Article

Assessment of Media Literacy Skills of Undergraduates in Universities in Ogun State, Nigeria

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Abstract

This study assessed the media literacy skills level of undergraduates in Ogun State, Nigeria. The study adopted the descriptive survey research design, while the multistage sampling procedure was adopted. The target population comprised 4 189 Level 200 undergraduates from eight departments of the selected faculties in the different universities in Ogun State, Nigeria. A validated questionnaire with Cronbach's alpha (r=0.96) was used as the data collection instrument. The probability proportional to size sampling technique was used to select 837 undergraduates from the study population. A total of 754 copies of the questionnaires were retrieved and used for the analysis. Data were collated and analysed using descriptive statistics. Findings revealed that 69.0% (520) undergraduates possessed high media literacy skills, 28.5% (215) possessed moderate media literacy skills, while 2.5% (19) possessed low media literacy skills. This indicated possession of high media literacy skills among undergraduates. Further, the construct, ability to access media messages or content, was the most prevalent out of the four constructs used to measure the media literacy skills of the undergraduates. The study recommended the nurturing of abilities to access, analyse, evaluate and create media content and the provision of accessible internet connectivity with internet-enabled media devices in the various units of universities, among other suggestions.

Keywords: 21st century skills; assessment; media literacy; media literacy skills; Ogun State, Nigeria; university undergraduates

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Introduction and Background to the Study

In our modern society, varied forms of media serve to inform, entertain, educate and connect individuals to the world. As a result, media is now used in most daily activities at homes, offices, organisations, social, religious and political gatherings, as well as in educational environments for communication, entertainment, learning and other purposes. Media has become imperative because it enhances learning, facilitates the enjoyment of content and satisfies users' intellectual curiosity. Zarei and Parhizkari (2017) emphasise factors such as motivation, self-efficacy and critical thinking that are key to student-centred learning being enabled through the support of media in diverse contexts. At the university level, media has greatly influenced teaching, learning and research activities, such that lecturers and students become involved in its application. Studies by Breslin (2021), Kleemans and Eggink (2016), Nwangwa, Youlonfoun, and Omotere (2014) and Tetep (2019) within and outside Nigeria have indicated how undergraduates lack the ability to make use of media for academic and personal enhancements.

Personal observations by the authors of this paper indicated that undergraduates are spending a lot of time watching films and games, reading content online, downloading, playing and listening to music, as well as multitasking on several social sites. Studies have ascertained that undergraduates are getting tethered to social media sites (Moeller, Powers, and Roberts 2012; Oluwole 2014). Parents and guardians are becoming increasingly concerned that their undergraduate children and wards are spending excessive time on Facebook, Instagram and other social sites at the expense of studying. Undergraduates' media use habits have encouraged a loss of concentration, procrastination, violent conduct, risky sexual behaviours, alcoholism, drug abuse and smoking, and other social vices (Geraee et al. 2015). The United Nations Educational, Scientific and Cultural Organisation (UNESCO 2012) earlier shared the view that the majority of students have become defenceless individuals and are more prone to dangers as a result of damaging media habits. These illustrations indicated the need for adequate media literacy education among undergraduates in Ogun Sate, Nigeria.

Definition of Media Literacy

Media literacy has been defined in many ways by researchers, associations, organisations, and even universities. For example, Baran (2012) defines it as the ability to effectively and efficiently understand and use any form of mediated information. The Office of Communication (OFCOM 2015) defines media literacy as the ability to access, understand and create communication in a variety of contexts. Rosenbaum (2016) describes media literacy as involving awareness of one or more characteristics of using media and the production of media messages. The researchers of this study conceptualised media literacy as the abilities of undergraduates to access, analyse, evaluate and create media messages or content in a variety of forms. Even though these definitions seem different, all of them address common goals of thoughtful assessment

of media content while improving skills to access, comprehend, analyse, use and produce media content.

Hobbs (2010) highlights media literacy skills as including the ability to search, locate and comprehend information and ideas, the ability to deconstruct or dissect messages in a variety of forms, identifying the author, purpose and points of view, as well as assessing the value and reliability of such content. Hobbs (2010) further identifies the ability to produce content in different formats using various digital technologies and resources, functioning as an individual or jointly with other people to share knowledge and information, finding solutions to challenges and participating as a constructive member of a community. These highlighted abilities are pertinent to university undergraduates, particularly in Ogun State, Nigeria, because the media, in its various forms, now influence the personal, educational, social, cultural and even religious lives of current university students.

Ogun State, with Abeokuta as its capital (created on 3 February 1976 by the General Murtala Mohammed Administration), is one of the 36 states in Nigeria. Ogun State is located in the southwestern part of Nigeria and shares borders with Ondo State to the east, Lagos State to the south, the Republic of Benin to the west, and Oyo and Osun States to the north. The State has the highest number of tertiary institutions, specifically 25, of which 15 are universities, spanning federal, state and private ownerships. The high number of universities in Ogun State may be attributed to its centrality of location and proximity to metropolitan cities, which probably encouraged individuals and religious bodies to cite educational institutions, thereby contributing to the development of would-be young leaders of tomorrow in Ogun State. These and other features, such as high student enrolment and high crime rates, prompted the researchers to examine the media literacy skills of undergraduates from universities in Ogun State, Nigeria.

