

**How to Cite:**

Onyeizu, A. O., Nancy, N. O., Samuel, O., Binta, O. D., & Michelle, N. (2022). Social media addiction on mental health of undergraduates. *International Journal of Health Sciences*, 6(S6), 2524–2542. <https://doi.org/10.53730/ijhs.v6nS6.9799>

## **Social media addiction on mental health of undergraduates**

**Ajaegbu Oguchi Onyeizu (PhD)**

Department of Mass Communication, Babcock University, Ogun State, Nigeria

\*Corresponding author email: [ajaegbuo@babcock.edu.ng](mailto:ajaegbuo@babcock.edu.ng)

**Nwaolikpe Onyinyechi Nancy (PhD)**

Department of Mass Communication, McPherson University, Ogun State, Nigeria

**Okere Samuel (PhD)**

Department of Mass Communication, Babcock University, Ogun State, Nigeria

**Oloyede David Binta (PhD)**

Department of Mass Communication, Federal Polytechnic, Offa, Kwara State, Nigeria

**Nwaogu Michelle**

Department of Mass Communication, Babcock University, Ogun State, Nigeria

**Abstract**---Young people are avid social media users and, as such, might be prone to mental health issues because of the comparison of the kind of life they see on social media. The study was anchored on the social comparison theory; hence, it investigated the influence of social media on the mental health of Afe Babalola University undergraduates. The survey design with a sample of 382 was chosen from the population of 8500 students. The study adopted the purposive sampling technique as respondents were chosen based on their usage of social media. It was discovered that increased use of social media leads to deeper social life suffering in the sense that addicted users interact more and value social media friends more than real-life interactions with family and friends. The study also revealed a moderate correlation between the increase in social media addiction and the increase in the mental health of users. Thus, social media significantly influences the mental health of undergraduates in the university. The study concluded that social media addiction has a moderate impact on youth mental health and thus recommends that

more awareness be raised about the negative effects of social media in order for people to self-regulate their social media use and limit the extent of comparison with the ostentatious lifestyle portrayed on social media.

**Keywords**---anxiety, depression, social comparison theory, social life suffering, social media addiction, mental health.

## Introduction

Social media can be classified as revolutionary because it has changed the entire world in the sense that it affects the way we think and act both positively and negatively due to usage and interactivity. Like any new discovery, the social media phenomenon has raised concerns, especially among young people. There has been a series of research conducted in this direction towards its use, influence, effects on the masses and its future direction. The use of social media platforms has become part of people's daily activities, either for work-related or for fun purposes. Studies have shown that an average of 2 hours and 24 minutes is spent on social media in a day (Dean, 2021). Also, it has been asserted that the world's internet users total 4.021 billion, with social media users on a regular basis amounting to 3.96 billion, with an average user having eight social media accounts (WeAreSocial (2018); Dean, 2021). According to Statista (2021), there will be 44.63 million social network users in Nigeria by 2025, up from approximately 24.59 million in 2019.

A lot of young people are unaware of the not-so-real lifestyle of some personalities they see on social media. They live by the dictates of what is seen on social media and feel pressured to live up to those standards. This tends to lead to stressful situations and, invariably, the mental health issues plaguing the youth of today, such as anxiety, depression, and also suicide ideation. This phenomenon has necessitated further studies among researchers and also medical professionals. Islam and Sikder (2020 p.285) opine that “addiction towards social media may lead to lower self-esteem and, in effect, reduced mental health”. In other words, self-esteem may act as a buffer between social media addiction and mental health. They further found out that students in Bangladesh are over dependent on social media, and this leads to a loss of self-esteem and self-worth. In a study by Karim et al. (2020), it was demonstrated that highly intense social media users are most likely to experience a certain level of depression. However, this could be linked to the specific activities and time spent as justified by the study conducted by Keles et al. (2019) towards categorizing their findings into time spent, activity, investment, and addiction as important considerations in social media involvement.

With the heightened use of social media by youths, it could be an obvious conclusion that social media use has some form of influence on the lives of youths today. Over the last few years, there has been a noticeable increase in the number of reported diagnoses of anxiety, stress, and depression, while suicide ideation has also increased drastically among youth. In Nigeria, youths account for 19.48% of the population, yet they are the most susceptible to having one form of mental illness or another (Golding, 2018). Ramoni (2018), citing a neuro psychiatrist, reported that one in five Nigerian youths has mental health issues, with the most common being anxiety and depression. Furthermore, another consultant psychiatrist attributed the rise in suicide among Nigerian youths to social media (Pulse NG, 2019).

This heightened use of social media has caused isolation among individuals, which in turn affects socialisation and interaction with the people they should be communicating with, which then leads to depression and a lack of resilience to handle stress (Pulse NG, 2019). In a Nigerian survey of mental issues, some common mental issues were depression and anxiety disorders. These issues if experienced long-term and not handled appropriately could lead to suicidal ideation (Africa Polling Institute and EpiAFRIC, 2020). According to Aluh et al. (2018), mental depression has been the most diagnosed health predicament in Nigeria, leading to total destruction of the general coordinated thoughts of affected victims. Therefore, this study set out to find how social media addiction influences the mental health of Afe Babalola University undergraduates. The study proposed the following hypotheses:

- H1: The social life of Afe Babalola University students suffer significantly due to social media use.
- H2: Social media interference with normal daily life patterns significantly influences the mental health of Afe Babalola University students.
- H3: The extent of agitation significantly increases due to social media use by Afe Babalola University students.
- H4: Social media use significantly influences the anxiety level of Afe Babalola University students.
- H5: Social media addiction significantly influences mental health.

