DETERMINANTS OF LEARNERS' SATISFACTION IN OPEN DISTANCE LEARNING PROGRAMMES IN NIGERIA

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Abstract

This study focuses on examining the relationship, and contribution of teaching and learning experiences, educational resources, technical support service, and infrastructure to the determination of learners' satisfaction in Open Distance Learning programmes in Nigeria. The study is guided with four research questions, and a descriptive research design approach was adopted for the study. A sample size of 719 students was randomly selected from three (3) purposively selected ODL institutions in South-western Nigeria. A semi-structured questionnaire duly validated was used in collecting data for the study. Data collected were analysed using frequency counts, percentages, Pearson Product Moment Correlation, and regression analysis. Results revealed that there is a significant relationship between teaching and learning experience, educational resources, technical support and infrastructure, and general satisfaction of students in ODL programmes. Also, age, sex, and school significantly jointly predict the general satisfaction of students in ODL programmes among other results. It was, therefore, suggested that future studies should consider some other factors that influence learners' satisfaction for the efficiency of the ODL delivery system in Nigeria.

Keywords: Teaching-learning experiences; student satisfaction; Open Distance Learning; educational resources

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Introduction

The education sector of a nation's economy is the most essential for its development as it has been established that the strongest element that symbolises a country's economic growth is the human capital. Investments in the development of human capital through education have been found to have a positive impact on nations' growth and wealth (El-Hilalia, Al-Jaber, Hussein, 2015). With the increase in demand for education worldwide most especially higher education due to the need to be functional in the knowledge economy of the 21ˢᵗ century and the increasing awareness about alternative learning opportunities through open distance education for those who are deprived of participation as a result of the limited available space in the conventional educational system; those geographically disadvantaged to participate or in employment but desire to upgrade their educational level, access to university education has thereby been made easier now than several decades ago as a result of the exponential growth in the communication technologies.

Open distance learning provides learning opportunities to people through the use of diverse information communication technologies in a manner that physical contact between the instructor and the learner is eliminated and learning is made more open and very flexible for the learners. Through ODL, the burden placed by time and location to participate in learning opportunities is taken away from the learners and learners learn at their convenience and space. ODL is therefore taken as a promising and indeed a practical strategy to solve the basic problems confronting higher education provision most especially widening access and increasing participation because of its potentials to increase flexibility in learning, eliminate the geographical burden and enhance convenience and effectiveness of education acquisition for individual and collective development (Ohioze, Odishika, Adedeji, Olusanya, and Adesina-Uthman, 2013; Rajaduran, Alias, Jaaffar, and Hanafi, 2018). However, ODL has been observed to have certain challenges which include lack of peer contact, and social interaction, difficulty in developing learning materials, and lack of flexible tutorial support which tend to make learners under the ODL mode have a sense of isolation, frustration and confusion and these adversely affect learners interest and significantly affect their satisfaction in the programmes. Student satisfaction in Open and Distance Learning is a critical element in the successful completion of distance learning programmes and it is important in the evaluation of ODL institutions in terms of identifying their strength and areas of improvement (Lee and Chan, 2007; Rajaduran et al., 2018).

Review of Literature

Students' satisfaction means a short-term attitude arising from a student's evaluation of his educational experiences. It is a students' disposition by subjective evaluation of education outcomes and experience. Hence, it is a function of the relative level of experiences and perceived performance about educational service. Surmising from these views, students' satisfaction can be defined as a learner's short-term attitude ensuing from his evaluation of learning experience, services and available facilities (Weerasinghe and Fernando, 2017). It is a multidimensional process which is influenced by different factors including but not limited to Grade Point Average (GPA), personal and institutional factors such as age, gender, learning style, employment, marital status, quality of instructions, clarity of expectations, teaching style, and promptness of the instructor's feedback. Other factors as identified by scholars are the quality of lecturers and physical facilities, student-lecturer relationships, course content, library facilities and learning materials as well as flexible curriculum, university status and prestige, student's loyalty, service quality, welfare services, learning environment, institutional effectiveness and social conditions (BC College & Institute Student Outcomes, 2003; Kumar, 2014; Motefakker, 2016;

Tandilashvili, 2019; Weerasinghe and Fernando, 2017).

