Social Media Influence on Health Adherence and Mental Well-Being among Nigerian Youths

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Abstract- Background: ***In today's digital age, social media platforms play a crucial role in disseminating health information. While they promise increased health awareness, their influence on health adherence and mental well-being among Nigerian youths remains unclear.***

Objectives: ***This study investigates the influence of social media on health adherence and mental well-being among Nigerian youths, focusing on barriers and facilitators to adherence to health recommendations and the emotional toll of alarming health content.***

Methods: ***A survey research design was adopted, targeting 384 Nigerian youths aged 18–50 years, active on Facebook, Instagram, and WhatsApp, and interacting with health-related content. Data were collected using a structured questionnaire and a modified DASS-21 questionnaire. Descriptive and inferential statistics analyzed social media usage, health behaviours, and mental well-being indicators, with a significance threshold set at*** $p < 0.05$.

Results: ***Credibility concerns significantly hinder the translation of health-related content into actionable behaviours. A significant portion of participants (63.4%) reported experiencing anxiety and stress after encountering distressing or alarming health information on social media. Positive messaging and enhanced digital health literacy were critical facilitators in mitigating these effects.***

Conclusions: ***Social media exerts a dual influence on health communication among Nigerian youths, serving as a tool for raising awareness and source of mental health challenges. To maximize its potential, credible health content, digital health literacy programmes, and mental health support systems must be integrated into digital platforms. Effective strategies are recommended to leverage social media as a positive tool for health promotion without compromising mental well-being.***

Indexed Terms- ***Social media, health adherence, mental well-being, Nigerian youths, health communication.***

I. INTRODUCTION

The rapid evolution of social media has redefined global communication, introducing new opportunities and challenges in various sectors, including health. Platforms such as Facebook, Instagram, and WhatsApp now play an integral role in shaping health behaviours, especially among youths (Moorhead et al., 2013). In Nigeria, where an estimated 70% of the population is under the age of 35 (Nigeria Population Commission, 2019), social media has emerged as a dominant source of health information. These platforms offer a unique opportunity for health promotion, providing easily accessible channels for disseminating health-related content and engaging audiences in issues such as preventive care, disease awareness, and mental health. However, the dual nature of social media raises critical concerns about its impact on health adherence and mental well-being, particularly in a developing country context where access to reliable healthcare is often limited.

The role of social media in health promotion has been extensively studied worldwide. Studies have shown that social media facilitates health awareness campaigns, encourages preventive behaviours, and supports self-monitoring of health status (Capurro et al., 2014; Bhattacharyya & Roy, 2016). For example, during the COVID-19 pandemic, social media platforms were instrumental in disseminating critical

health information, promoting vaccination campaigns, and educating the public on preventive measures (Depoux et al., 2020). However, the unregulated nature of these platforms has also allowed for the proliferation of misinformation, alarmist health narratives, and unverified remedies, which can undermine public trust and fuel anxiety (Cinelli et al., 2020).

In Nigeria, social media serves as both a lifeline and a liability for health communication. While it bridges gaps in healthcare accessibility by providing critical information to underserved populations, it also exposes users to a flood of conflicting messages, many of which lack scientific support (Odiboh et al., 2022). Nigerian youths, who are among the most active social media users, are particularly vulnerable to the psychological toll of consuming distressing health-related content. Research indicates that exposure to alarming health information via social media can increase anxiety, depression, and stress levels, which in turn affect health-seeking behaviours (Keles et al., 2019; Berryman et al., 2018). For many, the fear of illness or the stigma associated with certain health conditions deters them from seeking medical help or adhering to health recommendations.

The mental health implications of social media use are well documented in the literature. Studies have linked prolonged exposure to social media to negative emotional outcomes, including feelings of inadequacy, anxiety, and depression (Ivie et al., 2020; Andreassen et al., 2017). In the Nigerian context, where mental health issues are often stigmatized and poorly addressed, the psychological impact of social media is a growing concern. Youths frequently encounter alarmist health narratives and exaggerated claims that exacerbate their stress levels, creating a cycle of fear and avoidance (Aluh et al., 2019). This indicates the need to investigate the role of social media in shaping both health adherence and mental well-being within this demographic.

While there is a growing body of research on the relationship between social media and health behaviours globally, limited attention has been given to the unique dynamics in developing countries such as Nigeria. Existing studies often fail to account for the socioeconomic, cultural, and infrastructural factors that influence health communication in these settings (Folaranmi et al., 2022). For example, low health literacy levels, combined with limited access to credible sources, make Nigerian youths particularly susceptible to misinformation. Furthermore, the absence of effective regulatory frameworks for online health content exacerbates these challenges, resulting in many users being unable to distinguish between accurate and misleading information.

The problem this study seeks to address lies in the dual role of social media as both a facilitator and a barrier to health adherence and mental well-being among Nigerian youths. On the one hand, social media provides an accessible platform for health promotion, offering opportunities for engagement and self-care. On the other hand, it contributes to the spread of misinformation, fosters emotional distress, and creates barriers to effective health decision-making. These contradictory effects highlight the urgent need for empirical research to understand how social media influences health behaviours and mental health outcomes in this demographic.

To achieve this, the study is guided by two primary objectives:

1. The factors that facilitate or hinder the relationship between social media use and adherence to health recommendations among Nigerian youths should be identified and analysed.
2. Ascertain the influence of social media use on the mental well-being of Nigerian youths in relation to health checkup behaviours and adherence.