## **Literature Review**

This study was anchored on the Social Comparison Theory.

### **Social Comparison Theory**

This theory explains how individuals tend to garner information from a group of people to re-assess their abilities upward or downward. The

theory explains that human beings possess an ambition to know more about their opinions, capabilities and the possible heights they can attain and when they are unable to evaluate their own opinions and capabilities they seek others with whom to compare themselves to. The social media platforms have people from all walks of life, so it is easy to see groups to make comparisons with. For youths, this can be very unhealthy because the youthful age is a time when a variety of opinions are formed, some guided and some unguided, which tend to shape who they become. Also, with all the lavish lifestyles that can be found on social media, unhealthy and unrealistic aspirations can be set, and when they are not met accordingly, it could lead to distress, anxiety, depression, and even suicide ideation.

### **Social Media Addiction**

According to Moran (2014), everyone is addicted to something. An estimated 210 million people worldwide suffer from internet and social media addiction, with young, single females constituting the majority of this population (Mediakix, 2019). According to Sophia (2017), social media addiction is when someone spends too much time on social media sites. Simply put, social media addiction is the excessive use of online networking sites to the point where it interferes with one's normal daily routine. Although there is no single sign of social media addiction, many physicians have observed similar symptoms such as depression, anxiety, psychological disorders, and others, proving the existence of social media addiction (Sophia, 2017). Social media addiction affects about 12% of social media users, with symptoms including mood, physical and emotional reactions, cognition, and interpersonal and psychological issues (Hou, Xiong, Jiang, Song, and Wang, 2019). The most significant distinction between social media use and social media addiction is that social media addiction is generally associated with negative outcomes. Social media addiction has been linked to anxiety, depression, and long-term well-being, as well as poor academic performance, information comprehension, and life satisfaction (Hou et al., 2019).

Some indicators to show one's addiction to social media though not proven scientifically are constantly checking the phone for message notifications, turning to social media as the first thing in the morning, procrastination of more important activities to make posts or respond to social media messages, constantly monitoring engagements on social media posts, and so on. Ward (2019) adds some other indicators like checking social media first thing in the morning, removing posts that haven't received a certain number of likes, overanalyzing self-posts, constantly refreshing feeds, obsessing over becoming verified, being unable to go to the bathroom without a phone, and feelings of discontent when reactions to posts are not as desired. Some of these could raise anxiety levels thus affecting the well-being of the individual.

For the purpose of this study social media addiction and its influence on mental health will be measured using actual time spent on social media (in minutes, hours and days), social media use, level of social media interference with normal daily life pattern, 'social life' suffering, extent of agitation due to social media usage, extent of anxiety due to social media usage and extent of depression due to social media usage.

### **Social Life suffering**

Spending time with friends in a physical setting to derive pleasure is what social life entails. As a result, social life suffering in relation to social media addiction simply means a decrease in physical interaction with friends and/or family as a result of excessive social media use. Individuals' social lives can easily take a back seat due to the convenience of social media, which can lead to a loss of meaningful interaction and communication.

### **Social Media Interference with Normal Daily Life Pattern**

This refers to using social media in such a way that it has a negative impact on one's normal daily routine. This could be related to academics, as social media addiction may impair real-time learning. When social media users multitask by studying/working while using social media, it can result in a slow assimilation rate, which can have a negative impact on overall academic performance in the long run (Hou et al., 2019).

### **Agitation Due to Social Media Addiction**

Agitation caused by social media addiction is a constant state of worry or unease caused by a strong desire to use or check social media constantly. Bashir and Bhat (2017) discovered that youths are concerned when their messages on social media platforms are inaccessible. The obsession with habitual checking of social media messages exemplifies this, displaying a manifestation of anxiety caused by mobile phones.

### **Social Media Addiction and Anxiety**

Social media and anxiety disorder are two terms that are interconnected (Bashir and Bhat, 2017). When compared to other mental health issues such as depression and post-traumatic stress disorder (PTSD), anxiety disorder is often overlooked as a mental health issue; however, it has recently been on the rise. Welch (2019) reported in an article that a new study found that the percentage of youths suffering from anxiety, depression, and other mental health issues has risen dramatically over the last decade, but that the same trend was not observed in older adults. This rise corresponds to an increase in social media usage. The fear, nervousness, or anxiety caused by not

having a mobile phone and the services it provides is known as nomophobia (no-mobile-phone-phobia) (Cano, 2018). One of the services phones provide is social media accessibility, which is also one of the reasons most social media addicts are glued to their phones. The rise in nomophobia as a result of social media addiction is a prime example of how social media greatly influences anxiety (Cano, 2018).

