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Perception and Readiness of Students' Towards Online Learning in Nigeria During Covid-19 Pandemic

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Abstract

The coronavirus pandemic saw the abrupt shutting down of higher institutions of learning by government, and students were told to vacate campuses as one of the measures to curb further infections. In order to ensure uninterrupted educational delivery, universities across the continent are introducing online learning. This study investigated the perception and readiness of students' towards online learning in Nigeria during the Covid-19 pandemic. This study employed descriptive survey research design and structured questionnaire was the instrument used for the data collection. A total of one hundred and forty-eight (148) undergraduate students filled the questionnaire. The collected data was analyzed using tables, frequency counts, charts and percentage. On the positive side, the study revealed that majority of the respondents claimed to be conversant with online learning with a high level of readiness. Furthermore, the findings revealed that majority of the respondents indicated high level of ICTs skills and competencies needed for online learning. On the negative side, fear of high cost of data, poor internet services, erratic power supply, inaccessibility to online library resources and limited access to computer were the major perceived challenges to effective online learning. Based on this findings, the study recommended

that, Nigerian universities must as a matter of necessity improvise means through which knowledge delivery and general learning activities can be achieved seamlessly and at the lowest cost to the students even while they are at home.

Introduction

The outbreak of the novel coronavirus which emerged in December 2019 in Wuhan, China (Covid-19, formerly known as 2019-nCoV) represents a significant and urgent threat to all. The emergence of the virus has so far disrupted economic, social, political as well as educational activities. The devastating effects of the pandemic on life, health, education and economy globally cannot be over-emphasized. It has affected more than 180 countries across the continents of Europe, Africa, Asia, North America, South America and Australia/Oceania (McIntosh, 2020). As a result of the devastating effect on the citizens of the planet by the increasing cases of the Coronavirus around the world, the World Health Organization on March 11th 2020 declared the Coronavirus as a global pandemic.

The implications of the coronavirus pandemic saw the abrupt shutting down of higher institutions of learning by government, and students were told to vacate campuses as one of the measures to curb further infections. Such effect curtly distorted the ongoing face-to-face classes programs of the various institutions of learning. Without an iota of doubt, the closure of these institutions would have a dramatic impact on the students, higher education sector and countries' economic development (Tamrat & Teferra, 2020). The ripple effect of such action includes disruption of student cognitive learning process, delay in student graduation, tendencies of postponing academic sessions, and likelihood of student indulging in unwholesome behavior during the lockdown known as juvenile delinquency amongst others.

In order to bridge the gap and ensure uninterrupted educational delivery, universities across the continent are setting up institution-wide task forces to mitigate the impact of the pandemic. Many are attempting to shift to online teaching and learning through institutional, national, continental and international initiatives. Online learning is seen as alternate learning that its entirety is dependents on the use of internet and some other important technologies with no physical recourse to classrooms between the students and lecturers. (Tamrat & Teferra, 2020). In an effort to

continually engage the students with their respective courses and programme of study, many higher institutions of learning in developed countries have quickly switched to online learning. (Awojide, 2020). In the same manner, many low and middle income countries are making concerted efforts at adopting the same approach; however, this has become a difficult task due to deficient infrastructure, mixed perception and inadequate preparedness by the institutions and students. The idea behind adopting online learning during the pandemic is that it provides great flexibility in teaching methodology, content management, a synchronous and asynchronous interaction between teachers and students, organizing and structure of courses. In addition, it provides distance learning that is capable of creating new learning environments to achieve prosperous academic program as well as provides tools for students to be in contact with peers and teachers inside and outside the classroom without spreading Covid-19 (Tamta & Ansari, 2017; Rasouli, Rahbania & Attaran, 2016).

Statement of the Problem

The Federal Government of Nigeria at a point directed heads of higher institutions of learning to recommence their aborted academic sessions as result of the COVID-19 pandemic via online learning (ASUU-UI Publicity Committee, 2020). However, this generated a lot of controversy and different opinion from the public, students and the lecturers which they ascribed to lack of properly laid framework for the implementation of online learning. Other perceived challenges identified includes lack of technological skills and experience and poor teaching infrastructural facilities required for running online learning smoothly. It is well known that online learning depends on the availability of functional ICT facilities, technical-know how (skills) and students' readiness. It is against this background that this study intends to investigate undergraduate student's perception, readiness and skills towards online learning during the Covid-19 pandemic in the country.

Research questions

This study was guided by the following research questions:

1. How conversant are the students with online learning?
2. What is the perception of students towards online learning platform during Covid-19 lockdown?
3. How ready are students' towards using online learning platform?
4. What skills and competencies do students posses/have for using online learning platform?

5. What are the perceived challenges that could hinder students from participating effectively in online learning platforms during Covid-19 period?