The study also tests the following hypothesis:

There was no significant relationship between the influence of social media use on mental well-being (depression, anxiety, and stress levels) or the frequency of health checkup behaviours and adherence among Nigerian youths.

This research aims to fill the gap in understanding the intricate relationships among social media use, health adherence, and mental well-being, providing evidence-based insights to guide interventions that optimize the benefits of social media while addressing its challenges.

Social Media Use in Health Communication

The pervasive use of social media has fundamentally transformed health communication globally, creating unprecedented opportunities for disseminating health information, fostering engagement, and promoting behaviour change (Korda & Itani, 2013). Social media platforms such as Facebook, Instagram, WhatsApp, and Twitter provide a dynamic environment in which health organizations, practitioners, and users can interact. These platforms allow for the rapid dissemination of health-related information, enabling users to access advice, share experiences, and engage in discussions (Ventola, 2014). In particular, health

campaigns targeting behavioural changes, such as smoking cessation, vaccination uptake, and lifestyle modifications, have been widely conducted via social media, with varying degrees of success (Korda & Itani, 2013). However, the effectiveness of these campaigns largely depends on the credibility, accessibility, and context of the information shared.

Globally, studies have shown that social media plays a crucial role in increasing health literacy and awareness. For example, Moorhead et al. (2013) reported that social media platforms are critical for improving health outcomes by providing users with timely access to vital health information. In the Western world, these platforms have been instrumental in public health campaigns, particularly during crises such as the COVID-19 pandemic. Platforms such as Instagram and Twitter are used to share guidelines, update the public, and dispel misinformation (Liu, 2020). Social media also enhances patient engagement and facilitates interactions between healthcare providers and patients, thereby improving the overall healthcare experience (Kietzmann et al., 2011). Despite these benefits, challenges such as misinformation, unequal access to digital resources, and limited digital health literacy persist, especially in developing countries.

In low- and middle-income countries, including Nigeria, the adoption of social media for health communication is steadily increasing, but its utilization remains constrained by infrastructural and socioeconomic barriers. Research by Oyinlola (2022) highlights that while Nigerian youths are increasingly using social media to access health-related content, many remain skeptical of its credibility, often relying on informal and anecdotal evidence. This skepticism is compounded by the spread of misinformation, which undermines trust in legitimate health sources and adversely affects health behaviour (Oyeyemi et al., 2014). Moreover, cultural factors and language barriers influence how social media content is perceived and acted upon. For example, the use of complex medical jargon or Western-centric campaigns may alienate Nigerian users, reducing the effectiveness of health communication initiatives.

The global importance of adherence to health recommendations and checkup behaviours cannot be overstated, particularly as it plays an important role in preventing and managing various diseases. Research consistently shows that a multitude of factors influence individuals' adherence to health recommendations, including socioeconomic status, education, access to health services, cultural norms, and psychological barriers (Liu, 2020; Volpp et al., 2009). These factors are often interrelated, influencing the degree to which individuals engage in health-promoting behaviours such as regular checkups, vaccinations, and prescribed treatments. For example, youth adherence to health recommendations is frequently hindered by factors such as a lack of awareness, mistrust in health information, and competing priorities such as academic pressures and social activities (Ryan et al., 2008; Smith et al., 2014).

Social media has emerged as a double-edged sword in this context, capable of both facilitating and hindering adherence to health recommendations. On the one hand, social media platforms serve as valuable tools for disseminating health information, enabling health organizations to reach wide audiences with tailored messages. In particular, social media platforms such as Instagram, Facebook, and Twitter are increasingly used by public health bodies to promote healthy behaviours, such as vaccination, healthy eating, and disease prevention (Moorhead et al., 2013; Ventola, 2014). Studies have shown that social media can significantly influence health behaviours by providing real-time access to expert advice, peer support, and health campaigns (Korda & Itani, 2013). For example, Liu (2020) argued that during the COVID-19 pandemic, social media's role in disseminating information about preventive behaviours, such as mask-wearing and social distancing, led to significant improvements in adherence to public health recommendations.

However, social media can also hinder adherence to health recommendations. The spread of misinformation and health myths on these platforms can confuse users and foster skepticism toward legitimate health guidance (Kaplan & Haenlein, 2010). For example, alarmist health-related posts can contribute to heightened anxiety and avoidance behaviours, discouraging individuals from seeking necessary medical checkups or adhering to prescribed health protocols (Friedman et al., 2022). Moreover, the influence of peer groups and social comparison on social media can often undermine personal health decisions, as youths may choose to conform to peer behaviour rather than adhering to medical advice (Tomé et al., 2012). In many instances, the line between trustworthy and untrustworthy health information becomes blurred, creating a complex environment for youths who are trying to navigate health advice in an age dominated by digital content (Islam et al., 2024).

In recent years, interest in the complex relationship between social media use and mental well-being has increased, particularly with respect to issues such as

depression, anxiety, and stress. This has become even more critical in light of the increasing penetration of social media platforms among youths globally. Studies have shown that social media can have both positive and negative effects on mental health. On the one hand, social media offers opportunities for connection, peer support, and the dissemination of positive health messages. On the other hand, it has been linked to increased levels of anxiety, depression, and stress, especially when individuals engage in unhealthy comparisons with others or consume distressing content (Fuchs, 2017; Pantic, 2014). Research by Kross et al. (2013) demonstrated that the passive use of Facebook, such as browsing others' posts without engaging in interactions, is correlated with decreased well-being, as it fosters social comparison and feelings of inadequacy. Similarly, anxiety and depression are frequently associated with problematic social media use, where individuals feel pressure to present an idealized version of themselves online, leading to stress and emotional burnout (Woods & Scott, 2016).

