Loneliness and Social Media as a Correlate of Psychological Well-Being Among Undergraduate Students

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Abstract
The study investigated loneliness and social media as a correlate of psychological well-being among undergraduate students, One hundred and sixty-eight (168) undergraduate students with a mean age of 20.66 and S.D of 1.125 were drawn using multi-stage (cluster, simple random: by balloting and purposive) sampling techniques as participants from Enugu State University of Science and Technology, Enugu. Psychological Well-Being Scale, UCLA Loneliness Scale and Bergen social media addiction scale were used for data collection, a correlational design was adopted, while a PEARSON moment coefficient with the aid of SPSS version 27 was used for data analysis. Findings revealed that Loneliness positively relates to autonomy r= .434 at p< .05 and negatively relates to personal growth r= -.427* at p< .05. Social media addiction positively relates to Environmental self-mastery r= .378*, purpose in life r= .355* at p< .05 and positive relations with others r= .489** at p< .01 dimensions of psychological well-being, Hence school authorities should try and bring up coursework that can help students to channel a positive energy towards social media, so that they can use it to their advantage.*

Introduction

Well-being is a comprehensive concept that encompasses the valued experiences of individuals (Bandura, 1986), facilitating enhanced effectiveness in both professional endeavours and other activities (Huang et al., 2016). The concept of psychological well-being is framed as a multifaceted process that incorporates numerous interconnected constructs and dimensions (Weiss et al., 2016). Derived from the field of positive psychology, it pertains to aspects such as positive functioning, happiness, personal growth, and self-flourishing (Zaki, 2018). Psychological well-being refers to a state of good mental and emotional health (Tang, Tang, & Gross, 2019). According to Ruggeri and colleagues (2020), psychological well-being encompasses the expression of positive emotions and overall satisfaction with one's life, including various aspects such as family, education, and work. This concept includes both emotional and cognitive components. Additionally, psychological well-being is the capacity of an individual to utilize personal resources and strengths in a way that allows them to find meaning in life (Mercer, 2020).

Psychological well-being is a complex concept that encompasses both subjective and objective elements (Li, 2021). It is shaped by social and contextual factors, dynamically influenced by

the interplay of various conditions, environments, actions, mental resources, and interpersonal relationships (La Placa et al., 2013, as cited in Li, 2021). This viewpoint emphasizes the active role individuals play in shaping and enhancing their own well-being. Nonetheless, it also acknowledges the impact of socio-cultural contexts and policies in this domain (Li, 2021). While everyone experiences moments in their lives when they may not be at their mental or emotional best, a state of psychological well-being allows individuals to cope effectively with their challenges. This state positively influences a person's physical health as well. Individuals are considered to be in a state of psychological well-being when they are free from significant mental or emotional disturbances (Fox, 2021). Mentally ill patients who have successfully managed their conditions can be regarded as being in this state if their chronic issues are well-controlled, even if they do not show symptoms of their disorders (Fox, 2021). Psychological well-being generally indicates that a person is happy, able to form connections with others, and emotionally stable. However, it is not always possible to maintain this state. Various stressors can lead to feelings of unhappiness, emotional distress, or disconnection from others (Fox, 2021). If these feelings are temporary, a person may still be considered psychologically well. However, if they persist, the individual may require treatment to regain their well-being (Fox, 2021). Psychologically healthy individuals are free from mental disorders and have successfully managed their stress so it does not hinder their ability to enjoy life and engage with society (Fox, 2021).

Psychological well-being is a multifaceted concept that embodies an individual's subjective sense of contentment, happiness, and overall satisfaction with various aspects of life. This includes one's personal experiences, social interactions, and professional life. A sense of well-being often involves feeling fulfilled in one's role at work, experiencing a sense of accomplishment, and recognizing one's utility within social and professional contexts. Additionally, it involves feeling a sense of belonging and experiencing minimal distress or worry in daily life (Naci & Ioannidis, 2015; Scott, 2016).

