Lecturers' Attitude to Social Network Media: Implication for Accessibility and Usability Need in Open and Distance Education

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Abstract. An attempt was made to determine the level of lecturers' attitude to social network media, the factor which is paramount to accessibility and usability need of the learners in Open and Distance Learning (ODL). A multi-stage, stratified and simple random sampling techniques were used to select 80 lecturers that constituted the study sample. Fifty of these lecturers came from single mode University while, the remaining 30 were from dual mode university. The instrument used for data collection was adapted from an eclectic integration of previous instruments developed by some researchers, with a reliability coefficient of 0.75 using test-retest method. Five research questions and three hypotheses guided the study. Descriptive statistics was used to analyse the research Questions. The hypotheses formulated were analyzed with t-test and Analysis of variance. It was discovered that the general attitudes of lecturers towards social network media were positive. It was therefore recommended that awareness programme that promote attitude towards social network media should be organized, for ODL lecturers to further increase their interest in their participation in good accessibility and usability exercise in ODL. Also, ODL lecturers should be given training that is e-learning oriented in social network media through, workshop and conferences to further improve their contribution to accessibility and usability needs of the learners.

Keywords: Lecturer · Attitude · Social network media · Accessibility · Usability · Distance education

1 Introduction

Open and distance learning focuses on removing barriers to accessing learning. National Policy on Education [1] emphasizes on the uses of a variety of media and technologies to provide and/or improve access to good quality education for large members of learners wherever they may be. Open and Distance Learning, (ODL) refers to the form of study where students are not in direct physical contact with their lectures. Distance education has the goal of providing access to quality education and equity in educational opportunities for those who otherwise would have been denied. Also, most ODL system has a philosophy that aims to remove barriers to education and allow learners to study what they want, when they want and where they want (Common

Wealth Learning [2]). Therefore ODL is about increasing educational access and increasing educational choice.

Laudable as the objectives are in ODL, the successful implementation of information and communication technologies to achieve the objectives depend largely upon the accessibility and usability of the learning resources to meet the needs and preferences of all users. According to Cooper [3] usability can be defined as the effectiveness, efficiency and satisfaction with which user can achieve specified learning goals in a particular environment with a particular learning resources, while accessibility is defined as the ability of the learning environment to adjust to the needs of all learners [4]. Thus accessibility and usability are intrinsically linked. Milken [5] had earlier reported that information and communication technologies under the right conditions have the potential to accelerate, enrich, and deepens knowledge acquisition. Example of such is Web 2.0 technologies which include social networking sites, blogs, wikis, video sharing sites, hosted services web applications and others. Social network media is an unmatchable and essential channel through which meaningful knowledge, skills and ideas could be imparted and, or transmitted to the learners [6]. According to Brag [7], social networks has been defined as a body of applications that augment group interaction and shared spaces for collaboration social connection, and aggregates information exchanges in a web-based environment. Social networking tool are more diverse and some are better fit for a particular purpose. The specific applications that are devised to be used as a teaching tool are often referred to as e-learning platforms. The sites where students can participate, create his own studying schedule, exchange information with other students and interact with the instructor in real-time, while teachers are privilege to monitor the performance of their students in specific tasks, and can give them support, feedback and assistance [8].

The importance of teachers' quality in education has been emphasized in the national policy of Education [1], it is stated that no education system can rise above the quality of its teachers. Therefore, it is worthwhile to know that attitude of lecturers' remains the key factors for any strategy put in place to ensure students' success in education. This is because successful integration of the media is possible where lecturers display reasonable positive and acceptable attitude towards a thing. Also, lecturers' attitude and believe are known to influence their teaching and management strategies and thus, directly influence students' outcome [9]. In the same vein, Yusuf [10] stressed that belief or attitude about the use of any material or tool may determine the extent to which the teacher is willing to make adjustment in the teaching methods, curriculum or instructional mode. Therefore, right attitude will propel lecturers to be conversant with educational innovations, new media and their application in learning process, also, it will help him present the courses learning materials in a meaningful manner, and foster the communication environments require which encourage and facilitate the students' accessibility and usability needed for meaningful learning.

Furthermore, Darling-Hamond [11] opined that what lecturers know and do have positive influence on what the learners achieve. As such there is need to consider the area of specialization of lecturers while assessing the lecturers' knowledge of and attitude to social network media. Also, it takes a skillful lecturer to produce high levels of students through quality instructions that are taught using an appropriate medium.