Specifically, the desire to explain factors that influences students' satisfaction in open distance learning among scholars and practitioners has led to the conduct of many studies among ODL students in a different part of the world with varying results. For instance, Kuo, Walker, Belland and Schroder (2013), investigated the extent at which interaction and other factors contribute to student satisfaction in online learning settings. The result of their study indicated that learner-instructor interaction, learner-content interaction, and internet self-efficacy serve as good predictors of student satisfaction while interactions among students and self–regulated learning did not contribute to students' satisfaction.

Similarly, Harsasi and Sutawijaya (2018), conducted a study to examine the determinants of student satisfaction in online tutorial in a distance education institution, the result of the study revealed among others that course structure and online tutorial flexibility was found as variables that influence student satisfaction. Other empirical studies on students' satisfaction in Open distance learning found out that learning content, course design, reliability, cost & time, website content, communication, feedback, preparation teaching methods, accessibility, professionalism, technology, interactivity, assurance etc are factors that determine students satisfaction in the open distance learning environment (Bolliger & Martindale, 2004; Barbera, Clara and Linder-Vanberschot, 2013; Perera and Abeysekera 2015; Perera, Abeysekera, Sudasinghe, Dharmaratne, 2017).

Based on the continuous increase in enrolment and students diversity in open distance learning programmes, educators and scholars worldwide are keenly interested in further investigation of other factors that contribute to learners' satisfaction as this contributes to learners' motivation which is a predicting factor for student success in open distance programmes (Bolliger & Martindale, 2004). It, therefore, becomes imperative to have a better understanding of factors that determine or contribute to student's satisfaction in the open and distance learning environment most especially in Nigeria where there is a surge in learners' enrolment in ODL programmes based on astronomical increase in population and the conventional universities incapacity to absorb all prospective students. Hence, the purpose of this study is to examine factors that determine students overall satisfaction (teaching & learning experience, educational resources, technical support, and infrastructure) and which of these factors contribute most to learners' satisfaction in open distance learning with a view at providing actionable recommendations aimed at improving students' satisfaction and learning in ODL programmes in the country.

This study is guided with the following research questions:

1. Is there any significant relationship of the variables (teaching & learning experience, educational resources, technical support and infrastructure) with the students' satisfaction with ODL programmes and services?
2. What is the composite contributions of teaching & learning experience, educational resources, technical support, and infrastructure to the determination of learners' satisfaction with ODL programmes and services?
3. What is the relative contribution of teaching & learning experience, educational resources, technical support and infrastructure to the determination of learners' satisfaction with ODL programmes and services?
4. What are the effects of demographic variables (age, sex, school, marital status and academic level) on the general satisfaction of ODL students?

Methodology
The study adopted a descriptive survey research design and the population of the study consist of students enrolled in open distance learning programmes in universities in the South-western region of Nigeria. A sample size of 719 students was randomly selected from three (3) purposively selected ODL institutions in South-western Nigeria (University of Ibadan Distance Learning Centre = 271, National Open University of Nigeria, Ibadan Study Centre = 233 and Ladoke Akintola University of Technology Open and Distance Learning Centre = 215). The purposeful selection of the three ODL institutions was based on having similar characteristics known with other ODL institutions in the country and the proximity to the researchers as they are all located in Oyo State, Southwest Nigeria. A self-completion semi-structured questionnaire tagged "Student's Assessment of Open and Distance Learning Programmes and Services Questionnaire" was used as an instrument for the study. The questionnaire was duly validated by three experts in Open Distance Education, Measurement and Evaluation and Adult Education at the University of Ibadan. The questionnaire was pilot-tested among fifty (50) ODL students and 0.71 Cronbach coefficient were obtained and considered reliable for data collection. The questionnaire was personally administered with the help of two research

assistants to the students during their interactive sessions in the institutions. Data collected were analysed using frequency counts, percentages, Pearson Product Moment Correlation and regression analysis.