Many studies in Nigeria have addressed social media use, digital literacy, and information literacy skills, with only a few focusing on the study of media literacy skills of undergraduates, which is the focus of this study. For instance, Ukwoma, Iwundu, and Iwundu (2016) assessed the digital literacy skills of undergraduates at just one university in Nigeria. Adeoye and Adeoye (2018) examined the digital literacy skills of undergraduates in federal institutions only. The findings of these studies are only suggestive of media literacy skills that undergraduates should possess. Some studies that actually assessed media literacy skills levels of undergraduates in the country were rather too narrow or limited, either in terms of content scope, subject or geographical scope and or research methodology employed. For instance, Wogu et al. (2019) assessed the media literacy skills of only mass communication undergraduates at public universities in southeast Nigeria. Aduloju (2019) did a qualitative content analysis of media literacy courses of communication departments at federal, state and private universities. Although Adulojo's study covered the three types of universities available in the country, it failed to assess the media literacy skills level of undergraduates at the sampled institutions.

The current study, therefore, set out to add to the body of knowledge by identifying the media literacy skills level and the media literacy skills possessed by undergraduates at the federal, state and private universities to better identify Nigerian undergraduates' level of media literacy skills. The study further hopes to identify the prevalent media literacy skills and, finally, to suggest how university management could develop and nurture these skills among undergraduates at Nigerian universities. These aims distinguish the present study from other media literacy researches among undergraduates in Nigeria.

Statement of Problem

The use of media (whether traditional, new, or web-based) is becoming universal and inevitable in the current mediated age, and as such, undergraduates are getting actively engaged. Despite the fact that undergraduates are adept users of media, they are not necessarily competent and wise users of the various media formats. Research evidence revealed that many undergraduates could not skilfully use the media to obtain highly relevant and needed information for academic purposes, while some lack the ability to evaluate and validate content they come in contact with.

News broadcast avenues indicated exposure of undergraduates to social ills and violence, while some have lost their lives as a result of damaging media use habits. These instances could be attributed to various factors, such as the non-existence of media literacy instructions; a poor level of integration of the instruction into university courses; lecturers' poor knowledge of media literacy education; inadequate media facilities and resources; lack of media specialists; as well as a lack of scholarly research in the area at universities. Thorough media literacy education could assist learners to thrive in the digital age, overcome challenges and attain academic excellence, among other benefits. These scenarios indicated the need for adequate media literacy education among undergraduates in Nigeria. It is against this backdrop that the present study investigated the level of media literacy skills of undergraduates at universities in Ogun State, Nigeria.

Specific objectives of this study include:

1. Determining the level of media literacy skills possessed by undergraduates in Ogun State.
2. Identifying which one of the four media literacy constructs is more pronounced among undergraduates in Ogun State.
3. Offering recommendations based on the findings of the study.

Literature Review

Definitions and Examples of Media

Media generally has been described as any form or channel of communication that conveys or delivers news, messages, music, movies, education, promotional content, data and other forms of information. Bunatli and Sunal (2014) describe media as covering all the means of communication that has the capability of informing, raising awareness, educating, socialising, entertaining people and setting agendas, including all kinds of oral, written and visual images. Akinboro and Olayinka (2020) consider media as messages communicated through a mass medium to many people, while Konac and Barut (2021) view it as means of communication, like the radio, newspapers and the Internet that reach and influence people widely. The researchers of this study described media essentially as information and communication technology (ICT) tools and resources used by undergraduates to communicate, create, disseminate, store and manage information for academic, personal and other uses.

Based on the researchers' conception, media comprises telecommunication technologies (like cable, satellite, television, radio, and video conferencing); digital technologies (such as computers, the Internet, intranets and extranets); and software applications. Media also includes resources such as hard and soft versions of information-bearing materials like textbooks, reference materials and journals; non-print resources like slides, projectors, posters, and graphs; and social media like Facebook, WhatsApp, and Delicious. These media formats are now being utilised by universities for teaching, learning, research, extension services and other functions and have brought about new frontiers of knowledge and, consequently, developments at the individual, university and national levels. Personal computers, laptops, the Internet, handheld devices, and electronic databases are influencing undergraduates' manners of communication, learning, interaction and information-seeking behaviours.

Media contains knowledge, statistics, data, news and other important information that could be utilised by undergraduates for studying, learning new things, carrying out projects and research and satisfying intellectual curiosity. Media could also be utilised by undergraduates to express and exchange ideas, experiences, opinions, needs and aspirations with other students, either within or outside of their immediate environment. Media also contains information about countries, people, personalities, places, fashion, norms and cultures and events of individuals, organisations and nations.

These varied forms of media have also been used to understand and manage social issues such as life skills acquisitions, alcoholism, tobacco and drug abuse, eating disorders, violence, gender identities, racism, discrimination and other forms of oppression (Koltay 2011). These media uses have helped to empower and shape individuals' opinions, attitudes, perceptions, and beliefs and have greatly impacted the decisions, beliefs, perspectives and value systems of individuals, including undergraduates. It is thus vital that undergraduates, as learners, acquire and nurture media literacy skills in

order to maximise efficient and skilful use of media for academic and self-empowerment—and, ultimately, improved quality of life.

Importance of Media Literacy to Undergraduates

Media literacy has become prominent among university students for many reasons. Firstly, undergraduates require information and knowledge for studying, writing tests and examinations, completing assignments or projects and conducting and writing research reports. Undergraduates also need information to facilitate useful connections and better relationships with friends, colleagues, lecturers, family members and other categories of people. Media literacy could assist undergraduates in developing the competencies needed to beneficially utilise media and information resources to attain and sustain educational excellence and solve life-challenging issues. Undergraduates thus need to develop media literacy skills so that they can make the best exploration and utilisation of both the old and newer media to be self-directed and independent.