In addition, the quality lecturers provide an environment that allows students reach their potential.

Researchers have found that lecturer become more efficient and more effective as he stays longer on his profession by learning more and more on the job, learn more about the difficulties learners encounter while learning [12, 13]. His grooming experience help students gain insight into how to overcome. In a study conducted by Adeyemi [14], he found that institutions having more lecturers with 5 years and above teaching experience achieve better results than those having more teachers with less than 5 years teaching experience. Similarly, Rice [15] reported that lecturers become more skilled with experience.

In addition, the mode of University might also influence lecturers' knowledge of and attitude to social network media, which in turn could have implication on the media accessibility and usability exercise. Study has revealed that Nigeria has one single—mode Open University, the National Open University of Nigeria as well as six dual—mode Universities (conventional Universities with Distance Learning Institute) recognized by the National Universities Commission. These are the Universities of Ibadan, Lagos, Abuja, Maiduguri, Obafemi Awolowo, Ile—Ife and Federal University of Technology, Yola [16].

2 Statement of the Problem

Removing barriers to access learning in Open and Distance Learning (ODL) requires a deep knowledge about the complex interrelation between lecturers' attitude to accessibility and usability need of learning resources for learners. The difficulty in achieving such knowledge might result in pedagogy ineffectiveness. Thus, surveying the lecturers' attitude to social network media as a prerequisite to effective accessibility and usability development in distance learning is a topic worth researching.

Research Questions

1. What are the lecturers' attitudes towards social media?
2. What type of social media do lecturers in Open and Distance Learning (ODL) have the most knowledge of?
3. Do areas of specialization of ODL lecturers influence their attitudes towards social media?
4. Do years of experience of ODL lecturers influence their attitudes towards social media?
5. How does institutional mode influence lecturers' attitude to social media?

Hypotheses

Ho_1 There is no significant difference in the attitude of lecturers' of different areas of specialization towards the use of social media.

Ho_2 No significant difference exists between the attitude of experienced and less experienced lecturers in their attitude towards the use of social media.

Ho$_3$ There is no significant difference between attitude of lecturers in single mode and dual mode ODL toward the use of social media.

Methodology

Research Design. A descriptive survey employing the ex-post factor design in which none of the variables used was manipulated, but was utilized as they occur.

Population and Sample. The population of the study was made up of all lecturers in Open and Distance Learning Universities in Nigeria. A multi-stage, stratified and simple random sampling techniques were used to select 80 lecturers that constituted the study sample. The first stage was to stratify the lecturers in ODL on the basis of their faculties. Using the simple random sampling technique, the representatives of each of the faculties were selected: 19, 10, 19, 16, and 16 of these lecturers were drawn from school/ faculty of Education, Law, Management Science, Art and Social Sciences, and Science and Technology respectively. The second stage was to stratify the selected 80 ODL lecturers on the basis of their institutional mode: 50 lecturers drawn from the only single mode distance University—National Open University of Nigeria (NOUN) and 30 lecturers from one of the oldest dual mode Universities (The Distance Learning Institute—DLI in University of Lagos). Among the sample were 40 experienced lecturers and 40 less experienced lecturers.

Instrument and Data Collection. The instrument used for data collection was adapted from an eclectic integration of previous instruments developed by Beatie, Andeson and Antonak [17], Christensen and Knezek [18], Yusuf [19] and Issa [20]. The instrument comprises of three sections. Section A deals with demographic information including Institutional mode, name of school/faculties, lecturers' teaching experience and area of specialization. Section B contains items that elicit information from lecturers on attitudes to social network media using a 4-point likert type response format (4 = strongly agree, 3 = agree, 2 = disagree, 1 = strongly disagree). Section C contains items that elicit information from lecturers on their use of social network media, using a close ended questions regime, YES/NO answer. The questionnaire instrument was validated by colleagues at school of education, National Open University of Nigeria. The reliability of the instrument was determined through a test–retest method, and value was found to be 0.75. The research assistants ensured the questionnaires were collected in person, this ensure 100 % rate of return. The data collection took two weeks.

Data Analysis Procedures. Data collected for the study were analysed using descriptive to statistics (Frequency and percentages) for research questions, to ascertain the level of lecturers' attitude to social network media. The bar charts were drawn to represent extent of attitude to social network media among ODL lecturers. The three hypotheses were tested using t-test and Analysis of variance.

Results and Discussion

1. **Research Question 1:** What are the lecturers' attitudes towards social network media?