Data Analysis and Results

Table 1
Demographic Characteristics of the Respondents

Age	Age group	Frequency	Percentage (%)
	16-30 years	389	54.1
	31-50 years	274	38.1
	51 years and above	56	7.8
Sex	Male	381	53.0
	Female	338	47.0
Marital Status	Single	351	48.8
	Married	315	43.8
	Divorce	53	7.4
Institutions	UI DLC	271	37.7
	NOUN	233	32.4
	LODLC	215	29.9
Academic Level	100 Level	146	20.3
	200 Level	124	17.2
	300 Level	185	25.7
	400 Level	130	18.1
	500 Level	119	16.6
	Others	15	2.1

Table 1 shows a summary of the demographic characteristics of the respondents. It was revealed that majority of the respondents (54.1%) are within the age group of 16-30 years and a majority of them (53.0%) are male. Equally, 48.8% of the respondents are single followed by married (43%) and divorce (7.4%) while students from U.I DLC accounted for 37.7% of the respondents with NOUN and LODLC having 32.4% and 29.9% respectively. On the academic level of the respondent, the table shows that 300 level students accounted for 25.7% of the respondents followed by 100 level students (20.3%) and 400, 200, 500 and other levels accounting for 18.1%, 17.2%, 16.6% and 2.1% respectively.

RQ1: Is there any significant relationship of the variables (teaching & learning experience, educational resources, technical support and infrastructure) with the students' satisfaction with ODL programmes?

Table 2

Inter-correlation Matrix of independents and dependent variables

Variable	Satisfaction	Teaching/ Learning	Education resources	Technical support	Infrastructure
Satisfaction	1				
Teaching/Learning	.268**	1			
(P value)	.000				
Educational Resources	.173**	.075*	1		
(p-value)	.000	.044			
Technical Support	.298**	.304**	.018	1	
(p-value)	.001	.000	.638		
Infrastructure	.279**	.294**	.151**	.314**	1
(p value)	.000	.000	.000	.000	
Mean	2.40	4.60	4.22	2.48	4.58
Standard Deviation	.86	1.35	1.29	1.04	1.32

*Significant at p<0.05, ** significant at p<0.01

Table 2 above shows the inter-relationship among the independent variables and between dependent and independent variables. It could be inferred that teaching & learning experience (r = .268, N= 719, p < .05), educational resources (r = .173, N= 719, p < .05), technical support (r = .298, N= 719, p < .05), and infrastructure (r = .279, N= 719, p < .05) correlate significantly with general satisfaction of students with ODL programmes. This Implied that teaching & learning experience, educational resources, technical support and infrastructure could influence the general satisfaction of students in ODL programmes to some extent. Therefore, there is a significant relationship between teaching & learning experience, educational resources, technical support and infrastructure with general satisfaction of students with ODL programmes.

RQ2: What are the composite contributions of teaching & learning experience, educational resources, technical support and infrastructure to the determination of learners' satisfaction in ODL programmes?

Table 3.1
Composite Contributions of teaching & learning experience, educational resources, technical support and infrastructure to learners' satisfaction with ODL programmes

.R	R Square	Adjusted R Square	Std. Error of the Estimate
0.410	0.168	0.164	.788

Table 3.2
Summary Regression ANOVA

	Sum of Squares	df	Mean Square	F	P	Remark
Regression	89.707	4	22.427			
Residual	443.517	714	.621	36.104	0.000	Sig.
Total	533.224	718				

Note: dependent variable: satisfaction. Predictors: (constant), teaching & learning experience, educational resources, technical support and infrastructure

The regression table above shows that teaching & learning experiences, educational resources, technical support and infrastructure taken together jointly correlate positively (R = 0.410) with

learners' satisfaction with open distance learning programmes. This implies that the four independent variables have positive multiple relationships with learners' satisfaction with ODL programmes. Hence, these four independent variables have the potential of explaining satisfaction level of learners in ODL programmes to an extent as they account for 16.8% of the total variance in satisfaction level (R^2 =0.168) and this leaves the remaining 83.2% to other factors that were not considered in the study. The level of significance of the R^2 value of .168 is significant (F= 36.104, P < 0.05). This implies that teaching and learning experiences, educational resources, technical support service and infrastructure jointly contribute to learners' satisfaction with ODL programmes. Therefore, there is a composite contribution of all variable to learners' satisfaction with ODL programmes.

RQ3: What is the relative contribution of teaching & learning experience, educational resources, technical support and infrastructure to the determination of learners' satisfaction with ODL programmes?