Media, including the traditional, new, and web-based, has become a dominant tool for accessing, finding, collecting, preserving and disseminating knowledge and information. Media has also become an important tool for acquiring the abilities to create, disseminate and exploit knowledge and information to improve the standard of living of individuals (Aiyebelehin and Azubuikwe 2016; Schmidt 2012). Acquisition of skills needed to access, retrieve and exploit media content skilfully, efficiently and responsibly, and also good knowledge of digital and web-based resources, are important for the demonstration of media literacy skills among university undergraduates. Media literacy is central to the academic and life-long learning habits of undergraduates as it empowers learners to search, obtain, assess, exploit, create and share information to achieve individual, social, cultural, work-related and educational goals. Undergraduates will not function effectively and efficiently in whatever activities, tasks and or challenges they are involved in if media literacy is lacking or insufficient.

Media literacy is an important asset in producing knowledgeable graduates. The need for undergraduates to ascertain what content is needed, where and how to access, explore, evaluate, handle and exploit content to attain progress—in educational, personal and other aspects of life—becomes imperative. Undergraduates, therefore, need to possess and demonstrate varied and high level media literacy skills to responsibly access, retrieve, manage and use the information contained in various media technologies and resources—for whatever purpose(s) undergraduates deem fit. In addition, they should be able to utilise information responsibly to overcome frustration and information overloads, be free from various forms of academic dishonesty, and finally become knowledgeable, analytical and creative graduates.

The web environment, in particular, implies that undergraduates are now not only consumers of media but have also become designers or producers of media. The 21st century media skills call upon the ability of undergraduates to effectively create and deliver media products. Undergraduates need skills in critically evaluating and

creatively producing media representations or expressions in a variety of media (Pacific Policy Research Centre 2010).

Media literacy, for critical media consumption and responsible media production, thus becomes imperative for Nigerian undergraduates (Adekunmisi 2021). Media literacy would help undergraduates to develop habits of inquiry and skills of expression required to become analytical thinkers, effective communicators, problem-solvers, active participants and prosumers of content (Centre for Media Literacy 2020). These skills have great implications for serious academic and personal activities of undergraduates in Nigeria, where the majority of inhabitants are still grappling with multifaceted challenges of growth, development and survival. These instances have made media literacy an essential skill that undergraduates must possess and demonstrate in order to thrive in the current and emerging information age.

Web 3.0, Web 4.0, Web 5.0 and beyond have penetrated every sector of developed economies. These countries have taken full advantage of technological media revolutions to transform their economies and other sectors and have come up with initiatives and newer forms of technologies that characterise and distinguish these countries. Web 2.0 is the foundation of these developments and achievements. It is thus important that undergraduates develop, possess, demonstrate and nurture media literacy, including the skills to constructively participate in both the current and emerging information era. It is equally important that Nigerian universities, faculty and academic librarians, particularly in Ogun State, fully embrace and implement media literacy instruction in order to achieve and sustain all facets of development at the individual, institutional and national levels.

Media Literacy Skills of Undergraduates

In spite of the recognition of numerous benefits of media literacy education and skills, research documentation still indicates insufficient or low media literacy (skills) among undergraduates at the international level (Breslin 2021; Schilder, Lockee, and Saxon 2016; Tetep 2019). Lenhart et al. (2010) report undergraduates' excessive reliance on mobile phones for news, entertainment and social media sites, and as a result, young people have become a vulnerable population while consuming media (UNESCO 2010). Wang, Chen, and Liang (2011) report that parents and guardians are increasingly concerned about college and university students' devotion to social media sites at the expense of studying.

These excessive media use habits have encouraged the loss of concentration, violent behaviours, absurd sexual relationships, distorted body image, drug abuse, smoking, alcoholism, and ultimately poor educational performance among students (Amadi and Ewa 2018; Pinkleton et al. 2012). In addition, undergraduates now have constant access to abundant information, more than ever before (Moeller et al. 2012), such that sorting valid information from misinformation has become a challenge among undergraduates (Kim, Sin, and Yoo-Lee 2014; Sin and Kim 2013). Andriesen and Brink (2013) indicate

the non-existence of quality assurance and validity and reliability of data created online. Bentley (2017) expresses documented shortcomings in students' abilities to discern facts from fiction and opinion in online publications.

Empirically, Moeller et al. (2012) assessed the behaviours of 1 000 undergraduates from 10 different countries whose mobile phones were withdrawn for 24 hours. They found total reliance and habit-forming on cell phones, such that the respondents confirmed a lack of self-direction without media. The undergraduates reported a high level of boredom and admitted outright failure in efforts to go unplugged. The study helped the respondents to recognise the extent to which online connections had substituted real friendship. They agreed on the need to curb excessive media use behaviour and habits. In recognition of the consequences of students' media use habits, Moeller et al. (2012) call for media literacy curricula that embrace students' reflections on their own media exploitation habits. Pfeffer (2014) and Tetep (2019) call for the promotion of media literacy education by governments and universities.

In Nigeria, some studies have documented that undergraduates are not optimally utilising media facilities and resources for academic purposes, despite universities' huge expenditure on purchases, installation and maintenance of electronic media and resources. For instance, Adekunmisi, Ajala, and Lyoro (2013) and Oluwole (2014) indicate that undergraduates use media (specifically the Internet and mobile phones) greatly for social purposes rather than for educational intent. Adetoro and Sodipe (2013), Ezeah, Asogwa, and Edogor (2013) and many other researchers found that undergraduates were more familiar with and used social media tools largely for relational communication than for academic intents. There is now an increasing number of media literacy advocates clamouring for improved media literacy instructions in Nigerian universities.