The psychological effects of social media use are particularly pertinent when considering their impact on health-seeking behaviours and adherence to health recommendations. Depression, anxiety, and stress levels can significantly influence individuals' willingness to seek medical advice, follow health guidelines, or adhere to recommended treatments. In fact, studies have shown that mental health struggles, such as those related to social media use, can contribute to the avoidance of health-related behaviours, including checkups or self-care, either due to stigma, embarrassment, or lack of motivation (Perloff, 2014; Sowislo & Orth, 2013; Kemel, 2022). For example, youths suffering from depression or anxiety may neglect their physical health, as they struggle to manage their mental well-being, resulting in missed appointments, delayed treatments, or failure to engage in preventive health practices (Lund et al., 2011). Additionally, those experiencing heightened levels of stress may perceive medical checkups as overwhelming or unnecessary, further exacerbating their mental health challenges (Collins et al., 2023). Consequently, the intersection of social media use, mental health, and health behaviour needs to be examined more closely to understand how social media platforms can either promote or hinder adherence to health-related practices.

Despite the growing body of research in this area, there is a notable absence of localized studies exploring the impact of social media on mental well-being and health-seeking behaviours in Nigeria, a context that differs significantly from that in Western societies. Much of the literature on this topic is based on studies conducted in Western countries, where the sociocultural and economic contexts are vastly different from those in Nigeria (Duggan et al., 2015). In particular, studies on social media use and mental well-being in African nations, including Nigeria, are rare. There is limited understanding of how Nigerian youths, with their unique sociocultural experiences, use social media and how this affects their mental health, health perceptions, and health-related behaviours. Given the distinct challenges facing Nigeria, such as high levels of poverty, limited healthcare access, and deeply rooted cultural beliefs, exploring how these factors may interact with social media's effects on mental well-being and health behaviours is crucial. This gap provides an opportunity to investigate how Nigerian youths' experiences with social media influence their mental health and, by extension, their health-seeking behaviours and adherence to medical recommendations.

This study is guided by two influential theories: the health belief model (HBM) and cognitive dissonance theory (CDT). These theories offer valuable insights into how social media shapes health behaviours, influences adherence to health recommendations, and impacts mental well-being among Nigerian youths.

The health belief model (HBM), developed by Rosenstock (1974), provides a framework for understanding how individuals make health-related decisions. According to the HBM, an individual's decision to engage in health behaviour is influenced by their perceptions of the susceptibility and severity of a health problem, the benefits of taking action, and the barriers that may prevent action. In the context of social media, the model suggests that youths' engagement with health-related content on these platforms influences their perceptions of health risks and benefits. For example, when social media messages highlight the risks of neglecting health checkups and emphasize the effectiveness of preventive measures, youths may be more likely to perceive a higher risk of illness and a greater benefit from adhering to health recommendations. Furthermore, the presence of cues to action, such as health campaigns or reminders on social media, can prompt individuals to take health-promoting actions. Self-efficacy, or an individual's confidence in their ability to take action, also plays a role, as youths who feel confident in their ability to manage their health are more likely to follow through with health recommendations. This model guides the first objective of the study by helping to identify and analyse how social media influences youths'

perceptions and subsequent adherence to health behaviours.

Cognitive dissonance theory (CDT), introduced by Festinger (1957), posits that individuals experience psychological discomfort when their beliefs or attitudes conflict with their behaviours. In the realm of health, dissonance occurs when individuals know that a behaviour, such as health checkups, is beneficial but does not engage in it, leading to internal tension. According to CDT, individuals are motivated to resolve this discomfort by changing their behaviour or modifying their beliefs. Social media plays a key role in this process, as exposure to health-related content can either reduce or exacerbate cognitive dissonance. For example, when youths encounter persuasive health messages on social media about the importance of regular checkups, they may experience dissonance if their behaviours contradict these messages. The presence of such content can motivate them to align their behaviours with their attitudes, thus reducing dissonance.

Conversely, when social media presents contradictory or distressing health information, it can increase dissonance and contribute to anxiety or stress, especially if youths are in conflict with their health-related decisions. This theory is particularly relevant to the second objective of the study, as it helps to explore how social media influences mental well-being in relation to health behaviours, such as the anxiety that may arise when individuals fail to adhere to health recommendations despite knowing their importance.

Through the integration of the health belief model and cognitive dissonance theory, this study aims to examine the dynamic relationships among social media use, health adherence, and mental well-being among Nigerian youths. Both the model and theory offer a holistic lens through which to understand the psychological mechanisms driving health-related decisions and behaviours in the context of social media. They provide a framework for exploring how youths perceive health risks, the benefits of health actions, and the psychological discomfort that may arise when their behaviours conflict with health recommendations, ultimately guiding this research into how social media influences both health behaviours and mental well-being.

Methods

This study adopted a survey research design to examine the influence of social media on health behaviours and mental well-being among Nigerian youths. The survey design was deemed appropriate for its ability to collect quantitative data from a large population and identify patterns relevant to the research objectives (Creswell, 2014). The study focused on youths aged 18-50 years who are active users of Facebook, Instagram, and WhatsApp and who have interacted with health-related content.