Review of Related Literature

According to Smart and Cappel (2006) the concept "e-learning," "online learning," and "web-based learning" have been used interchangeably. According to Kharve and Gogia (2016) online learning or e-learning is a process of learning by electronic means which involves the use of computer, mobile phone or other electronic devices and accessing internet. There are two types of online learning: the synchronous interactive settings where learners meet in real time. This type of learning depends entirely on internet based resources and support systems through which anybody with connectivity can access anywhere and learn. Asynchronous online-learning on the other hand, involve interactive sessions where participants interact at different times. It is an "on demand" service providing educational content in form of virtual classroom, webinars, online course, discussions forums and many more. In the online learning, the teacher-centered has changed to a student-centered approach (Hrastinski, 2008).

Accordingly, online learning depends critically on an electronic devices and effective library system with online resources with seamless access from across the globe. In most developing countries, learning is mostly done traditionally (face-to-face), thus adapting to online learning would requires certain behavioral changes and regulatory directives in order to make it work for the learner and teachers. This become more important because not all the students and lecturers are adequately conversant and proficient on how to participate in online learning platform. As such, online learning can only be effective where there is adequate support system. For such support to be sustainable, both students and facilitators must have seamless access to electronic devices, internet as well the required skills to navigate the platform. Furthermore, they must be attuned to the new environment and culture of learning. Consequently, the perception of students on online learning resources may lead to acceptance and use which may translate to good additional method of learning during the pandemic lockdown (ASUU-UI Publicity Committee, 2020).

More recently, various studies about the subject (online learning) have been carried out globally, however there is little or no studies that specifically address issues relating to the perception and readiness of undergraduate students towards online learning in Nigeria during the Covid-19

pandemic lockdown. Bączek, Zagańczyk-Bączek, Szpringer, Jaroszyński and Wożakowska-Kapłon (2020) investigated students' perception of online learning during the Covid-19 pandemic in Poland. The result shows that majority of the students had never experienced any form of e-learning before the pandemic, hence they identified technical issues as one of their key challenges. This result might stem from the fact the students were not previously exposed to online learning due to inadequate awareness and accessibility to facilities required. Shetty, Shilpa, Dey and Kavya (2020) surveyed the attitude of the undergraduate students towards online learning during Covd-19 crisis in India. The result shows that the students have favourable perceptions towards online learning for sustaining their academic interest and development during the pandemic. Nevertheless, they perceived many challenges during online learning like lack of face-to-face interactions, lack of socialization, distraction by social media, technology related issues etc. In contrast, Abbasi, Ayoob, Malik and Memon (2020) surveyed the perceptions of students towards e-learning during the lock down at Liaquat College of medicine and dentistry. The result indicated that majority of the students have negative perceptions towards e-learning. The study concluded that there is need for administration and faculty members to take crucial measures for improving e-learning for better education during the lockdown.

Readiness or preparedness of student to respond to changes and adapt to online learning, as a new way of delivering lectures/classes is a step towards the right direction (Smart & Cappel, 2006). Readiness of students, facilitators and technology, is one of the most significant aspect in this context. It entails students' competence, confidence in using technological tools and the ability to participate in self-directed learning. Hence, it can be seen as the extent to how online learning will be effective or accepted. Chung, Subramaniam and Dass (2020) surveyed students' readiness for online learning in Malaysia. The result shows the readiness of students to participate in online learning is slightly moderate as some of them were not ready for online learning due to lack of learners control, self-directed learning and online communication efficacy. On the challenges universities are facing towards the efforts to ensure students finish their courses on time during the coronavirus pandemic, Nganga, Waruru and Nakweya (2020) noted that online learning preparedness varies from one institution to the other. Not all the student and lecturers had been trained on how to participate in online learning. Most students do not have laptops or money to buy internet bundles. Dube (2020) investigated the challenges faced by rural learners in South Africa in the context of the Covid-19. The result indicated that the greatest challenge faced with

online education is internet connection to which respondents claim to be very expensive or, in some cases, very limited. Other challenges mentioned are unavailability of network, shortage of devices for online learning, closure of internet cafés, lack of computer skills, and expensive internet data. From the literature review above, it has been discovered that students have different perceptions of the use of online learning, hence the outcome varies. This perception might stem from fact they have different level of exposure, knowledge and encounters.

