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## E-learning Environment and Learners' Satisfaction- The Learners' View

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### ABSTRACT

Distance learners play prominent roles in any online learning environment. The ability of the learners to harness technological tools into the traditional learning environment brings about efficiency in Open and Distance Learning. The factors that influence learners' level of satisfaction in the distance learning environment are critical to open and distance education success. The domain of this study lies in two randomly selected Open and Distance Learning institutions in southwest Nigeria. A sample of 100 learners was randomly selected from each institution, making a total of 200 participants. Data was collected using a validated structured questionnaire. The learners' ability, responses, and satisfaction were analysed using descriptive analysis based on Moore's transactional distance theory. Generally, all the independent variables had means between 3.16 and

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3.50. Results showed that learners prefer web-based learning, which helps them manage their time compared to face-to-face learning. E-learning facilitates learning in ODL, which also leads to effective time management that enhances teaching and learning; learners are well satisfied with the flexible characteristics of ODL, which makes education more accessible. However, it is recommended that tuition loans should be provided for learners of ODL institutions. This will immensely contribute to the nation's development, add value to human lives, and reduce the number of drop-outs resulting from varying crises in society.

## **1. Introduction**

Distance learning is a mode of conveying education and instruction, often on an individual basis, to learners who are not physically present in a traditional setting or classroom. Distance learning provides access to learning when the source of information and learners and the facilitator are separated in time and distance. Distance learning courses that require a physical on-site presence for any reason, excluding taking examinations, are referred to as hybrid or blended courses of study (Moore, 2005). Teaching and learning through open and distance learning platforms could possibly be more effective than the traditional or face-to-face platform when appropriate teaching-learning methods are utilised.

In most developing countries, educating the citizenry through on-campus teaching is almost impossible due to limited resources and a rapidly growing population (Kamal & Sultana, 2000). Consequently, an alternative route for efficiency and effective mean of teaching and learning has to evolve. It has now become apparent that the pendulum is tilting more to open and distance learning due to the rapid increase in online learning enrollment. Therefore, the need for a thorough understanding of online learners' experiences and perceptions cannot be overemphasised. Studies examining the experiences and perceptions of

learners in online learning are diverse. In the report of Smart & Cappel, 2006; Gilbert, Morton & Rowley, 2007; Popovici & Mironov, 2015 and Nichols (2010), most research on online learning focused less on learners experiences. However, learners are essential for any online learning environment (Benneth, Maton, & Kervin, 2008; Wintera, Cottona, Gavina, & Yorkeb, 2010; Lint, 2013). Sheridan & Kelly (2010) found that learners were more likely to be motivated if they clearly understood their expectations rather than inspired by relationships with instructors. Galy, Downey & Johnson (2011) concluded that learner-content interaction plays the most crucial role in ensuring that online learners are successful. In the view of Mahajan & Kalpana (2018), there is a need for urgent attention, as a definite change is required in learning styles to keep pace with the developed scenario in learning mechanism, which is shifting towards competency-based curricula emphasises and the learning outcome.

In the report of Yukselturk & Yildirim (2008), it has been established that learners' satisfaction is a pointer to the quality of learning experiences. Learners' satisfaction in Open and Distance Learning modes is often diminished by the lack of confidence in the practical usage of information and communication technology (ICT). Thus, this can negatively affect learners' academic performance (Galy *et al.*, 2011). As against the traditional mode, the nature of Open and Distance Learning put much responsibility on the part of the learners. This is as stated in Moore & Kearsley (2012). In ODL, learners who cannot utilize the learning platforms efficiently are prone to be satisfied (Artino, 2008; Puzziferro, 2008). Rovai (2007) noted that learners' computer literacy and time management are crucial in a distance learning context and concluded that such factors are meaningful in online classes. Self-regulatory skills of time management lead to more excellent academic performance. This also encourages learners to navigate the tech-driven learning environment, resulting in an efficient and effective ODL or blended learning environment.

## **1.1. Conceptual framework**

In the Open and Distance Learning environment, flexibility and distance in time and geography can benefit learners using network technologies. This connects learners with distributed learning resources. These learning strategies can make access to education more convenient and cost-effective for learners, facilitators and education providers. These learning strategies can as well be helpful in any form of education. Therefore, the frontiers of programs, education budgets, and on-time delivery, educational content for learners can be stretched anywhere, anytime.

