



Research Paper

Impact of social network structures on information diffusion in Nigeria.

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Abstract

In today's society, information dissemination is profoundly influenced by social media technology. This study investigated the impact of social network structures on information diffusion in Nigeria, focusing on the information behavior of undergraduate students in selected universities in Nigeria. Five research objectives guided this study, which employed a descriptive survey research design. The population included undergraduate students. Using Israel's (2003) sample size model with a 5% precision level and a 95% confidence level, a sample size of 385 was determined. Simple random sampling was utilized to select the participants. A self-designed questionnaire, divided into five sections, was validated using a content-related approach and tested for reliability with a Cronbach's alpha coefficient of 0.679. Data analysis was conducted using IBM SPSS version 21.0, with frequency counts and percentage tables employed to present the research objectives. The study found that Facebook was the most preferred social media platform among undergraduate students, with high social media usage primarily for connecting with friends and academic activities. A significant relationship was observed between the purpose of social media use and the information behavior of students. Based on these findings, it was recommended that university management integrate social media applications into their learning and teaching systems to maximize the benefits of social media.

Keywords: information diffusion, social media, undergraduate students, information behaviour.

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I. Introduction

Social media is often lauded as a potentially transformative information resource, deeply influencing societal dynamics. Information is the powerhouse of our emerging technology-driven society, shaping and reshaping the way we live, interact, and understand the world (Prabhavathi, 2011). Over the past several years, there has been a significant increase in information available in various formats, leading to an information overload and sparking interest in studying human information behaviour (Fasola & Olabode, 2013).

The accessibility of public information enables individuals to perform diverse tasks in both private and official capacities (Davies et al., 2012). This accessibility necessitates choices among various information sources, leading to variations in people's information behaviour. The advent of the internet, and more recently, social media, has drastically transformed information behaviour. New technologies facilitate and provide flexibility in communicating and sharing resources.

The 21st century has seen unprecedented technological advancements globally, including the development of internet facilities, establishment of libraries, and improvements in communication multimedia (Adeniyi, 2004). The availability of information significantly impacts a system's reliability and its chances of survival. Social media, as a pervasive element, plays a dominant role in the social structure of society, altering the nature of social relationships (Al-Sharqi, Hashim & Kutbi, 2015). It has revolutionized communication, interaction, and socialization, particularly appealing to youths for activities not possible in face-to-face contexts (Lee et al., 2015).

Social media is pivotal in the sharing of various types of information—sensitive, sensational, political, and casual (Osatuyi, 2013). Although the history of social media is not new, its integration into mainstream cultural activities is a recent phenomenon. People have utilized digital media for networking, socializing, and information gathering for over 30 years (Boyd & Ellison, 2008). Initially conceptualized many years ago, social

media has evolved into sophisticated technology, with Facebook being a notable example. It began as a local social network at Harvard, developed by Mark Zuckerberg, and has grown to become the largest social networking site with over 500 million active users by 2012 (Facebook Statistics, 2012).

Over the past decade, social media has increasingly influenced the information behaviour of students in higher education. Social media encompasses a wide range of internet applications supporting social communication, with an emphasis on interaction, user-generated content, and building online communities (Turban, King & Lang, 2011). It enhances the communication process in society by facilitating the sharing of ideas, thoughts, and opinions.

Social networking sites (SNS) have emerged as modern tools for global connectivity (Aghazamani, 2010). They allow people to connect and interact, influencing various aspects of life including work, play, learning, and socializing (Khoo, 2010). Social media offers a rich environment to study information behaviour, with vast amounts of recorded and publicly accessible information (Khoo, 2010).

Social media technologies, enjoying phenomenal success, include platforms such as Facebook, Twitter, and YouTube, each boasting millions to billions of users worldwide (Facebook, 2017; Twitter, 2017; YouTube, 2017). Among these users are students who utilize social media for accessing information, group discussions, resource sharing, and entertainment (Wang, Chen & Liang, 2011).