The population for this study comprised 59,750,000 active social media users in Nigeria, as reported by Datareportal (2024). This population reflects the widespread use of social media among Nigerian youths, making it suitable for analysing the relationships among social media usage, health behaviours, and mental well-being. The study employed purposive sampling to select three social media platforms: Facebook, Instagram, and WhatsApp on the basis of their popularity and user engagement levels in Nigeria. Convenience sampling was used to recruit respondents for the online questionnaire designed through Google Forms, ensuring accessibility to individuals who met the inclusion criteria.

To determine the sample size, Cochran's formula was utilized, with adjustments made via the Finite Population Correction (FPC) formula to account for the known population size. A sample size of 384 respondents was calculated, providing a representative sample for meaningful statistical analysis. This approach aligns with recommendations from Israel (1992) for determining adequate sample sizes in survey research.

Two types of questionnaires were employed as data collection instruments: a structured questionnaire and a slightly modified version of the Depression, Anxiety, and Stress Scale (DASS-21) tool. The structured questionnaire was designed to capture key variables related to the first objective, including social media usage patterns (frequency, type of content, and platform preferences) and health behaviour indicators (facilitating and hindering factors and adherence to health recommendations). The DASS-21 questionnaire, modified to align with the study context, was used to assess mental well-being indicators such as depression, anxiety, and stress levels, addressing the second objective. Both questionnaires were reviewed by experts in public health and communication to ensure content validity. A pilot study was conducted with 30 respondents to test the reliability of the instruments, yielding a Cronbach's alpha coefficient of 0.82, which indicates high internal consistency (Field, 2013).

Data collection spanned 12 weeks and involved online distribution through Facebook, Instagram, and

WhatsApp. These platforms were chosen for their high engagement rates among Nigerian youths, as noted by Datareportal (2024). The online survey ensured convenience for respondents, enabling data collection from diverse state and geographic locations within Nigeria. Participation was voluntary, and informed consent was obtained before the respondents completed the questionnaire. Anonymity and confidentiality were guaranteed to encourage honest responses.

The data collected were analysed via SPSS (version 26). Descriptive statistics, including frequencies, percentages, and means, were utilized to summarize social media usage patterns, health adherence behaviours, and mental well-being. Inferential statistics was applied to test the hypothesis and examine the relationships between variables. Specifically, a bivariate correlation method was employed to evaluate the strength and direction of associations between social media use, health adherence, and mental well-being, with the level of statistical significance set at $p < 0.05$. This analytical approach enabled a robust exploration of the relationship between social media engagement and health-related behaviours, aligning with established practices in quantitative research (Pallant, 2020).

Results

This section presents empirical findings from the study of the influence of social media on health adherence and mental well-being among Nigerian youths. The results, derived from the data and statistical analysis, are organized according to the study's research questions and one hypothesis. The focus is on social media usage patterns, emotional responses to health content, and their effects on health behaviours and mental well-being.

Table 1.1: *Distribution of responses showing respondents' frequency of social media usage*

S/N	Variables	Responses	Frequency	Percentage (%)
1.	Which social media do you use?	Facebook	149	38.8
		Instagram	118	30.7
		WhatsApp	117	30.5
2.	How often do you use social media?	A few times a week	113	29.4
		Once a day	24	6.3
		Once a week	4	1.0
		Several times a day	243	63.3
3.	On average, how much time do you spend on social media per day?	1 – 2 hours	129	33.6
		2 – 3 hours	138	35.9
		Less than 1 hour	21	5.5
		More than 3 hours	96	25.0
	Total		384	100

Source: Field Survey (2024)

The data presented in Table 1.1 reveal the types of social media platforms used by the respondents and their frequency of usage. The majority of respondents (149, 38.8%) reported using Facebook, followed by Instagram, with 118 respondents (30.7%), and WhatsApp, with 117 respondents (30.5%). The lower section of the table indicates that WhatsApp had the smallest proportion of usage among the three platforms.

Regarding the frequency of social media use, the results show that most respondents (243, 63.3%) engage with social media several times a day. This was followed by 113 respondents (29.4%) who used social media a few times a week. Additionally, 24 respondents (6.3%) reported using social media once a day, whereas 4 respondents (1%) reported using social media once a week, as shown in the bottom rows of the table.

Further analysis of the average daily usage of social media revealed that a significant proportion of the respondents (138, 35.9%) used social media for 2-3 hours a day. This group was followed by 129 respondents (33.6%) who spend 1-2 hours per day on social media. The third largest group, 96 respondents (25%), reported using social media for more than 3 hours a day, whereas 21 respondents (5.5%) used social media for less than one hour per day.

These results suggest that the majority of young individuals, particularly those aged 26–35, engage with Facebook, Instagram, and WhatsApp for 2-3 hours daily. This equates to approximately one-eighth of their day spent on social media. As a result, this demographic is frequently exposed to real-time information, including health-related content. The type of content they interact with directly influences their level of knowledge and awareness of health-related matters.

