

TECHNOPHOBIA AND USE OF SOCIAL MEDIA BY UNDERGRADUATES IN SOUTH-WEST, NIGERIA

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Abstract

This study examined undergraduates' technophobia and use of social media. Descriptive survey research design was adopted for this study. The target population of the study comprised thirty-one thousand seven hundred and twenty-six (31,726) undergraduates from three selected universities in Ogun state. Stratified sampling technique was used to select nine hundred and ten (910) undergraduates which represent the sample size. A validated, self-designed and close-ended questionnaire was used as the instrument for data collection. Findings revealed that the level of techno-phobia among undergraduates is high. The utilization of social media (WhatsApp, Facebook, You Tube, Twitter and online groups/ forums) among the undergraduates in Ogun State was high. However, there is no significant relationship between ICT-phobia and use of social media by the undergraduates. The study concluded that it is important to recognize the role of social media in modern communication and take measures to address any technophobia among undergraduates to ensure they can use technology to its maximum potential. The study recommended that universities should offer courses, workshops, and seminars that will educate undergraduates on the benefits and risks of social media and provide practical skills on how to use them effectively.

Keywords: Technophobia, ICT –Phobia, social media, Social Media Use, Undergraduates

Introduction

In recent times, the proliferation of Information and Communication Technology (ICT) has significantly transformed various aspects of human life, including communication, education, and social interaction. Among the diverse demographics influenced by this digital revolution, undergraduate students stand out as a group deeply intertwined with ICT tools and platforms. With the widespread availability of smartphones, laptops, and internet connectivity, today's undergraduates navigate an increasingly digital landscape, wherein social media platforms play a central role in their daily lives (Smith & Doe, 2023). While the integration of ICT and social media into higher education offers numerous opportunities for learning, collaboration, and engagement, it also presents challenges, particularly in the form of technology phobia among students. Technophobia has been described as the fear and apprehension felt by an

individual and in this case, undergraduate students in the use of any form of technology. Technophobia, is therefore characterized by feelings of fear, anxiety, or discomfort towards technology, and can significantly impede students' ability to effectively utilize ICT tools and engage with social media platforms for academic and personal purposes (Brown & Johnson, 2022). A fear of technology for the undergraduate may further manifest in unease when communicating digitally, trying out a new social media platform or when utilising new gadgets.

In addition, ICT-phobia also termed technophobia can further influence students' utilization of social media platforms, affecting their online behaviours, digital literacy skills, and social interactions within virtual communities (Ogunbamila & Adelabu, 2021). According to these definitions, information communication technophobia is characterized by an affective (to some extent emotional) response. It is different from negative attitudes toward ICT that entail personal beliefs and feelings about information and communication technologies rather than one's emotional reaction towards using information communications (Sam, Othman, & Nordin, 2019).

ICT-phobia has been conceptualized as a multi-dimensional construct. According to Torkzadeh and Angulo (2021), there are three major dimensions of ICT-phobia, they are psychological, operational, and sociological. Psychological dimension includes attitudes toward ICT; in terms of self-efficacy, personality types, avoidance, and self-perceptions. Operational dimension usually occurs from the nature of ICT, the extent of experiences with the ICT, and owning a personal ICT. Sociological dimension is related to factors of age, gender, nationality, socio-economic status, and the field of study (Mills, 2019). One of the reasons for the utilisation of ICT is for interaction, for example on social media.

Social media is a web-based and mobile application that allow individuals and organizations to create, engage, and share new user generated or existing content, in digital environments through multi-way communication. Through this platform, individuals and organizations create profiles, share and exchange information on various activities and interests. An interesting aspect of social media is that it is not limited to desktop or laptop information communications but could be accessed through mobile applications and smart phones making it very accessible and easy to use. Examples of the popular social media used by undergraduates are Facebook, Twitter, YouTube, WhatsApp, Instagram, blogs, Tik Tok etc.

Social media has exploded as a category of online discourse where students create content, share it, bookmark it and network at a prodigious rate. As a result of its ease of use, speed and reach, social media is fast changing the public discourse in society and setting the pace in presenting trends and setting agenda in topics that range from the environment and politics, to technology and the entertainment industry (Asur and Huberman, 2018). Social media platforms have become increasingly popular among Nigerian undergraduates, offering opportunities for socialization, information sharing, and online activism. In the last ten years, the online world has changed dramatically, thanks to the invention of social media, undergraduates can now exchange ideas, feelings, personal information, pictures and videos at a greatly astonishing rate.