Adeoye and Adeoye (2018) report extensive media literacy skills confidence with an overall mean score of ($\bar{x}$=3.02) among undergraduates of the selected federal universities in Nigeria. The confidence to choose the right tool to find information ($\bar{x}$ =3.22) ranked highest, followed by the confidence to use the online tools and websites to find information online ($\bar{x}$=3.13). The least ranked were confidence to work with other people online to create a shared document or presentation ($\bar{x}$=2.84) and confidence to use media-capture devices, e.g., recording on video ($\bar{x}$=2.83). Wogu et al. (2019) assessed the media literacy skills of mass communication undergraduates at 10 universities in south-east Nigeria and discovered that rudimentary computer and internet literacy was prevalent among the students. The researchers report that the skills needed for a critical understanding of media and communication skills required for responsible occupational practices were not so prevalent among the students. It is important to look at the research methodology employed for this present study.

Research Methodology

Research Design

The descriptive survey research design of ex-post-facto type was adopted for the study to establish the media literacy skills level of undergraduates at the universities in Ogun State without manipulating the variable and upon which inferences were made.

Population of the Study

The target population comprised Level 200 undergraduates from private, state and federal universities in Ogun State, Nigeria. Level 200 undergraduates were used because the students were presumed to have more time and be more available to administer copies of the questionnaire than penultimate and final year students. Information about the universities and undergraduates' enrolment figures was obtained from the academic planning units of universities in Ogun State, Nigeria. The research was quantitative in nature, and the data collected were subjected to analysis, upon which inferences and recommendations were made.

Sampling Technique and Sample Size

The multi-stage sampling—which entails the division of the target population into clusters or sub-groups at different stages of sampling to ease the data collection procedure, increase the precision level and eliminate any form of bias—was employed for the research. Four stages of sampling procedures were employed. At the first stage of sampling, universities that had been established and been in operation for not less than eight years were purposively selected. These universities were assumed to have produced substantial numbers of graduates.

At the time the study was conducted, 13 universities existed in Ogun State; nine universities had been functional for eight or more years. The universities were Babcock University (BU), Ilishan-Remo; Covenant University (COU), Otta; Crawford University (CRAU), Igbesa; Crescent University (CREU), Abeokuta; and the Federal University of Agriculture, Abeokuta (FUNAAB). Others are The Bells' University of Technology (BUT), Otta; Southwestern University (SU), Okun-Owa; Olabisi Onabanjo University (OOU), Ago Iwoye; and Tai Solarin University of Education (TASUED), Ijagun, Ijebu-Ode.

In the second stage, universities having the same faculties were purposively selected. Only two faculties, namely Faculties of Management Sciences and Science, were commonly found in all the selected universities. Further, the departments that were commonly available in the two faculties were purposively chosen at the third stage of sampling. Therefore, the Departments of Chemistry, Physics, as well as Biological and Mathematical Sciences, were chosen from the Faculty of Science, while the Departments of Business Administration, Economics, Banking and Finance, as well as Accounting were selected from the Faculty of Management Sciences. TASUED, Ijebu-

Ode and SU, Okun-Owa were excluded on the basis of the non-existence of some of the departments in the two institutions, leaving seven universities as a sampling frame.

Finally, the probability proportional to size sampling technique was utilised to select 20.0% of the target population from the eight departments of the selected universities in Ogun State. Olusegon and Akinbode (2016) submit that for target subjects in several hundreds, a 20% sample size is desirable; for a population in a few thousands, a 10% sample size is advisable, while a 5% sample or less is justifiable or advisable for a population of several thousands. Going by this sampling procedure, 837 undergraduates constituted the sample size from a population of 4 189 Level 200 undergraduates from eight departments of seven selected universities in Ogun State, as shown in table 1.

Data Collection Instrument

The research instrument for the study was a structured questionnaire tagged "Undergraduates' Media Literacy Scale (UMLS)." This comprised two sections, A and B. Section A was named "Demographic Information Scale (DIS)" and comprised five items designed to elicit information on age, gender, department, faculty and name of university of respondents. Section B was named "Undergraduates' Media Literacy Skills Scale (UMLSS)." The scale was made up of 17 items of 4-point Likert, ranging from Not skilled at all = 1; Slightly skilled = 2; Averagely skilled = 3; and Highly skilled = 4.

Validity and Reliability of the Data Collection Instrument

The questionnaire was validated by four lecturers each from the Departments of School Library and Media Technology (SL and MT); Library, Archival and Information Studies (LARIS), and Guidance and Counselling (G and C), all from the University of Ibadan, Nigeria. The suggestions of the 12 lecturers were incorporated into the structuring of the instrument, which helped to ensure its content, criterion-related and construct validity. A test-re-test of the instrument was conducted on 30 undergraduates of the Faculty of Pharmacy, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. A Cronbach alpha reliability coefficient of 0.96 was reported for the Media Literacy Skills Scale.