Table 1.2: *Distribution of responses showing what respondents do with social media*

S/N	Responses	Frequency	Percentage (%)
1	Browsing posts	303	43
2	Commenting on posts	50	7
3	Messaging family and friends	34	5
4	Sharing contents	49	7
5	Posting updates	123	18
6	Joining groups/discussions	14	2
7	Commenting on health-related posts	13	2
8	Following health professionals' pages	8	1
9	Joining health-related groups discussions	11	1.6
10	Reading health-related posts	50	7
11	Watching videos on health topics	36	5
12	Messaging or consulting with healthcare professionals	6	0.4
13	Sharing health information/content	8	1
	Total	705	100

***Multiple Responses
Source: Field Survey (2024)

The results presented in Table 1.2 highlight the activities that respondents engage in while using social media. The most common activity is "browsing posts," with 303 respondents (43%) affirming their participation in this activity. Following closely is "posting updates," reported by 123 respondents (18%). Other activities include "Commenting on Posts" and "Reading Health-Related Posts," both of which were affirmed by 50 respondents (7% each of the total respondents).

Furthermore, "sharing content" and "watching videos on health topics" were reported by 49 (7%) and 36 (5%) respondents, respectively. At the lower end of the table, the respondents also engaged in activities such as Messaging Family & Friends (34 respondents, 5%), Joining Groups/Discussions (14 respondents, 2%), and Commenting on Health-Related Posts (13 respondents, 2%). Additionally, 11 respondents (1.6%) reported joining health-related groups or discussions, 8 respondents (1%) followed health professionals or pages, and 8 respondents (1%) shared health-related content. Finally, 6 respondents (0.4%) reported messaging or consulting with healthcare professionals.

The findings suggest that the primary activity for respondents on social media is browsing posts, which often leads to encounters with health-related information. This, in turn, may prompt them to share content, join health-related discussions, watch health videos, and, in some cases, message or consult with healthcare professionals.

Table 1.3: *Distribution of responses showing respondents' prompts by social media to check health status and frequency of visits to healthcare providers for checkups*

S/N	Variables	Responses	Frequency	Percentage (%)
1.	Has information or inspiration from social media prompted you to regularly track your health changes or symptoms?	Yes	321	83.6
		No	63	16.4
2.	How frequent do you visit healthcare providers for checkups?	More than twice a year	105	27.3
		Once a year	14	3.6
		Rarely/Never	117	30.6
		Regularly	134	34.9
		Twice a year	14	3.6
Total			384	100

Source: Field Survey (2024)

The results presented in Table 1.3 examine respondents' opinions on how health-related information from social media prompts them to track their health changes and how frequently they visit healthcare providers on the basis of these prompts. The findings revealed that a significant majority of the respondents (321, representing 83.6%) reported being prompted to track their health changes via health-related information received via social media, whereas 63 respondents (16.4%) indicated that they had not been influenced to track changes in their health status through such information.

Further analysis revealed that among those prompted, 134 respondents (34.9%) reported visiting healthcare providers "Regularly" on the basis of social media prompts. This group was followed by 105 respondents (27.3%) who visited healthcare providers "More than Twice a Year." However, 117 respondents (30.6%) reported "rarely/never" visiting healthcare providers due to social media health content. Additionally, 14 respondents (3.6%) each reported visiting healthcare providers "once a year" and "twice a year."

The findings suggest that while social media health content has encouraged some respondents to visit healthcare providers for checkups, it has not significantly influenced the adoption of health-tracking devices or apps among the majority. This lack of utilization may contribute to limited knowledge of personal health status. Regular health monitoring through devices or apps, even without visiting healthcare providers, could enhance respondents' health awareness and enable informed decisions on health management.

Table 1.4: *Distribution of responses showing factors that facilitate or hinder the relationship between social media use and health status checkup adherence*

S/N	Responses	SA	A	D	SD	U	Mean	St.D	Dn
1	I find online health communities helpful in adhering to health recommendations	94	74	82	14	120	3.02	1.570	D

2	Social Media helps me understand my health status better	85	104	80	-	106	3.17	1.514	D
3	Social Media influences my decision to prioritize regular health checkups	51	71	89	18	155	2.60	1.490	D

Key: SA (strongly agree), A (agree), D (disagree), SD (strongly disagree), U (undecided, Dn (decision)
Source: Field Survey (2024)

The analysis of the results in Table 1.4 utilized the *limit of real numbers* as a benchmark for determining the decision rule for each scale of measurement. The scales of measurement categorize responses on the basis of mean scores within the following ranges:

- "Strongly agree decision = (5.00–4.45) = 5 points
- "Agree decision = (4.44 – 3.45) = 4 points
- "Disagree" decision = (3.44 – 2.45) = 3 points
- "Strongly disagree" decision = (2.44 – 1.45) = 2 points
- "undecided" decision = (1.44 – 0.45) = 1 point

The results in Table 1.4 reveal a preponderance of decisions tilting towards the "Disagree" category on the basis of the above *limit of real numbers*. This indicates that the respondents largely disagreed with the factors assessed in this study. The findings suggest that most respondents do not believe that online health communities are helpful in adhering to health recommendations. They also do not agree that social media enhances their understanding of their health status. Finally, the respondents largely disagreed that social media influences their decision to prioritize regular health checkups.

The implication of these findings is that while social media plays a role in disseminating health-related information, its influence on respondents' health status checkup adherence appears limited.