Methodology

The study employed a descriptive survey research design. The target population of this study were all undergraduate students from the Department of Library and Information Sciences, Bayero University, Kano. A structured questionnaire was used as the instrument for data collection. The questionnaire was designed after an elaborate literature review and related studies (Smart & Cappel, 2006; Popovici & Mironov, 2015; Rasouli, Rahbania & Attaran, 2016). To ensure validity of the questionnaire, face and content validity was done by experts in the area of teaching and instructional technology. The first part of the questionnaire captured background information about the respondents. The second part of questions assessed the respondents' perception and readiness towards online learning based on Likert scale format. The instrument was pre-tested and Cronbach's Alpha co-efficient test (r) yielded 0.84, which indicates that the instrument is very reliable. Nonetheless, minor changes were made to the questionnaire to ensure the effectiveness of the value. The administration of the questionnaire was done through the use of online hosted 'Google forms'. The link to the forms where made available to the target students across all the levels of the Department using their respective Whatsapp Group platform. The Whatsapp platform enabled a research assistant that was employed individually across all the levels (level 1 to level 4) to constantly send reminders to the students. Informed consent of the participants were sought on the first displayed page of the questionnaire and assured of their anonymity. Data was collected between the periods of 12th May to 10th June, 2020. The data obtained was extracted, cleaned and transferred onto Statistical Package for Social Sciences (SPSS) version 21 for the analysis. Descriptive statistics such as frequency, tables and percentages were used to present the findings. A total of one hundred and forty (148) undergraduate student filled the questionnaire and were found useful for the analysis.
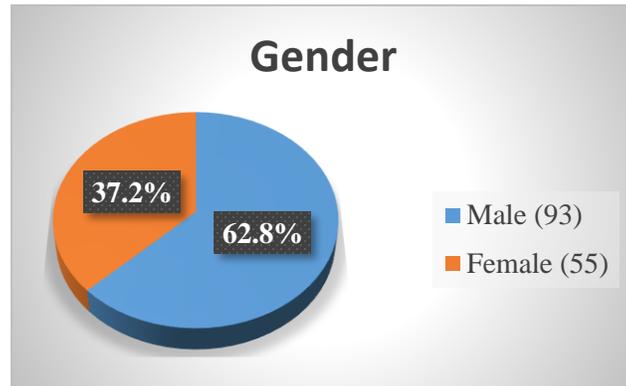
Results

Figure 1: Gender

Figure 1 represents the gender distribution of the target respondents across all the levels of the Department of Library and Information Sciences. With a total of 148 respondents, 93 (62.8%) representing the male population while the remaining 55 (37.2%) were females. This goes to show the high level of gender equality practiced across the target department, this also depicts how diverse and gender sensitive the opinions that informs the findings of this study are.

Figure 2: Age Distribution

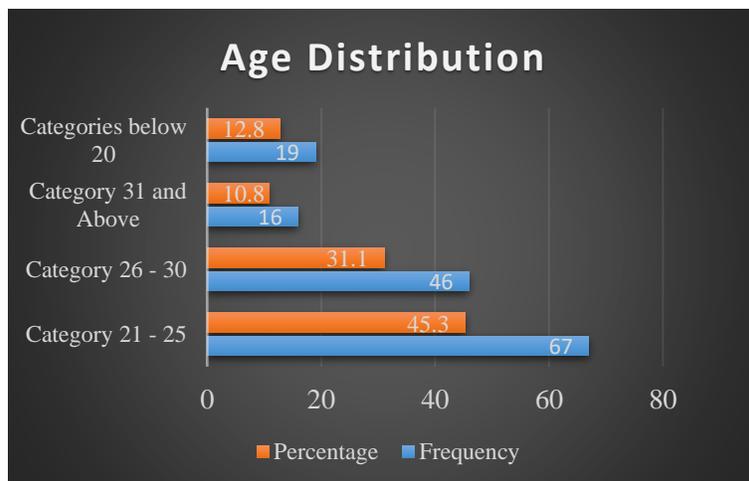The age distribution of the respondents reflects a great deal in their capacity to use and manipulate ICT facilities for learning and research activities. Figure 2 revealed that respondents within the age of 21-25 constitute the highest respondents with 67 (45.3%), this was followed by those within the age of 26-30 with 46 (31.1%) respondents. While the categories of those below 20 years of age

and those of 31 years and above had 19 (12.8%) and 16 (10.8%) respectively. One can infer that categories of respondents between the age of 21 -25 showed more interest in the research. Age of respondents is one the most important characteristics in understanding their views and perception about a particular problem; by and large age indicates level of maturity of individuals, in that sense age becomes more important to examine the response.
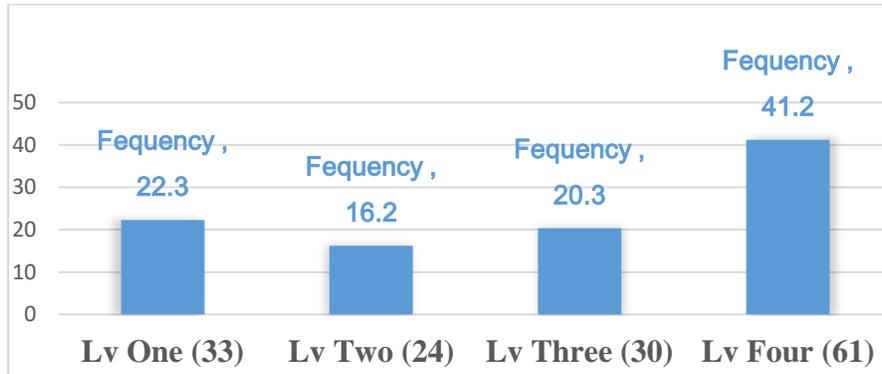