For high academic performance and to attain learners' satisfaction in any course, high-quality resources such as interactive online databases, audiotapes, articles, and study guides are paramount. Generally, instructors often state that the focused preparation required by e-teaching improves their overall teaching ability and empathy with learners. Teaching and learning strategies used in ODL are pertinent to open and flexible education, where learning is not necessarily at a distance but enhances the traditional mode of learning. It has become pertinent among Open and Distance educators that program developers should begin to define the purpose, audience, and content. Only then should consideration be given to which technology is best suited to its delivery and use.

The concept of synchronous and asynchronous learning is an essential aspect of the learning environment. Synchronous learning uses technologies that facilitate live interactive instruction, and all are engaged simultaneously, irrespective of space and geography. This concept is similar to the face-to-face classroom teaching and learning platform, not considering the remote localities of the participants. It also makes use of prepared and organised timetables. The synchronous technology includes web conferencing, video-conferencing, live streaming and a wide plethora of others. In the last two decades, robot proxies have been used in the e-classroom (de Greeff & Belpaeme,

2015). According to Holmberg (2000), asynchronous learning allows learners access to course materials and flexibility on their schedules. One very old form of asynchronous delivery in distance education is Mail correspondence. Other technologies used in this regard include e-mail, video and audio recordings, print materials and a host of others. Therefore, asynchronous delivery allows the learners and instructor/facilitator to be separated in time and distance from the delivery of instruction. Instances of telecommunications systems that utilise asynchronous learning include broadcast television (cable or digital), electronically stored media and computer software.

## **2. Statement of the Problem**

The economic downturn in Nigeria has resulted in high unemployment rates and has made the job market competitive and unreachable to many. Distance learning offers a flexible way to improve academic skills and employment prospects. Distance learning programs also offer provider-specific certificates and degrees that often cost less than traditional programs and enable learners to combine academic work with other activities. Different variables are affecting the satisfaction of learners in Open and Distance Learning. Since the internet and the utilisation of ICTs are engaged in the organisation and delivery of Open and Distance Learning, problems may arise ranging from learners' perception of the technology as assisting or retarding the learning process. However, different variables affect learners' satisfaction in the distance learning environment. These variables include knowledge and proficiency with ICT, self-study ability, learning materials, feedback mechanism, communication, combining academics with other responsibilities, acceptability, and socioeconomic factors. Therefore, the factors that influence learners' satisfaction level in the distance learning environment will be examined in this research.

## **2.2. Research Questions**

1. What are the learners' abilities and responses towards web-based learning?
2. How accessible are the various media facilitating learning in distance learning institutions?
3. What is the satisfaction level of learners with distance learning mode?
4. What factors enhance learners' satisfaction in a distance learning environment?

## **3. Research Methodology**

### **3.1. Research Design, Population and Sample size**

The study employed a survey design method. The study population comprised all the undergraduate learners of the Distance Learning Institute, University of Lagos and National Open University of Nigeria (Lagos Study Centre) who enrolled for the undergraduate Distance Learning Programme. The total population was respectively put at 17,710 and 31,400. A purposive stratified sampling technique was used to group respondents into their different domains. A simple random sampling technique was used to select 100 respondents from the final year learners from each institution to give a sampling size of 200 respondents.

### **3.2. Research Instrument**

A structured questionnaire was used as the instrument for data collection and validated by experts in research. A pilot test was conducted using 30 2nd Year learners who will not participate in the study. Cronbach's alpha was used to check the internal consistency of the instrument.

The questionnaire was designed along a four-point Likert scale comprising of twenty items. The questionnaire consists of two sections: A and B. Section A sought information on demographic data about the respondents, while section B was made up of the main items of the questionnaire. Data were analysed by the use of descriptive statistical analysis. The four-point Likert scale had four parts SA (4), A (3), D (2) and SD (1). At the same time, the scores were added to make a total of 10 points. This gives a mean of 2.5. Using the harmonic mean at 0.5 significant level, the decision rule point will be 3.0. Any value above this point was agreeing, while the value below is disagreeing.

#### 4. Findings

*Cronbach's alpha* for each research question is shown in table 1.