Table 4

Relative contributions of the independent variables to learners' satisfaction

Variable	Unstandardized Coefficients		Standardized Coefficients			
Model	(β)	Std. Error	Beta	T	Sig.	Remark
Constant	.698	.154	-	4.535	.000	-
Teaching & learning	.096	.023	.151	4.104	.000	Sig.
Educational resources	.095	.023	.143	4.119	.000	Sig.
Technical support service	.171	.031	.208	5.608	.000	Sig
Infrastructure	.096	.024	.148	3.958	.000	Sig

a. Dependent Variable: Satisfaction

Table 4 shows that among all the independent variables, technical support service made the highest contribution to learners' satisfaction with ODL programmes (β = 0.208, P< 0.05) which is significant. Follow by teaching & learning experience with a coefficient (β = 0.151, P< 0.05) which is also significant. Others are infrastructure with (β = 0.148, P< 0.05) and educational resources (β = 0.143, P< 0.05) both was significant. Hence, there is a significant relative contribution of technical support service, teaching & learning experience, infrastructure and educational resources to learners' satisfaction in ODL programmes and services. Again, technical support service contributed most to learners' satisfaction while educational resources contributed the least.

RQ4: What are the Effects of demographic variables (age, sex, school, marital status and academic level) on the general satisfaction of ODL students?

Table 5

Summary of multiple regression analysis showing the joint and independent prediction of age, sex, school, marital status and academic level on students' satisfaction with programmes offered by ODL institutions

Variables	β	T	P	R^2	F	P
Age	.050	1.265	<.05			
Sex	.124	3.367	<.05			
School	.207	5.661	<.05			
				.067	10.253	<.05
Marital Status	.021	.506	>.05			
Academic Level	.011	.313	>.05			

*Dependent variable: satisfaction

The table 5 above shows that age, sex, and school significantly jointly predict general satisfaction of students in ODL programmes $(R^2 = .067$; F (5,713) = 10.253; p < .05). This means that age, sex, and school had 6.7% of the variance observed in general satisfaction, other factors not captured in this study contributed much more on general satisfaction. Further results from Table 5 shows that Age ($\beta = .051$; t = 1.265; p < .05), sex ($\beta = .124$; t = 3.367; p < .05) and school ($\beta = .207$; t = 5.661; p < .05) had significant independent influence on general satisfaction of students with open and distance learning programmes, while marital status ($\beta = .021$; t = .506; p > .01) and academic level ($\beta = .011$; t = .313; p > .01) does not independently influence general satisfaction of students.

Discussion

The purpose of this study was to examine the relationship and contribution of teaching & learning experiences, educational resources, technical support service and infrastructure to the determination of learners' satisfaction in ODL programmes in Nigeria. The study revealed that teaching & learning experience, educational resources, technical support service, and infrastructure have a significant relationship with general satisfaction of students in ODL programmes and the implication of this result is that general satisfaction of student in the open and distance learning programmes is influenced by their teaching & learning experiences, available educational resources, technical support service, and infrastructure in the institutions. It was also established that the four independent variables taken together jointly correlate positively with learners' satisfaction in ODL programmes and this suggests that the four independent variables have the potential of explaining 16.8% of the total variance in students' satisfaction which is an indication that other factors contribute to students' satisfaction in ODL programmes but these factors are outside the scope of this study. Perera and Abeysekera (2015), observed that learners' satisfaction in ODL programmes cannot be pinned down to specific factors since students under the ODL mode comes from different societies with varying degrees of cultures, family backgrounds, educational backgrounds and different ICT skills, so what contributes to a student' satisfaction in the ODL programme might be different from others. These results agree with previous research findings (Bolliger & Martindale, 2004; Artino, 2007; Kuo, Walker, Belland, and Schroder, 2013; Li, Marsh, and Rienties, 2016).