Figure 2: Level of Respondents

The figure 3 depicts the distribution of the students across the various levels of the Department that provided the target population. While level 400 (the highest level and the level that provided the highest number of respondents) had 61 (41.2%) students who responded to this study, this was followed by level 100 students (the lowest level) which provided a total of 33 (22.3%) respondents. Levels 200 and 300 had a total of 24 (16.2%) and 30 (20.3%) respondents respectively. The high number of respondents recorded at the lowest and the highest level can be attributed to the fact that, while level 100 students are fresh entries that requires information on how to easily register their courses and also find their way around the university, they solely depend on each other using information gathered from what they share among themselves on their Whatsapp group platform. The 400 level students on the other hand are final year students looking forward to graduating, they also rely solely on each other and most importantly information gathered from their Whatsapp platform to avoid making any regrettable and irreversible mistake that may hinder them from graduating, hence these set of students regularly use and visit their Whatsapp group platform compared to those in Levels 200 and 300.

Table 1: Level of Conversant

Level of Conversant		Frequency	Percentage
	Conversant	76	51.4
Valid	Not conversant	54	36.5
	Very conversant	18	12.2
	Total	**148**	**100.0**

Table 1 revealed that an overwhelming majority of the student 76 (51.4%) claimed to be conversant with online learning while 18 (12.2%) claimed to be very conversant with online learning. However 54 (36.5%) stated that they are not conversant with online learning. The level of conversance of a technology by student can be as a result of several situation such as operational environment of the student, availability of the technology to the student etc.

Table 2: Students' perception towards online learning

Statement	SA	A	DA	SD
I believe online learning will be very **useful** to me during this Covid-19 period	81(54.7%)	59(39.9%)	5(3.4%)	3(2.0%)
I believe that the features of online learning will be very **easy to use**	44(29.7%)	92(62.2%)	7(4.7%)	5(3.4%)
I feel that online learning will help me to improve on my **digital creativity**	85(57.4%)	59(39.9%)	2(1.4%)	2(1.4%)
There will be significant **academic improvement** in my study through e-learning during the Covid-19 period	57(38.5%)	84(56.8%)	5(3.4%)	2(1.4%)
I think I will **prefer online learning** method over face-to-face class room method	15(10.1%)	53(35.8%)	64(43.2%)	16(10.8%)
I will be very much **at ease in using online learning** facilities over face to face.	18(12.2%)	61(41.2%)	59(39.9%)	10(6.8%)
Online learning will **lead to considerable reduction in my financial expenses** over face-to-face method	35(23.6%)	68(45.9%)	35(23.6%)	10(6.8%)
With ICTs, online learning will **provide lots of flexibility** over face-to-face method	35(23.6%)	78(52.7%)	30(20.3%)	5(3.4%)
Online learning system can **remediate the present lockdown challenge** of teaching.	47(31.8%)	91(61.5%)	6(4.1%)	4(2.7%)

Key: SA=Strongly Agree; A=Agree; DS=Disagree; SD= Strongly Disagree

The perception of students' towards online learning during the Covid-19 have been measured with an intent to understanding their views and what constitute their opinion on the subject matter.

- **On the usefulness of online learning**: Table 2 depicts that most of the respondents; 81 (54.7%) strongly agreed, followed by 59 (39.9%) that agreed to online learning been useful to them in the era of the Covid-19 pandemic. This is a considerably positive reaction as compared to 5 (3.4%) and 3 (2.0%) respondents who disagreed and strongly disagreed respectively. The result showed clearly that majority of the respondents have a positive perception to the usefulness of online learning in the Covid-19 era.

- **Easy to use**: Ease of use is an important consideration in the successful implementation of any ICT innovation. A large number of the respondents have attested to the fact that when implemented, online learning will be easy to use. The table revealed that most of the respondents 92 (62.2%) Agreed, followed by 44 (29.7%) who strongly agreed.

- **Improving digital creativity**: Digital creativity is about using digital tools and technologies to explore creative ideas and new ways of displaying ideas, research, or work. Majority of the respondents confessed that the use of online learning will go a long way to improving their digital creativity skills such as new ways of creating, disseminating and experiencing learning. Table 5 revealed that 85 (57.4%) strongly agreed and 59 (39%) of the respondents agreed. 2 (1.4%) of the respondents unanimously developed a mixed feeling by disagreeing and strongly disagreeing.