The convenience of accessing remote information through social media has significantly impacted libraries and information centers. This evolution has altered the roles and concepts of libraries and librarians, integrating information and communication technologies into their operations (Quadri, 2012). Internet use has become integral to higher education students' lives globally, supporting social interactions and fostering online communities that exhibit collaborative information behaviour (Vijayakumar, 2015; Khoo, 2015).

1.1 Statement of the Problem

Social media has become a widely accepted and crucial communication tool among students, particularly at the higher education level. However, the pervasive use of social media significantly affects students' information behavior, either positively or negatively (Christopher, 2010). Various studies by researchers such as Lenhart and Madden (2007), Boyd (2009), Madge et al. (2009), Christopher (2010), Virkuss (2010), Wang et al. (2011), Ndaku, and Eke et al. (2014) have explored social media usage among undergraduate students. While these studies have focused on adoption, utilization, and challenges, there is a need to investigate the specific influence of social media on the information-seeking behavior of university undergraduate students. This study aims to fill that gap.

1.2 Objectives of the Study

The primary objective of this study is to investigate the **impact of social network structures on information diffusion in Nigeria**. The specific objectives are to:

1. Identify social media tools preferred by undergraduate students.
2. Determine the extent of social media usage by undergraduate students.
3. Examine the purposes of social media usage among undergraduate students.
4. Study the information behavior of undergraduate students on social media.
5. Investigate the influence of social media usage on the information behavior of undergraduate students.

1.3 Research Questions

This study seeks to answer the following research questions:

1. What are the social media tools preferred by undergraduate students?
2. What is the extent of social media usage by undergraduate students?
3. For what purposes do undergraduate students use social media?
4. What is the information behavior of undergraduate students on social media?
5. How does social media usage influence the information behavior of undergraduate students?

1.4 Research Hypothesis

H01: There is no significant relationship between the purpose of using social media and the information behavior of undergraduate students.

II. Literature Review

Akinwumiju (2000) describes the review of related literature as the systematic identification, location, and analysis of documents containing information related to the research problem. This process helps avoid unproductive approaches, achieve methodological insights, find recommendations for further research, and support grounded theory (Omopupa, 2016). This literature review covers the following areas:

The history of social media traces back to the Bulletin Board System (BBS) that facilitated user exchanges of software, data, messages, and news. In 1979, Duke University graduates Tom Truscott and Jim Ellis conceptualized networked communication, resulting in "Usenet" in 1980, the first genuine attempt at social networking (Kaplan & Haenlein, 2010). By 1992, the Internet had become a prominent networking tool, further propelled by the development of the Mosaic browser. In 1998, "Open Diary" emerged, bringing people together to share diaries online. Social media sites like Blogger and Faceparty appeared in 1999, followed by platforms such as Wikipedia, Picasa, Friendster, and Flickr post-2000. Facebook, launched in 2004, and YouTube became leading social media platforms, transforming social networking into a global phenomenon.

Social media, often used interchangeably with social networking sites, is defined by Kaplan and Haenlein (2010) as a group of internet-based applications that build on Web 2.0 foundations and allow the creation and exchange of User Generated Content. Nwanton et al. (2013) define social media as internet-based tools that enable users to engage, generate content, and search for information online. Other definitions emphasize social media's role in sharing and discussing information and experiences efficiently (Parr, 2010), creating or co-creating value (Jantsch, 2008), and facilitating real-time feedback and online discussions (Dykeman, 2008). Social media technologies include blogs, wikis, media sharing tools, networking platforms, and virtual worlds (Bryer & Zavatarro, 2011).

Kaplan and Haenlein (2010) classify social media into six categories: collaborative projects (e.g., Wikipedia), blogs and microblogs (e.g., Twitter), content communities (e.g., YouTube), social networking sites (e.g., Facebook), virtual game worlds (e.g., World of Warcraft), and virtual social worlds (e.g., Second Life). These categories encompass various applications, including social networking sites, creative works sharing sites, user-sponsored blogs, company-sponsored websites, business networking sites, collaborative websites, virtual worlds, commerce communities, podcasts, news delivery sites, educational material sharing, open source software communities, and social bookmarking sites (Mangold & Faulds, 2009).