### **Social Media Addiction and Depression**

According to Parekh (2017), depression is a major illness that has a negative impact on how you feel, think, and act. Furthermore, Parekh (2017) stated that symptoms can include: sadness or depression, feelings of worthlessness or guilt, difficulty thinking, concentrating, or making decisions, thoughts of death or suicide, and so on. The rise in depression has also been linked to social media (Norton, 2020). Excessive use of social media can cause anxiety, which can lead to depression (Bashir and Bhat, 2017, Norton, 2020). Many studies have found that increased social interaction online increases the risk of depression, though the quality of interaction is important (Selfhout, Brantje, Delsing, ter Bogt, and Meeus, 2009). According to Norton (2020), spending long hours on Twitter and Facebook can exacerbate depression; similarly, people suffering from depression are more likely to withdraw from physical interactions and spend more time online.

### **Review of Related Empirical Literature**

Masih and Rajkumar (2019) discovered in their study that adolescents who are internet addicts are more likely to develop mental health problems than other adolescents. Further findings showed that these adolescents develop the tendency to media multi-tasking, which is connected with symptoms of depression and social anxiety. In their study on social media addiction, Simsek et al. (2019) found that high school students tend to engage in more online conversations in order to deal with anxiety and frustration from the pressure of university entrance exams, and this in turn can lead to social media addiction. In a related study, Hou et al. (2019) discovered that social media addiction, mental health, and academic performance have a negative correlation. In another related study, Azizi et al. (2019) in a cross-sectional study showed that students' overdependence on social networking had a significant negative outcome on academic performance. It also found that internet addiction was higher in males than females.

Furthermore, Robinson et al. (2019) reported that social comparison, social media addiction, and social interaction are three social media behaviours that distinguish individuals with major depressive disorder and others. Keles et al. (2019) evaluated the effects of social media on psychological distress, depression, and anxiety in adolescents. The major findings of the study were categorized into four categories: time spent on social media, activity carried out on social media,

investment, and addiction. Time spent on social media was the highest risk factor for anxiety, psychological distress, and depression. Riaz et al. (2018) set out to determine the influence of social media in developing social anxiety among university students in Lahore and discovered that there is no relationship between social media and social anxiety.

Memon et al. (2018) searched for evidence on how the use of social media can negatively influence adolescents' deliberate self-harm and suicidal tendencies. The authors discovered that spending more time on social media increases exposure to and participation in self-harm practices. This is similar to Kelly et al. (2018) who analysed social media use on adolescent mental health and discovered that spending greater time on social media could lead to low self-esteem, poor sleep habits, and body image dissatisfaction, which in turn could result in depressive symptoms. In line with social comparison, De Vries et al. (2018) discovered that viewing positive Instagram posts can reduce or increase positive social comparison depending on the length of time spent on social media. O'Reilly et al. (2018) opined that there is little empirical evidence on the investigation of how adolescents perceive the use of social media, especially in the direction of knowledge acquisition. The study adopted a focus group approach where the thematic analysis showed evidence of social media perception being a threat to social wellbeing among adolescents.

Ólafsson (2018) anxiety among adolescents increased with increased use of social media in a cross-sectional survey to determine how social media is related to anxiety. Also, gender influences anxiety because girls experience anxiety more than boys. Marchant et al. (2017) adopted a systematic review approach to their study, and their results showed an existing relationship between internet use, self-harm behaviour in association with internet addiction, a high rate of internet use and suicide content. Adolescent Facebook behavior and anxiety were studied by Muzaffar et al. (2017). This study revealed that there was a significant relationship between having more Facebook friends, a heightened use of Facebook, and increased Facebook behaviour. McCrae et al. (2017) conducted a study analyzing the relationship between social media and depressive symptoms in children and adolescents. This study found that girls are more likely to show depressive symptoms than boys and that social media use had a correlation to self-objectification, body-shame, and dieting. Sandbys (2017) studied the effects of social media on mental health and discovered that the participants experienced FOMO (Fear Of Missing Out) and that social media has a negative impact on image comparison.

A study by Calancie et al. (2017) established that Facebook usage can trigger multiple adverse trait characteristics that are specific to anxiety disorder. In addition, Kircaburun (2016) discovered that there was a significant relationship between daily internet use, social media

addiction, and depression. Kim (2016) looked at the extent of online media activities' influence on adolescents' psychological well-being. The researcher focused on exploring the association between the adolescents' internet-based social media and their psychological well-being. These reviewed studies all point to the fact that social media overuse could lead to addiction, which in turn has adverse effects on the mental health of young people.

## Materials and Methods

A survey research design was adopted for this study with a population comprising 8,500 students (Registry, 2019) of Afe Babalola University, Ekiti state. The participants were certified eligible as they are young people, and it is common knowledge that young people are heavy users of social media. Using the purposive sampling technique, participants were selected based on their usage of social media. The sample comprised 382 respondents. In order to test the reliability of the research instrument, twenty (20) copies of the research instrument were distributed to students at Babcock University. The Cronbach's Alpha co-efficient values for the constructs were as follows: Social Media Usage (0.755), Social Life Suffering (0.789), Social Media Interference in normal daily life pattern (0.737), Extent of Agitation (0.824), Extent of Anxiety (0.838), and Extent of Depression (0.835). Simple and multiple linear regressions were adopted to test the proposed hypotheses. The questionnaire was distributed to 382 respondents with a retrieval rate of 94.5 per cent.

