Learner's Perception and Attitude toward Blended Learning Practice: Experience from Ladoke Akintola University of Technology (LAUTECH)

Yinus S. O, Oyedeji. Y. O, Adeoye O.O and Arulogun, O. T.

Open and Distance Learning Centre (ODLC),

Ladoke Akintola University of Technology, Nigeria.

Abstract

Technology has become an inseparable element in all aspects of human life, especially in effective learning spaces, and this has increased the importance of blended learning, whether in the government-owned or private sector. This is evidenced by the extent to which the use of blended learning practices can complement quality education is worthy of exploration from stakeholders perspectives in the Nigerian context. This study assesses learners' perceptions of blended learning practices. A sample size of three hundred and eighty-four was randomly surveyed from a population of more than 6,000 students enrolled in accounting, agricultural science, computer science, marketing, and nursing degree programs at LODLC using the Krejcie and Morgan (1970) sample calculation method. An online questionnaire instrument was administered via Google Form, with 273 out of 384 (72% of the total) responses received and found useful for the study. The collected data were analyzed using descriptive statistics, while the formulated hypotheses were tested through the use of Chi-Square at a 95% confidence level.Based on the outcome of the analysis, this study concluded that learners have a positive perception and attitude toward blended learning practices, and factors such as the problem of Internet access and the learner's lack of commitment outside the university campus form a major hindrance to the effectiveness of the learners' usage of blended learning. In view of the above findings, it is recommended that improvements in technology infrastructure and capacity building towards effective implementation of the blended learning approach be fully embraced in Nigeria's tertiary institutions.

Keywords: Blended learning Practice, Distance Education, eLearning, Learners Perception

1. Introduction

Learning is a means of acquiring new understanding, knowledge, behaviours, skills, values, attitudes, and preferences, and this entails a very complicated process that can never be limited to a classroom setting. The use of technology in learning, normally referred to as e-learning, has become necessary and inevitable because of its positive effects on the teaching and learning processes. With the emergence of ICT, another learning approach has been developed that is known as blended learning. This teaching and learning strategy is a combination of distance learning and direct class lectures, referred to as blended learning. In some studies, with the aim of enhancing students' knowledge, the lecture method was better than the active and learner-centred method. In Nigeria, like many developing countries, e-learning and Information Communication Technology (ICT) have become an important part of a national effort to improve education. On one hand, Nigerian educators hope that e-learning will

provide a pathway to quality education for students as seen during ravaging Covid-19 pandemic period .The COVID-19 eruption opened the prominence of online education and distance learning, it has also impacted prominent institutions of developed and developing nations through deployment of new and efficient technology that will enhance technology (Eduventure, 2019: Adeoye, Adanikin, and Adanikin, 2020; Oladejo and Yinus 2020; Pingle, 2011; UNESCO, 2020).

E-learning can extend beyond the classroom and consists of material and communication via electronic devices, for example, over the internet, accessed directly from the learners' personal computers (PCs). Among the many cited advantages of e-learning are: continuous learning, time savings, and reduced travel costs. (Dana & Wafa, 2011). Thus, e-learning has appealed not only to learners but also to teachers and lecturers and has experienced noticeable growth in recent years because of the many ways it eases learning and teaching, especially through blended learning.

Blended learning is an approach to learning that combines e-learning with traditional place-based classroom methods. Muhammed (2015) posits that blended learning is a means of combining face-to-face and online learning. Most of the current efforts have been focused on encouraging students to use blended learning. "Blended learning is the organic integration of thoughtfully selected and complementary face-to-face and online approaches and technologies" (Nisha & Priya, 2014). According to Vaksalla, Mohd Saat, Ishak, Hanawi, Mohd Amin, Kamsan, Zulkifli & John (2019), one of the main differences between blended learning and conventional methods is the use of a variety of media within the learning system. Furthermore, blended learning allows learners to decide how and where to get the information regarding the subject of discussion by the tutors or teachers. Additionally, findings from previous studies like Mohammed (2015) indicate that blended learning practice meets the educational needs of students such as satisfaction of learning, enhancing convenience and flexibility, achieving and improving language learning skills, as well as developing critical thinking skills. Another study by Vaksalla *et al.* (2019) shows that blended learning easily provides a home for researchers to study and examine the various factors that influence students towards using the e-learning system.