Mayfield (2008) identifies seven kinds of social media: social networks, blogs, wikis, podcasts, forums, content communities, and microblogging. Kaplan and Haenlein (2010) propose a similar classification, including collaborative projects, blogs and microblogs, content communities, social networking sites, virtual game worlds, and virtual social worlds. This study considers Mayfield's classification to evaluate social media platforms.

SNSs allow people to create personal webpages and connect with friends to share information and communicate (Mayfield, 2008). These sites provide platforms for real-world friends to interact virtually, integrating into daily life. The original social network sites date back to 1995, with platforms like classmates.com helping people reconnect with old friends and schoolmates.

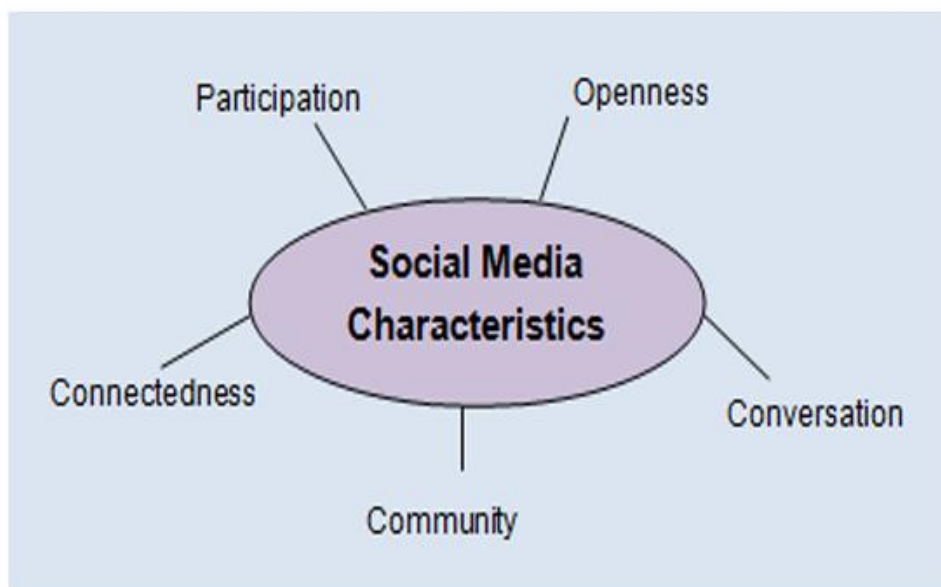


Figure 1: Social Media Characteristics

Social media is increasingly recognized as a valuable tool in academic settings, facilitating connectivity, collaboration, and information sharing among students and educators. Various studies highlight its benefits, such as Facebook's role in offering spontaneous learning opportunities and enhancing engagement in educational activities (Mazman&Usluel, 2010). The integration of social media in higher education enriches the learning experience, fostering interaction and collaboration (Lederer, 2012). Research also shows a significant

use of social media by university students, with Facebook being the most prevalent platform (Bagget & Williams, 2012). Notably, Facebook's extensive user base and frequent use underscore its dominance in social networking, as depicted in Figure 1, which shows it leading with over one billion active users, followed by LinkedIn and Twitter (Leverage New Age Media, 2014). The extensive use of social media by students also suggests a trend towards leveraging these platforms for academic and social purposes, although there are concerns about its potential impact on academic performance and the need for strategic implementation in educational institutions (Kear, 2010; Dabner, 2011).

Studies on the information behavior of students on social media reveal varied patterns and preferences in their online activities. Kellar (2006) found that information-gathering tasks on the web, such as those involving research, take longer and rely heavily on search engines like Google. Other studies, such as those by Hsieh (2006) and Thompson (2003), highlight that both children and adults exhibit distinct information-seeking behaviors, with a notable preference for search engines and web portals. A significant portion of students and faculty use the internet for both academic and non-academic purposes, emphasizing its critical role as an information source.