## Data Analysis

Table 1  
Demographic Characteristics of Respondents

Variable		Frequency(n)	Percentage (%)
Gender	Male	143	39.6
	Female	218	60.4
	Total	361	100.0
Age	15-16	29	8.0
	17-18	95	26.3
	19-20	146	40.4
	21-22	72	19.9
	23 – 24	19	5.3
	Total	361	100.0

Source: Field Survey 2020

According to Table 1, females made up the majority of study participants (60.4%), while males made up 39.6% of the study. These respondents were young. This is because the majority were between the ages of 17 to 20 (66.7%), followed by those who were between the ages of 21 to 25 (19.9%). This shows that the study was dominated by young female participants.



### Test of Hypotheses

H1: Social life suffers significantly due to social media use.

Table 2  
Influence of Social Media Use on Social Life Suffering of Undergraduates

Model	Standardi t	Sig. zed	Unstandardized Coefficients		
			B	Std. Error	Beta
(Constant)			-1.340	.403	
Social Media Usage			0.424	.039	0.497
7					
0.000					

Dependent Variable: Social Life Suffering  $R^2 = 0.247$

Source: Field Survey 2020

Table 2 shows that social life suffers significantly due to social media use ( $B = 0.424$ ,  $R^2 = 0.247$ ,  $t(360) = 10.847$ ,  $p < 0.05$ ). Results show that there is a moderate positive correlation coefficient ( $r = 0.497$ ), which implies that increased use of social media leads to deepening social life suffering. The model could explain 24.7 percent of the variance in social life suffering ( $R^2 = 0.247$ ). Consequently, the hypothesis that social life suffers significantly due to social media use was accepted.

H2: Social media interference with normal daily life pattern significantly influences mental health.

Table 3  
Showing the Influence of Social Media Interference on Mental Health of Undergraduates

Model	Unstandardized Coefficients		Standardi t	Sig
	B	Std. Error		
(Constant)		33.773	1.313	25.73
0				
Social	Media	5.204	.484	0.493
0.000				10.74
0.000				

---

Dependent Variable: Mental Health  $R^2 = 0.243$

Source: Field Survey 2020

---

Table 3 depicts that social media interference with normal daily life pattern significantly influences mental health ( $B = 5.204$ ,  $R^2 = 0.243$ ,  $t(360) = 10.745$ ,  $p < 0.05$ ). There is a positive correlation coefficient ( $r = 0.493$ ), which implies that increased social media interference with normal daily life pattern increasingly affects mental health. The model could explain 24.3 percent ( $R^2 = 0.243$ ) variance of social media interference in normal daily life. Therefore, the hypothesis that social media interference with normal daily life pattern significantly influences mental health was accepted.

H3: Extent of agitation significantly increases due to social media use.

Table 4  
Influence of Social Media Usage on Extent of Agitation of Undergraduates

Model Coefficients	Unstandardized		Standardized Coefficient	Sig.
	B	Std. Error	Beta	
(Constant)	8.730	0.762		11.450 .000
Social Media Usage	0.885	0.074	0.534	11.966 0.000

---

Dependent Variable: Extent of Agitation  $R^2 = 0.285$

Source: Field Survey 2020

---

Table 4 shows that extent of agitation significantly increases due to social media use ( $B = 0.885$ ,  $R^2 = 0.285$ ,  $t(360) = 11.966$ ,  $p < 0.05$ ). It shows that there is a positive correlation coefficient ( $r = 0.534$ ) which suggests increase in social media usage is associated with increase in extent of agitation in users. The model could explain 28.5 percent ( $R^2 = 0.285$ ) variance of extent of agitation. Therefore, the hypothesis that extent of agitation significantly increases due to social media use was accepted.

H4: Social media use significantly influences anxiety level.

Table 5  
Showing the Influence of Social Media Usage on Anxiety Level of Undergraduates

Standardi T	Sig. zed	Error			
Coefficients					
Beta					
(Constant)	4.844	0.702		6.897	0.000
Social Media Usage		0.730	0.068	0.492	10.70
3					
0.000					
Dependent Variable: Anxiety Level $R^2 = 0.242$					
Source: Field Survey 2020					

Table 5 indicates that social media use significantly influences anxiety level ( $B = 0.730$ ,  $R^2 = 0.242$ ,  $t(360) = 10.703$ ,  $p < 0.05$ ). There is a positive correlation coefficient ( $r = 0.492$ ), which suggests an increase in social media usage is associated with an increase in anxiety levels in users. The model could explain a 24.2 percent ( $R^2 = 0.242$ ) variation in anxiety level. Therefore, the hypothesis that social media use significantly influences anxiety levels was accepted.

H5: Social media addiction significantly influences mental health.

Table 6  
Influence of Social Media Addiction on Mental Health of Undergraduates

Model	Unstandardized		Standardi T	Sig.	
Coefficients			zed Coefficients		
B	Std.		Beta	Error	
(Constant)	31.594	1.019	30.99	0.000	
			5		
Social Media	2.785	0.166	0.664	16.80	0.000
Addiction				4	
Dependent Variable: Mental Health $R^2 = 0.440$					
Source: Field Survey 2020					

Table 6 demonstrates that social media addiction has a negative impact on mental health ( $B = 2.785$ ,  $R^2 = 0.440$ ,  $t(360) = 16.804$ ,  $p$

0.05). The result shows that there is a positive correlation coefficient ( $r = 0.664$ ), which suggests an increase in social media addiction is moderately associated with an increase in the mental health of users. The model could explain 44 percent ( $R^2 = 0.440$ ) of the variance of undergraduates' mental health. Therefore, the hypothesis that social media addiction significantly influences mental health was accepted.