E-learning management platforms like Modular Object-Oriented Dynamic Learning Environment (MOODLE) are used to develop courses offering blended learning experience. These provide environments that caters for the needs of students who are not in a position to attend traditional contact classes due to personal or professional reasons. For example, MOODLE provides an opportunity to learners to meet the instructor and avoid a completely impersonal course experience as in the case of a course offering purely by e-learning. Studies have reported similar or better learning outcomes in students in blended learning environment when compared to students in traditional learning environments. One factor that is important in blended learning is students' satisfaction. Student satisfaction can be an obstacle to successful implementation of blended learning. Evaluation studies on the implementation of blended learning have shown that satisfaction is influenced by students' attitudes, expectations, and feedback (Nisha & Priya, 2014).There is no dispute that the use of technology-driven tools like the internet, computers, smartphones, and others handheld devices has made it possible for blended Learning practice. The extent to which the practice influence quality learning has become a debate among the stakeholders in the education sector. However, despite the enormous benefits of blended learning, most universities in Nigeria failed to embrace it. Furthermore, the observation of Dziuban et al. (2006) emphasizes that, despite the agitation of literature on blended learning as a means of strengthening effective learning, most nations still know little about the nature of blended learning practices worthy of exploration in the Nigerian institution context. The extent to which the use of blended learning practices can complement quality education is worthy of exploration from stakeholders perspectives in the Nigerian context. In view of the above, this study assesses learners' perception toward the acceptance and use of blended learning practices in selected public owner university.

2. Literature Review

2.1 Concept of Blended Learning

The concept of blended learning has been defined by several researchers and scholars. For instance, Singh and Reed (2001) defined blended learning as a learning programme where more than one delivery mode is being used to optimise the learning outcome and cost of programme delivery. According to Thorne (2003), blended learning is a way of "meeting the challenges of tailoring learning and development to the needs of individuals by

integrating the innovative and technological advances offered by online learning with the interaction and participation offered in the best of traditional learning". In addition, Badawi (2009) defined blended learning as "a flexible approach that combines face-to-face learning activities with online learning practices that allow students to exchange collective and individual feedback and responses in four specific areas, namely, learner feedback, learner strategies, and alternative assessment, synchronously or asynchronously". Findings of several studies have shown that blended learning has a more positive impact on students learning than online or face-to-face learning. Despite the merits of blended learning itself, its effectiveness is determined by the proper design. The means of achieving equilibrium between e-learning and face-to-face modes is crucial to the success of the blended learning environment (Dan Lu, 2021).

There are different ways to approach blended learning. The following are examples of the most used blended learning models.

- *Flipped model*: This blended learning model allows trainers to prioritize active learning during class time, by giving learners the training materials and presentations before the actual class. The trainer can simply share the content via a learning management system (LMS), email, or however training is delivered.

- *Face-to-face driver model*: This is the closest to a traditional classroom structure. Instead of the session taking place in a physical classroom, learners log into a webinar or meeting session, like a Zoom Meeting. The learning happens online, with assignments being set afterwards. This blended learning model is easily delivered using an LMS. With one, you can deliver the training session and share assignments with learners before or after the session has taken place.

- *Enriched virtual*: An alternative to full-time online training that allows learners to complete the majority of coursework online, and also attend webinars for face-to-face learning sessions with an instructor. Attendance is ad hoc and at the learners discretion, giving them the flexibility to learn at their own pace.

2.1.2 Perceptions and Attitudes on Blended Learning

Literature shows students' perceptions and satisfaction as important variables for determining the quality of a blended learning environment. For example, the Bendania (2011) study found that students' attitudes towards the blended learning are influenced by experience, confidence, enjoyment, usefulness, motivation, and whether students have ICT skills. Another study by Akkoyunlu & Yilmaz (2006) reported a close connection between satisfaction and students' participation in the online discussion forum. Findings from other studies such as Dziuban, Hartman, Juge, Moskal, & Sorg (2006) at the University of Central Florida, revealed students' positive attitudes towards the blended learning environment, and that satisfaction could be attributed to features like flexibility, convenience, reduced travel time, and face-to-face interaction. Other studies show that peer interactions, user-friendliness, online course quality, and course design attract students to online studies (Micabalo, Cano, Navarro, Tan & Montilla, 2021). Some studies illustrate that prior experiences with the computer seem to be a significant factor influencing the attitude of students towards e-learning (Saade and Bahli, 2015).