- **Academic improvement**: With online learning come the many possibilities to gathering lots of e-resources to support academic pursuit of a student with ease and flexibility. While table 5 revealed very few respondents; 5 (3.4%) 'disagreeing' and 2 (1.4%) 'strongly disagreeing' that online learning will not in any way improve their academic performance, majority of the respondents 84 (56%) and 57 (38.5%) strongly agreed that online learning will improve their academic performance.

- **Preferred online learning over face-to-face method:** The coming of the Covid-19 pandemic has once again reawakened the debate as to whether online learning is preferable over the old conventional face-to-face method of learning. On this, the respondents expressed lot of mixed feelings as could be seen in their response where most of the students 64 (43.2%) disagreed with the idea while 53 (35.8%) agreed. On the other hand, 15 (10.1%) strongly agreed and 16

(10.8) strongly disagreed to the idea that online learning is preferable over the face-to-face method. It can be deduced from the above responses that some students are bound to perform better over others in the era of Covid-19 depending on their choice of learning method.

- **At ease in using online learning:** Almost similar to the views expressed over the preference of online learning over the conventional method, overwhelmingly, there seem to be a lot of mixed feeling among a large number of respondents; 61 (41.2%) to be precise, who revealed that they agree over the 59 (39.9%) who disagreed. On the other hand however, 18 (12.2%) respondents strongly agreed and 10 (6.8%) strongly disagreed.

- **Reduction in financial cost:** as to whether online learning reduces a great deal of students' financial cost over the face-to-face conventional method, 68 (45.9%) respondents agreed that their cost of learning will be greatly reduced. This was followed by 35 (23.6%) respondents strongly agreeing and the same number of respondents also (35; 23.6%) disagreeing with the view. 10 (6.8%) however strongly disagree with the idea that online learning will reduce their financial expenses over the face-to-face learning method.

- **Provides lots of flexibilities:** flexibilities are one among the features of online learning over the face-to-face conventional method. An overwhelming percentage of the respondents 78 (52%) agreed that indeed, online learning will provide lots of flexibility, this was followed by 35 (23.6%) respondents who strongly agree as against 30 (20.3%) and 5 (3.4%) who disagree and strongly disagree respectively that online learning will not provide them any form of flexibility over the conventional learning method.

- **Remediate the challenges that come with Lockdown:** Lots of students are presently constrained by the effect of the present lockdown brought by the Covid-19 pandemic. This is reflected in their responses where majority of the respondents 91 (61.5%) agree and 47 (31.8%) strongly agreeing to the view that online learning will go a long way in remediating the effect of the lockdown on students. A very few number of respondents 6 (4.1%) and 4 (2.7%) disagreed and strongly disagreed respectively to the above view.

Table 3: Students' readiness towards online learning in Covid-19

Statements	SA	A	DA	SD
I have **sound knowledge of ICT** to operate on any online learning platform	47(31.8%)	79(53.4%)	17(11.5%)	5(3.4%)

	SA	A	DS	SD
With my **good knowledge of the internet**, using online learning platform would not be a problem	55(37.3%)	73(49.3%)	16(10.8%)	4(2.7%)
With my good **knowledge in general web browsing/surfing**, using online learning platform would not be a problem	44(29.7%)	80(54.1%)	20(13.5%)	4(2.7%)
I have a **sound electronic device (computer/smartphone)** required to register for an Online learning class	59(39.9%)	74(50.0%)	10(6.8%)	5(3.4%)
I have **access to good internet** broadband to get me connected to an online learning class	29(19.6%)	75(50.7%)	36(24.3%)	8(5.4%)
I have regular power supply to support my online learning class	21(14.2%)	50(33.8%)	65(43.9%)	12(8.1%)
I would not face any form of **distraction in using** online learning during this Covid-19 period	33(22.3%)	73(49.3%)	39(26.4%)	3(2.0%)

Key: SA=Strongly Agree; A=Agree; DS=Disagree; SD= Strongly Disagree

As depicted in table 3, majority of the responses revealed a good level of readiness as indicated in the analysis below:

- **Knowledge of ICT:** Sound knowledge of ICT is a prerequisite to involvement in any form of online learning. Table 6 reveal an overwhelming majority of the respondents 79 (53.4%) agreeing to having sound knowledge of ICT, followed by 47 (31.8%) respondents who strongly agreed to the same view. 17 (11.5%) and 5 (3.4%) disagreed and strongly disagreed respectively. This set of respondents indicated not having sound knowledge of ICT. These persons will indeed find it very difficult to participate in any form of online learning.