### **Discussion of Findings**

The major aim of the current study was to explore the influence of social media addiction on mental health among youths of Afe Babalola University. Of all the respondents, the females ( $n = 218$ ; 60.4%) were more represented than the males ( $n = 143$ ; 39.6%). Key findings are discussed below.

#### **Social Life Suffering due to Social Media Usage**

This study found that the participants experienced social life suffering due to heightened social media usage, which indicates that social media users are prone to suffering in their social life. For example, with social media friends, one does not need real-life friends. This finding is synonymous with O'Reilly et al (2018), where it was discovered that there were social consequences for adolescents' social media addictive behavioral patterns in which addicted individuals replaced quality time with family and friends with social media. They further noted that some people can get addicted (to social media) and feel like they have to stay on that website or social media, while others admitted that some people cannot survive without a phone and they do not like to talk to their families most of the time. Another study which further affirms these results is the findings of Kircaburun (2016), who found that human beings need physical interactions, and the artificial/superficial interactions they receive online might not be enough to feel fulfilled psychologically and emotionally.

On the other hand, Kim (2016) opined that one of the benefits of social media use is that it strengthens social relations and socializing, while RSPH (2017) states that social media helps in making, maintaining, and building upon relationships with family and friends. However, the findings of Hoge et al. (2017) reveal that time spent on social media displaces face-to-face interactions, which in turn intensifies their social impairment. It can be inferred that excessive social media use can lead to social life suffering, that is, a clear decline in physical interaction with family and friends or meaningful physical relations between family and friends. Conclusively, the more people are addicted to social media, the more people refrain from seeing and interacting with the people that matter most in their lives, as social media seems like the more preferred/suitable option to interact with one another, thus creating disconnectedness, which in turn could lead to other things.

### **Social Media Interference with Normal Daily Life Pattern**

This current study reveals that excessive social media use has the ability to interfere with the normal daily routine of individuals. de Vries et al. (2018) reported a more negative mood balance after using Facebook. Azizi et al. (2019) also found that there is a negative correlation between students' social networking and their academic performance, i.e., an increase in the excessive use of social media results in a decrease in academic performance. In contrast, Revathy et al. (2018) found that content on stress and depression and platforms where women discussed issues such as fitness, stress, and postpartum depression helped women to overcome some of those issues, which in turn positively affected their mood (over a period of time). Nevertheless, Hou et al. (2019) found that social media addiction is negatively associated with mental health and academic performance. In other words, reduced social media use results in increased academic efficiency. This analysis suggests that social media usage interferes with undergraduates' normal daily life patterns. The findings showed that excessive social media use has the power to inhibit real-time learning, cause slow assimilation, or simply serve as a distraction, and the result of this is affected grades. This is just another indicator of social media interference with normal daily life patterns.

### **Extent of Agitation due to Social Media Usage Level of Anxiety due to Social Media Usage**

The results from this research revealed that the participants of this study were highly agitated due to social media use. These findings are consistent with the findings of Calancie et al. (2017), who discovered that participants frequently felt the need to check Facebook to stay up to date on what was going on. also revealed that people feel a certain pressure to stay connected to the site even when the desire to be disconnected is strong, and this could be overwhelming. In addition, Simsek et al. (2019) revealed that as the duration of social media use increases, the level of addiction (with all dimensions) also increases. This implies that as time goes by, individuals that use social media can spend less time away from their social media, indicating that they behave agitatedly if they are kept away from their social media for too long.

Some of the ways that participants felt agitated due to social media usage was that: they frequently checked their social media and they felt the need to check their social media immediately after they received a notification. They were, however, not extreme in the sense that they did not really feel they were missing out or they were worried when they were not able to check their social media. The results obtained from this study revealed that the participants of this study had anxiety ascribable to social media usage to a low extent. The test of hypothesis disclosed that an increase in social media usage is

associated with an increase in anxiety levels in users. These results are in accordance with the findings of Hughes (2018), who found that excessive use of social media platforms contributes to greater levels of FOMO, which also contributes to higher levels of social anxiety. Sandbys (2017) also had similar results, which support the notion that social media causes or increases FOMO, which in this study, is described as social comparison linked with anxiety. Although it is to a low extent, the study revealed that social media negatively influences anxiety among youths.

### **Extent of Depression due to Social Media Use**

The findings obtained from this study revealed that respondents had experienced depression to a low extent due to social media use. The findings from this study agree with the findings of Kleemans et al. (2016), which revealed that manipulated Instagram photos have a negative effect on the body image of adolescent girls, as it leads to negative self-comparison, which leads to lower bodily self-esteem and self-dissatisfaction. The findings of this study and those of other studies substantiate the use of the social comparison theory in this research. Youths negatively compare themselves to other people on social media, and this causes them to have self-dissatisfaction and lower self-esteem and also causes them distress, which in turn can all lead to depression. However, a study by Jelenchick et al. (2012) negates this, as the study found that there were no significant associations between social media use and depression.