The result further shows that technical support service among other independent variables had the highest contribution to learners' satisfaction in ODL programmes. Though, teaching & learning experience, educational resources, and infrastructure also significantly had relative contributions to students' satisfaction. This result could be attributed to the fact that open distance learning students often face challenges arising from inadequate interaction with facilitators and problems relating to time constraint due to social or work obligation as well as non-familiarity with self-study skills or the medium of instruction which tend to create some sense of isolation and anxiety among the students, but with adequate technical support services from the institutions, most of these issues are lessened and learners tend to have more confidence in the system and this ultimately enhance their satisfaction in the educational programmes. Technical support service is a critical element of any open and distance learning system and comprises of activities that are not only responsive to the students' needs but also making ODL programmes and services very accessible to learners through the provision of a wide array of supports ranging from information support, institutional support, academic support and timely feedback to students and other stakeholders with the sole aim of helping learners to go through the educational path with minimal difficulties and concerns (Chattopadhyay, 2014).

On the effect of demographic factors on students' satisfaction in ODL programmes, the result of the study revealed that while age, sex, and school significantly jointly predict general satisfaction of students in ODL programmes, marital status and academic level of the students does not independently influence general satisfaction of students. These results imply that students' perception of satisfaction with ODL programmes is influenced by either being young or old as older people tend to be more satisfied with ODL programmes compared to younger students based on their expression as observed by the researcher. Older people feel a more sense of satisfaction as they feel happy having a

second chance to acquire a university education and for some, it's an opportunity to upgrade their level of education while still in active employment, unlike younger ones who expressed frustration at not getting direct admission to regular programmes based on their academic performance in Unified Tertiary Matriculation Examination (UTME) or strong competition for limited available space in the regular university. Also, younger students feel that learning under ODL tends to make them redundant as they have nothing doing during long vacation as well as lack of self-study skills which is a necessity for survival under the ODL mode of study. Student's gender and nature of the institution (school) is found to also predict student's satisfaction because male tends to show more resilience compared to the female and the type of school, based on facilities provided by the institutions also influence students' satisfaction in ODL programmes while marital status and academic level of the students seem not to be an influencing factor as to whether being married, single or divorced doesn't change their expectation of the ODL system and what satisfies those expectations are based on policy frameworks operating in the school and available infrastructure that support their learning.

Conclusion

The study was conducted to examine the relationship and contribution of teaching & learning experiences, educational resources, technical support service and infrastructure to the determination of learners' satisfaction in ODL programmes in Nigeria. The findings of the study revealed that teaching & learning experience, educational resources, technical support service, and infrastructure have a significant relationship with general satisfaction of students in ODL programmes and when the four independent variables are taken together, they jointly correlate positively with learners' satisfaction in ODL programmes. Also, the result shows that among the four independent variables, technical support service had the highest contribution to learners' satisfaction in ODL programmes and it was further established that while age, sex, and school significantly jointly predict general satisfaction of students in ODL programmes, marital status and academic level of the students does not.

Based on these results, it was recommended that there is a need for ODL institutions to make concerted efforts at improving the educational resources and infrastructural facilities available to enhance the teaching and learning process for students which will, in turn, boost their satisfaction level in the programmes. Technical support services in the institutions should be strengthened significantly to reduce students' sense of isolation and anxiety that always leads to a high dropout rate and long completion time among the ODL students. There should be an age restriction on admission to ODL programmes or certain skills acquisition that could engage the younger ones during vacation should be incorporated into the ODL curriculum and self-study strategies should be inculcated into the students during freshers' orientation programmes often organised for new students. Future studies should consider some other factors that influence learners' satisfaction for the efficiency of the ODL delivery in Nigeria

References

Artino, A. (2007). Motivational beliefs and perceptions of instructional quality: predicting satisfaction with online training*. *Journal of Computer Assisted Learning*, *24*(3), 260–270. DOI: 10.1111/j.1365-2729.2007.00258.x

BC College & Institute Student Outcomes. (2003). Understanding Student Satisfaction. Retrieved from https://www.kpu.ca/sites/default/files/downloads/Understanding_Student_Outcomes6359.pdf

Bolliger, D. U., & Martindale, T. (2004). Key Factors for Determining Student Satisfaction in Online Courses. *International Journal on E-Learning*, *January-March*, 61–67. Retrieved from https://pdfs.semanticscholar.org/2be9/f3cf41f5bc6a95710f6b347363a344f0b922.pdf