Further research by Folorunso et al. (2010) and Haridakis and Hanson (2009) examined social media use among university students, revealing that students often trial social networking sites before fully adopting them. These studies show that YouTube and other social media platforms are perceived as blending social networking with traditional media consumption. This duality enhances users' experiences, providing both entertainment and opportunities for social interaction, reflecting the evolving nature of media consumption among students.

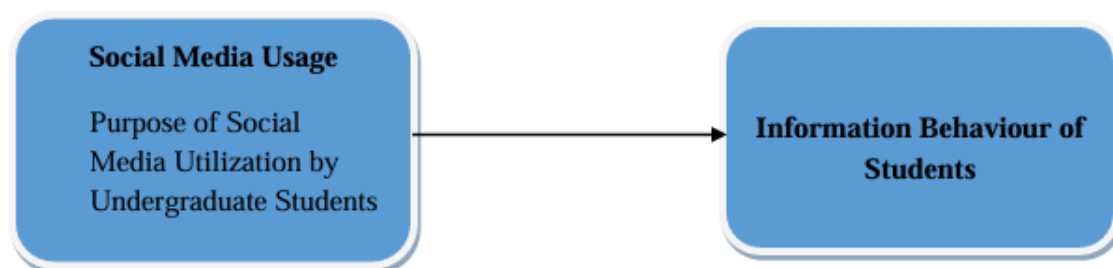


Figure 2: Self-Constructed Conceptual Model

Two theoretical frameworks, the Diffusion of Innovation Theory and the Uses and Gratification Theory, underpin this study. The Diffusion of Innovation Theory, introduced by E. M. Rogers, explains how new ideas or products spread through a population over time, highlighting stages such as awareness and adoption. The Uses and Gratification Theory, developed by Blumler and Katz, focuses on why and how people use specific media to satisfy various needs. This theory emphasizes the active role of the audience in selecting media that fulfills their individual requirements for information, entertainment, and social interaction.

III. METHODOLOGY

Research methodology is described as the overall research design and strategy (Johnson & Christensen, 2012) that a researcher uses to execute research. Research methodology is a discipline-specific approach and process of research (Kinash, 2006). Creswell (2009) explained that research method involves the technique of data collection, analysis, and interpretation that researchers propose for their studies. Based on these definitions, research can be understood to be a systematic way of finding answers to questions and the scientific way of attaining the accuracy of a given situation.

This chapter contains the general procedure for the conduct of the study. It, therefore, gives detailed information on the following: research design, population of the study, sample and sampling techniques, instrumentation, psychometric properties of the instrument, validity of the research instrument, reliability of the research instrument, procedure for the administration of the instrument, procedure for scoring, and method of data analysis.

3.1 Research Design

Research design is the logical sequence that connects empirical data to the research questions and research conclusions. It is an approach to thinking about doing research, which summarizes the procedure for conducting a study that includes when, from whom, and under what conditions the research data was obtained, as well as how a study was conducted. It specifies how a study was carried out and the manner in which it answers the research questions (McMillan & Schumacher, 2006; Ikoja-Odongo, 2000).

The research design adopted for the study is the descriptive survey method. This method is considered appropriate because it arrives at dependable solutions to problems through systematic analysis and interpretation of data collected from the respondents on the subject matter, thereby making it possible for generalization (Neuman, 2011).

3.2 Population of the Study

Best and Kahn (2006) defined population as any group of individuals that has one or more characteristics in common, distinguishing the group from other individuals. The research population is described as the entire group of people on whom the results of a study are intended to be applied (Johnson & Christensen, 2012; Nkomo, 2009; Fraenkel & Wallen, 2000).

The study is undertaken to examine the impact of social media usage on the information behavior of students of tertiary institutions in selected universities. Therefore, the population for this study comprises undergraduate students in three selected universities. These institutions have been in existence for more than five years. According to data collected from the Directorate of Academic Planning in the three universities, the population of undergraduate students is presented in Table 3.1.