Table 1. Lecturers' attitude to social network media

S/N	Items	Agree (%)	Disagree (%)
1	I enjoy doing things on the Social Network Media for teaching	73 (91.3)	7 (8.7)
2	I am tired of using Social Network Media for teaching	9 (11.3)	71 (88.7)
3	I would work harder if I could use Social Network more often	65 (81.3)	15 (18.7)
4	I can learn many things when I used Social Network Media	74 (92.6)	6 (7.4)
5	I believe that is very important for me to learn how to use Social Network Media to assist students	76 (95)	4 (5)
6	Social Network Media would improve the education of the students	76 (95.1)	4 (5)
7	Knowing how to use Social Network Media to assist students is a worthwhile skill	73 (91.3)	7 (8.8)
8	Learning Social Network Media to assist the students is boring to me	11 (13.8)	69 (86.2)
9	Social Network Media would increase my productivity in teaching the students	71 (88.8)	9 (11.2)
10	The challenge of learning about Social Network Media to teach the students is exciting	80 (100)	0

From Table 1, it is observed that responses in each of the ten items were in favour of positive attitude to social network media in distance learning by the lecturers. This was also supported by the favourable frequency counts and percentages recorded under the agree column. For instance, enjoying doing things on the Social Network Media for teaching (N = 73, % = 91.3), Social network would increase my working pace (N = 65, % = 81.3), Knowing how to use Social Network Media to assist students is a worthwhile skill (N = 76, % = 95).

1. **Reseach Question 2:** What type of social network media do lecturers in Open and Distance Learning (ODL) have the most knowledge of?

From Table 2, most ODL lecturers generally use Facebook (N = 64, % = 80) among all the types of social network media, followed by Messenger (N = 50, % = 62.5), Youtube (N = 48, % = 57.5) and Google Plus (N = 45, % = 56.3) in that order. The least ones are Tagged (N = 2, % = 1.3), Propeller (N = 2, % = 2.5) and Technorati (N = 3, % = 3.8).

Table 2. The social network media the majority of lecturers had knowledge most

S/N	Social network media	Yes (%)	No (%)
1	Flickr	32 (40)	48 (60)
2	Diigy	4 (5)	76 (95)
3	Xanga	13 (16.3)	67 (83.8)
4	Twitter	41 (51.2)	39 (48.8)
5	Tumble	8 (10)	72 (90)
6	Friendster	9 (11.3)	71 (88.8)
7	Twiki	14 (17.5)	66 (82.5)
8	Messenger	50 (62.5)	30 (37.5)
9	Stumbler	13 (16.3)	67 (83.8)
10	Technorati	3 (3.8)	77 (96.3)
11	Najialonge	9 (11.3)	71 (88.8)
12	Facebook	64 (80)[a]	16 (20)
13	Linkedin	30 (37.5)	50 (62.5)
14	Fresqui	8 (10)	72 (90)
15	Hi5	15 (18.8)	65 (81.3)
16	Skype	38 (47.5)	42 (52.5)
17	Myspace	27 (33.8)	53 (66.3)
18	Yigg	9 (11.2)	71 (88.8)
19	Live.journal	8 (10)	72 (90)
20	Google Plus	45 (56.3)	35 (43.8)
21	Orkut	15 (18.8)	65 (81.3)
22	Twacle	5 (6.3)	75 (93.7)
23	Propeller	2 (2.5)	78 (97.5)
24	Reddit	4 (5)	76 (95)
25	Bebo	3 (3.8)	77 (96.3)
26	Tagged	1 (1.3)	79 (98.8)
27	Cafemom	5 (6.3)	75 (93.8)
28	Meetup	9 (11.3)	71 (88.8)
29	Youtube	46 (57.5)	34 (42.5)

[a] The Social Network Medium that the majority of the lecturers use.

1. **Research Question 3:** Do areas of specialization of ODL lecturers influence their attitudes towards social media?