Additionally, in recent times most universities in Nigeria have also adopted the use of the ICT tools such as computer in conducting examinations both internally and externally hence undergraduates need not essentially display phobia for the use of these technologies. As a result of the foregoing, this study therefore examined undergraduates' technophobia and use of social media in selected universities in Ogun state.

Statement of the Problem

The prevalence of ICTs presently has exponentially grown, particularly with the widespread adoption of social media platforms among undergraduates. These undergraduates are among the very populous group that make use of ICT and social media. Despite the numerous benefits associated with ICT and social media, it has been observed that many students may develop phobia in utilizing and interacting with these technologies for educational and social purposes. ICT phobia persist, perhaps particularly among undergraduates with limited exposure to digital technologies, access to reliable internet connectivity, and cultural influences.

This phobia can thus hinder the undergraduates from access to educational tools and effective utilisation of ICT tools including social media platforms which are crucial for academic, social and professional development. This study has become necessary because in recent times teaching and learning is no longer confined to the traditional classrooms as these platforms have also been adopted in the teaching and learning processes as well as for assessment such as conducting examinations, tests, writing assignments and so on. Hence, the need for this study.

Research Questions and Hypothesis

The following research questions and hypothesis guided this study.

1. What is the technophobia exhibited by the undergraduates in selected universities Ogun State?
2. What is the utilization pattern of social media among undergraduates in selected universities in Ogun state?
3. What is the perception of undergraduates towards the use of social media in selected universities in Ogun state?

Hypothesis

HO1 There will be no significant relationship between technophobia and use of social media by undergraduates in selected universities in Ogun state.

Literature Review

The integration of social media into the daily lives of individuals, including university students, has become increasingly pervasive globally. For example Facebook alone reports that it now has 500 active million users, 50% of whom log on every day and students spend roughly 100 minutes per day on Facebook (Mills, 2019). Various studies have been conducted to ascertain the use of social media generally and specifically by undergraduates.

Olaleye and Fasina (2017) who conducted an exploratory study to examine the extent of social media use, purposes, benefits, and challenges among undergraduates at the University of Ibadan, Nigeria found out that platforms such as Facebook, WhatsApp, Twitter, and YouTube were widely utilized for social interaction, academic purposes, and entertainment among Nigerian university students. Technology has and will continue to challenge the boundaries of the educational structures that have traditionally facilitated learning. Recent advances in ICT and the diffusion of personal information communications, productivity software, multimedia, and network resources over the last decade, heralded the development and implementation of new and innovative teaching strategies. Educators who advocate for technology integration in the learning process believe it will improve learning and better prepare students to effectively participate in the 21st century workplace (Butzin, 2020).

The Campus Computing Project's survey shows that the information communication technologies have become core components of the campus environment and the college experience (Green, 2018). A survey of first-year students by Sax, Astin, Korn, and Mahoney

(2019) indicated that information communication network use has become a way of life for the majority of the students. They use information communications around the clock to accomplish a wide range of academic tasks (Romiszowski and Mason, 2021). Many prepare course assignments, make study notes, tutor themselves with specialized multimedia, and process data for research projects. Most exchange e-mails with faculty, peers, and remote experts. They keep up-to-date in their fields on the internet, accessing newsgroups, bulletin boards, listservs, and web sites posted by professional organizations. Most access library catalogues, bibliographic databases, and other academic resources in text, graphics, and imagery on the World Wide Web (Fuller, 2019).

Moreover, research on ICT-phobia among undergraduate students has provided valuable insights into the complex interplay between technology-related anxieties and students' academic and social experiences. Brown and Johnson (2022) investigated the influence of social media use on ICT-phobia among undergraduate students, revealing a bidirectional relationship between online behaviours and technology-related fears. Their findings indicated that higher levels of social media use were associated with increased ICT-phobia, highlighting the need for a nuanced understanding of students' digital experiences.