Table 1.5: *Distribution of responses showing factors that hinder the use of social media to improve health awareness and adherence to health recommendations*

S/N	Responses	Frequency	Percentage (%)
1	Distrust in online health information	104	21
2	Inadequate digital literacy	35	7
3	Limited access to internet or devices	31	6
4	Lack of access to digital resources	19	4
5	Misinformation	264	53
6	Privacy concerns	48	9
	Total	501	100

***Multiple Responses
Source: Field Survey (2024)

The findings presented in Table 1.5 identified factors that hindered the use of social media in enhancing health status awareness and adherence to health recommendations. The respondents provided multiple responses to the questions, highlighting various challenges. The results revealed that misinformation emerged as the most significant barrier, as affirmed by 264 respondents, representing 53% of the total participants. Other notable hindrances included distrust in online health information (104 respondents, 21%), privacy concerns (48 respondents, 9%), inadequate digital literacy (35 respondents, 7%), limited access to internet or digital devices (31 respondents, 6%), and lack of access to digital resources (19 respondents, 4%).

The implications of these findings are significant. The inability to verify the authenticity and credibility of health information disseminated on social media raised widespread concerns about misinformation, which respondents identified as the most critical challenge. Additionally, issues such as "distrust and privacy concerns" in online health information further undermined the perceived reliability of social media as a credible platform for obtaining health-related information. These barriers collectively call into question the viability of social media as a dependable medium for fostering health awareness and adherence to recommended health practices.

Table 1.6: *Distribution of responses showing the influence of social media use on the mental well-being of respondents*

Variables	VM	C	SW	NAA	Mean	St.D	Dn
I couldn't seem to experience any positive feeling at all after reading health-related posts on social media	102	120	98	64	2.68	1.142	C
I felt that I had nothing to look forward to after engaging with health-related contents on social media	81	185	93	25	2.84	0.830	C
I found it difficult to work up the initiative to do things after seeing posts about serious health conditions on social media	97	198	79	10	2.99	0.751	C
I was unable to become enthusiastic about anything after reading health-related posts on social media	118	180	69	17	3.04	0.815	C
I felt I wasn't worth much as a person after comparing myself to others' health-related posts on social media	136	153	64	31	3.03	0.919	C
I felt that life was meaningless after engaging with certain health information on social media	146	155	58	25	3.10	0.885	C
I felt downhearted and blue after reading posts about health issues on social media	142	160	67	15	3.12	0.830	C
I was worried about situations in which I might panic and make a fool of myself after reading about symptoms of various disease on social media	107	177	86	14	2.98	0.806	C
I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat) after reading health-related posts on social media.	105	168	91	20	2.93	0.846	C
I felt I was close to panic after coming across certain health information on social media	142	160	68	14	3.12	0.825	C
I felt scared without any good reason after reading about health risks on social media	157	131	81	15	3.12	0.874	C
I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of	99	114	66	105	2.54	1.146	C

physical exertion) after consuming health-related contents on social media							
I felt trembling (e.g. in the hands) after reading health-related posts on social media	126	161	69	28	3.00	0.895	C
I was aware of dryness of my mouth after engaging with alarming health news on social media	163	148	62	11	3.21	0.812	C
I found it hard to wind-down after reading alarming health news on social media	81	189	95	19	2.86	0.800	C
I tended to over react to situations after engaging with health-related posts on social media	141	155	65	23	3.08	0.879	C
I felt that I was using a lot of nervous energy after consuming health information on social media	154	156	55	19	3.16	0.848	C
I found myself getting agitated after reading health-related posts on social media	147	157	67	13	3.14	0.821	C
I found it difficult to relax after reading disturbing health information on social media	155	147	72	10	3.16	0.819	C
I was intolerant of anything that kept me from getting on with what I was doing after engaging with health-related content on social media	143	154	73	14	3.11	0.836	C
I felt that I was rather touchy after consuming health-related posts on social media	204	91	71	18	3.25	0.918	C

Keys: VM (very much), C (considerably), SW (somewhat), NAA (not at all), Dn (decision rule)
Source: Field Survey (2024)

The limit of real numbers was also utilized here as a basis for determining the decision rule for each scale of measurement in the analysis of the results presented in Table 1.6 above. The scales of measurement categorize responses on the basis of their mean scores, which fall within the predefined limits for each scale. The following are the limits applied to real numbers:

- "Very much" decision = (4.00 – 3.45) = 4 points
- "Considerably" decision = (3.44 – 2.45) = 3 points
- "Somewhat" decision = (2.44 – 1.45) = 2 points
- "Not at all" decision = (1.44 – 0.45) = 1 point

The findings revealed that the decisions predominantly tilted towards "Considerably," on the basis of the established benchmark referred to as the "Limit of real numbers." The results indicated that all the responses recorded mean scores that fell within the range of "Considerably," thereby confirming the decision rule "C," representing "Considerably." This finding indicates that social media use had a considerable influence on the mental well-being of the respondents. Specifically, the top influences were identified in the following responses:

- "I felt that I was rather touchy after consuming health-related posts on social media" (Mean = 3.25)
- "I was aware of the dryness of my mouth after engaging with alarming health news on social media" (mean = 3.21)
- "I felt that I was using a lot of nervous energy after consuming health information on social media" (Mean = 3.16)
- "I found it difficult to relax after reading disturbing health information on social media" (Mean = 3.16)

- "I found myself being agitated after reading health-related posts on social media" (mean = 3.14)

The above findings indicate the visible influence of health-related information or messages received via social media on respondents' physical and emotional reactions. The influence was particularly evident in how respondents processed and responded to alarming or disturbing health-related content. These influences extended to their physical appearance, reactions to everyday situations, and personal perceptions or opinions about themselves, as shaped by the nature and content of health-related social media posts.