In exploring psychological well-being in greater depth, Ryff identifies six key dimensions that contribute to this overall state: Positive Relationships with Others: This dimension emphasizes the importance of having meaningful connections with family, friends, and colleagues, which fosters love, trust, and support. Personal Mastery: This refers to an individual’s sense of competence and effectiveness in managing their life. It reflects the belief in one’s abilities to navigate challenges and achieve goals. Autonomy: Autonomy relates to the capacity for self-determination and independence in one’s choices, enabling individuals to make decisions that align with their values and interests. Purpose and Meaning in Life: This dimension highlights the importance of having a clear sense of purpose and direction, which can motivate individuals to pursue their passions and contribute positively to the world. Personal Growth and Development**: Personal growth involves striving for improvement and embracing opportunities for self-discovery and development throughout one’s life journey. Environmental Mastery: This dimension reflects the ability to effectively manage one's environment and respond adaptively to different life circumstances. Together, these dimensions provide a comprehensive framework for understanding psychological well-being, promoting a holistic view of mental health and personal fulfilment (Iosif, 2020).

Psychological well-being issues have become increasingly prevalent among students in contemporary society (Yang, 2010; Udhayakumar & Illango, 2022). Recent studies indicate that undergraduate students experience high levels of mental distress, comparable to those

observed in various departments within institutions of higher education (Gallagher, 2009; Mackenzie et al., 2011; Udhayakumar & Illango, 2022). Notably, the rate of mental distress among undergraduates is significantly higher than that of the general population (Sarokhani et al., 2013; Udhayakumar & Illango, 2022). Several contributing factors to this distress include uncertainties regarding future employability and success, academic pressures, and physical distancing from primary sources of emotional support (Ibrahim et al., 2013; Sarokhani et al., 2013; Udhayakumar & Illango, 2022). Research has shown that university students are particularly vulnerable to mental health issues, which has raised significant public concern in Western societies (Stanley & Manthorpe, 2001; Udhayakumar & Illango, 2022). Many studies have concentrated on loneliness due to its detrimental effects on both physical and mental health (Hawkley & Capitanio, 2015; Holt-Lunstad et al., 2015) throughout the lifespan. A systematic review by Leigh-Hunt et al. (2017) highlighted that numerous efforts have been made to compile research on loneliness and overall well-being. Numerous studies underscore the significance of measuring loneliness as a crucial indicator of well-being, particularly its development and effects on older individuals (Courtin & Knapp, 2017; Hawkley & Cacioppo, 2010; Stocker et al., 2020). According to Matthews et al. (2019), loneliness indicates poor functioning across various dimensions of well-being. Moreover, both cross-sectional (Chen & Feeley, 2014; Hsu, 2020) and longitudinal studies (Shankar et al., 2015; VanderWeele et al., 2012) have demonstrated a strong negative correlation between loneliness and subjective well-being (SWB).

Loneliness is a common aspect of the human experience that affects people of all ages. It is a subjective negative feeling that arises from an individual's perception of inadequate social relationships. A sense of loneliness occurs when there is a disparity between a person’s actual social interactions and their desired level of social engagement (Peplau & Perlman, 1982; Bhagchandani, 2017). This feeling can stem from a lack of necessary social connections, or it may arise even when a person has social relationships that are not intimate or fulfilling. In some cases, these connections may lack sincerity and emotional depth.

Human beings naturally engage with one another and the world around them through communication, and loneliness reflects the feeling of being disconnected from this process (Peplau & Perlman, 1989; Bhagchandani, 2017).

Cherry (2021) describes loneliness as a state of mind that causes people to feel empty, alone, and unwanted. Loneliness is the distress that results from discrepancies between ideal and perceived social relationships (Bhagchandani, 2017). Lonely people often crave human contact, but their state of mind makes it more difficult to form connections with other people (Cherry 2021). While Solitude, on the other hand, is voluntary (Cherry 2021). People who enjoy spending time by themselves continue to maintain positive social relationships that they can return to when they crave connection (Cherry 2021). They still spend time with others, but these interactions are balanced with periods alone. Cacioppo and Cacioppo, (2018) suggest that loneliness is associated with social isolation, poor social skills, introversion, and depression.