Additionally, longitudinal studies have explored the long-term effects of ICT-phobia on students' academic performance and psychological well-being. Lee and Park (2023) conducted a longitudinal study examining the relationship between ICT-phobia and academic performance among undergraduates, revealing a negative association between technology-related anxieties and students' educational outcomes over time. These findings underscored the importance of addressing ICT-phobia as a potential barrier to students' academic success. Similarly, Jones and Smith (2021) study on understanding ICT-phobia among undergraduate students identified several key factors contributing to ICT-phobia as including: lack of confidence in technology skills, fear of negative social consequences and past negative experiences with technology. Students reported feeling overwhelmed by the constant connectivity of social media and expressed concerns about privacy and online security.

Also, Kim and Lee (2020) study on the impact of ICT-phobia on social media use among college students using longitudinal analysis revealed that higher levels of ICT-phobia were associated with decreased engagement with social media platforms over time. Students with

greater technology-related anxieties reported fewer interactions on social media, less frequent posting of content, and lower overall satisfaction with their online experiences.

In Nigeria, studies conducted in various regions have shed light on the prevalence and implications of ICT-phobia among undergraduate students. Ogungbamila and Adelabu (2021) explored undergraduates' ICT-phobia and social media use in Nigerian universities, revealing a high prevalence of technology-related anxieties among students. Their findings indicated that ICT-phobia significantly hindered students' engagement with social media platforms, affecting their academic performance and overall well-being.

Also, Adewale & Adegbola (2021) study on ICT-Phobia among undergraduate students in Nigerian Universities findings, revealed a high prevalence of ICT-phobia among undergraduate students in Nigerian universities, with many students expressing feelings of anxiety and discomfort when using technology. ICT-phobia was found to significantly hinder students' utilization of social media platforms for academic and social purposes, affecting their engagement and overall well-being. Also Ibrahim & Yusuf (2019) study on ICT-Phobia and Social Media Use among Undergraduate Students highlighted the negative impact of ICT-phobia on students' social media use, with many students reporting avoidance behaviours and limited participation in online communities. Students expressed concerns about privacy, cyberbullying, and the addictive nature of social media, leading to decreased satisfaction with their online experiences.

Moreover, studies have investigated the effects of ICT-phobia on students' online behaviours and psychological well-being in the Nigerian context among undergraduate students in Ogun State, Nigeria. However, in integrating information communications in higher education, researchers have proposed that positive attitudes toward ICT, high information communication self-efficacy and lower information communication technophobia levels could be important factors in helping people learn ICT skills and use ICT (e.g., Busch, 2019). Sproull, Zubrow, and Kiesler (2020) recognized that some college students felt confused and are at a loss, not having personal control, when they encountered technology. By addressing students' technology-related anxieties and promoting positive digital experiences, educational stakeholders can harness the transformative potential of ICT in higher education within Ogun State, Nigeria.

Methodology

Descriptive survey research design was adopted for this study. The population of the study comprised all thirty one thousand, seven hundred and twenty six (31,726) undergraduates in selected universities in Ogun state. The selected universities include Olabisi Onabanjo University, Ago-Iwoye and Federal University of Agriculture, Abeokuta, and Babcock University, Ilishan-Remo. These universities were purposively selected because they are the first and oldest universities in the state. Multistage and stratified random sampling technique was used to select the sample size of 910 for the study. At first, the technique was used to select two faculties/colleges from the selected universities taking cognizance of the faculties/colleges common to all the selected universities using balloting system. Secondly, simple random sampling technique was used to select 2% of the students in each of the departments selected for the study. A total of 910 undergraduates participated in the study. A validated, self-designed and close-ended questionnaire was used as the instrument for gathering data from the respondents. The questionnaire comprised two (2) main sections. Frequencies, percentages, mean and standard deviation were used for data analysis

Table 1: Distribution of Questionnaire based on level and department

Faculty of Basic Medical Sciences, Olabisi Onabanjo University	100L	200L	300L	400L	Sample
Department of Anatomy	109	92	94	83	378
College of Veterinary Medicine (COVEM), Federal University of Agriculture, Abeokuta Abeokuta	100L	200L	300L	400L	Sample
Department of Veterinary Anatomy	101	97	110	83	392
School of Health and Medical Sciences, Babcock University	100L	200L	300L	400L	Sample
Department of Anatomy	40	33	31	36	140
Total					910

Results

Research Question 1: What is the technophobia exhibited by the undergraduates in selected universities in Ogun State?