From Fig. 1, it is clear that attitude of ODL lecturers towards Social network media is slightly influenced by their area of specialization, since all the five schools have almost the same mean. However, Science and Technology lecturers have the highest attitude.
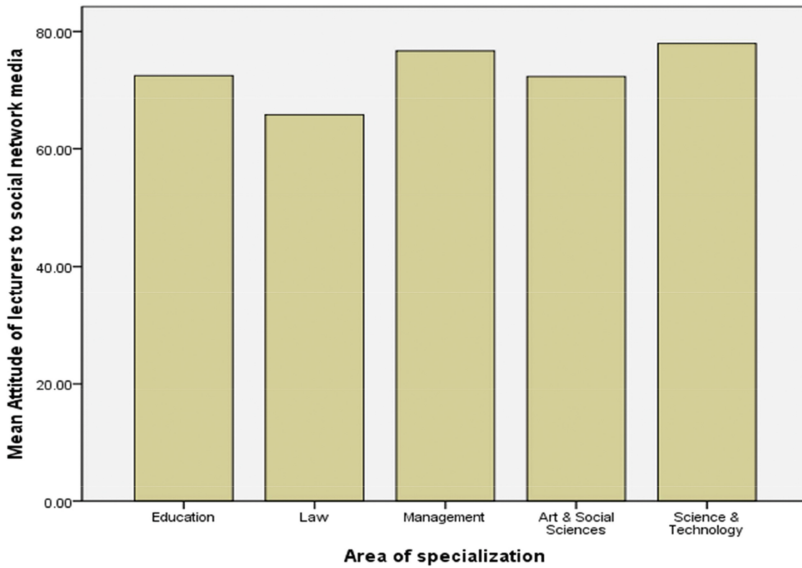
Fig. 1. The influence of area of specialization on lecturers' attitude to social network media.

1. **Research Question 4:** Do years of experience of ODL lecturers influence their attitudes towards social media?
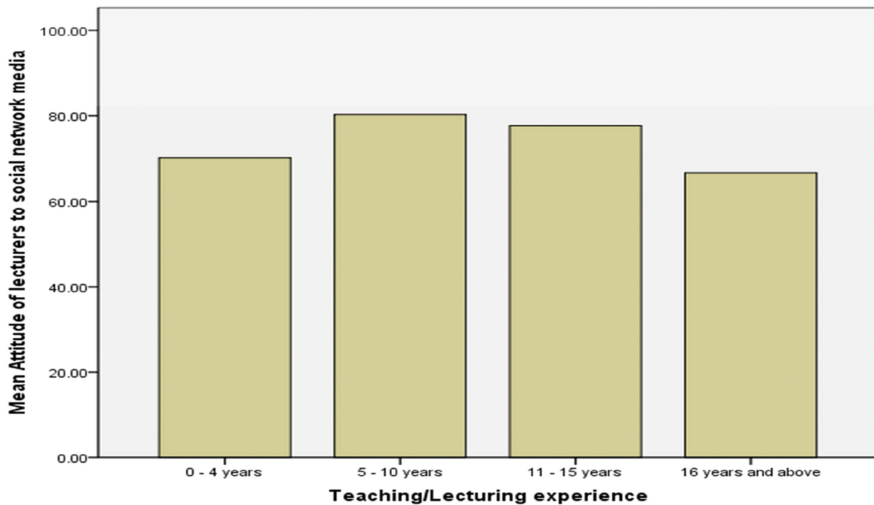
Fig. 2. The influence of experience on lecturers' attitude to social network media

Figure 2 above show the attitude of ODL lecturers towards Social network media by their year of experience. It can be seen that the less that the less experienced (0–4 years) and the most experienced (16 years and above) lecturers have less attitude towards social network media than the averagely experienced (5–10 and 11–15 years).

Hypotheses Testing

Ho$_1$ There is no significant difference in the attitude of lecturers' of different areas of specialization towards the use of social network media.

Table 3. Summary of Analysis of Variance (ANOVA) test of difference in means among the five areas of specialization

S/N	Area of specialization	N	Mean
1	Law	10	65.75[a]
2	Art/social science	16	72.34[b]
3	Education	19	72.50[b]
4	Management	19	76.71[b]
5	Science/technology	16	77.97[b]
	F-value = 4.124, df. = 4, 75 p-value = 0.004		

From Table 3, the Calculated F-value is 4.124 (degrees of freedom, df. = 4, 75) with p-value of 0.004, it is therefore concluded that there is significant difference in the means of attitude (in percentage) of lecturers among the five areas of specialization. This implies that area of specialization has significant effect on attitude of lecturers to social network media. From the Table, Law has different superscript (letter a) from the other four areas of specialization, therefore Law lecturers have different attitude toward social network from the other four areas of specialization that have the same superscript (letter b).

Ho$_2$ No significant difference exists between the attitude of experienced and less experienced lecturers in their attitude towards the use of social network media.