This revelation corroborates the social cognitive theory, which stands on the belief that a person not only learns from his/her own experiences but also by observing the actions of others and the results of those actions (Glanz, 2001). According to these results and the findings of Davis and Pimpleton-Gray (2017), social media use has the ability to cause people to copy undesirable actions (such as self-injury and suicide/suicide ideation) through observational learning, which is one of the concepts of social cognitive theory. The results from this study, in conjunction with the findings of other studies, have proven that depression has negative links to social media.

### **Social Media Addiction Significantly Influences Mental Health**

The results show that social media addiction significantly influences mental health. There is a positive relationship which suggests that an increase in social media addiction is moderately associated with an increase in the mental health of users. Social life suffering, social media usage, social media interference with normal daily life patterns, and level of agitation were used to quantify social media addiction, whereas anxiety and depression were used to assess mental health. The hypotheses based on each of these concepts were proven, thus validating the final hypothesis, which says that social media significantly influences mental health.

## Conclusion

The purpose of this study was to determine the influence of social media addiction on mental health among students at Afe Babalola University. The study revealed that social media addiction moderately influences mental health among youths. The study showed that people who use social media excessively have significant negative effects on their social life, their daily routine, and the level of agitation they experience. This study also revealed that an increase in social media addiction is paralleled by a decrease in mental health. Youths (who were represented by students in this study) are active users of social media and, with the continual development in technology, that is hardly going to change. Therefore, it is imperative for everyone to be educated on the potential dangers of social media addiction on mental health in order for the correct preventive measures to be taken. Lastly, this study revealed that it is not necessarily the quantity of time spent on social media that is important, but more so the quality of time spent on social media.

## Recommendations

The following recommendations have been made based on the findings of this study:

- Firstly, more awareness should be created about the negative effects of excessive social media use. Schools should increase the digital literacy of young people by helping them recognise cases of cyber bullying, depressive posts, uploads, or content from people and, ultimately, any pattern of unhealthy social media use. Parents should also be made more aware so that they can continue the learning process at home.
- Secondly, people should also be made aware of the dangers of comparison (social comparison theory) and the power of social media to change their thinking or cause them to do things they would not ordinarily do.
- Lastly, meaningful physical and social interaction should be encouraged. Parents and children should try and ensure that they are actually present when having face-to-face interactions so that they can be more meaningful and so that social media will not serve as a substitute for such meetings. Additionally, outside interactions should be encouraged so that people can take their minds off of social media and experience new things, which can help to combat or reduce social media addiction.

## Competing Interests

On behalf of all authors, the corresponding author states that there is no conflict of interest.

## Funding Agency

There is no funding agency.

## Data availability

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

## References

- Africa Polling Institute & EpiAFRIC (2020) Mental health in Nigeria survey. Available from <https://nigeriahealthwatch.com/wpcontent/uploads/bsk-pdf-manager/2020/01/MENTAL-HEALTH-IN-NIGERIA-SURVEY-Conducted-by-Africa-Polling-Institute-and-EpiAFRIC-January-2020-REPORT.pdf>. [Accessed 10th April, 2021].
- Aluh, D.O., Anyachebelu, O.C., Anosike C. & Anizoba E.L. (2018) 'Mental health literacy: what do Nigerian adolescents know about depression?' *International Journal of Mental Health Systems*. 12(8). doi: 10.1186/s13033-018-0186-2.
- Azizi, S. A., Soroush, A. & Khatony, A. (2019) 'The relationship between social networking addiction and academic performance in Iranian students of medical sciences: A cross-sectional study', Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6500070/>. [Accessed 24th May, 2020].
- Bashir, H. and Bhat, S. (2017). Effects of Social Media on Mental Health: A Review. *The International Journal of Indian Psychology*, 4(3), 2348-5396. doi:10.25215/0403.134.
- Berryman, C., Ferguson, C. J. & Negy, C. (2017) 'Social media use and mental health among young adults', *Psychiatry Quarterly*, 89(4), pp. 1-8. DOI: 10.1007/s11126-017-9535-6.
- Calancie, O., Ewing, L., Narducci, L. D., Horgan, S. & Khalid-Khan, S. (2017) 'Exploring how social networking sites impact youth with anxiety: A qualitative study of Facebook stressors among adolescents with an anxiety disorder diagnosis', *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 11(4). DOI: <http://dx.doi.org/10.5817/CP2017-4-2>.
- Davis, S. J. & Pimpleton-Gray, A. M. (2017) 'Facebook and social contagion of mental health disorders among college student', *IAFOR Journal of Psychology and the Behavioral Science*, 3(2). DOI: <https://doi.org/10.22492/ijpbs.3.2.03>.
- Dean, B. (2021) Social network usage & growth statistics: how many people use social media in 2021. Available from <https://backlinko.com/social-media-users>. [Accessed 6th April, 2021].
- De Vries, D. A., Möller, A. M., Wieringa, M. S., Eigenramm, A.W. & Hamelink, K. (2018) 'Social comparison as the thief of joy. emotional consequences of viewing strangers' instagram posts', *Media Psychology*, 21(2), pp. 222-245. DOI: <https://doi.org/10.1080/15213269.2016.1267647>.
- Glanz, K. (2001). Nutrition in the prevention and treatment of disease social cognitive theory. Available from: <https://www.sciencedirect.com/topics/medicine-and-dentistry/social-cognitive-theory>. [Accessed 25th February, 2020].