Nonetheless, other studies such as that by Smyth, Houghton, Cooney, & Casey (2012) involving students in a school of nursing and midwifery in their first year of introducing blended learning reported some negative perceptions of the blended learning environment caused by delayed feedback from the teacher and poor connectivity of the internet. In another study conducted by Stracke (2007), the lack of reciprocity between traditional and online modes, the lack of use of printed books for reading and writing, and the use of the computer as a medium of instruction were considered major reasons for student's withdrawal from the blended course. These findings indicate that students' negative attitudes towards the blended learning environment mainly stem from its inadequate design. (Dan Lu, 2021). Negative attitudes of students towards online learning are also associated with low-level computer skills, technological anxiety, and computer hardware problems, as well as poor study skills, low motivation, and an inability to work independently. Another factor identified as producing negative attitudes towards online learning is the view that online classes lack personal contact with the teacher and other students. Research has shown that some students report feelings of isolation and loneliness when required to face a computer screen. They miss the face-to-face contact with students and the instructor found in the traditional classroom. More so, attitudes are positive or negative evaluations of objects, people, or situations that predispose us to feel and

behave towards them in positive or negative ways. Demographic variables are also considered important in explaining attitudes towards online learning. For example, course, family income, and family structure might determine whether a student opts for online courses (Micabalo, *et al.,* 2021). Literature also shows that males, older students, employment status, and those with family responsibilities are more likely to prefer online classes.

2.1.4 Challenges of Blended Learning

Blended learning comes with its own challenges. For example, unlike in the face-to-face learning, an independent self-study (fully-online) requires a significant amount of discipline and motivation to be successful at it. This is because, on their own and at their own pace, learners might not be challenged to work harder unlike if it was a face-to-face learning where deadlines are to be met. This issue, however, can be better managed if the learners interact in an online community of learners, as done in face-to-face learning. Limitations include that asynchronous type of e-learning is not effective for delivering technical training programmes, for example to IT courses because asynchronous learning does not enable real-time interaction with the instructor and other learners, and also does not allow students to have practical exposures on what they learn. Other challenges are:

- Internet connectivity. The cost of accessing the internet in Nigeria is still on the high side. Hence, some students find it a challenge to afford.
- Irregular and frequent interrupted power supply in Nigeria is a perennial problem affecting almost every aspect of the economy, including education. Most rural areas in Nigeria are not even connected to the national grid. The consequence of this is that students residing in such areas may find it difficult to use ICT effectively.
- Limited expertise. Lack of, or inadequate trained personnel are a challenge to the use of ICT in most Nigerian higher institutions.
- Lack of financial support to build the required infrastructure and to produce learning materials for students.
- Inequality of access to technology among students. Some students are unable to afford computers due to the relative cost to the average income of workers in the country.

2.2 Theoretical Framework

This present study embedded a modified TAM theory known as the Unified Theory of Acceptance and Use of Technology (UTAUT) as a construct towards acceptance and usage of blended learning practices. This is based on the fact that the perceived likelihood of adopting the technology is dependent on the direct effect of four key constructs, namely performance expectancy, effort expectancy, social influence, and facilitating conditions. The effect of predictors is moderated by age, gender, experience, and voluntariness of use, as suggested by Venkatesh et al. (2003).

2.3 Empirical Review

Yinus, Alimi, Adeyemi, Akindele, Olagoke, Tajudeen & Kabasinguzi (2020) studied the influence of eLearning practices on the education system in public tertiary institutions during the COVID-19 pandemic era. Four hundred (400) questionnaires were administered to students of LAUTECH, the Open and Distance Learning Centre, and Oyo State, Nigeria. Analysis from the study revealed that eLearning practice has a significant influence on the education system during the pandemic era and further identifying high-impact teaching ethics towards effective online education, which include: effective instructional design strategies in content and courseware adaptation; timely delivery of lectures to students using a Learning Management System (LMS); adoption of social media to complement the LMS in social and peer interactions; access to an adequate learner support system provided by administrators, advisors, and counsellors; high quality assurance by governing authorities; and competency reports of all stakeholders being generated for review to improve the quality of education given to the learners. According to a study carried out by Neima , Mahmoud , and Badaw (2013) at King Khaled Universitys Faculty of Nursing in Abha City, the effect of a blended learning approach on student nurses attitudes and academic achievements revealed that the study group subjects (blended learning group) had higher mean attitude subscales and total scores, achievement test scores, and mean motivational subscales and total scores than the control group (traditional), in addition to there being statistically significant differences between the two groups in relation to the previously

mentioned variables. Therefore, this study recommended an educational programme for academic staff for teaching using a blended learning approach.