- **Knowledge of internet:** Knowledge of the internet is also very important as online learning are sent by the facilitators and received by the students through the use of internet. As regards the knowledge on the Internet, 73 (49%) of the respondents agreed while 55 (37%) strongly agree that with their good knowledge of the internet, online learning wouldn't be a problem. 16 (10.8%) and 5 (3.4%) who disagreed and strongly disagreed respectively on the other hand are of the opinion that their sound knowledge of the internet alone, is not enough to effectively participate in online learning platforms.

- **Knowledge in general web browsing/surfing:** on the importance of general web browsing and surfing, a large number of the respondents believed it is not a problem for them as far as online learning is concerned. 80 (54.1%) of the respondents 'agree', 44 (29.7%) of the

respondents strongly agree, while 20 (13.5%) disagree. This was also followed by 4 (2.7%) who strongly disagree with the idea.

- **Sound electronic device:** A sound electronic device is the gateway to any form of online learning. This is because online learning requires the use of an ICT device be it a computer or a simple hand held smart phone that is fully equipped with the necessary software. Surprisingly, most of the students 74 (50.0%) agree to having a sound electronic device, this was followed by 59 (39.9%) respondents who strongly agree to having an electronic device. This is not surprising as the use of smart phones and computer have become a common trend among so many youth especially those who can afford it. A few number of the respondents 10 (6.8%) and 5 (3.4%) however disagreed and strongly disagreed about having a sound smart phone for online learning.

- **Access to good internet:** Online learning requires good access to internet for the student to be able to benefit fully. All learning materials are sent and received through the internet; hence, internet becomes a prerequisite for online learning. 75 (50.7%) of the respondent agree to having access to good internet broad band but this was closely followed by 36 (24.3%) of respondents who disagree to having access to internet broadband. This can be attributed to a common fact that access to personal internet in Nigeria requires money and not all students can actually afford to buy the amount of data needed to operate an online learning platform. On the two extremes are respondents who strongly agree and strongly disagree i.e. 29 (39.9%) and 8 (5.4%) respectively.

- **Regular power supply:** ICT devices require power to be able to perform their functions optimally. Regular power supply is a mirage in some parts of Nigeria and alternatives of power supply (generators, inverters, solar etc.) has become a thing of luxury to those who can afford them. With the present power crisis facing Nigeria, majority of the respondents 65 (43.9%) overwhelmingly disagree with the availability of regular power supply needed for online learning, this was followed by 50 (33.8%) who agree to having regular power supply; this sets of students could include those leaving in the urban areas and some of whom can afford to provide alternative means of power. 21 (14.2%) of the respondents strongly agree with 12 (8.1%) strongly disagreeing.

- **Distraction:** One of the major problem students face in the use of online related services is distraction that may come either from environmental factors or internet related distractions like those from social medias such Facebook and Whatsapp. Whether the respondents will not be facing any form of distraction in their use of online learning platform, 73 (49.3%) of the respondents agree while 39 (26.4%) disagree - meaning, there are tendencies of facing distraction in the process of using online learning platforms. 33 (22.3%) and 3 (2.0%) of the respondents strongly agree and strongly disagree respectively.

Table 4: ICT skills & competencies of students towards online learning

Statements	VP	P	FP	NP
Basic computer skills (e.g. typing and editing)	46(31.1%)	76(51.4%)	21(14.2%)	5(3.4%)
Advanced computer skills (Internet use)	41(27.7%)	75(50.7%)	28(18.9%)	4(2.7%)
Managing multimedia contents skills (power point, keynote)	22(14.9%)	71(48.0%)	46(31.1%)	9(6.1%)
Using the Web for education skills (Screen recording)	31(20.9%)	68(45.9%)	34(23.0%)	15(10.1%)
Using online tools in education skills: Video chat (e.g., Skype) Web Video (e.g., YouTube)	42(28.4%)	68(45.9%)	32(21.6%)	6(4.1%)
Designing online contents skills (Google Drive, forums)	23(15.5%)	57(38.5%)	46(31.1%)	22(14.9%)
Online communication skills: Social Media (e.g. Facebook, Twitter, E-mail)	72(48.6%)	66(44.6%)	7(4.7%)	3(2.0%)
Use of electronic resources(e.g OPAC, database)	32(21.6%)	63(42.6%)	37(25.0%)	16(10.8%)
Time management	32(21.6%)	84(56.8%)	27(18.2%)	5(3.4%)

Key: VP= Very Proficient; P= Proficient; FP=Fairly Proficient; NT=Not Proficient

To better understand the extent of readiness of the students towards online learning, their skills and competencies were assessed against set standard to determine their level of proficiency in the use and handling of ICTs in general. Basic computer skills of the respondents that involved ability to type and edit was the first to be identified. Majority of the students, 76 (51.4%) claimed to be 'proficient' followed by 46 (31.1%) who indicated that they are 'very proficient'. 21 (14.2%) and