- Golding, S. (2018) The challenges of mental health and youths in Nigeria. Retrieved from: <https://www.wellbeingwomen.org/the-challenges-of-mental-health-and-youths-in-nigeria>. [Accessed 20th September, 2020].
- Hou, Y., Xiong, D., Jiang, T., Song, L. & Wang, Q. (2019) Social media addiction: its impact and intervention. *cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 13(1). DOI: <http://dx.doi.org/10.5817/CP2019-1-4>. Available from: <https://cyberpsychology.eu/article/view/11562/10373>.
- Hughes, S. (March). The effects of social media on depression, stress and anxiety. Department of Psychology. Dublin Business School. Available from: [https://esource.dbs.ie/bitstream/handle/10788/3481/ba\\_hughes\\_s\\_2018.pdf?sequence=1&disAllowed=y](https://esource.dbs.ie/bitstream/handle/10788/3481/ba_hughes_s_2018.pdf?sequence=1&disAllowed=y). [Accessed 5th April, 2021].
- Islam, T., & Sikder, P. W. (2020) 'Social media addiction & its effect on mental health among the private university students in Bangladesh: A questionnaire based survey', *International Journal of Academic Research in Business and Social Sciences* 10(4), pp. 281-294. Available from [https://hrmars.com/papers\\_submitted/7129/Social\\_Media\\_Addiction\\_its\\_Effect\\_on\\_Mental\\_Health\\_among\\_the\\_Private\\_University\\_Students\\_in\\_Bangladesh\\_A\\_Questionnaire-Based\\_Survey.pdf](https://hrmars.com/papers_submitted/7129/Social_Media_Addiction_its_Effect_on_Mental_Health_among_the_Private_University_Students_in_Bangladesh_A_Questionnaire-Based_Survey.pdf). [Accessed 24th April, 2020].
- Karim, F, Oyewande, A. A., Abdalla, L., Ehsanullah, R. C. & Khan, S. (2020) 'Social media use and its connection to mental health: A systematic review', *Cureus* 12(6). Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7364393/>. [Accessed 24th April, 2020].
- Keles, B., McCrae, N. & Grealish, A. (2019) 'A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents', *International Journal of Adolescence and Youth*, 13(1). DOI: <https://doi.org/10.1080/02673943.2019.1590851>.
- Kelly, Y., Zilanawala, A., Booker, C. & Sacker, A. (2018) 'Social media use and adolescent mental health: findings from the UK Millennium cohort study', *Clinical Medicine: Elsevier* 6(1). DOI: <https://doi.org/10.1016/j.eclinn.2018.12.005>.
- Kim, H. H. (2016) 'The impact of online social networking on adolescent psychological well-being (WB): a population-level analysis of Korean school-aged children', *International Journal of Adolescence and Youth*, 22(3). DOI: <https://doi.org/10.1080.02673843.2016.1197135>.
- Kircaburun, K. (2016) 'Self-esteem, daily internet use and social media as predictors of depression among turkish adolescents', *Journal of Education and Practice*, 7(24). Available from: <https://files.eric.ed.gov/fulltext/EJ111285.pdf> [Accessed 24th April, 2020].
- Kleemans, M., Daalmans, S., Carbaart, I. & Anschütz, D. (2016) 'Picture perfect: the direct effect of manipulated instagram photos on body image in adolescent girls', *Media Psychology*, 21(1), pp. 93-110. DOI: <https://doi.org/10.1080/15213269.2016.1257392>.
- Marchant, A., Hawton, K., Stewart, A., Montgomery, P., Singaravelu, V., Lloyd, K., Purdy, N., Daine, K. & John, A. (2017) 'A systematic review of the relationship between internet use, self-harm and suicidal behaviour in young people: The good, the bad and the unknown', *PLoS ONE*, 13(3): e0193937, DOI: 10.1371/journal.pone.0193937.
- Masih, J. & Rajkumar, R. (2019) 'internet addiction disorder and mental health in adolescent. *Journal of Depression and Anxiety*. DOI: 10.4172/2167.S13-002.