Table 4. Summary of Analysis of Variance (ANOVA) test for significance difference in means among the four categories of years of experience

S/N	Teaching experience	N	Mean
1	16 years and above	6	65.75[a]
2	0–4 years	40	72.34[a]
3	11–15 years	15	72.50[b]
4	5–10 years	19	76.71[b]
	F-value = 10.228, df. = 3, 76 p-value = 0.000		

From Table 4, the Calculated F-value is 10.228 (degrees of freedom is 3 and 76) with p-value of 0.000, since the p-value (0.000) is less than 0.05 (level of significance) the null hypothesis is rejected and it is therefore concluded that there is significant difference in the means of attitude (in percentage) of lecturers among the four categories of experience. This implies that years of teaching experience has significant effect on attitude of lecturers to social network media. From the Table, 16 years and above and 0–4 years have the same superscript (letter a) and they are different from the other two categories (11–15 years and 5–10 years) with different superscript (letter b). Therefore lecturers with 16 years and above and 0–4 years of experience have different attitude toward social network from the other two categories (i.e. 11–15 years and 5–10 years).

Ho₃ There is no significant difference between attitude of lecturers in single mode and dual mode ODL to of social net work media.

Table 5. t-test of attitude of ODL lecturers in single mode and dual mode towards Social network media

Variable	N	Mean score	Std dev.	Std. Error	DF	T-cal	P
Single mode	50	73.100	10.22	1.45	78	−793	0.430
Dual mode	30	74.750	6.47	1.18			

Significant at 0.05 level

Table 5 showed that the mean attitude of lecturers in single mode is 73.10 while that of those in dual mode ODL is 74.75. The t-calculated is −0.793 (degree of freedom is 78) with p-value of 0.430. The hypothesis is accepted at 0.05 level of significance (p-value > 0.05). It is therefore concluded that there is no significant difference between attitude of ODL lecturers in single mode and dual mode towards Social network media.

3   Discussion of Findings

Distance education's focus on opening access to education for those who otherwise would have been denied is mostly achievable through lecturers who have right attitude to media technologies.

From this study, ODL lecturers have been found to have positive attitude towards social network media. This is in agreement with the finding of Issa [20] who reported lecturers' positive attitude towards assistive technologies. This might be possible because of the popularity that social network media have gained in removing time and space barriers in education.

Finding on area of specialization on ODL lecturers' attitude showed that area of specialization influenced their attitude. This is contrary to the report of Winogrod [21] who asserted that the role of media technologies in various areas of specialization is like the role of mathematics to the physical sciences. This is because of the variation found in lecturers' attitude as it regards their areas of specialization, towards social network media.

Experience on lecturer's attitude revealed that the less experienced (0–4 years) and the most experienced (16 years and above) lecturers have less attitude towards social network media. The reason might be because the young lecturers are yet to realize the need to remove barriers in distance education, while the older ones are still finding it difficult to change from the orientation which they had in conventional institutions (where face to face teaching is the main thing) before transferring their services to ODL institutions. Also, lack of training through seminars and workshops that is e-learning oriented might be responsible for the results.

The importance of training was further underscore by these researchers. Swarts [22], supports the need for teachers to be adequately and appropriately trained through pre-service and in-service education programmes. In a similar manner, Desimone [23] asserts among others that high quality professional development of teachers exhibits the characteristics: focus on core content and modeling of teaching strategies for the content, and inclusion of opportunities for active learning of new teaching strategies. Also, Coggshall and Ott [24] discovered that professional training through staff programmes improves teachers' effectiveness.

Findings on attitude of lecturers in single mode and dual mode institutions towards social network media showed no significant difference between the two. The reasons might be because of the central objective of ODL, which is to provide access to quality education and equity in educational for those who otherwise would have been denied. Therefore, lecturers in the two both have obligations to do things that will facilitate this objective.

4   Conclusion and Recommendations

It can be concluded that ODL lecturers' positive attitude towards social network media can position them to have understanding of its specific standards and thereby, provide huge contributions to accessibility and usability needs of the learners, through feedback offered to the soft ware developers.

It was recommended that:

1. Awareness programme that promotes ODL lecturers' attitude towards social network media should be organised, to enhance their move for good accessibility and usability exercise in ODL.
2. ODL lecturers should be given training that is e-learning oriented in social network media through, workshop and conferences, to further increase their interest in effort towards success of accessibility and usability needs of the learners.

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