Table 1: Sample size of undergraduates in selected universities

Institution/Department	Population of L200	Sample Size	Institution/Departments	Population of L200	Sample Size
OOU					
Faculty of Management Science			**Faculty of Science**		
Economics	294	58	Mathematical Science	245	49
Bus. Administration	291	58	Chemistry	163	32
Accounting	251	50	Biological Sciences	311	62
Banking and Finance	248	49	Physics	60	12
Total	**1084**	**215**	**Total**	**779**	**155**
FUNAAB					
Faculty of Management Science			**Faculty of Science**		
Economics	146	29	Mathematics	81	16
Bus. Administration	139	28	Chemistry	92	18
Accounting	114	23	Biological Sciences	121	24
Banking and Finance	136	27	Physics	96	19
Total	**535**	**107**	**Total**	**390**	**77**
BABCOCK UNIVERSITY					
Faculty of Management Science			**Faculty of Science**		
Economics	100	20	Mathematical Science	4	1
Bus. Administration	77	15	Chemistry	2	0
Accounting	181	36	Biological Sciences	39	8
Banking and Finance	11	2	Physics	5	1
Total	**369**	**73**	**Total**	**50**	**10**
CRESCENT UNIVERSITY					
Faculty of Management Science			**Faculty of Science**		
Economics	14	3	Mathematical Science/ Computer Science	18	4
Business Administration	19	4	Chemistry/ Biochemistry	7	1
Accounting, Banking and Finance	18	4	Biological Sci/ MCB	18	4
			Physics/ Info. Tech	18	4
Total	**51**	**11**	**Total**	**61**	**13**
COVENANT UNIVERSITY					
Faculty of Management Science			**Faculty of Science**		
Economics	79	16	Mathematical Science	74	15
Bus. Administration	64	13	Chemistry	28	6
Accounting	119	24	Biological Sciences	105	21
Banking and Finance	33	7	Physics	89	18
Total	**295**	**60**	**Total**	**296**	**60**
CRAWFORD UNIVERSITY					
Faculty of Management Science			**Faculty of Science**		
Economics	28	6	Mathematical Science/ Computer Science	32	6
Bus. Administration	23	5	Chemistry	5	1
Accounting	46	9	Biological Sci./ MCB	18	4
Banking and Finance	5	1	Physics	9	2
Total	**102**	**21**	**Total**	**64**	**13**

Table 1: Sample size of undergraduates in selected universities					
Institution/Department	**Population of L200**	**Sample Size**	**Institution/Departments**	**Population of L200**	**Sample Size**
THE BELLS' UNIVERSITY OF TECHNOLOGY					
Faculty of Management Science			**Faculty of Science**		
Economics	22	4	Mathematical Science	2	0
Bus. Administration	8	2	Chemistry	5	1
Accounting	43	9	Biological Sci. MCB	31	6
Banking and Finance	2	0	Physics	2	0
Total	**75**	**15**	**Total**	**40**	**7**
GRAND TOTAL Level 200 undergraduates = 4, 189					
GRAND TOTAL Sample Size = 837					

Source: Adekunmisi (2021)

Data Collection Procedure

An introductory letter was obtained from the Head of Department, SL and MT, and was taken to the academic planning directorates and heads of departments of the respective universities to seek permission and support in the collection of statistics on undergraduates' enrolment and administration of the questionnaires in the various departments. The data collection took 4–6 weeks to complete, except for one university that took longer. A trained research assistant helped in the conduct and retrieval of the questionnaires from undergraduates of CRAU, COU, CREU and OOU. The academic librarians of FUNAAB and BUT and an adjunct staff of BU (having followed the ethical procedures of BU) assisted in the conduct and retrieval of the questionnaires from respondents. Of the 837 copies of the questionnaire conducted on the respondents, 754 copies were retrieved and used for data analysis. This constituted a 90.10% response rate.

Method of Data Analysis

The data collected were analysed using the frequencies, percentages, means and standard deviations.

Ethical Consideration

The study conformed to ethical standards relating to the consent of all participants in the study. The participants were thus requested to provide, without any coercion, suitable responses to the items. The purpose of the study, how the data would be utilised, the benefits of the findings and the confidentiality of respondents to other parties were explicitly stated in the instructional part of the research instrument. The researchers ensured that the data and references presented in the study were not artificially generated but rather original collections from field work. As such, all the data and results obtained were precisely and accurately presented in the study.

Results

This sub-section is concerned with the results of the analysis of the media literacy skills of the respondents. The results of the study are presented, discussed and supported with relevant literature.

Table 2: Demographic characteristics of respondents

Variables	Descriptors	Frequency	Percentage
Institution	Olabisi Onabanjo University	316	41.90
	Federal University of Agriculture Abeokuta	180	23.90
	Babcock University	58	7.70
	Crescent University	24	3.20
	Covenant University	120	15.90
	Crawford University	34	4.50
	The Bells' University of Technology	22	2.90
	Total	**754**	**100.0**
Gender	Male	349	46.3
	Female	405	53.7
	Total	**754**	**100.0**
Age range	16–20 years	367	48.7
	21–25 years	337	44.7
	26–30 years	50	6.6
	Total	**754**	**100.0**

Source: Adekunmisi (2021)

Table 2 indicates that the majority of the respondents were from OOU and FUNAAB, while BUT had the least number of respondents. Female undergraduates constituted the majority, while the age group 16–20 years dominated the study, followed by the age group 21–25 years.