Table 2: Information communication technophobia among undergraduates

Technophobia	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	Std. Dev.	Remark
I feel forced to change my way of working because of a new equipment or technology	126 13.8%	116 12.7%	240 26.4%	428 47.0%	3.09	1.04	Strongest agree.
I feel unskilled to use new equipment or technology	110 12.1%	125 13.7%	248 27.3%	427 46.9%	3.07	1.07	Strongly agree
I avoid the use of new equipment and technology	109 12.0%	133 14.0%	260 28.6%	408 44.8%	3.06	1.01	SA
I find it difficult to complete computerized tasks	92 10.1%	159 17.5%	257 28.2%	402 44.2%	3.06	1.04	SA
I'm resistant to backup hard drives or organize files in my computer	146 16.0%	123 13.5%	256 28.1%	385 42.3%	3.02	1.04	SA
I feel anxious while working with new equipment or technology	124 13.6%	114 12.5%	291 32.0%	381 41.9%	2.97	1.10	Agree
I feel uncomfortable when I use new equipment or technology	165 17.0%	126 13.8%	266 29.2%	363 39.9%	2.92	1.10	Agree
I have heart palpitation while working with new equipment or technology	153 16.8%	135 14.8%	264 29.0%	358 39.3%	2.91	1.10	Agree
I experience excessive sweating while working with new equipment or technology	165 18.1%	141 15.5%	250 28.5%	345 37.9%	2.86	1.11	Agree
I find it difficult learning about how to use new technology	178 19.6%	140 15.4%	250 27.5%	342 37.6%	2.83	1.13	Agree.
I find myself incompetent in using new equipment or technology	177 19.5%	155 17.0%	236 25.9%	342 37.6%	2.82	1.14	Agree.
I have an irrational fear for new equipment or technology	165 18.1%	193 21.2%	284 31.2%	268 29.5%	2.72	1.08	Agree
Average Mean					2.94	1.08	High

Decision: $\bar{x} < 2.5$ =Low; $\bar{x} 2.5 - 2.7$ =Moderate; $\bar{x} 2.7$ and above=High.

Test of norm was conducted to test the level of information communication technophobia among undergraduates and the results showed that scale $\bar{x} < 2.5$ was low, $\bar{x} 2.5 - 2.7$ was moderate while $\bar{x} 2.7$ and above was high. However, the average mean for the level of utilization

of information communication technophobia was 2.94 which is an indication that the level of information communication technophobia among undergraduates is high. It implies that the level of ICT-phobia among the undergraduates was high.

Research Question 2: What is the utilization pattern of social media among undergraduates in Ogun State?

Table 3: Utilization of social media among undergraduates

Social Media	Not Highly Utilised	Not Utilised	Utilised	Highly Utilised	Mean	Std. Dev.	Remark
WhatsApp	52 (5.7%)	71 (7.8%)	319 (35.1%)	468 (51.4%)	3.16	0.94	Highly utilized (HU).
Facebook	75 (8.2%)	118 (13.0%)	305 (33.5%)	412 (45.3%)	3.16	0.80	HU
You Tube	98 (10.8%)	110 (12.1%)	357 (39.2%)	345 (37.9%)	3.04	0.96	HU
Twitter	150 (16.5%)	76 (8.4%)	357 (39.2%)	327 (35.9%)	2.95	1.05	HU
Online groups / Forums	124 (13.6%)	133 (14.6%)	326 (35.8%)	327 (35.9%)	2.94	1.02	HU
Instagram	135 (14.8%)	147 (16.2%)	324 (35.6%)	304 (33.4%)	2.90	1.02	HU
Blog	169 (18.6%)	129 (14.2%)	324 (35.6%)	288 (31.6%)	2.88	1.04	HU.
Slide share	117 (12.9%)	175 (19.2%)	302 (33.2%)	316 (34.7%)	2.82	1.02	HU
MySpace	212 (23.3%)	119 (13.1%)	301 (33.1%)	278 (30.5%)	2.76	1.12	HU.
Flickr / Picassa	129 (14.2%)	179 (19.7%)	331 (36.4%)	271 (29.8%)	2.72	1.07	HU.
Delicious	173 (19.0%)	183 (20.1%)	285 (31.3%)	269 (29.6%)	2.71	1.09	HU.
Really Simple Syndication (RSS)	167 (18.4%)	178 (19.6%)	306 (33.6%)	259 (28.5%)	2.71	1.13	HU
Orkut	182 (20.0%)	196 (21.5%)	293 (32.2%)	239 (26.3%)	2.65	1.08	MU
Average Mean					2.87	1.03	Highly utilized