Chattopadhyay, S. (2014). Learner Support Services in Open Distance Learning System: Case Study on IGNOU. Retrieved from https://www.researchgate.net/publication/336128443_Learner_Support_Services_in_Open_Distance_Learning_System_Case_Study_on_IGNOU

El-Hilali, N., Al-Jaber, S., & Hussein, L. (2015). Students' Satisfaction and Achievement and Absorption Capacity in Higher Education. *Procedia - Social and Behavioral Sciences*, *177*, 420–427. DOI: 10.1016/j.sbspro.2015.02.384

Harsasi, M., & Sutawijaya, A. (2018). Determinants of Student Satisfaction in Online Tutorial: A Study of a Distance Education Institution. *Turkish Online Journal of Distance Education*, *19*(1), 89–99. DOI: 10.17718/tojde.382732

Kumar, V. (2014). *Students' Satisfaction Level in Higher Educational Institutes: A Study of Public Institutes in Sirsa.* Retrieved from https://www.semanticscholar.org/paper/Students'-Satisfaction-Level-in-Higher-Educational-Kumar/e3d6bb79638d0433c2e24d017addd3e07f91e3da#extracted

Kuo, Y.-C., Walker, A. E., Belland, B. R., & Schroder, K. E. E. (2013). A predictive study of student satisfaction in online education programs. *The International Review of Research in Open and Distributed Learning*, *14*(1), 16. DOI: 10.19173/irrodl.v14i1.1338

Lee, M. J., & Chan, A. (2007). Reducing the Effects of Isolation and Promoting Inclusivity for Distance Learners through Podcasting. *Turkish Online Journal of Distance Education*, *8*(1), 85–105. Retrieved from http://www.acarindex.com/dosyalar/makale/acarindex-1423932372.pdf

Li, N., Marsh, V., & Rienties, B. (2016). Modelling and Managing Learner Satisfaction: Use of Learner Feedback to Enhance Blended and Online Learning Experience. *Decision Sciences Journal of Innovative Education*, *14*(2), 216–242. DOI: 10.1111/dsji.12096

Motefakker, N. (2016). The Study of the Level of Satisfaction of the Students of the Faculty of Social Sciences with Welfare Services of Imam Khomeini International University of Qazvin. *Procedia Economics and Finance*, *36*, 399–407. DOI: 10.1016/s2212-5671(16)30052-1

Ohioze, W. F., Odishika, V. A., Adedeji, L. A., Olusanya, S. O., & Adesina-Uthman, G. A. (2013). Appraisal of Open and Distance Learning Education in Nigeria through NOUN. Retrieved from https://www.researchgate.net/publication/279980229_Appraisal_of_Open_and_Distance_Learning_Education_in_Nigeria_through_NOUN

Perera, M. J. R., & Abeysekera, N. (2016). Model-based analysis of student satisfaction in open distance learning. *Kelaniya Journal of Management*, *4*(2), 23. DOI: 10.4038/kjm.v4i2.7498

Perera, M.T., Abeysekera, N., Sudasinghe, S., & Dharmaratne, I. (2018). *Predictive Drivers of Students "Satisfaction in Open Distance Learning In Sri Lanka.* Retrieved from https://www.semanticscholar.org/paper/Predictive-Drivers-Of-Students-%E2%80%9F-Satisfaction-In-In-Perera-Abeysekera/b500b9e7f3a7bd435f9881c2f4d7d90168fd0388

Rajadurai, J., Alias, N., Jaaffar, A. H., & Hanafi, N. W. (2018). Learners' Satisfaction and Academic Performance in Open and Distance Learning (ODL) Universities in Malaysia. *Global Business and Management Research: An International Journal*, *10*(3), 511–524. Retrieved from https://www.questia.com/library/journal/1G1-567634619/learners-satisfaction-and-academic-performance-in

Tandilashvili, N. (2019, June 30). Factors Influencing Student Satisfaction in Higher Education. The Case of a Georgian State University. RAIS Conference Proceedings - The 13th International RAIS Conference on Social Sciences and Humanities, USA. DOI: 10.2139/ssrn.3433958

Weerasinghe, S., & Fernando, L. S. (2017). Students' Satisfaction in Higher Education Literature Review. *American Journal of Educational Research*, *5*(5), 533–539. DOI: 10.12691/education-5-5-9

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