Table 1: Population of the Study

S/N	University	Population
1	University of Benin	7000
2	Edo State University	8520
3	Auchi Polytechnic Auchi	45013
	Total	60533

3.2.1 Sampling Technique and Sample Size

Researchers use various sampling techniques to collect data when the population is large and when studying all its elements is not possible (Bosire, 2011; Nyandemo, 2007). Sampling technique is the approach used in taking a small group from a larger group, investigating it, and drawing an accurate conclusion that can be generalized onto the larger group (Rea & Parker, 2005).

The overall sampling consists of the undergraduate students in the five universities. However, three universities were selected as the sample frame for this study, based on ownership type. This study adopts simple random probability sampling to select undergraduate students. According to Aina (2002), simple random sampling is the basic sampling method of survey research and aims at giving each person in the sampling frame an equal chance of being selected. Thus, the sample size comprises the portion of the population for the study, ensuring representativeness for generalization (Johnson & Christensen, 2012; Creswell, 2009; Best & Kahn, 2006).

In order to accurately take a sample from the population, the Israel sample size model (2003) was used. For a given total population of N, if $\pm 5\%$ is taken for precision levels where the confidence level is 95% and $P = .5$, the sample (n) should be $= X$ (Israel, 2003). Based on Israel's model, the total population is 60533; by taking $\pm 5\%$, the expected sample size should be 385.

Table 2: Population and Sample Size Distribution of the Respondents

S/N	University	Population	Sample Size
1	University of Benin	7000	46
2	Edo State University	8520	54
3	University -B	45013	285
	Total	60533	385

3.2.2 Data Collection Instrument

According to Kiplang'at and Ocholla (2005), data collection instruments are expected to provide accurate and adequate data in line with the objectives of the study. For this study, a questionnaire titled "Influence of Social Media Usage on the Information Behavior of Undergraduate Students in Selected Universities . Questionnaire" was used.

3.2.3 Validity of the Instrument

Validity of the instrument shows how well the research instrument measures what it is supposed to measure (Bosire, 2011). The self-structured questionnaire was validated using a content-related approach. Four copies of the questionnaire were given to lecturers of the Department of Library and Information Science, University of Ilorin, and the project supervisor. The retrieved questionnaires and necessary suggestions were used in designing the final instrument.

3.2.4 Reliability of the Instrument

Reliability of an instrument is the consistency of an instrument in measuring what it is meant to measure. Maree (2011) opined that reliability has to do with consistency, and high reliability is obtained when the instrument gives the same results if the research is repeated on the same sample. To ensure consistency, the study was subjected to a reliability test by administering fifty (50) copies of the questionnaire to undergraduate students of a different university from the sampled. Forty-four (44) copies were retrieved and subjected to Cronbach's alpha to determine the overall reliability of the questionnaire. The reliability of the scaled items is presented in Table 3.

Table 3: Reliability Test of the Scaled Variables

Reliability Tests	Variables	No. of Pilot Items	Alpha
Purpose of Social Media Utilization	Information Behaviour of Undergraduate	10	0.724
Students on the Usage of Social Media	Students on the Usage of Social Media	11	0.634

Table 3 shows that the reliability coefficient for the scaled item “Purpose of Social Media Utilization” had a correlation coefficient of 0.724, while “Information Behaviour of Undergraduate Students on the Usage of Social Media” had a correlation coefficient of 0.634. The average reliability coefficient of the scaled variables had a correlation coefficient of 0.679.

3.2.5 Administration of the Instrument

The questionnaire was administered personally by the researcher, who moved around the three selected university campuses to administer the questionnaire to the students. The researcher ensured that students had enough time to respond without interference and collected the completed questionnaires. The administration of the data collection instrument took two weeks for completion.

3.3 Method of Data Analysis

Frequency counts and simple percentages were used to analyse the five objectives of the study. The data collected were coded and analysed using Statistical Package for Social Science (IBM-SPSS) version 22.0. Data presentations for the research objectives were done using tables, while Spearman Rank Order Correlation was used to test the formulated hypothesis, and regression analysis was used to determine the influence of social media on the information behavior of undergraduate students.