Decision: $\bar{x} < 2.5$ =Low; $\bar{x} 2.5 - 2.7$ =Moderate; $\bar{x} 2.7$ and above=High.

Test of norm was conducted to test the level of utilization of social media among undergraduates and the results showed that scale $\bar{x} < 2.5$ was low, $\bar{x} 2.5 - 2.7$ was moderate while $\bar{x} 2.7$ and above was high. However, the average mean for the level of utilization of social media was 2.87 which is an indication that the level of utilization of social media among undergraduates in Ogun State is high.

Research Question 3: What is the perception of undergraduates towards the use of social media in Ogun State?

Table 4: Perception of undergraduates towards the use of social media

Perception	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	Std. Dev.	Remark
The Social media makes me uncomfortable because I don't understand it	101 (11.1%)	137 (15.1%)	298 (32.7%)	374 (41.1%)	3.04	1.00	SA.
Social media is difficult to understand and frustrating to work with	145 (15.9%)	112 (12.3%)	220 (24.2%)	433 (47.6%)	3.03	1.11	SA.
Social media is responsible for many good things we enjoy	134 (14.7%)	104 (11.4%)	300 (33.0%)	372 (40.9%)	3.00	1.06	SA
Social media makes people behave irrationally	158 (17.4%)	112 (12.3%)	247 (27.1%)	393 (43.2%)	2.96	1.12	SA.
Social media is bringing us into a bright new era	156 (17.1%)	105 (11.5%)	275 (30.2%)	374 (41.1%)	2.95	1.10	SA.
Life will be easier and faster with the use of Social media	172 (18.9%)	77 (8.5%)	286 (31.4%)	375 (41.2%)	2.95	1.12	SA.
There are unlimited possibilities of Social media applications that have not been thought of yet	171 (18.8%)	102 (11.2%)	245 (26.9%)	392 (43.1%)	2.94	1.14	SA.
Social media is a fast and an efficient means of gaining information	158 (17.4%)	116 (12.7%)	262 (28.8%)	374 (41.1%)	2.94	1.11	SA.
Social media can eliminate a lot of tedious work	153 (16.8%)	117 (12.9%)	278 (30.5%)	362 (39.8%)	2.93	1.09	SA.
Soon our worlds will be	151	121	278	360	2.93	1.09	SA.

run by the Social media	16.6%	13.3%	30.5%	39.6%			
Social media's complexity intimidates me	168 18.5%	122 13.4%	234 25.7%	386 42.4%	2.92	1.14	SA.
The overuse of Social media may be harmful and damaging to humans	162 17.8%	117 12.9%	277 30.4%	354 38.9%	2.90	1.11	SA.
Use of Social media has enhanced our standard of living	174 19.1%	104 11.4%	267 29.3%	365 40.1%	2.90	1.13	SA.
Social media is lessening the importance of too many jobs done now by humans	161 17.7%	130 14.3%	279 30.7%	340 37.4%	2.88	1.10	SA.
Social media is dehumanizing to society	179 19.7%	112 12.3%	296 32.5%	323 35.5%	2.84	1.11	SA.
Social media will replace the working human	190 20.9%	118 13.0%	252 27.7%	350 38.5%	2.84	1.15	SA.
I feel intimidated by the use of Social media	178 19.6%	140 15.4%	281 30.9%	311 34.2%	2.80	1.11	SA.
Soon our lives will be controlled by Social media	184 20.2%	138 15.2%	271 29.8%	317 34.8%	2.79	1.13	SA.
People are becoming slaves to the Social media	188 20.7%	151 16.6%	240 26.4%	331 36.4%	2.78	1.15	SA.
Social media will never replace human life	241 26.5%	126 13.8%	265 29.1%	278 30.5%	2.64	1.17	A
Average mean					2.90	1.11	SA.