Table 3a: Level of media literacy skills possessed by undergraduates							
S/N	**Media literacy constructs**	**NS**	**SS**	**AS**	**HS**	$\overline{x}$	**SD**
	Ability to access media messages or content						
1	Access Facebook, LinkedIn, WhatsApp and other social applications to get the information I want	50 6.6%	58 7.7%	260 34.5%	386 51.2%	3.30	0.87
2	Access radio, television, video cassettes, computers, laptop, smart phones, CD-ROMs, DVDs, MP3 and other handheld devices and so on to get the information I want	46 6.1%	81 10.7%	302 40.1%	325 43.1%	3.20	0.86
3	Access Internet social search engines, electronic resources and databases to get the information I want.	62 8.2%	73 9.7%	301 39.9%	318 42.2%	3.16	0.91
4	Access e-books, e-dictionaries, e-encyclopaedia, e-directories, e-graphs, e-tables, e-diagrams, e-pictures and so on to get the information I want.	90 11.9%	73 9.7%	271 35.9%	320 42.4%	3.09	1.00
5	Access blogs, Wikis, instant messages, Flickr and so on to get the information I want	64 8.5%	117 15.5%	330 43.8%	243 32.2%	3.00	0.90
	Mean = 3.15						
	Ability to analyse media messages or content						
6	Analyse information from Facebook, Tweeter and WhatsApp	64 8.5%	112 14.9%	281 37.3%	297 39.4%	3.08	0.94
7	Analyse information from Internet social search engines, electronic sources and databases	59 7.8%	125 16.6%	312 41.4%	258 34.2%	3.02	0.91
8	Analyse information from radio, slides, television, cassettes, computer, smart phones, CD-ROMs, DVDs, MP3 and other handheld devices and so on	87 11.5%	111 14.7%	304 40.3%	252 33.4%	2.96	0.97
9	Analyse information from blogs, Wikis, instant messages, Flickr and so on	59 7.8%	139 18.4%	365 48.4%	191 25.3%	2.91	0.86
	Mean = 2.99						
	Ability to evaluate media messages or content						
10	Evaluate and interpret content from Facebook, Tweeter, LinkedIn and WhatsApp and other social networking sites	75 9.9%	118 15.6%	346 45.9%	215 28.5%	2.93	0.91
11	Determine authors' expertise, recency and validity of different media resources	68 9.0%	152 20.2%	356 47.2%	178 23.6%	2.85	0.88
12	Evaluate and interpret content from radio, slides, television, cassettes, computer, internet sources, smart phones, CD-ROMs, DVDs, MP3 and other handheld devices and so on	97 12.9%	152 20.2%	319 42.3%	186 24.7%	2.79	0.96
13	Evaluate and interpret content from blogs, Wikis, instant messages, Flickr and so on	86 11.4%	159 21.1%	350 46.4%	159 21.1%	2.77	0.91
	Mean = 2.84						

Table 3a: Level of media literacy skills possessed by undergraduates							
S/N	**Media literacy constructs**	**NS**	**SS**	**AS**	**HS**	$\bar{x}$	**SD**
	Ability to create media messages or content						
14	Use the various sources (print, non-print, electronic and Web 2.0) simultaneously to submit an individual project to my lecturers	65 8.6%	157 20.8%	343 45.5%	189 25.1%	2.87	0.89
15	Use the computer and Internet resources to create my Library or University Facebook, Tweeter, LinkedIn account or research group	76 10.1%	176 23.3%	317 42.0%	185 24.5%	2.81	0.92
16	Use computer/laptops or my smart phone to create a blog or Wikis	94 12.5%	209 27.7%	289 38.3%	162 21.5%	2.69	0.95
17	Synthesise and use various electronic media to create and design my webpage	108 14.3%	206 27.3%	285 37.8%	155 20.6%	2.65	0.96
	Mean = 2.76						
	N = 754; **Criterion Mean = 2.50;** **Weighted Mean = 2.94**						

Key: 1= Not skilled at all; 2 = Slightly skilled; 3 = Averagely skilled; 4 = Highly skilled

Source: Adekunmisi (2021)

In this segment, respondents were requested to state the level of media literacy skills possessed on a 17-item scale, as presented in table 3a. The data indicated that the ability to access media content or messages ($\bar{x}$ =3.15) ranked highest, followed by the ability to analyse media messages or content ($\bar{x}$ =2.99). The ability to create media messages or content ($\bar{x}$ =2.76) ranked least among undergraduates. The data further indicated that the mean scores of each of the four constructs ($\bar{x}$ =3.15), ($\bar{x}$ =2.99), ($\bar{x}$ =2.84) and ($\bar{x}$ =2.76) of the media literacy skills of the respondents were much higher than the criterion mean ($\bar{x}$ =2.50). However, using the criterion mean ($\bar{x}$ =2.50) against the overall weighted mean ($\bar{x}$ =2.94) as the benchmark; it could be inferred that the undergraduates at universities in Ogun State, Nigeria, possessed high media literacy skills. This is indicated by the high mean scores for each of the media literacy constructs, where the ability to access media content or messages ranked highest, and the ability to create media messages or content ranked least among the undergraduates.

Table 3b: Test of norm on level of media literacy skills possessed by respondents

Interval	**Total mean score**	**Level of media literacy skills**	**Frequency**	**Percentage**
1–22		Low	19	2.5
23–44		Moderate	215	28.5
45–68	**50.07**	High	520	69.0

To further confirm the level of media literacy skills possessed by the respondents, the test of norm, as shown in table 3b, was used to determine the level of the skills. The highest obtainable score was 68 (that is, 4 X 17). Using low, moderate and high, an interval score of 23 was established and was employed to chart the norm table. The grand mean score ($\bar{x}$ =50.07) indicates the benchmark falls within the interval 45–68, which is considered high media literacy skills level. This clearly reveals that the undergraduates in universities in Ogun State, Nigeria, possess high media literacy skills.

This result is not surprising because, in the current mediated age, undergraduate students enjoy quality access to media and information resources, particularly web-based media. The abundance of media devices and information resources has probably improved the students' ability to access more content and messages, which could have been responsible for the high level of media literacy skills reported in the study. Undergraduates' improved level of access to media (especially smart phones, laptops, I-pads and so on) and the Internet through different modules, along with high skills to access information and media messages, probably developed and improved their other abilities or skills, namely their ability to analyse, evaluate and create media messages and content.

Further, the high media literacy obtained could be attributed to improved access to e-resources and databases, as well as information literacy programmes of university libraries for the students. This might also be due to undergraduates' deliberate and intensive efforts to exploit media technologies and resources. These include web-based applications to fulfil needs for information, which developed and improved the students' level of access to information, capabilities to analyse, assess and produce or create newer content and ultimately, media literacy. The undergraduates' high level of engagement with the different media, along with the series of online activities like text messaging, blogging, podcasting and social networking to interact, express, and share information, developed and improved the media literacy skills of the students.