IV. Data Presentation, Analysis, and Discussion of the Findings

This section presents and discusses the data analyses and interpretations. The study investigated the influence of social media usage on the information behavior of undergraduate students in selected universities in Nigeria. Five research objectives were formulated for this study. The data presentation for the research objectives was done using tables. Spearman Rank Order Correlation was adopted for testing the hypothesis. A total of 385 copies of the questionnaire were administered to undergraduate students. A total of 338 participants responded and completed the survey questionnaire, giving a response rate of 88%.

In the analysis, "strongly agreed" and "agreed" are merged to form "agreed," while "disagreed" and "strongly disagreed" are merged to form "disagreed." That is, SA + A = Agreed and D + SD = Disagreed.

Demographic Distributions of the Respondents

Table 4: Respondents and Frequency of Response

Institution	Frequency	Percent
University of Benin	42	12.4
Edo State University	47	13.9
Auchi Polytechnic Auchi	249	73.7
Total	338	100.0

Table 4 shows that the majority of the respondents were **Auchi Polytechnic Auchi** undergraduate students with 249 (73.6%), followed by **Edo State University** with 47 (13.9%), and **University of Benin** with 42 (12.4%).

Table 5: Academic Level of the Respondents

Level	Frequency	Percent
100 Level	62	18.3
200 Level	118	34.9
300 Level	95	28.1
400 Level	36	10.7
500 Level	27	8.0
Total	338	100.0

Table 5 reveals that the highest number of respondents were in the 200 level (34.9%), followed by the 300 level students (28.1%). The least percentage (8.0%) of the respondents were in the 500 level. This implies that 200 level students constituted the highest number of respondents.

Table 6: Age of the Respondents

Age	Frequency	Percent
15-19 Years	88	26.0
20-24 Years	139	41.1
25-29 Years	111	32.8
Total	338	100.0

Table 6 shows that the highest number of respondents (41.1%) were within the age range of 20-24 years, followed by 25-29 years (32.8%), while the least were respondents within the age range of 15-19 years (26.0%).

Table 7: Gender of the Respondents

Gender	Frequency	Percent
Female	160	47.3
Male	178	52.7
Total	338	100.0

Table 7 indicates that 160 (47.3%) of the respondents were female while 178 (52.7%) were male. Thus, the majority of the respondents were male.

Research Question One: What are the social media tools preferred by undergraduate students?

Table 8: Social Media Tools Used by Undergraduate Students

Social Media Application	Yes	No
	F	%
Facebook	324	95.9
Twitter	260	76.9
Instagram	302	89.3
LinkedIn	158	46.7
Snapchat	168	49.7
Eskimi	190	56.2
Youtube	257	76.0
Skype	193	57.1
Google+	236	69.8

Table 8 reveals that the majority of the respondents use Facebook (95.9%), Instagram (89.3%), Twitter (76.9%), YouTube (76.0%), Google+ (69.8%), and Eskimi (56.2%). The least used social media tools among the respondents are LinkedIn (46.7%) and Snapchat (49.7%). This implies that Facebook is the most used social media tool among undergraduates.

Research Question Two: What are the extents of social media usage by undergraduate students?

Table 9: Frequency of Social Media Usage

Response	Frequency	Percent
Never	4	1.2
Fairly	35	10.3
Occasionally	54	16.0
Frequently	155	45.9
Very Frequently	90	26.6
Total	338	100.0

Table 9 shows the frequency of social media use among the respondents. Specifically, less than half (45.9%) of the respondents indicated they use social media frequently, while more than one quarter (26.6%) indicated very frequently. Only 1.2% of the respondents never use social media. Thus, it can be concluded that more than seven in ten (72.5%) of the respondents use social media frequently and very frequently.