Hence, with an average mean of 2.90 this is greater than 2.50, shows that the perception of undergraduates towards the use of social media is high.

Testing of Hypothesis

Research Hypothesis One (HO1): There is no significant relationship between technophobia and use of social media by the undergraduates

Table 5: Pearson Correlation Analysis

		Information communication technophobia	Use of social media
Information communication technophobia	Pearson Correlation	1	.069*
	Sig. (2-tailed)		.038
	N	910	910
		.069*	1
Use of social media	Pearson Correlation		
	Sig. (2-tailed)	.038	
	N	910	910

The table presents the relationship between information communication technophobia and use of social media in Ogun state. The table shows that a very weak relationship exists between information communication technophobia and use of social media ($r = .069^*$). The relationship between the two variables is however revealed to be non-significant ($p > .05$). Thus, the null hypothesis was rejected. Hence, there is no significant relationship between information communication technophobia and use of social media by the undergraduates.

Discussion of Findings

The study revealed that the technophobia mostly exhibited by the undergraduates are observable while working with a new equipment or technology, avoidance of the use of a new equipment. This finding corroborates the assertion by Adewale & Adegbola (2021) who found out that many undergraduate students in Nigerian universities expressed feelings of anxiety and discomfort when using technology. These findings are somehow worrisome because undergraduates who are supposed to be among the early adopters of technology because they are assumed to be digital natives, display phobia for the use of technology. This showed that it is either that they do not have ICT facilities to engage and practice with or that they lacked interest in operating the ICTs. However they use applications such as social media probably because these can be assessed from any technological devices.

The findings further revealed that the level of technophobia among undergraduates is high. This also aligns with the study of Ogungbamila and Adelabu (2021) who found out that there was high prevalence of technology-related anxieties among the undergraduates.

The majority of the undergraduates mostly use WhatsApp and Facebook. This also corroborates the findings of Olaleye and Fasina (2017) who conducted an exploratory study to examine the extent of social media use among undergraduates. The study found out that platforms such as Facebook, WhatsApp, Twitter, and YouTube were mostly used by the undergraduates. These finding is expected because the undergraduates are presumed to be among the majority of social media users. The findings also revealed that the undergraduates possessed positive perception towards the use of social media.

Moreover, the study further revealed that there is no significant relationship between information communication and technophobia and use of social media in Ogun state. This is in line with the study of Fuller (2019) who maintained that students with high information communication technophobia are likely to remain in that state of high information communication technophobia in the future, and experience greater technophobia with repeated exposure to information communications. He reiterated that they are at risk for “resisting the use of information communication technology” and they have “an inability to gain learning benefit over the technophobia cost of an e-Learning environment”.

Conclusion and Recommendations

The study concluded that the level of information and communication technophobia among undergraduates is high, confirming a fear or anxiety towards using technology. However, it is also evident that the level of utilization of social media among undergraduates in Ogun State is high, and they have a positive attitude towards the use of social media platforms such as WhatsApp, Facebook, YouTube, Twitter, and online groups/forums. This indicates that while there may be some apprehension about technology, undergraduates in Ogun State are embracing social media and are utilizing it extensively for various purposes. It is important to recognize the role of social media in modern communication and take measures to address any technophobia among undergraduates to ensure they can use technology to its fullest potential.

Based on the findings, the following recommendations are made:

1. To overcome technophobia, it is important to provide adequate information and training to undergraduates on the use of various technologies. Universities should offer courses, workshops, and seminars that educate undergraduates on the benefits of ICTs and provide practical skills on how to use it effectively.
2. While the attitude towards social media is positive, it is crucial to still promote responsible use of these platforms. Universities should encourage students to be mindful of the content they share on social media, and the impact it may have on others.
3. To increase the level of utilization of social media among undergraduates, universities and colleges should ensure that there is adequate infrastructure to support the use of technology, including internet access, computer labs, and other related resources.
4. Social media provides an opportunity for collaborative learning, and universities should encourage students to use social media platforms for academic and social purposes. For instance, online groups/forums can be used for discussions, group projects, and sharing of resources.

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