5 (3.4%) of the respondents fell into the category of 'fairly proficient' and 'Not proficient' respectively. Advanced computer skills involving the use of internet was also assessed where a large number of the respondents; 75 (50.7%) indicated having the skills. 41 (27.7%) said they are 'Very Proficient' while 28 (18.9%) and 4 (2.7%) fell into the category of fairly proficient' and 'not proficient' respectively. Skills for Managing multimedia content such as PowerPoint, keynote etc. also had a large number of the respondents 71 (48.0%) being 'proficient while 46 (31.1%) indicated to be 'fairly proficient' in those skills. At the extreme are respondents 22 (14.9%) and 9 (6.1%) who indicated 'very proficient' and 'not proficient' respectively.

Using the web for educational activities such as screen recording is also another important skills, of which 31 (20.9%) indicated that they are 'very proficient' while 15 (10.1%) said they are 'not proficient'. However, majority of the respondents 68 (45.9%) are 'proficient' while 32 (21.6%) are 'fairly proficient'. Skills for using online tools such as Skype, Zoom, web video, YouTube etc. for educational activities are some of the required skills for the effective use of online learning. 42 (28.4%) of the respondents are 'very proficient', 68 (45.9%) are 'proficient', 32 (21.6%) are 'fairly proficient' while 6 (4.1%) are 'not proficient'. Responses for designing online content skills such as Google Drives, forums etc. indicated that 23 (15.5%) are 'very proficient', 57 (38.5%) are 'proficient', 46 (31.1%) are 'fairly proficient' and 22 (14.9%) are 'Not proficient'.

Online communication skills that requires the use of Facebook, Twitter, Email etc. had majority of the respondents 72 (48.6%) being 'very proficient', 66 (44.6%) 'Proficient', 7 (4.7%) 'Fairly proficient, and 3 (2.0%) 'Not proficient'. Use of e-resources such as database, OPAC etc. The responses indicated that 32 (21.6%) are 'very proficient', this was followed by 63 (42.6%) who indicated to be proficient', 37 (25.0%) 'Fairly proficient' and 16 (10.8%) 'Not proficient'. Time management is an important factor in online learning as it involves the use of scarce resources to achieve set goals. Majority of the respondents; 84 (56.8%) are proficient' followed by 32 (21.6%) being 'very proficient', 27 (18.2%) 'Fairly proficient and 5 (3.4%) 'Not proficient'.

Table 5: Perceived challenges to online learning

Variables	Frequency (n=148)	Percentage
Attitudes of users to change	34	22.9
Limited access to computer	52	35.1
High cost of data	119	80.4

Inadequate knowledge of online platforms/tools	39	26.4
Poor internet services	89	60.1
Lack of time and convenience	33	22.3
Erratic power supply	89	60.1
Inaccessibility to online library resources	60	40.5

As depicted in table 5, majority of the respondents; 119 (80.4%) faces challenges related to high cost of data needed to access the internet. This was followed by poor internet services as well as erratic power supply which had 89 (60.1%) respondents each. Other challenges are inaccessibility to online library resources, limited access to computer, inadequate knowledge of online platforms/tools, attitude of users to change and lack of time and convenience which had 60 (40.5%), 52 (35.1%), 39 (26.4%), 34 (22.9%) and 33 (22.3%) of the respondents respectively.

Discussion of findings

This study investigated the perception and readiness of students' towards online learning in Nigeria during the Covid-19 pandemic. Knowledge and familiarity with any innovation like online learning where it does not exist before is very important in determining the rate of success of that innovation when finally deployed or implemented. The level of conversant of students with online learning has been measured in this study to determine the extent of knowledge they possess about the concept of online learning. One main finding of the study is the positive reaction of the majority of the respondents that claimed to be very conversant with online learning. This finding is in sharp contrast with outcome of Bączek, Zagańczyk-Bączek, Szpringer, Jaroszyński and Wożakowska-Kapłon (2020) which revealed that most of the students had never experienced any form of e-learning before the pandemic. The implication of this situation will reflect in the students' level of acceptance and involvement in the introduction of online learning system as a result of Covid-19. While some students may operate smoothly under such a platform, others might experience lots of difficulties in assimilating and operating effortlessly.