Anumaka, Yinus,and Sanni (2021) examine the adoption of e-learning and the educational success of international students during the COVID-19 period. Ten listed private universities in Uganda were selected using stratified and simple random sampling techniques. The result of the analysis revealed that all considered variables such as access to the internet, adaptive intelligent and tutoring systems, and the level of competence of students in e-learning are major determinant factors towards the adoption and adaptation of e-learning and that its implementation enhances the educational success of international students in selected tertiary institutions in Uganda during the COVID-19 period. A research study conducted by Muhammad, Tazeen , and Syed . (2019) on the perceptions of nursing students regarding blended learning methods at the University of Lahore, Pakistan, Twelve in-depth interviews were conducted with the undergraduate students who have learned in both blended learning and traditional lecture-based semesters at the Lahore School of Nursing. An analysis of the 12 students' interviews was conducted with the major themes of awareness, learning strategies, learning activities, evaluation, and interpersonal skills. Participants shared a lot of experiences regarding the effectiveness of a blended teaching environment compared to a lecture-based teaching environment. Blended learning fostered nursing students learning and was beneficial to students' learning in a tertiary environment. It was recommended that institutions, policymakers, and regulatory bodies incorporate this strategy into the nursing curriculum in Pakistan.

In a study conducted by Vakasallah A. et al. (2019) on students' perceptions and attitudes towards blended learning among undergraduate students in Kuala Lumpur, A cross-sectional study was done to determine the perception and attitude of undergraduates among gender, years of study, and departments. In this study, three domains were considered: perception, blended learning concepts, and negative impression. A total of 126 students from Years 1 and 2 were recruited as respondents from two departments in the university in Kuala Lumpur. Students had high preferences for perceptions and concepts of blended learning. In terms of perception, there was a significant difference in the departments approaches to blended learning among biomedical and nutrition students. According to the results of the multivariate test, there was a significant difference between departments for domain negative expression and the concept of blended learning. According to the study conducted by Okocha, Eyiolorunshe, and Oguntayo (2017) on student acceptance of blended learning in Nigeria, at the Centre for Learning Resources at Landmark University Omu-aran, Kwara State. The study explains the factors that influence the acceptance of blended learning and the level of acceptance of the features of blended learning by undergraduate students at Landmark University. Questionnaires were used as the instrument for data collection. The study found that performance expectations and facilitating conditions significantly influenced the acceptance of blended learning. In understanding the acceptance of blended learning features, the student shows more interest in course-related readings and course materials available on the learning management system and less interest in discussion with lecturers and discussion with classmates. It was also discovered that there is no relationship between the learning styles of students and their intention to adopt blended learning.

2.3.1 Gaps researched

This study focuses on learners perceptions and attitudes towards blended learning practise from the perspective of students in the Open and Distance Learning Centre of a selected institution across four faculties (the Faculty of Management Sciences, the Faculty of Computing and Informatics, the Faculty of Agricultural Sciences, and the Faculty of Nursing Sciences) that have an idea of blended learning practise. This study makes use of homogeneous purposive sampling techniques in the selection of respondents and serves as a gap constituted by this study.

3. Methodology

The study population included almost 6,000 students enrolled in the LODLC degree curriculum. A survey design was used. The sample size of 384 was calculated using the Krejcie and Morgan (1970) sample calculation method, as shown in Appendix 1. According to Morgan sample method, the sample size for a population of 6,000 to 10,000 plus is 384. 96 learners were selected using simple random sampling techniques from four faculties operating open and distance learning in a selected sampled university: Faculty of Management Sciences, Faculty of Computing and Informatics, Faculty of Agricultural Sciences, and Faculty of Nursing Sciences were selected

using simple random sampling techniques, and this is based on the fact that the entire population from which the sample is taken is homogeneous in nature. An online questionnaire instrument was delivered via Google Form, with 273 out of 384 (72% of the total) responses obtained and found useful for the study. The collected data were analysed using descriptive statistics, while the formulated hypotheses were tested through the use of Chi-Square at a 95% confidence level.