Scale	Item Numbers	Cronbach's Alpha
Learners' abilities and response to web-based learning	5	0.972
Accessibility of the various media facilities to learners in ODL	5	0.898
Level of learners' satisfaction with distance learning mode	5	0.952
Factors that can enhance Learners satisfaction in ODL	5	0.934

The results showed that Cronbach's *alpha* values were all above 0.88 (0.898 to 0.972), which indicates both an acceptable internal consistency

#### 4.1. Data Presentation of Respondent Demographics

The demographic status of the respondents is revealed in Figures 1a-c. Figure 1a depicts that a more significant proportion of the respondents were females (63%). The age distribution indicated that most respondents (53%) are in their youthful years, a stage whereby they would be craving for satisfaction in their endeavours. This was closely followed by young adults between the ages of 31- 35 years of age. Their marital status indicated that most of the respondents were either married or single, while less than 10% of the respondents were either divorced or widowed.

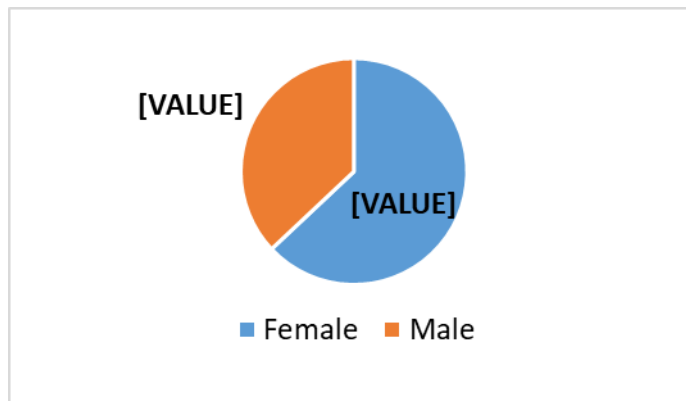


Figure 1a: Graph showing gender status of respondents

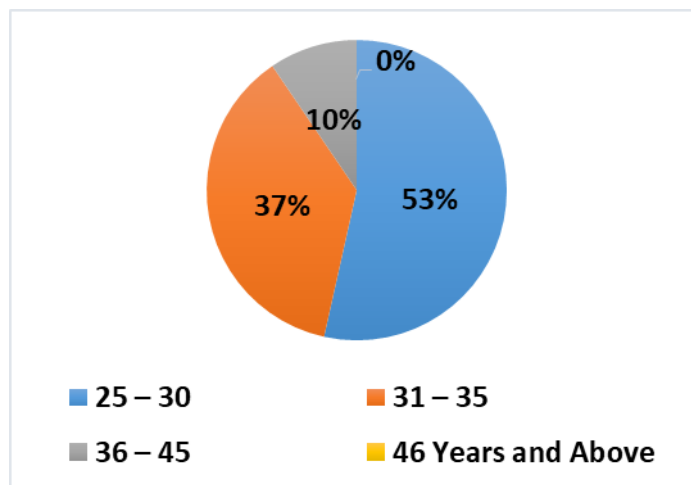


Figure 1b: Graph showing age range of respondents



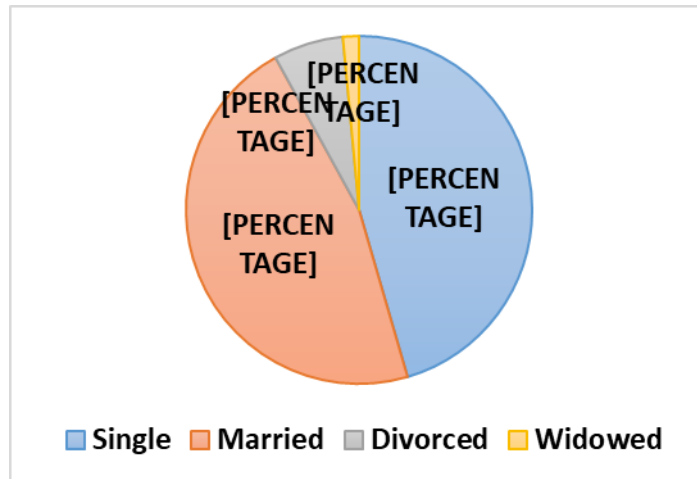


Figure 1c: Graph showing marital status of respondents

#### 4.2. Presentation of Data to Answered Research Questions

**Research Question I: What are the learners' abilities and responses towards web-based learning?**

**Table 1: Learners' abilities and reactions to web-based learning**

S/ N	Questionnaire Items	SA -4	A -3	D -2	S D -1	Mea n	SDe v
Q1	Learners' preference for web-based learning to face-to-face learning.	76	99	1 2	13	3.19	0.82
Q2	Web-based learning is adequate for all aspects of teaching-learning process	86	98	1 0	6	3.32	0.71
Q3	Learners get feedback from facilitators on time using a web-based learning system.	71	88	2 3	18	3.06	0.91
Q4	Learners gain and develop self-study skills	80	78	1 3	29	3.05	1.02
Q5	Web-based learning is friendly and easier for learners.	11 1	62	1 6	11	3.37	0.85
<b>Mean (<math>\bar{X}</math>)</b>						<b>15.99/5 =</b>	<b>3.20</b>

The table above shows the respondents' responses to learners' abilities and responses to web-based learning. In this study, a positive reaction is measured with a mean equal to/greater than 3.0 and negative responses are measured with a mean below 3.0. The total mean responses to this research question is 3.2. The study revealed that the learners have a positive attribute and ability towards web-based learning.

**Research Question II: How accessible are media facilities to the learners?**

**Table 2: Accessibility of the various media facilities to learners in ODL**

S/N	Questionnaire Items	SA -4	A -3	D -2	SD -1	Mean	SDev
Q6	Learning is accessible via video-conferencing	188	10	2	0	3.93	0.29
Q7	There is adequate communication through the Learning Management Systems (LMS)	91	108	1	0	3.45	0.51
