidence and assertion of autonomy) with problematic social networking sites (SNS) use was investigated among undergraduates. Results confirmed the first hypothesis that loneliness positively correlated with problematic SNS use. This is similar to previous studies (Davis, 2001; Song et al., 2014; Deutrom, Katos & Ali, 2021). Similarly, happiness correlated with SNS, confirming hypothesis two. The result was consistent with studies by researchers (Spraggins,2009; Cardak, 2013; Akin, 2012; Uysal, 2015; and Kross et al., 2013). Howe er, students should understand that no matter how excited they may be, it is not wise to post-digital information and content compulsively on social media to show that he is making progress. Such behaviour can attract the wrong people, making them victims of cyberstalking, cyber-bullying and cyber-aggression (Anyaegbunam, 2019). Students should also understand that the quantity of "likes, comments or followership" online does not determine or guarantee happiness, success or quality of life (Diefenbach & Anders, 2002). Similarly, interpersonal dependency and its sub-scale dimensions correlated with problematic SNS use, confirming hypotheses 3 and 4, supporting previous studies (Overholser, 1992; Caplan, 2005; Bornstein et al., 2009; Utz & Beukeboom, 2011 and Škaˇrupová & Blinka, 2016).

Limitations of the study

The study adopted a correlation design which does not infer any directional dependency. It also utilised a questionnaire that produces random relations among variables without the research's direct manipulation or control—an attribute which can be possible in experimental and longitudinal studies. Thus future research in this area could consider other designs that can enhance the directional dependency.

Implications

The study has theoretical and practical implications. While social networking can promote social index and, by extension, social well-being, it has cost implications (time and financial). It can also become detrimental to mental well-being if the contents and schedules are poorly managed. Theories are still exploring the processes involved in problematic social networking crossing from well-being to challenge. Nevertheless, one thing is specific, problematic social networking increases some mental health (loneliness, dependency) and can decrease mental well-being (happiness).

Conclusion

Social networking is gradually becoming a crisis because people enjoy the easiness and electrifying activities there. So undergraduates get entangled in such activities to the detriment of their academic pursuits. The outcome is a poor academic outcome, loneliness, dependency and poor happiness. Unfortunately, practitioners often do not consider problematic social networking as part of the challenges linked to well-being problems among undergraduates. Well, the results of the present study have reiterated that problematic social networking should be considered a severe risk factor for the well-being of the users.

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