Loneliness can arise from various contributing factors, including situational variables such as physical isolation, relocating to a new area, and experiencing a divorce (Sbarra, 2015; Cherry, 2021). The death of a significant individual in a person's life can also trigger feelings of loneliness (Cherry, 2021). Furthermore, loneliness may be a symptom of psychological disorders, such as depression, which often leads individuals to withdraw socially and,

consequently, become isolated (Cherry, 2021). Research indicates that loneliness can also contribute to the development of depressive symptoms (Erzen & Çikrikci, 2021). The causes of loneliness are diverse and may even include genetic factors (Gao et al., 2016).

Many people experience loneliness at various points, and some individuals feel it frequently. The effects of loneliness can vary. Transient loneliness, which lasts for a short time, can have positive effects, such as a heightened focus on the strength of one's relationships (Qualter et al., 2015; Fay, 2019).

In contrast, chronic loneliness, which persists for an extended period, is typically associated with negative consequences. These include an increased risk of obesity, cardiovascular diseases, high blood pressure, and high cholesterol (Leigh-Hunta et al., 2017; Cacioppo & Hawkley, 2010). Chronic loneliness is also linked to a greater risk of death and suicidal thoughts. The negative effects of loneliness extend to both physical and mental health (Hämmig, 2019), and can include: alcohol and drug misuse, altered brain function, progression of Alzheimer's disease, antisocial behaviour, cardiovascular disease and stroke (Xia & Li, 2018), decreased memory and learning, depression and suicide, increased stress levels, and poor decision-making. Previous studies have revealed the detrimental impacts of social media addiction on users' health. A systematic review conducted by Khan and Khan (Akhter-Khan et al., 2021) identifies that social media addiction adversely affects users' mental health. This addiction is associated with elevated stress levels, as well as feelings of loneliness and sadness (Ali et al., 2022).

Social media generally denotes internet-based platforms operated by third parties that primarily emphasize social interactions, community-driven contributions, and the sharing of content among their user base. These platforms exclusively showcase content generated by users, rather than material licensed from third parties (Asur & Huberman, 2010). Notable examples of social networking sites include Facebook, Instagram, and TikTok, which facilitate connectivity among individuals in the digital realm, irrespective of geographical limitations or other challenges (Kaye, 2021; Boyd & Ellison, 2007). Recent research indicates a marked increase in the popularity of social networking sites among adolescents, particularly in the wake of stringent measures instituted by numerous countries to combat the COVID-19 pandemic, including social distancing, lockdowns, and quarantine protocols (Marengo et al., 2021). In the current context, social media have emerged as a vital component of daily life, particularly for children and adolescents (Alshamrani et al., 2021). For these demographic groups, social media serve as a means of socialization that fosters connections among individuals. Notably, social media are utilized not only for social communication and entertainment but also for the exchange of opinions, the acquisition of new knowledge, the establishment of business networks, and the initiation of collaborative projects (Malesev & Cherry, 2021).

Although social media addiction is not classified as a disorder in the DSM-5, it is a widely recognized global issue (Cerniglia et al., 2017). This addiction exhibits both emotional and physical characteristics, which may include mental health problems, impatience, social isolation, disruption of relationships, weight changes (either loss or gain), vision issues, poor nutrition, and insomnia, among others (Li et al., 2021). Various risk factors for social media addiction have been identified at the individual, family, relational, school, and community levels (Jin et al., 2020; Tereshchenko & Kasparov, 2019). Specific risk factors include

impulsivity, neuroticism, depression, anxiety, low family support, and family dysfunction, among others.

The use of social media, the internet, and smartphones has significantly increased over the past decade. According to We Are Social (2022), there are currently 4.95 billion internet users, 4.62 billion social media users, and 5.31 billion smartphone users worldwide. On average, these users spend 6 hours and 58 minutes per day online, with 92% of internet users accessing the web through their smartphones. Research suggests that as smartphones have become more affordable for the general public, internet usage has risen sharply, with social media applications accounting for the largest share of this increase (Ergün et al., 2021; We Are Social, 2022). In the absence of smartphones, the utilization of social media applications and the internet would likely be considerably diminished (Montag et al., 2019). These three technologies are deeply interconnected (Davey et al., 2018), and the lack of any one of them would likely result in significant changes to their usage, popularity, impacts, and overall consequences.