The finding supported assertions of authors like Mtega, Bernard, and Dettu (2013), who share the view that the transformations of the web from static to dynamic, coupled with the heavy use of media devices, have facilitated undergraduates' participation in the creation, storage, sharing and retrieval of content through media channels. Inagaki et al. (2012) state that the collaborative nature of the Internet has encouraged university students to exploit it for various functions, different insights and with varied outcomes. Lynch (2017) submits that as undergraduates' nature of access to media improves, the students' abilities to access media, be creative and make connections, will improve.

The finding equally supports empirical documentation from Nigeria and other countries. For instance, Ukwoma et al. (2016) report high digital literacy skills among the undergraduates of UNN. Similarly, Adeoye and Adeoye (2018) report high media literacy skills confidence among the undergraduates in selected federal universities in southwest Nigeria. At the international level, Wineburg and McGrew (2016) report

moderately high levels of media literacy skills among middle school students, high school students and college students, where a majority signified confidence in information evaluation skills, although some students were more likely to use false websites than accurate websites. Soroya et al. (2021) report the fluency of the undergraduates of the University of Punjab, Lahore, Pakistan, with the use of legal and harmful content and web-based activities. This depicts a high media literacy skills level among the undergraduates with the use of information.

The finding is supportive of a declaration made by Ashrafi-rizi et al. (2014) and Leach (2017) that media literacy should be a 21st century approach that focuses more on improving students' competencies to use the media responsibly for entertainment, recreation, production and interpretation of media messages, rather than for entertainment and leisure alone. This affirms the submission of Lin et al. (2013) and Adekunmisi (2021) that an individual must be "new media" literate in order to participate responsibly in the mediated age or society. Literat (2014) succinctly states that an individual must be more than an adept media consumer. Similarly, Lana (2018) asserts that for quality co-existence with the media, it is essential for individuals to possess knowledge and skills on how to use, analyse, critically assess and create media content. These are indications that competencies to access, analyse, and critically evaluate different media (including media contents) and create communications and content in a variety of contexts are imperative for undergraduates.

The development and demonstration of these competencies are fundamental to the learning and research activities of undergraduates. It is important for undergraduates in Nigerian universities to acquire, develop, and demonstrate these abilities because the creative deployment of these competencies will enable undergraduates' excellence in communicating—traditionally, digitally and visually—with people, particularly lecturers and academic colleagues. These competencies will also impact heavily on the attainment of educational and personal excellence, hence the need for high media literacy among undergraduates, particularly in developing countries like Nigeria.

The Media Literacy Construct that is more pronounced

In this segment, four constructs, as depicted in table 3, namely: i) the ability to access media messages or content; ii) the ability to analyse media messages or content; iii) the ability to evaluate media messages or content; and iv) ability to create media messages or content, were indicators of media literacy of the undergraduates. The findings revealed the ability to access media messages or content ($\bar{x}$ =3.15) ranked highest, followed by the ability to analyse media messages or content ($\bar{x}$ =2.99), and then the ability to evaluate media messages or content ($\bar{x}$ =2.84). The lowest ranking construct among the undergraduates was the ability to create media messages or content ($\bar{x}$ =2.76), although the mean score was still higher than the criterion mean of ($\bar{x}$ =2.50).

Findings revealed that the first construct, the ability to access media messages or content ($\bar{x}$ =3.15) was the highest, and was even much higher than the overall weighted mean

of media literacy skills ($\bar{x}$ =2.94) and also higher than the criterion mean ($\bar{x}$ =2.50). This implies that the respondent undergraduates possess sufficient skills to use any form of media (print, non-print, electronic and web-based) to access, locate, retrieve and preserve content needed for academic and personal endeavours. The high ability to access media messages agreed with media access described by Chen and Wu (2011) as the ability to use different formats or modalities of media to access information or media contents.

The findings confirmed assertions that students now have unobstructed access to media and information resources. For instance, Moeller et al. (2012) state that due to widespread internet access, coupled with various mobile devices, undergraduates are connected to the Internet, no matter what their settings. Undergraduates are enjoying increasing and constant access to read, express and share content online, in addition to connecting with friends, family members, lecturers and other known and unknown individuals for interaction and socialisation. Lardinois (2012), as well as Ensley and Kaskosz (2013), asserts that many educational applications available on smart phones have enabled students' ability to retrieve, download and open almost all content via Wi-Fi networks and mobile internet. These findings affirm the statement that owning a smart phone is a major step to having knowledge and educational resources at one's fingertips (Mwabungulu and Mungwabi 2017).

The findings of Awoyemi, Awominure, and Omole (2018) corroborate the findings of this study. The authors discovered that Law undergraduates at Ekiti State University used social networking sites largely for accessing information for academic purposes (99.0%), connection with friends and colleagues (99.0%), and online learning (98.5%), among other purposes. These social networking sites and tools are largely accessible through media like computers, laptops, smart phones and other hand-held devices, which most undergraduates have ready access to almost on a daily basis.

The last construct, that is, the ability to create media messages or content ($\bar{x}$ =2.76), ranked lowest among the indicators of media literacy among the undergraduates in Ogun State, although the value was still higher than the criterion mean ($\bar{x}$ =2.50). This indicates that respondents possess a good level of ability to create, design or produce media messages or content. When the value was compared to mean scores of the other three indicators of media literacy, namely ($\bar{x}$ =3.15), ($\bar{x}$ =2.99) and ($\bar{x}$ =2.84), one might be right to infer that the ability to create media messages or content is not so prevalent among respondents. This implies that a majority of the respondents are not good or active prosumers of media, but rather are active consumers of media.