Table 10: Extent of Social Media Usage

Hour	Frequency	Percent
Less than 1 hour	42	12.4
1-2 hours	57	16.9
3-4 hours	89	26.3
4-5 hours	70	20.7
6-7 hours	64	18.9
8-9 hours	16	4.7
Total	338	100.0

Table 10 shows the hourly basis on which the respondents utilize social media. The table shows that the highest number of respondents (26.3%) use social media between 3-4 hours daily, followed by 20.7% who spend between 4-5 hours. However, only 4.7% of the respondents spend between 8-9 hours on social media daily.

Research Question Three: For what purposes do undergraduate students make use of social media?

Table 11: Purposes of Social Media Usage by Undergraduate Students

Statement	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed
I use social media to:	F	%	F	%
facilitate my learning	191	56.5	72	21.3
get relevant information pertaining to my studies	134	39.6	115	34.0
make new friends	153	45.3	151	44.7
connect with friends	189	55.9	137	40.5
solve social issues	50	14.8	27	8.0
connect with my course-mate	158	46.7	131	38.8
update my knowledge with my course of study	165	48.8	161	47.6
update my knowledge outside my course of study	147	43.5	128	37.9
reduce stress	134	39.6	105	31.1
share my opinion on trending issues	165	48.8	130	38.5
watch video and listen to music	195	57.7	119	35.2
upload and download videos	144	42.6	104	30.8
learn about religious issues	139	41.1	89	26.3
facilitate interaction	148	43.8	129	38.2
entertain myself	200	59.2	121	35.8
seek the attention of the government	134	39.6	65	19.2

Table 11 shows the purposes of social media usage by undergraduate students. It reveals that the majority of the respondents indicated that they use social media to facilitate their learning (77.8%), connect with friends (96.4%), update knowledge within and outside their course of study (96.4% and 81.4% respectively), reduce

stress (70.7%), watch videos and listen to music (92.9%), and entertain themselves (95.0%). Fewer respondents indicated using social media to solve social issues (22.8%) or seek government attention (58.8%). This implies that the primary purposes for using social media among undergraduates are for learning, connecting with friends, and entertainment.

Research Question Four: What is the impact of social media usage on the information behavior of undergraduate students?

Table 12: Impact of Social Media Usage on Information Behavior

Statement	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed
I use social media to:	F	%	F	%
share educational materials with course-mates	124	36.7	138	40.8
participate in group discussions	127	37.6	145	42.9
gain academic support from peers	141	41.7	149	44.1
access information from educational groups	149	44.1	139	41.1
learn about the latest educational trends	127	37.6	137	40.5
explore new ideas in my field of study	147	43.5	123	36.4
access online journals and books	132	39.1	115	34.0
enhance my research skills	141	41.7	130	38.5
seek advice from professionals	143	42.3	138	40.8
participate in academic webinars and seminars	111	32.8	126	37.3

Table 12 indicates that a significant proportion of respondents use social media to share educational materials (77.5%), participate in group discussions (80.5%), gain academic support from peers (85.8%), access information from educational groups (85.2%), learn about the latest educational trends (78.1%), explore new ideas in their field of study (79.9%), access online journals and books (73.1%), enhance research skills (80.2%), seek advice from professionals (83.1%), and participate in academic webinars and seminars (70.1%). This implies that social media positively impacts the information behavior of undergraduate students by enhancing their academic engagement and access to educational resources.

Research Question Five: What are the challenges faced by undergraduate students in using social media?

Table 13: Challenges Faced in Using Social Media

Statement	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed
I face challenges in:	F	%	F	%
managing time spent on social media	144	42.6	115	34.0
avoiding distractions while using social media	158	46.7	131	38.8
accessing reliable information	138	40.8	117	34.6
maintaining privacy and security	141	41.7	122	36.1
facing social media addiction	135	39.9	123	36.4
dealing with cyberbullying	112	33.1	102	30.2
experiencing network issues	123	36.4	119	35.2
managing academic performance	127	37.6	113	33.4
avoiding misinformation and fake news	134	39.6	105	31.1
facing harassment or stalking	109	32.2	104	30.8

Table 13 reveals the challenges faced by undergraduate students in using social media. The majority of respondents indicated challenges in managing time (76.6%), avoiding distractions (85.5%), accessing reliable information (75.4%), maintaining privacy and security (77.8%), and facing social media addiction (76.3%). Fewer respondents faced issues with cyberbullying (63.3%) and harassment or stalking (63.0%). This implies that while social media offers significant benefits, it also presents considerable challenges related to time management, privacy, and reliable information access.