Test of Hypothesis

H_0: *There is no significant relationship between the influence of social media use on mental well-being (depression, anxiety, and stress levels) and the frequency of health checkup behaviours and adherence among Nigerian youths.*

Table 1.7: Correlation results for the influence of social media on mental health outcomes and the frequency of health checkup behaviours

Descriptive Statistics

	Mean	Std. Deviation	N
Frequency of Health Status checkup	3.32	1.685	384
Influence of Social Media on mental health outcomes	3.01 7036	.575 440	384

Correlations

		Frequency of Health Status checkup	Influence of Social Media on mental health outcomes
Frequency of Health Status checkup	Pearson Correlation	1	-.122*
	Sig. (2-tailed)		.016
	N	384	384
Influence of Social Media on mental health outcomes	Pearson Correlation	-.122*	1
	Sig. (2-tailed)	.016	
	N	384	384

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

The hypothesis was tested, as shown in the table above, via bivariate correlation statistical analysis at the 0.01 level of significance. This indicates that the P value is considered statistically significant when it is less than or equal to 0.01 (i.e., $P \leq 0.01$), as determined by the Sig. (2-tailed) value.

The results reveal that the P value (0.016) exceeds 0.01, implying that the results are not statistically significant. As a result, the null hypothesis, which states that *"There is no significant relationship between the influence of social media use on mental health outcomes (depression, anxiety, and stress levels) and the frequency of health checkup behaviours and adherence among Nigerian youths,"* is accepted.

Furthermore, the results indicate that a 100% increase in the influence of social media on mental health outcomes (measured by depression, anxiety, and stress levels) among Nigerian youths corresponds to a negative value (-0.122) in the frequency of health checkup behaviours and adherence. This finding suggests a weak inverse relationship between the influence of social media on mental well-being and health checkup behaviours. In contrast, a 100% increase in the frequency of health checkup behaviours and adherence is associated with a negative value (-0.122) in social media's influence on mental health outcomes, further supporting the presence of a weak inverse relationship between the two variables.

II. DISCUSSION

This section provides a detailed interpretation of the study's findings in relation to existing theoretical frameworks and the relevant literature. It examines the implications of social media's influence on health adherence and mental well-being, considering the emotional and behavioural responses of Nigerian youths. The discussion explores the intricacies of these findings, highlighting their contributions to the broader understanding of health communication and social media's role in shaping health behaviours.

Research Question 1 identified and analysed the factors that facilitate or hinder the relationship between social media use and adherence to health recommendations among Nigerian youths. The findings, derived from the survey results (Tables 1.4 & 1.5), revealed significant insights into these factors.

The results clearly revealed that many respondents were undecided about the role of social media platforms in helping them adhere to regular health recommendations. For example, the majority of respondents (155 out of 384) were undecided about the influence of social media on their decision to prioritize checkups, leading to a decision rule of "Disagreeing" on the basis of the mean score." Since most of the responses for the three variables were largely "undecided," the decision rule was affected, making the mean scores fall within the limit of real numbers for "disagree." This hesitation reflects a gap in translating health-related content into actionable behaviour, which aligns with the health belief model (HBM). According to the HBM, individuals' decisions to engage in health-promoting behaviours depend on their perceived susceptibility, severity, and benefits of taking action (Rosenstock, 1974). The survey findings suggest that while social media provides access to health information, the absence of trust and clarity undermines its ability to influence perceived benefits and severity effectively.

The results revealed a significant relationship between social media use and adherence to health recommendations, with enabling factors such as visual engagement and community support counterbalanced by barriers such as misinformation and source credibility. These findings align with existing studies, such as Kaplan & Haenlein (2010), which highlighted the dual nature of social media as both a facilitator and a barrier to effective health communication.

A key finding from the study was the dual role of accessibility and credibility. While social media provides easy access to health-related content, concerns over credibility hinder individuals from acting on the health information they encounter. Research by Moorhead et al. (2013) corroborates this, emphasizing the need for mechanisms to increase the reliability of health information on social platforms.

The results also reflect how exposure to conflicting health information via social media can create cognitive discomfort among users. This finding aligns with the tenets of cognitive dissonance theory (CDT), which posits that when individuals encounter contradictory information, it can lead to psychological discomfort, prompting them to either disregard the information or seek out content that confirms their pre-existing beliefs (Festinger, 1957). In the context of this study, the respondents' skepticism toward the reliability of health information via social media suggests that the presence of conflicting messages may contribute to dissonance, thereby affecting their ability to act on health recommendations.

Research Question 2 explored the influence of social media use on the mental well-being of the respondents, particularly with respect to health checkup behaviours and adherence. The findings from Table 1.6 revealed several critical insights into the influence of social media on the respondents' mental well-being and their frequency of health checkup adherence.

The mean scores of all the responses related to social media use and mental well-being fell within the "Considerably" range, as indicated by the decision rule of "C." This suggests that social media use has a considerable influence on the mental well-being of respondents. The most notable responses, on the basis of their mean scores, are as follows:

- "I felt that I was rather touchy after consuming health-related posts on social media" (mean = 3.25).
- "I was aware of the dryness of my mouth after engaging with alarming health news on social media" (mean = 3.21).