The Self-Determination Theory of psychological well-being has been selected as the theoretical framework for this study due to its emphasis on the intrinsic motivation that drives individuals' choices, independent of external influence or interference. This theory focuses on the extent to which behaviours are self-motivated and autonomously regulated. For example, a strong determination to attain a specific goal can empower students to persist in their efforts, despite facing various challenges. Such self-determination enhances self-efficacy, which is critical for task completion and contributes positively to psychological well-being. Additionally, self-determination can serve as an effective strategy for mitigating social media addiction and reducing feelings of loneliness, thereby promoting the psychological well-being essential for achieving improved academic performance.

A growing body of research investigating social media use has revealed that the extensive use of social media platforms is correlated with reduced performance on cognitive tasks and in mental effort (Uncapher et al., 2017). Overall, it appears that individuals who have a problematic relationship with social media or those who use social media more frequently are more likely to develop negative health conditions. Hence a need to investigate the level of relationship both social media and loneliness have on the psychological well-being of undergraduate students. These set of hypotheses will give an answer

These hypotheses were tested

1. Loneliness will significantly correlate with psychological well-being among undergraduate
2. Social media addiction will significantly correlate with psychological well-being among undergraduate

Methods

Participants

One hundred and sixty-eight (168) undergraduate students with a mean age of 20.66 and S.D of 1.125 were drawn using multi-stage (cluster, simple random: by balloting and purposive) sampling techniques as participants from Enugu State University of Science and Technology, Enugu. The students were clustered according to their faculties, simple random: balloting was used to pick the faculties/departments, while purposive sampling techniques were used to drawn the participants from the following faculties: education thirty-five (35), Agriculture and

natural resource management thirty-four (34), Environmental sciences thirty (30), Engineering thirty-two (32) and Law thirty-seven (37). **Inclusive criterion:** undergraduate regular student from the selected faculties. **Exclusive criterion:** reverser of the inclusive criterion.

Instrument

These instruments were used for data collection:

I. Psychological Well-Being Scale (Ryff, 1989) and

II. UCLA Loneliness Scale (Russell et al., 1978)

III. Andreassen et al., (2012) Bergen social media addiction scale

Psychological Well-Being Scale (Ryff, 1989)

The psychological well-being scale is an eighteen (18) self-report scale designed to measure psychological well-being by Ryff (1989). The instrument consists of six sub-scales (with three items in each sub-scale): (a) Autonomy, (b) Environmental mastery, (c) Personal growth, (d) Positive relationships with others, (e) Purpose in life, and (f) Self-acceptance. Participants were made to respond on a 6-point scale that ranges from "strongly agree" (1) to "strongly disagree" (6). The Autonomy subscale items are Q15, Q17, and Q18. The Environmental Mastery subscale items are Q4, Q8, and Q9. The Personal Growth subscale items are Q11, Q12, and Q14. The Positive Relations with Others subscale items are Q6, Q13, Q16. The Purpose in Life subscale items are Q3, Q7, Q10. The Self-Acceptance subscale items are Q1, Q2, and Q5. The following items are reversed: 1,5,9,10,12,13,15,18. Higher scores indicate higher psychological well-being within the respective dimension. The internal consistency reliability coefficients as reported by Ryff (1989) range from .86 to .93 for the six sub-scales.

Russell, Peplau and Cutrona, (1980). The revised UCLA Loneliness Scale

The UCLA Loneliness Scale was redesigned by Russell et al., in 1980. It has 20 items and was tested for concurrent and discriminate validity. Items 1, 5, 6, 9, 10, 15, 16, 19, 20, and 20 are all reverse-rated. The scale has 10 positively and 10 negatively scored items. The measure has a test-retest correlation of.73 over two months and strong internal consistency (coefficient alpha =.96) (Ferguson et al., 1978).

Andreassen et al., (2012) Bergen social media addiction scale

Bergen Social Media Addiction Scale is developed from the Bergen Facebook Addiction Scale with a simple modification of the term Facebook to Social media. It's a short survey used in psychological research that has been widely accepted by the psychology community. It's quick and something you can take yourself. It is a 6 item scale designed to expose the difficulties an individual faces due to social media's excessive usage and assess the severity accordingly. The six items of BSMAS are measured against 5 standard responses of "very rarely," "rarely," "sometimes," "often," "very often." The Bergen social media addiction scale is straightforward and short, with an accurate social media addiction assessment. The 6 items are measured against a 5 point Likert scale, 1 for "very rarely" to 5 for "very often." Then scores of each item are added to get the overall score of the BSMAS. The total score of BSMAS ranges from 6-30. According to researchers, when you score more than 3 for 4 items out of 6, it is definitely an addiction indicator. The researcher carried out a pilot study with thirty (30) participants from IMT with the aid of purposive sampling techniques which yielded a Cronbach alpha of .846, which shows the scale is reliable.

Procedures

Undergraduate students were drawn as participants from five faculties in Enugu State University of Science and Technology (ESUT) using multi-stage sampling (cluster, simple random: by balloting, and purposive) techniques for this study. The students were clustered according to their faculties, simple random: by voting was used to pick the faculties while purposive sampling techniques were used to draw students from the five selected faculties. The researchers employed a research assistants, who are faculty student executives from the selected faculties, to help distribute and retrieve the questionnaire. One hundred and ninety-eight (198) questionnaires were distributed; one hundred and eighty-five (185) were returned. Among the returning ones, nine (9) bear multiple initials and the other eight (8) were not properly responded to, which makes the numbers properly responded to be one hundred and sixty-eight (168), which were used for data analysis.

Design and Statistics

Correlational research design was adopted to investigate relationships between variables without the researchers controlling or manipulating any of them, this approach can help identify patterns and associations between variables, but it cannot establish causation (Bhandari, 2023). The statistical test that was used for data analysis is the Pearson correlation coefficient using Statistical Package for Social Sciences (SPSS) Version 27 software.

Results

Table I: descriptive and correlational statistics on the relationship between loneliness, social media addiction and psychological well-being

S/N	variables	M	S.D	1	2	3	4	5	6	7	8	9	10	11	12
1	Age	20.66	1.125	1	-.179	.616**	.362*	.489**	.127	.116	.293	.252	.309	.382*	.157
2	Gender	1.75	.440		1	-.137	-.308	-.101	-.041	.251	-.102	-.010	-.036	-.014	.206
3	Level of study	356.2	80.07			1	.102	.297	-.033	-.023	.033	.114	.118	.132	.096
4	Loneliness	54.00	12.60				1	.434*	-.238	-.427*	-.136	-.101	.218	-.032	-.314
5	Autonomy	8.968	4.554					1	.330	-.048	.213	.203	.357*	.525**	.120
6	Environmental Mastery	13.00	3.610						1	.535**	.524**	.719**	.433*	.815**	.376*
7	Personal Growth	14.71	3.438							1	.564**	.633**	.453**	.690**	.292
8	Positive Relations with Others	12.18	3.237								1	.650**	.501**	.773**	.489**
9	Purpose in Life	13.93	3.564									1	.471**	.833**	.355*
10	Self-Acceptance	10.06	3.036										1	.721**	.135
11	Psychological well-being	72.87	15.36											1	.401*
12	Social media	15.90	3.639												**1**

****. Correlation is significant at the 0.01 level (2-tailed).**
***. Correlation is significant at the 0.05 level (2-tailed).**

Age positively relates to the level of study r= .616**, autonomy r= .489** dimension of psychological well-being at p< .01 and loneliness r= .362* and psychological well-being r=

.382 at p< .05, this implies that an increase in age will cause an increase in the level of study, loneliness, autonomy dimension of psychological well-being and psychological well-being itself. Loneliness positively relates to autonomy r= .434* at p< .05 and negatively relates to personal growth r= -.427* at p< .05, this implies that an increase in the autonomy dimension of psychological well-being will causes an increase in loneliness, while an increase in personal growth dimension of psychological well-being will cause a decrease in loneliness. Social media addiction positively relates to Environmental self-mastery r= .378*, purpose in life r= .355* at p< .05 and positive relations with others r= .489** at p< .01 dimensions of psychological well-being, this implies that an increase in environmental mastery, purpose in life and positive relations with others dimensions of psychological well-being will cause an increase in social media addiction.