Hypothesis Testing

Table 14: Spearman Rank Order Correlation between Social Media Usage and Information Behaviour

Variable	N	Correlation Coefficient	p-value
Social Media Usage	338	0.675	0.000
Information Behavior	338		

Table 14 shows a significant positive correlation ($r = 0.675$, $p < 0.05$) between social media usage and information behavior. This implies that increased usage of social media significantly enhances the information behavior of undergraduate students.

V. Discussion of Findings

The findings of this study reveal that social media tools such as Facebook, Instagram, Twitter, YouTube, and Google+ are the most preferred among undergraduate students in selected universities. These findings are consistent with previous research which reported similar trends in social media usage among university students.

The study also found that a significant proportion of students use social media for academic purposes such as facilitating learning, connecting with course-mates, updating knowledge, and accessing educational resources. These findings align with the work of other researchers, who reported that social media positively impacts students' academic engagement and information behavior.

However, the study also identified challenges associated with social media usage, including time management, privacy concerns, and access to reliable information. These challenges highlight the need for universities to provide guidance and support to students in managing their social media use effectively.

Overall, the study concludes that while social media presents significant opportunities for enhancing academic engagement and information behavior, it also requires careful management to mitigate potential challenges.

VI. CONCLUSIONS AND RECOMMENDATIONS

This section summarizes the findings of the study. It also provides conclusions based on these findings and offers recommendations for university management, government agencies, students, and library staff. The major findings of this study, derived from the research questions and hypothesis testing, are as follows:

1. **Prevalence of Social Media Usage:** Undergraduate students frequently use various social media applications, though there is variation in the extent of their use. Despite this variation, social media remains a common tool among students.
2. **Most Used Platforms:** Among the social media applications, Facebook is the most widely used by students, whereas LinkedIn and Snapchat are less frequently utilized.
3. **Purpose of Use:** Social media is primarily used by undergraduates to connect with friends. Additionally, it serves educational purposes such as updating knowledge in their field of study, obtaining relevant study information, facilitating e-learning, and connecting with course-mates.
4. **Behavioral Attitudes:** The study highlights diverse behavioral attitudes exhibited by students on social media, including both psychological and emotional aspects.
5. **Significant Relationship:** There is a significant relationship between the purpose of using social media and the information behavior of undergraduate students in the selected universities.

This study has established empirical evidence regarding the influence of social media usage on the information behavior of undergraduate students in three university in Nigeria. Specifically, it has provided insights into the types of social media applications used, the extent of their use, their purposes, and their impact on information behavior. These findings contribute to a deeper understanding of how social media affects the information behavior of undergraduate students and can inform the development of policies related to their socio-educational activities. Based on the findings and conclusions of this study, the following recommendations are made:

1. **Integration of Social Media in Library Services:** University management should integrate social media applications into library service delivery and the learning system. Libraries could use social media platforms to offer reference services and engage with students.
2. **Encouragement for Academic Use:** Students should be encouraged to use social media for academic purposes, such as sharing ideas, communicating, and searching for academic information.
3. **Library Social Media Initiatives:** Library management should utilize social media for current awareness services, selective dissemination of information, and other library services.
4. **Social Media Librarian:** Consider creating a unit for social media librarians who would handle and respond to queries via library social media handles.

Contributions to Knowledge

This study provides empirical evidence of high social media usage among undergraduate students and demonstrates a significant relationship between the purpose of social media use and the information behavior of students. These insights contribute to the broader understanding of social media's impact on academic behavior.

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