Perception is very important in understanding human behavior because every person perceives the world and approaches lifes' problems differently. Individuals behave on the basis of their perception, as such one can predict their behavior in the changed circumstances by understanding their present perception of a phenomenon. The perception of the students where

measured against the advantages of online learning and wholesomely, the findings revealed an overwhelming number of students having a mixture of feelings between "strongly agreed" and "agree". From the responses gathered on the perception of students towards online learning during the Covid-19 pandemic, it is evident that a lot of students have positive perception towards the idea. This outcome closely corroborated the findings of previous studies which reported that students perceived online learning as very useful as most of them highly agreed to the effectiveness of online learning (Shetty et al., 2020; Demuyakor, 2020). Conversely, this result is in contrast with the findings of Abbasi, Ayoob, Malik and Memon (2020) where overall majority of the students had negative perceptions towards e-learning. However, some students have reservations as regards certain area such as preference and the ease of use of online learning over the conventional face-to-face method where they have come to differ in terms of the perceptions expressed.

For successful adoption and effective use of any tool or technology, measuring the level of readiness of the users to ascertain their preparedness towards its effective application and use becomes imperative. On students' level of readiness toward the use of online learning platform during the Covid-19 pandemic, an overwhelming majority of the respondents indicated a high level of readiness except for the fear of irregular power supply as expressed by some sets of students. This indicates general willingness of the students to accept and adapt to online learning under the current circumstances. This result is in agreement with the finding of Chung, Subramaniam and Dass (2020) which also found that students' readiness to participate in online learning was relatively moderate. In support of these result Ali (2020), suggested the need to consider staff' and students' readiness towards online learning implementation as well provision of necessary equipment and technical supports that will facilitate active participation.

The level of students' proficiency (skills and competencies) in the use and handling of ICTs is vital to the success of online learning. General analysis of the responses indicated that a large number of the respondents have some good measure of the relevant skills and competencies needed for the smooth and effective use of online learning platforms. The result also shows clearly that majority of the students claimed to be proficient with the use of online learning. This outcome contradicts the finding of Dube (2020) where their respondents complained of lack of computer skills. Having a high experience in computer literacy and general web surfing is paramount and a

factors favouring the interest of student in online learning because it is not possible to be interested in online learning without familiarity with computer and internet services such as chat, forums of discussions, web, electronic messaging, etc.

There are lots of challenges affecting learning in Nigerian universities. From the outcome of the findings; the perceived challenges that could hinder online learning were identified as: high cost of data, poor internet services, erratic power supply, inaccessibility to online library resources, limited access to computer, attitudes of users to change, and lack of time and convenience. This is outcome is consistent with a similar study carried out in South Africa by Dube, (2020). This outcome also supported World Bank (2020) regarding Covid-19 pandemic, who aptly pointed out that most students will have great difficulty accessing online learning, especially those staying in rural areas, having poor internet access and are subject to other disadvantages. These prevailing challenges have not only reduced the chances of the effective use of online learning but have also succeeded in frustrating the effort of those with strong passion to use the online method for general learning and academic activities. Ali (2020) further asserted that, for effective online learning to be delivered there is the need to have appropriate information and communication technology support in way of infrastructure and tools as well as hardware and software support system. Consequently, introducing online learning without adequately addressing the perceived challenges can have long damaging impact on the students, as they would likely presume that this mode is a poor substitute to face-to-face learning.

Conclusion and Recommendations

Prevailing circumstances caused by Covid-19 and the need to provide education with ease to students while facing the limitations brought about by the total lockdown have placed a burden on the shoulders of modern day universities. This study revealed that majority of the respondents claimed to be conversant with online learning. They also indicated a high level of readiness except for the fear of high cost of data, poor internet services, erratic power supply, inaccessibility to online library resources and limited access to computer. Based on these outcome, it is recommended that, higher institutions of learning must as a matter of necessity improvise means through which knowledge delivery and general learning activities can be achieved seamlessly and at the lowest cost to the students even while they are at home. The Government needs to invest more in the area of communication infrastructural facilities as well as partnering with

telecommunication companies for free internet service to university servers and students during online learning classes. Going forward, Nigerian universities and other higher institutions of learning should endeavor to inculcate online learning into their teaching practices as this will further accelerate the pursuit of aspects of technology based learning that would be found most useful.

Limitations of the study

This study cannot be wholly empirically generalized due to several limitations. First, we could not ascertain the exact number of students that received the survey instrument, hence the sample frame could not be calculated. Secondly, there seems to be low response to the administered questionnaire despite follow-up and constant reminder. This may be attributed to the fact that many of the students were unable to access internet service from their remote location or inability to subscribe data due to financial hardship during the lock down. Thirdly, the sample population for the study was drawn from a single department (Library and Information Science) and a university in the country, as such the extent to which the results of the study can be generalized is limited. Finally, students self-assessed level of skills and competencies could having been overrated or underrated. Nevertheless these limitations, this study has several implications. The findings from this study would serves as useful baseline for further study and provides an insight for higher institutions in the country, because online learning will become the norm of the future in education for developing countries. In addition, it is hoped that outcome of the study would help government, institutions and course facilitators in the design of online learning and proffering solutions to the perceived challenges.

Conflict of interest

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