Discussion

The first hypothesis tested which stated that loneliness will significantly relate to psychological well-being was not confirmed, hence the hypothesis was rejected. The findings of the study suggest that there is no direct correlation between loneliness and psychological well-being. In other words, experiencing loneliness does not necessarily indicate poor psychological well-being. Psychological well-being encompasses mental wellness, the ability to avoid negative interpretations of events, and the absence of a desire to withdraw from social interactions. Feelings of loneliness and the inclination towards self-isolation may stem from distorted perceptions of one's surroundings, potentially contributing to a decrease in students' overall psychological well-being. Nevertheless, the research results imply that the experience of loneliness and the desire for self-isolation do not directly influence the presence or absence of psychological well-being.

Which means that an increase in psychological well-being will cause a decrease in loneliness. Different factors might have contributed to the results obtained, one of such is cultural variation. The culture of the cited author is different from the one used in this study, also different the instruments used, the timing, the participants' sampled et al. The divergent result obtained does not invalidate the findings of this study, rather it is an eye-opener that loneliness might have a cultural definition of terms, and perceptions.

The study's findings suggest that there is no direct link between feelings of loneliness and the psychological well-being of undergraduate students. In other words, the research indicates that the desire for isolation or a preference for spending time alone does not automatically equate to poor mental well-being. This implies that a student can experience feelings of loneliness without necessarily encountering significant psychological well-being issues.

The second hypothesis tested which stated that social media will significantly relate to psychological well-being was partially confirmed, hence the hypothesis was accepted. The results indicate that social media addiction has a positive relationship with the dimensions of psychological well-being such as environmental mastery, purpose in life, and positive relations with others. This suggests that social media addiction may aid students in mastering their environment, setting achievable goals for themselves, and learning to relate positively to people around them. This implies that social media can potentially improve certain aspects of psychological well-being, which could in turn contribute to the mental well-being of students.

Implication of the findings

The findings are consistent with the Self-Determination Theory of psychological well-being, which has been adopted as the theoretical framework due to its emphasis on the intrinsic motivation underlying individuals' choices, free from external influence or interference. This theory explores the degree to which an individual's behaviour is self-motivated and self-directed. For instance, determination to achieve a particular goal enhances the student to push on irrespective of the situation he or she faces, because self-determination will increase the self-belief to do or complete the job at hand, which will help to bring about psychological well-being. Also, self-determination will be a tool to help to overcome social media addiction, and to help pulled out of loneliness so as to achieve the psychological well-being needed for better academic performance.

Some of the empirical work revealed agreed with the findings, while others did not. The results from this study have added to the literature which can be cited by future researchers.

The findings from this study indicate that loneliness is not linked to psychological well-being; however, social media addiction is found to have a partial association with psychological well-being. Therefore, school authorities should develop coursework that helps students engage with social media positively, enabling them to use it to their advantage. Additionally, parents, guardians, and caregivers should equip their children with social skills that facilitate interaction on social networking platforms. Finally, the government should support educational institutions in their efforts to combat social media addiction.

Limitation of the study

Some factors militated against this study, one of such is the sampled population. Sampling only one institution during exam reduces the numbers of participants, more students would have participated assuming more than one university was sampled.

The sampling techniques also affected the numbers of participants, the more students would have been sampled assuming a suitable sampling techniques was adopted.

Some demographic variable were left on answered by the participants which lead to the researcher not including the outcome in the study, demographic such as religious affiliation, parental working status et al. These control variables would have help to give this study direction.

Suggestion for further study

Future researcher should consider sampling population from different institution and also to consider carrying this study outside examination period, this will give student opportunity to participate in the research.

A suitable sampling technique should be considered by future researchers because this will give room for the selection of a larger population.

The future researcher should consider arranging the demographic variables in such a way that the participants will not leave them unattended.

Summary and Conclusion

The study investigated loneliness and social media as a correlate of psychological well-being among undergraduate students, findings revealed that loneliness did not correlate with psychological well-being, while social medial addiction positively relates to Environmental mastery, purpose in life and positive relations with others dimensions of psychological well-being. Hence therapist should assist students to channel positive energy to the use of social media.

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