- Available from: <https://www.longdom.org/open-access/interest-addiction-disorder-and-mental-health-in-adolescents.pdf>. [Accessed 24th April, 2020].
- McCrae, N., Gettings, S. & Pursell, E. (2017) 'Social media and depressive symptoms in childhood and adolescence: a systematic review', 2(4). Available from: <https://link.springer.com/article/10.1007/s40894-017-0053-4>. [Accessed 24th April, 2020].
- Mediakix (2019). These 8 Social Media Addiction Statistics Show Where We're Spending Our Time. (Blog Post) Retrieved from: <https://mediakix.com/blog/social-media-addiction-statistics/>
- Memon, A. M., Sharma, S. G., Mohite, S. S. & Jain, S. (2018) 'The role of online social networking on deliberate self-harm and suicidality in adolescents: a systematic review of literature', *Indian Journal of Psychiatry*, 60(4), pp. 384-392. DOI: 10.4103/psychiatry.IndianJPsychiatry\_414\_17. Available from: [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6278213/#\\_ffn\\_sectitle](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6278213/#_ffn_sectitle).
- Moran, M. (2014, February 26). Face it, everyone's addicted to something. *The Guardian*. Retrieved from: <https://www.google.co.uk/amp/s/amp.theguardian.com/commentisfree/2014/feb/26/addicted-cigarettes-coffee-video-games-question-time-exercise>.
- Muzaffar, N., Brito, E. B., Fogel, J. Fagan, D., Kumar, K. & Verma, R. (2017). 'The association of adolescent facebook behaviours with symptoms of social anxiety, generalized anxiety and depression', *Journal of the Canadian Academy of Child Adolescent Psychiatry*, 27(4), pp. 252-260. Available from: <https://www.cacapa-cepa.org/wp-content/uploads/The-Association-of-Facebook-Behaviors.pdf>. [Accessed 24th April, 2020].
- Norton, A. (2020, December 14). Depression Risk Rises from Too Much Social Media. *HealthDay News*. <https://www.webmd.com/depression/news/20201214/too-much-social-media-time-could-raise-risk-of-depression>.
- O'Reilly, M., Dogra, N., Whiteman, N., Hughes, J., Eruyar, S. & Reilly, P. (2018). 'Is social media bad for mental health and well-being? Exploring the perspectives of adolescents', *Clinical Child Psychology and Psychiatry*, 23(3). DOI: 10.1177/1359104518775154.
- Ólafarson, B. M. (2018). Social media use and its connection to anxiety and gender. Available from: [https://skemman.is/bitstream/1946/30650/1/40329\\_skemman.pdf](https://skemman.is/bitstream/1946/30650/1/40329_skemman.pdf). [Accessed 6th April, 2021].
- Ramoni, R. (2018, October 11) 1 in 5 Nigerian youths has mental problem. *Daily Trust*. Available from: <http://www.dailytrust.com.ng/1-in-5-nigerian-youths-has-mental-problem.html>. [Accessed 6th April, 2021].
- Revathy, V. R., Aram, I. A. & Sharmila, V. S. (2018) 'Social media as a means to overcome stress and depression among women', *Journal of Media and Communication*, 10(6). DOI: 10.5897/JMCS2018.0605. Available from: <https://academicjournals.org/journal/JMCS/article-full-text-pdf/C70384F57711>.
- Riaz, F., Ishaq, K. & Abbasi, A. (2018) 'Influence of social media in developing social anxiety: a study of university students in Lahore', *International Journal of Scientific and Research Publication*, 8(1). Available from: <http://www.ijsrp.org/research-paper-0218/ijsrp-p7427.pdf>.
- Robinson, A., Bonnette, A., Howard, K., Ceballos, N., Dailey, S., Lu, Y. & Grimes,

- T. (2019) 'Social comparisons, social media addiction and social interaction: an examination of specific social media behaviours related to major depressive disorder in a millennial population', *Journal of Applied Biobehavioral Research* 24(1). DOI: <https://doi.org/10.1111/jabr.12158>. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1111/jabr.12158>. [Accessed 24th April, 2020].
- Sandbys, S. G. (2017) 'Connectivity at a cost: adolescents' use of social media and its effects on their mental health', Available from: <https://www.massey.ac.nz/massey/fms/Colleges/College%20of%20Business/Communication%20and%20Journalism/Journalism%20Programme/Journalism%20Project%205.pdf?DOEF5F5572356B80FB9C34D34F4EFA6>. [Accessed 24th April, 2020].
- Simsek, A., Elciyar, K & Kizilhan, T. (2019) 'A comparative study on social media addiction of high school and university students', *Contemporary Educational Technology*, 10(2), pp. 106-119. DOI: <https://doi.org/10.30935/cet.554452>. Available from: <https://files.eric.ed.gov/fulltext/EJ1213656.pdf>.
- Sophia (2017). Social Media Addiction. (Blog Post). Retrieved from: <https://www.thewisdompost.com/essay/addiction/addiction/social-media-addiction/social-media-addiction-meaning-symptoms-causes-effects-treatment/1293>
- Statista (2021) Nigeria: number of social media users 2017-2025. Available from <https://www.statista.com/statistics/972907/number-of-social-network-users-in-nigeria/>. [Accessed 6th April, 2021].
- Ward, T (2018, June 8). How Much Social Media is Too Much? Retrieved from: <https://www.forbes.com/sites/tomward/2018/06/08/how-much-social-media-is-too-much/amp/>
- WeAreSocial. (2018) Global digital report 2018 Available from <https://www.wearesocial.com/uk/blog/2018/01/global-digital-report-2018>. [Accessed 6th April, 2021].
- Arnawa, I.K., Sapanca, P.L.Y., Martini, L.K.B., Udayana, I.G.B., Suryasa, W. (2019). Food security program towards community food consumption. *Journal of Advanced Research in Dynamical and Control Systems*, 11(2), 1198-1210.
- Gede Budasi, I. & Wayan Suryasa, I. (2021). The cultural view of North Bali community towards Ngidih marriage reflected from its lexicons. *Journal of Language and Linguistic Studies*, 17(3), 1484-1497
- Herman, H., Ardani, I. G. A. I., Aryani, L. N. A., Windiani, I. G. A. T., Adnyana, I. G. N. S., & Setiawati, Y. (2022). Signs and symptoms of depression in children and adolescents with type 1 diabetes mellitus: A case report. *International Journal of Health & Medical Sciences*, 5(1), 150-153. <https://doi.org/10.21744/ijhms.v5n1.1861>