4. Results and Discussion

4.1 Analysis of Economic Demographic data of the Respondents

As presented in Table 1, analysis revealed that 38.5% of the respondents are between the ages of 21 and 25 years; the majority (88.3%) are female; 11.7% are male; and more than three-quarters (72.2%) practice Christianity. The table also revealed that 77.7% of the respondents are of Yoruba ethnicity, 72.5% are single, and 27.5% are married. More so, Analysis revealed that 17% of the respondents are 100level students, 25% are in 200 level, 28% are in 300 level, 30% are in 400 level students.

Table 1: Demographic Data

Variables	Frequency (n=273)	Percentage (%)
Gender		
Male	32	11.7
Female	241	88.3
Age (in years)		
15-20	48	17.6
21-25	105	38.5
26-30	77	28.2
Above 30	43	15.8
Tribe		
Yoruba	212	77.7
Igbo	55	20.1
Hausa	6	2.2
Level		
100	49	17
200	68	25
300	77	28
400	79	30
Marital status		
Single	198	72.5
Married	75	27.5
Religion		
Christianity	197	72.2
Islam	76	27.8

Source: Author's Computation, (2023).

4.2 Perception on Knowledge of Blended Learning Practice

According to the analysis presented in Table 2, most of the respondents have knowledge about the concept of blended learning. 94.5% were of the opinion that blended learning is the combination of e-learning and face-to-face lectures. About two-thirds (65.5%) disagreed that face-to-face lectures are not necessary for blended learning. The table further shows that the majority (83.2%) agreed that blended learning does not involve purely online classes, and respondents agreed at 100% that blended learning practice embraces a crash course for learners in face-to-face, and the use of a learning management system (LMS) is a model for blended learning practice because it gives an avenue to manage, deliver, and track academic activities. This aligns with the outcome of Kurt (2012), who opined that the blended education model influences student achievement.

Table 2: Knowledge of blended learning

Variables	Frequency n=273)	Percentage (%)
Blended learning is the combination of e-learning and face to face lecture		
Yes	258	94.5
No	9	3.3
I don't know	6	2.2
Face to face lecture is not necessary for blended learning		
Yes	49	17.9
No	179	65.6
I don't know	45	16.5
E-learning is done through the use of online technology and computers		
Yes	273	100
No	-	-
I don't know	-	-
Blended learning involves purely online classes.		
Yes	15	5.5
No	227	83.2
I don't know	31	11.4
Blended Learning embrace online and face-to-face crash course Tutorial		
Yes	273	100
No	-	-
I don't know	-	-
Learning Management System is a blended learning model and it enables to manage, deliver, and track academic activities.		
Yes	273	100
No	-	-
I don't know	-	-

 Source: Author's Computation, (2023)

4.3 Learners Perception and Attitudes towards blended learning Practice

Analyses in Table 3 revealed that all the respondents agreed that blended learning is flexible and is suitable for all age groups and marital statuses. More so focusing on attitudes towards blended learning Practice: 83.3% of respondents were of the opinion that blended learning makes learning more flexible and user friendly than face to face, 77.3% rate the idea of blended learning as a good learning practice; and about two-thirds (61.5%) disagreed that adapting to the use of computers and online based studies is stressful. Only 5.4% of respondents do not feel confident about the internet-based learning programme, and finally, analyses revealed that 100% respondent like participating in an online based study because of its flexibility. The outcome of this study is supported by the findings of Muhammad, Tazeen, and Syed (2019), with the emphasis that blended learning fosters the students learning and is beneficial to students' learning in a tertiary environment. More so, Analysis revealed that 62.4% of the respondents agreed that blended learning is better than the face-to face learning. The majority (82.4%), agreed that academic performance will be better with blended learning than the ordinary teaching in class, 91.2% believed that students can easily switch from ordinary learning to blended learning effectively; and more than half of the respondents (63.8%) agreed that blended learning is adequate for courses that need practical demonstrations, like the nursing courses.

Table 3: Attitudes of Learners towards blended learning

Variables	Frequency n=273)	Percentage (%)
Blended learning makes learning more flexible and user-friendly than face to face learning.		
Strongly agree	182	66.6
Agree	46	16.7
Disagree	12	4.4
Strongly disagree	33	12.1
Students like the idea of blended learning		
Strongly agree	90	33.0
Agree	121	44.3
Disagree	30	11.0

