

Researchers' Attitude towards the Use of Open Access Scholarly Publications: The Position of LIS Lecturers in Southern Nigeria

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Abstract

The study examined researchers' attitude especially those of Library and Information Science lecturers towards the use of open access scholarly publications. Based on the three (3) objectives set out to guide the study, it was found that though the level of usage of open access publications is high for both senior and junior LIS lecturers although a bit higher for junior lecturers. Similarly, both cadre of lecturers exhibit positive attitude towards open access publications and this situation was found to account considerably for their tendency to use open access publications. The study recommended that universities should not only be equipped with enabling infrastructure, academic reward systems should be designed to encourage open access publications by lecturers. The paper also pointed out that tenure and promotion review committee members should have a change of attitude in evaluating publications in open access.

Keywords: Open Access Publications, Attitude, Use, Library and Information Science, Lecturers

1. Introduction

Due to the rapid increase of scholarly output and inflated journal prices, it is becoming practically difficult even for libraries in rich countries to subscribe to journals that are required by their clients. As a response to frustrating journal prices and other accompanying restrictions, the scholarly community has sought for alternative scholarly publishing systems, aimed at wider distribution of scholarly content without price or other copyright restrictions to end users (Björk, 2004; Yiotis, 2005 and Moller, 2006). The advent of the World Wide Web led to the explosion in electronic information

enabling scholarly research to be made available, to anyone in remote locations so long as they have access to a computer linked to the internet. This has acted as the catalyst for the emerging scholarly publication model is known as open access publication.

Open access to scholarly publication is used by a wide variety of users with different backgrounds and as such they have different perceptions of its nature. Several studies have identified several factors influencing the use of open access scholarly publication channels by scholars in carrying out their research. Koenig & Harrell (1995) and Norwick (2008) have reported differences in the levels of usage of open access publication by senior and junior lecturers, while studies on user attitude towards open access publications such as those of Swan & Brown (2004); Driscoll (2009) and Dulle, Minishi-Majanja & Cloete (2010) have indicated a positive users' attitude towards open access publications and how it influenced their choice of using the platform. In a similar study, Coonin and Younce (2010) and Harley, Earl-Novell, Arter, Lawrence & King (2006) have reported negative attitude of senior (tenured) lecturers towards open access publications. