AN EXPLORATORY STUDY OF THE IMPACT OF SOCIAL MEDIA COMMUNICATION ON FACE-TO-FACE COMMUNICATION

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ABSTRACT

This study examines how frequent social media communication influences face-to-face interaction and interpersonal confidence among undergraduate students at the Federal University of Technology Akure (FUTA), Nigeria. With the pervasive integration of digital platforms into everyday life, social media has become a primary means of social connection among young adults. However, its effects on offline communication behavior remain contested. Using a quantitative research design, an online survey was administered to a conveniently selected sample of 500 undergraduates. Data were analyzed using descriptive and inferential statistics to explore how patterns of social media use relate to students' confidence, comfort, and engagement in in-person interactions. Accordingly, the study examined social media usage patterns, confidence and comfort levels in initiating conversations, and nonverbal engagement such as eye contact during face-to-face communication. Results reveal that while most respondents feel more comfortable expressing themselves online, frequent social media communication also enhances confidence in initiating offline conversations. Although some reported minor nonverbal challenges, such as reduced comfort with eye contact, the findings suggest that social media complements rather than diminishes interpersonal communication competence.

Keywords: Social Media Communication, Social Media, Face to Face Communication, Interpersonal Communication

1 | Introduction

The term 'Social Media' refers to online platforms that are designed to facilitate interaction and collaboration among users, allowing them to easily and quickly share content in real-time (Aldahdouh, *et al.*, 2020). These platforms, such as Whatsapp, Facebook, Twitter, Tik Tok and Instagram, have become increasingly popular in recent years (Taylor, 2020). Due to the ease of use of social media, the speed of smart technology, and accessibility, these platforms open the communication channels worldwide regarding topics such as politics, technology, entertainment, and sports. One cannot fathom how much the Internet has evolved just in the last decade. These digitally-mediated communication tools facilitate the creation, dissemination, and consumption of various forms of content, ranging from one-to-one, one-to-many, or many-to-many communications, all within the context of a public, networked environment (Mohammed, 2021)

The heavy reliance on social media has impacted interpersonal interactions and social skills. Instead

of engaging in face-to-face conversations, some individuals are so dependent on their devices that they struggle to carry on a conversation in real life. Social media has become an increasingly dominant form of communication, and many people have become more preoccupied with checking their smartphone than interacting with loved ones (Subramanian, 2017).

Face-to-face interactions involve rich visual, auditory, tactile, and contextual information that helps people pick up important social cues and share intentions and emotions (Newson *et al*, 2024). While the internet and social media have certainly enabled people to build connections online, they have also led to a decline in face-to-face communication as many individuals spend large amounts of time interacting through digital devices. This tendency to hide behind computers and other gadgets for online communication rather than engage in direct, in-person interactions has negatively impacted interpersonal relationships (Aririguzoh *et al*., 2020)

Joseph and Aleyomi (2021) in their study on social media and communication patterns studied 120 students of the Periyar University, Salem, who were social media users. The findings of study showed that social media users have experienced different kinds of communication patterns and have evolved a new kind of online language using concise, brief, crisp, code words and acronyms for easy communication. He listed the acronyms commonly used on social media as follows: "LOL (Lough out loud); OMG (Oh my God); BFF (Best friend forever); TTYL (Talk to You later); BF/GF (Boyfriend/Girlfriend); IDK (I don't know)". He concluded by saying that the Internet has made a big revolution in the field of communication. Nurudeen *et al.* (2023) focusing on Facebook's impact on students' communication skills, specifically looked at how Facebook usage affects students' ability to interact with one another in

person. The results showed that, with the increased use of social media platforms like Facebook, students were becoming more reliant on online interactions and were less inclined to engage in face-to-face conversations. Mustafa (2023) revealed that majority of the respondents use social media for personal communication and most of them spend numerous hours on social media.

Al-Jbouri (2024) looked into the broader impact of social media on interpersonal communication. The study highlighted that social media tends to bring more negative effects, particularly in how people interact with one another in real life. According to Al-Jbouri, while social media provides a convenient way to stay connected, it often reduces the quality of face-to-face interactions. People, especially younger generations, may become more accustomed to digital communication, which can lead to a decline in social skills like empathy, active listening, and nonverbal communication.

In today's digitally connected world, social media platforms have become integral to socialization, shaping how individuals communicate and form relationships (Nguyen *et al*., 2020; Subramanian, 2017). While some researchers argue that increased digital communication may weaken interpersonal skills, others contend that online interaction can foster greater social confidence and empathy. These differing perspectives underscore the need to investigate how online engagement translates into real-world communicative competence, particularly among university students who are active digital users.

1.1 | Research Objective
The research objectives of this study are to:
1.   Determine the frequency and patterns of social media use for communicating with peers.
2.   Assess how online communication impacts students' confidence and comfort in

initiating and engaging in face-to-face interactions; and

3. Evaluate how social media engagement relates to students' interpersonal engagement and nonverbal communication (e.g., eye contact) during in-person conversations.

1.2 | Research Questions

1. How frequently do undergraduate students use social media to communicate with friends?
2. To what extent does frequent social media communication influence students' confidence and comfort in initiating and engaging in face-to-face interactions?
3. How does social media use affect students' engagement and nonverbal behavior during interpersonal communication?

2 | Materials and Methods
2.1 | Research Design

A quantitative research approach was employed, specifically through an online survey distributed to FUTA undergraduate students. It included questions which help revealed their perceptions about the influence of social media on their face-to-face communication. The method allowed for the collection of data about students' social media usage patterns, perceptions, and experiences.

2.2 | Research Population and Sample Size

The target population for this study was undergraduate students at Federal University of Technology Akure (FUTA). The sample size was 500 FUTA undergraduate students. These students were selected through a process of convenience sampling, ensuring that every individual within the undergraduate student population had an equal chance of being included in the study.

2.3 | Method of Data Collection

A pilot test was carried out to evaluate the reliability of the questionnaire using Cronbach's Alpha. The results indicated that most of the scales demonstrated acceptable internal consistency, with values above or close to the recommended 0.70 threshold for social science research. A comprehensive questionnaire was developed and distributed among students to gather valuable insights into various aspects of social media use and its effects on communication. To ensure a thorough understanding of the study, the questionnaire incorporated Likert-scale questions and demographic information to capture diverse perspectives. The data collection process was conducted through an online platform ensuring accessibility and maximizing response rates from the student population.

2.4 | Data Analysis

Data were analysed using SPSS, which facilitated descriptive and inferential statistics to examine relationships between social media use and communication behaviours. The variables include demographics, social media habits, and perceptions of face-to-face communication.

3 | Results

Table 1 presents the frequency and platform preference of social media use among respondents. The results indicate that WhatsApp is the most frequently used platform, accounting for 86.4% of first-choice preferences. Other platforms such as TikTok (4.6%), Facebook (3.6%), Twitter/X (3.2%), and Instagram (2.2%) trail far behind. When respondents were asked to identify their second and third most frequently used platforms, Facebook emerged as the leading second-choice platform (36.2%), while Instagram led as the third

Table 1 | Frequency and platform preference of social media use among FUTA undergraduates.

Items		Frequency	%
First Frequently Used			
Facebook		18	3.6
Instagram		11	2.2
Twitter/X		16	3.2
TikTok		23	4.6
WhatsApp		432	86.4
	Total	500	100.0
Second Frequently Used			
Facebook		181	36.2
Instagram		60	12.0
Twitter/X		48	9.6
TikTok		136	27.2
WhatsApp		75	15.0
	Total	**500**	**100.0**
Third Frequently Used			
Facebook		124	24.8
Instagram		138	27.6
Twitter/X		110	22.0
TikTok		103	20.6
WhatsApp		25	5.0
	Total	**500**	**100.0**
How Often do you use social media to contact friends?			
Never		1	0.2
Rarely		17	3.4
Occasionally		45	9.0
Frequently		279	55.8
All the time		158	31.6
	Total	**500**	**100.0**

Fieldwork, 2025

choice (27.6%). Overall, these results highlight WhatsApp's dominance as the primary means of communication among students, with other platforms serving complementary roles. In terms of communication frequency, a majority of students reported high engagement: 55.8% use social media "frequently" to communicate with friends, and 31.6% do so "all the time." Only 2% reported never using social media for communication, reflecting near-universal engagement among respondents.

Table 2 examines how communication frequency varies across age groups. Among respondents aged 21–25 years, 214 reported using social media frequently, and 102 reported using it all the time. For those aged 16–20 years, 53 used it frequently and 50 all the time. Among respondents above 25 years, 12 reported frequent use and 6 reported using it all the time. These findings demonstrate consistent social media activity across all age groups, with the 21–25 age range showing the highest engagement.

Table 3 presents gender-based communication patterns. Among male respondents, 173 use social

Table 2 | Frequency of Communication via Social Media by Age

		Age			Total
		16 - 20 years	**21 - 25 years**	**Above 25 years**	
How often do you use social media to communicate with friends?	Never	0	1	0	**1**
	Rarely	1	16	0	**17**
	Occasionally	11	33	1	**45**
	Frequently	53	214	12	**279**
	All the time	50	102	6	**158**
Total		**115**	**366**	**19**	**500**

Fieldwork, 2025

Table 3 | Frequency of Communication via Social Media by Gender

		Gender		Total
		Male	**Female**	
How often do you use social media to communicate with friends?	Never	1	0	**1**
	Rarely	9	8	**17**
	Occasionally	27	18	**45**
	Frequently	173	106	**279**
	All the time	104	54	**158**
Total		**314**	**186**	**500**

Fieldwork, 2025

media frequently and 104 all the time. Similarly, 106 female respondents use it frequently and 54 all the time. The data indicate that both genders show comparably high social media engagement, suggesting minimal gender-based differences in communication behavior.

Table 4 summarizes students' perceptions of how social media affects face-to-face communication. More than half (52.2%) of respondents feel more comfortable expressing themselves online than in person, while 33.8% reported no such effect. Regarding confidence in initiating face-to-face communication, 49% rated themselves as either moderately or very confident, and 27.6% remained neutral. In contrast, 69.2% stated that frequent social media use does not make in-person conversations more difficult, and 45% indicated they are less engaged during in-person interactions than online. Additionally, 58.8% reported some

Table 4 | Students' Perceptions of Comfort in Face-to-Face Communication

Items	Frequency	%
Do you feel social media has made you more comfortable expressing yourself online than in face-to-face conversations?		
Not at all	169	33.8
A little uncomfortable	20	4.0
Indifferent	50	10.0
Comfortable	261	52.2
Total	500	100.0
Do you feel that social media has made you more confident in initiating face-to-face		
Not Confident	30	6.0
Slightly Confident	87	17.4
Neutral	138	27.6
Moderately Confident	133	26.6
Very Confident	112	22.4
Total	500	100.0
Do you find it harder to maintain in-person conversations because of frequent social media use?		
Not at all	195	39.0
Rarely	151	30.2
I don't know	60	12.0
Often	74	14.8
Very Much	20	4.0
Total	500	100.0
How engaged are you in face-to-face conversations compared to online conversations?		
Much less engaged	87	17.4
Slightly less engaged	137	27.4
Equally Engaged	143	28.6
More engaged	109	21.8
Slightly more engaged	24	4.8
	500	100.0
Total		
How comfortable are you with maintaining eye contact during in-person conversations?		
Very uncomfortable	140	28.0
Slightly uncomfortable	154	30.8
I don't know	33	6.6
Comfortable	173	34.6
Total	500	100.0

Fieldwork 2025

discomfort maintaining eye contact during conversations, suggesting the presence of subtle nonverbal communication challenges.

Table 5 shows that respondents who use social media frequently or all the time are more likely to report being "much less" or "slightly less" engaged in face-to-face conversations. Nonetheless, a substantial number also report being equally or more engaged offline. This pattern suggests variability in how digital engagement influences in-person communication habits.

Table 5 | Engagement Levels in Face-to-Face Conversations vs. Frequency of Online Conversations.

		How often do you use social media to communicate with friends?					Total
		Never	Rarely	Occasionally	Frequently	All the time	
How engaged are you in face-to-face conversations compared to online conversations?	Much less engaged	1	2	9	50	25	**87**
	Slightly less engaged	0	11	11	88	27	**137**
	Equally Engaged	0	2	12	63	66	**143**
	More engaged face-to-face	0	2	10	72	25	**109**
	Slightly more engaged face-to-face	0	0	3	6	15	**24**
Total		**1**	**17**	**45**	**279**	**158**	**500**

Fieldwork 2025

The One Sample T-test results in Table 6 show that all measured perceptions differ significantly from the neutral test value ($p < .001$). The largest mean difference (3.42) corresponds to increased confidence in initiating face-to-face conversations, followed by comfort expressing oneself online (mean = 2.81). These results confirm statistically significant relationships between social media use and self-reported communication behaviors.

Table 6 | One Sample T-test

	Test Value = 0				95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Do you feel social media has made you more comfortable expressing yourself online than in face-to-face conversations?	45.759	499	.000	2.80600	2.6855	2.9265
Do you feel that social media has made you more confident in initiating face-to-face	64.576	499	.000	3.42000	3.3159	3.5241

	Test Value = 0				95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Do you find it harder to maintain in-person conversations because of frequent social media use?	39.939	499	.000	2.14600	2.0404	2.2516
How engaged are you in face-to-face conversations compared to online conversations?	53.046	499	.000	2.69200	2.5923	2.7917
How comfortable are you with maintaining eye contact during in-person conversations?	45.174	499	.000	2.47800	2.3702	2.5858

Table 7 presents effect sizes for the main variables. All Cohen's d and Hedges' correction values exceed 0.8, indicating strong effects. The strongest effect (Cohen's d = 2.888) relates to confidence in initiating face-to-face communication, followed by online comfort (Cohen's d = 2.046). These findings support the conclusion that social media use significantly influences students' self-perceived communication skills.

4 | Discussion

The discussion is structured around the three key objectives of this study.

Social Media Usage Patterns: - In line with the first objective, the findings reveal that students communicate with friends primarily through WhatsApp, confirming social media's dominance as a primary communication tool among young adults. This high usage reflects the integration of digital platforms into students' social lives,

supporting the argument of Eke *et al.* (2014) that social media has become an indispensable part of students' interaction and learning environments. The preference for WhatsApp supports Aldahdouh *et al.* (2020) and Taylor (2020), who emphasized social media's ease of access and its role in enhancing connectivity.

Impact on Comfort and Confidence: - Consistent with the second objective, the study explored how online communication influences students' confidence and comfort in initiating and sustaining face-to-face interactions. Findings indicate that while a significant number of respondents feel more expressive and comfortable communicating online, frequent social media communication also enhances their confidence when transitioning to in-person conversations. Similarly, Nguyen *et al.* (2020) also suggested that online communication can nurture social confidence and empathy by offering a safe space for self-expression.

Table 7: One-Sample Effect Sizes

		Standardizer[a]	Point Estimate	95% Confidence Interval	
				Lower	Upper
Do you feel social media has made you more comfortable expressing yourself online than in face-to-face conversations?	Cohen's d	1.37118	2.046	1.892	2.200
	Hedges' correction	1.37324	2.043	1.889	2.197
Do you feel that social media has made you more confident in initiating face-to-face	Cohen's d	1.18423	2.888	2.688	3.087
	Hedges' correction	1.18602	2.884	2.684	3.082
Do you find it harder to maintain in-person conversations because of frequent social media use?	Cohen's d	1.20149	1.786	1.644	1.927
	Hedges' correction	1.20330	1.783	1.642	1.924
How engaged are you in face-to-face conversations compared to online conversations?	Cohen's d	1.13477	2.372	2.201	2.543
	Hedges' correction	1.13648	2.369	2.197	2.539
How comfortable are you with maintaining eye contact during in-person conversations?	Cohen's d	1.22659	2.020	1.867	2.173
	Hedges' correction	1.22844	2.017	1.864	2.170

a.   The denominator used in estimating the effect sizes.
b.   Cohen's d uses the sample standard deviation.
c.   Hedges' correction uses the sample standard deviation, plus a correction factor.

Face-to-Face Engagement and Nonverbal Communication: - Aligned with the third objective, the study interprets the relationship between students' social media engagement and their interpersonal behavior, particularly in relation to eye contact and participation during in-person communication. Results reveal that while many students remain actively engaged in both online and offline communication, a small proportion report discomfort with sustained eye contact during face-to-face interactions. This supports Aririguzoh *et al.* (2020) who observed that prolonged digital engagement may affect nonverbal attentiveness and comfort. Thus, while social media facilitates communication, it may subtly influence nonverbal communication behaviors such as gaze, tone, and body language.

5 | Implications and Limitations

These findings imply that social media is a double-edged tool: it enhances communicative confidence but may subtly reduce nonverbal awareness. The study is limited by its single-institution focus, which may affect generalizability. Additionally, the reliance on self-reported data introduces the possibility of response bias. Future research could employ longitudinal or mixed-method approaches to capture behavioral evidence of communication changes over time.

6 | Conclusion

This study examined how frequent social media

communication affects face-to-face interactions among FUTA undergraduates. The findings reveal that social media, particularly WhatsApp, serves as the primary communication platform for students. Most respondents use these platforms frequently or constantly, regardless of age or gender. While many students report greater online comfort, a significant proportion also acknowledge improved confidence in initiating offline conversations. Overall, social media use appears to complement rather than replace face-to-face interaction. It enhances psychological readiness and communicative confidence while posing minor challenges in nonverbal communication. These results suggest that, when used constructively, social media can be an enabling rather than detrimental communication tool for young adults.

7 | Recommendations

1. Promote balanced media literacy programs — Universities should implement workshops that help students develop healthy boundaries between online and offline communication, emphasizing nonverbal and interpersonal skills.
2. Encourage hybrid communication activities — Student affairs departments could promote both online and face-to-face forums to build interpersonal confidence.
3. Future research directions — Further studies should employ qualitative and longitudinal designs across multiple universities to verify causality and explore cultural nuances in social media's impact.

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