Strongly disagree	32	11.7
Adapting to the use of computer and online based studies is stressful.		
Strongly agree	60	22.0
Agree	45	16.5
Disagree	151	55.3
Strongly disagree	17	6.2
Students feel confident about the internet program of learning		
Strongly agree	48	17.6
Agree	211	77.3
Disagree	9	3.3
Strongly disagree	5	2.1
Students like participating in an online based study because of its flexibility		
Strongly agree	121	44.3
Agree	156	55.7
Disagree	-	-
Strongly disagree	-	-
Blended learning is better than the face-to face learning		
Strongly agree	31	11.4
Agree	139	51.0
Disagree	88	32.2
Strongly disagree	15	5.5
Students can easily switch from ordinary learning to blended learning effectively		
Strongly agree	76	27.8
Agree	173	63.4
Disagree	24	8.8
Strongly disagree	-	-
Academic performance will be better with blended learning than the ordinary teaching in class		
Strongly agree	63	23.1
Agree	162	59.3
Disagree	20	7.3
Strongly disagree	28	10.3
Blended learning is adequate for courses that need practical demonstrations like the nursing courses		
Strongly agree	81	29.7
Agree	93	34.1
Disagree	72	26.4
Strongly disagree	27	9.9
Blended learning is flexible		
Strongly agree	212	77.7
Agree	61	22.3
Disagree	-	-
Strongly disagree	-	-
Blended learning is suitable for all age groups and marital status.		
Strongly agree	205	75.0
Agree	68	25.0
Disagree	-	-
Strongly disagree	-	-

Source: **Author's** Computation, (2023).

4.4 Learners Perception factors militating against acceptance and use of blended learning

Analyses presented in Table 4 revealed that 98.2% of respondents opined that the cost of internet connectivity and smart phones/laptops are major factors militating against the effective use of blended learning. The table further revealed that 86.5% disagreed that blended learning is time-consuming, and a larger percentage (96%) agreed that students' indiscipline, lack of commitment, and lack of motivation affect blended learning. All of the students (100%) agreed that factors working against acceptance and use of blended learning include students' lack of proficiency with computer and online technologies, a lack of sufficient power supply, and the lecturers' mode of instruction. This supports the outcome of Apandi and Raman (2020), with an emphasis on factors affecting successful implementation of blended learning in higher education.

Table 4: Militating Factors against Acceptance and utilization of blended learning

Variables	Strongly agree	Agree	Disagree	Strongly disagree
Cost of internet connectivity and smart phones/ laptop affects blended learning	107(39.2)	161(59.0)	-	5(1.8)
Students' indiscipline and lack of commitment affects blended learning	72(26.4)	198(72.5)	3(1.1)	-
Blended learning is time-consuming	26(9.5)	11(4.0)	199(72.9)	37(13.6)
Power supply affects blended learning	186(68.1)	87(31.9)	-	-
Lack of motivation in students affects blended learning	80(29.3)	182(66.7)	7(2.6)	4(1.5)
Students' lack of expertise in the use of computer/online technologies affects e-learning	197(72.2)	76(27.8)	-	-
Mode of teaching used by lecturers affects blended learning	121(44.3)	152(55.7)	-	-

Source: Author's Computation, (2023).

4.5 Testing of the Relationship Between Perceptions of Blended Learning and Academic Performance

Analysis in Table 5 shows the result of the chi-square test for the hypothesis stated. The table shows a chi-squared value of 2.137 and a p-value of 0.544. The conventional significance value is 0.05, and since the p-value is lower than the significance level, this implies that an association exists. Since the p-value is less than the conventional significance value, the null hypothesis is rejected. Hence, there is a significant relationship between students' perceptions of blended and their academic achievement. The outcome is aligned with the findings of Tong, Buyen, and Ngan (2022), Owens& Macy (2001) with the notion that perceptions of blended learning influences academic performance.

Table 5: Test of Hypothesis Using Chi-Square

	Value	Df	Asymp. Sig. (2- sided)
Pearson Chi-Square	2.137[a]	3	.017
N of Valid Cases	273		

Source: Author's Computation, (2023).

5. Conclusion and Recommendation

Based on the outcome of the analysis, this study concluded that learners have a positive perception and attitude toward blended learning practices, and factors such as the problem of Internet access and the learner's lack of commitment outside the university campus form a major hindrance to the effectiveness of the learners' usage of blended learning. In view of the above findings, it is recommended that improvements in technology infrastructure and capacity building towards effective implementation of the blended learning approach be fully embraced in Nigeria's tertiary institutions.

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Appendix: Table for Determining Sample Size for a Finite Population

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—N is population size. S is sample size.

Source: Krejcie & Morgan, 1970