Statements such as *"I felt that I was rather touchy after consuming health-related posts on social media"* and *"I was aware of dryness of my mouth after engaging with alarming health news on social media"* suggest that health-related content on social media triggers heightened emotional responses such as anxiety, nervousness, and stress. This aligns with the findings of previous studies, which suggest that social media can exacerbate anxiety and stress, particularly when users encounter alarming or distressing health-related content (Kaplan & Haenlein, 2010). These findings support the view that social media is not only a platform for information sharing but also a space where negative emotional consequences such as heightened fear and stress can emerge (Perloff, 2014).

Other significant responses include the following:

- "I felt that I was using a lot of nervous energy after consuming health information on social media" (mean = 3.16).
- "I found it difficult to relax after reading disturbing health information on social media" (mean = 3.16).

These responses reinforce the idea that respondents experienced difficulty relaxing after engaging with disturbing health-related content. This is consistent with the concept of 'health anxiety,' where frequent exposure to health-related information on social media

can lead to a disproportionate fear of health issues (Keles et al., 2019).

- "I found myself being agitated after reading health-related posts on social media" (mean = 3.14).

The findings suggest that social media use influences respondents' mental well-being, particularly in terms of how they physically and emotionally respond to disturbing health-related content. The results highlighted emotional reactions such as increased agitation, anxiety, and nervousness, with noticeable physical effects such as dryness of the mouth.

Further analysis revealed that disturbing health content on social media was more likely to trigger negative emotions, whereas positive health content seemed to have a calming or uplifting effect. This aligns with existing research that acknowledges the dual impact of social media content, both negative and positive on mental well-being (Moorhead et al. (2013)). Specifically, the findings revealed that for every increase in the frequency of checkup behaviours and adherence of 100%, there was a corresponding decrease in the influence of social media on the mental well-being of the respondents, represented by a negative value of (-0.122). This suggests that while social media exposure impacts emotional well-being, it does not correlate directly with an increase in health checkups and might even lead to a decrease in checkup frequency due to the negative emotional responses caused by certain health-related content.

These findings support the health belief model (Rosenstock, 1974), which emphasizes that individuals' health behaviours are influenced by their perceived susceptibility to health issues and their belief in the effectiveness of health actions. In this context, while social media exposure has the potential to increase health awareness, the negative emotional responses triggered by alarming content may reduce motivation to engage in health-promoting behaviours such as regular checkups.

The results of this study align with the literature on health communication in the digital age. Social media platforms have been recognized as double-edged swords, offering both positive and negative impacts on individuals' mental health (Keles et al., 2019). These findings indicate that social media can increase awareness of health issues and encourage individuals to seek medical attention. However, the overwhelming presence of health-related content suggests that strategies are needed to mitigate its potentially harmful effects, ensuring that social media remains a positive force in promoting health awareness and well-being.

Conclusion

This study examined the influence of social media on health adherence and mental well-being among Nigerian youths, with a focus on the psychological and behavioural outcomes resulting from exposure to health-related content. This study provides significant insights into the dual nature of social media's influence on both health adherence and mental well-being among Nigerian youths.

This research highlights a significant gap in the translation of social media content into actionable health behaviours. While platforms offer vast access to health information, the credibility of such content remains a crucial factor in determining its influence. The findings suggest that Nigerian youths are frequently exposed to conflicting health information, which can lead to cognitive dissonance and hinder the adoption of health-promoting behaviours. This aligns with the theoretical frameworks guiding the study, such as the health belief model and cognitive dissonance theory, which emphasize the complex intricate relationship between perceived health risks and individuals' ability to engage in preventive health actions.

In terms of mental well-being, the study revealed that exposure to distressing health-related content on social media triggers heightened emotional responses, including anxiety, agitation, and stress. These psychological effects are in line with previous studies on health anxiety and social media's role in exacerbating mental health concerns. The negative emotional consequences of social media use, particularly when interacting with alarming health content, appear to diminish youths' motivation to engage in health behaviours, such as regular health checkups, further highlighting the paradox of social media's role in health communication.

This study demonstrated the need for a critical examination of how health information is disseminated and consumed on social media platforms. While these platforms have the potential to raise awareness and drive health-related actions, they also pose significant challenges to mental well-being that cannot be overlooked. The results suggest that the potential benefits of social media in health communication can be fully realized only if strategies are implemented to address the emotional impact of health-related content.

Based on the findings and the conclusion drawn from this study, the following recommendations are proposed to address the challenges identified in this study:

- Mechanisms should be improved to ensure the credibility of health-related content shared on

social media platforms. Health organizations, experts, and influencers should collaborate to provide accurate, reliable, and evidence-based information to mitigate misinformation.

- Promote positive and reassuring health content on social media platforms to counterbalance the negative emotional responses caused by alarming health information. Content emphasizing self-care, stress management, and mental well-being should be prioritized.
- Develop public health campaigns aimed at educating Nigerian youths on how to critically engage with health information online, emphasizing the evaluation of source credibility and the emotional impact of health content.
- Integrate mental health support tools and resources into social media platforms, providing users access to professional assistance to cope with anxiety or stress triggered by health-related content.
- Further research should explore the long-term effects of social media on health behaviours and mental well-being. Longitudinal studies are recommended to understand how social media influences health outcomes over time in diverse cultural contexts.

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