Q8	Radio Lectures improve learners knowledge and learning ability	99	56	25	20	3.17	1.00
Q9	Webinars/Online videos e.g. YouTube are easily accessed by the learners	105	83	5	7	3.43	0.71
Q10	Tele-conferencing is adequate for learning in the ODL mode	98	51	19	32	3.08	1.11
<b>Mean (<math>\bar{X}</math>)</b>						<b>17.06/5 = 3.41</b>	

Table 2 shows the learners responses to the accessibility of media facilities on the ODL platform. The total mean responses of this research question is 3.41, which is greater than the decision point of 3.0 at a 0.95% significant level. This shows that the media facilities such as YouTube, radio lecture and teleconferencing used in facilitating learning in the ODL environment are accessible to the learners.

**Research Question III: What is the satisfaction level of learners with distance learning mode?**

**Table 3: Level of learners' satisfaction with distance learning mode**

S/N	Questionnaire Items	SA -4	A -3	D -2	SD -1	Mean	SDev
Q11	The flexibility of Open Distance Learning mode	101	82	11	6	3.39	0.73
Q12	No barrier on age	91	108	1	0	3.45	0.51
Q13	Distance learning education is unnecessarily expensive	97	58	23	22	3.15	1.01
Q14	Elimination of geographical barrier	59	59	49	33	2.72	1.06
Q15	Encourages time management skills.	98	51	19	32	3.08	1.01
<b>Mean (<math>\bar{X}</math>)</b>						<b>15.79/5=3.16</b>	

The results in Table 3 show the responses to the level of satisfaction derived from the ODL mode of learning. The general mean response is put at 3.16, depicting a cross satisfaction in the mode of delivery, the flexibility of facilitation of learning, elimination of age barrier and development of time management skills by the learners. However, the individual mean on item 14 shows a negative response to eliminating the geographical barrier, indicating that this factor does not have a satisfactory effect on the learners.

**Research Question IV:** What factors enhance learners' satisfaction in a distance learning environment?

**Table 4: Factors that can enhance Learners satisfaction in ODL**

S/N	Questionnaire Items	SA	A	D	SD	Mean	SDev
		-4	-3	-2	-1		
Q16	Wide acceptance and recognition of certificates	159	21	11	9	3.65	0.78
Q17	Enhanced quality of learning.	70	115	13	2	3.27	0.62
Q18	Wide coverage of programmes and acceptance of the ODL mode	128	64	6	2	3.59	0.60
Q19	Enact policy for tuition loans and bursary for learners of ODL.	100	94	6	0	3.47	0.57
Q20	Simplified and affordable media tools	120	69	5	6	3.52	0.69
<b>Mean (<math>\bar{X}</math>)</b>						<b>17.5/5=3.5</b>	

The result in Table 5 established that the learners agreed with the factors that can bring about satisfaction in the ODL environment. The total mean responses to this research question are 3.5. Evidence from the individual mean response shows that most respondents agreed that wide acceptance of certification and coverage of programmes enhanced the quality of ODL. Therefore, enacting tuition loans and affordable media tools policy would go a long way in building a good learning environment in ODL.