Critical media "consumer" implies that the undergraduates demonstrate adequate skills to access, locate, retrieve and critique content from all types of media, but possess limited skills to responsibly create or produce useful educational and research content ("prosumers"). The result conforms with the findings of Lim and Theng (2011), which revealed that youths (the group that the majority of undergraduates belong to) had

developed more skills for media consumption than for media creative expression and production.

Adeoye and Adeoye (2018) report confidence in choosing the right tools to find information, and confidence to use online tools and websites to find information online, as being prevalent among undergraduates in selected federal universities in Nigeria. In contrast, confidence in working with other people to create shared documents and also the confidence to use media-capture devices to create innovative products were not prevalent among the sampled undergraduates. Tetep (2019) reveals that in his research, 60.0–80.0% of Indonesian undergraduates possessed medium technical skills; 80.0–90.0% demonstrated low critical media comprehension, while 45.0% demonstrated medium communication skills. Wogu et al. (2019) documented computer and internet competencies as being pronounced, while analytical understanding of media and communication skills for responsible professional practices were not pronounced among the sampled undergraduates in Nigeria.

These findings are indications that undergraduates generally possess the competence to access different media, including media content, whereas the competence to come up with innovative or problem-solving ideas or products is not so prevalent among this category of students. Little wonder, Koltay (2011) describes a media literate person as one who can decode, evaluate, analyse and produce both print and electronic media. These abilities are applicable to undergraduates because, as learners, the abilities are needed for the attainment of excellence in educational, personal, social and even other aspects of life. This compelled Pfeffer (2014) and Tetep (2019) to clamour for universities' recognition of scholarly media use and production that will improve academic media literacy among university students.

Discussion of Findings

Overall, the findings revealed that undergraduates at universities in Ogun State, Nigeria, possessed high media literacy skills. Specifically, a majority of the undergraduates possessed a high level of the skills, around one third possessed moderate media literacy skills, while very few students demonstrated low media literacy skills. The finding is not surprising because the various kinds of media devices—smart phones in particular—are becoming more available with fascinating features that are attracting students' attention and making them more engaged with media features and social media platforms (for instance, Facebook and WhatsApp). As a result, undergraduates are enjoying all-round access to media (computers, smart phones and other ICT tools), which they use to source information either for academic, personal, financial or other information needs.

It is not surprising that the ability to access media messages and content ranked highest among the four constructs that were used to assess the media literacy skills level of undergraduates at Ogun State, Nigeria. This, in addition to universities' concerted efforts towards the acquisition of ICT skills through information literacy programmes

of university libraries, probably improved the media literacy skills of the sampled students. There is thus a need for the universities' management to improve undergraduates' level of acquisition of ICT and media literacy skills in order to enhance students' educational performances and, invariably, universities' images.

In recognition of the evidence that undergraduates are conversant in using many media formats and are enjoying free access to both useful and harmful information, there is the need for universities' management to concentrate efforts on developing and nurturing media literacy skills of undergraduates. Such training or media education would allow undergraduates to make wise, innovative and productive use of media and information for personal and university excellence. Media literacy education would also help undergraduates to overcome issues such as violence, crime, unusual sexual affairs, drug abuse, smoking, and other forms of unpleasant habits. As such, university management authorities should make classrooms, laboratories, lecture theatres, ICT centres, libraries, and university hostels internet-compliant, while media literacy and information technology courses should be integrated into undergraduates' academic curricula. Lecturers should also be urged to teach, demonstrate and impart knowledge to undergraduates, using a variety of ICT and social media applications that impact heavily on the media literacy of students.

Conclusion and Recommendations

Media literacy is a concept that university stakeholders cannot shy away from because apart from making students wiser consumers of content, it fosters critical thinking, information creation and evaluation skills, and develops other skills, such as collaboration and citizenship. Media literacy also develops the innovative and creative perspectives of students. However, the engaging nature of the various media formats makes media literacy highly imperative to students, particularly undergraduates who are now enjoying increasing and unobstructed access to the Internet and could knowingly or unknowingly make either good or bad use of media. Conclusively, the study that directed this article reported a high level of media literacy skills, although two skills, namely the ability to evaluate media messages and the ability to create media messages, were not as high as expected. The study thus revealed the ability to access media messages and the ability to analyse media messages as being prevalent among undergraduates. The finding thus correlates with earlier studies, which reported undergraduates as active users of media, particularly web-based media platforms that are multimedia-rich, interactive and collaborative in nature. These important features of web-based media, among other features, are encouraging undergraduates to be highly dependent on and engage with web-based media to find all kinds of information, whether useful or harmful in content. In light of the findings of this study, the following recommendations are proffered:

1. Universities' management must, of necessity, nurture students' abilities to effectively and responsibly access, analyse, evaluate and create print, non-print,

electronic and web-based media and content in order to make good, innovative and creative use of the various media formats, including content.

2. Media literacy instructions of universities should be made uniform, more innovative, engaging and collaborative and should be made compulsory for undergraduates before graduation. The content should also be handled by competent librarians and or media specialists.
3. The management of universities should establish, manage and sustain educational media resource centres where ICT facilities and media resources are made more available and accessible for use and for training the university community members, especially undergraduates.
4. Universities' managements should not relent in efforts to make campuses wireless by making internet connectivity and media resources more available and accessible in university libraries, ICT centres, lecture theatres, residential halls and other units. Lecturers, library staff and system analysts, who would influence undergraduates' wise and innovative use of ICT tools and media resources, should also be trained to be experts. This would improve the media literacy skills level of undergraduates and other members of universities' communities.

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