#### 4. Discussion

The demographic analysis revealed that most learners are in the age bracket of 25-35. This age group is often referred to as the searching age, where young adults seek satisfaction. In determining learners' abilities and responses towards the web-based learning in Open and Distance Learning, it was observed that the learners prefer web-based learning to face-to-face learning. The learners also showed positive responses to web-based learning based on feedback

mechanisms, self-study ability, and simplified course materials. This finding agrees with the view of Nosrati (2015), who, in his study on teachers' and learners' attitudes toward the use of web-based language learning (will), found that students and teachers generally have a positive attitude towards computer technology use both in their daily use and study. This correlates with the submission of Chiu, Sun, Sun & Ju (2007), who discovered that learners exhibited significant positive effects on satisfaction to attainment value, utility value, intrinsic value, distributive fairness, and interactional fairness.

In examining the accessibility of the various media tools for facilitating learning in ODL, it was observed that the learners showed a significant positive response to having access to the multiple media tools which aid their learning in the various programmes enrolled for—bearing in mind that the respondents in this study were the year five learners who had spent a couple of years in the various institutions. The various media through which teaching and learning are communicated include video conferencing, learning management systems (LMS), radio lectures, online videos (YouTube) and teleconferencing. These assist the learners to attain their academic goals. Galy et al. (2011) had also stated that learners' competency and level of use of technology has a considerable role in the quality of interaction in a distance learning environment

Technological media facilitates learning in ODL, which also leads to effective technology tools utilised communication that enhances teaching and learning processes in ODL. This find accordance with Galusha (2001), who stated that effective communication means transmitting knowledge, skills, values, customs, attitudes and beliefs to the correct destination, with the right way and time with the proper use for the right purpose effect.

On the level of learners' satisfaction with distance learning mode, the learners exhibited significant positive effects with the flexibility mode of ODL as this gave a high mean value. This corresponds with Holmberg, who in 2000 stated that asynchronous learning allows participants (learners) access to course materials and flexibility on their schedule. The flexible characteristics of Open and Distance Learning make education more accessible, convenient and cost-effective for the learners, tutors and education providers. In agreement, Messo (2014) found that 63.6% of learners sampled enrolled on the ODL programme because of the flexible learning mode. Our study also revealed that the learners are positively inclined towards the ability to manage their time. Several studies have shown that the ODL mode allows for the development of time management skills by the learners who have to shift between work time, study time, and other social responsibilities. In Goodson, Miertschin & Stewart, (2015), the students sampled also agreed that engagement in online studies has helped them develop their time management skills.

This study further sorted for the factors that can enhance learners' satisfaction in ODL institutions. From the analysis, the learners agreed that a broad acceptance of the certificates of study and an increase in the number of programmes on the ODL mode would bring about satisfaction in the mode of learning. It is widely believed that if the qualification of ODL graduates are recognized as a yardstick for career advantage or basis for promotion or consideration for employment, more people will be interested in the mode of learning and place more value on it. Also, as more people are opting for ODL than the traditional face-to-face learning system, the respondents were positively inclined to have a policy on tuition loans for learners of ODL. This lay credence to Komba (2009), who, in the study on access to education through ODL in Tanzania, showed that the highly subsidized distance education provides an excellent opportunity for people who could not otherwise acquire the education they longed for. Generally, good quality education is expensive. ODL is a platform to

bring quality education to all and sundry and is not immune to high running costs. However, the respondents expect quality education from ODL at a subsidized rate or bursary allowance as obtained with learners in the face-to-face mode of learning.

## **Conclusion**

This was a study that investigated learners satisfaction with learning environments in ODL. Satisfaction was a prevalent theme that pervaded diverse views of ODL training. The learners in this study consistently expressed their satisfaction with the learning mode despite its challenges, as they also found the program rewarding. The learners' views about ODL showed that their experiences with ODL were positive, and they were satisfied with the content of the training.

## **Recommendations**

Institutions should conduct in-depth research on how to design and adapt content materials to suit learners at the micro-level, manage information and ensure that they have the necessary modern ICT tools. Cost-effective and self-learning platforms will also enhance ODL education which will also promote enrollment from the unreached.

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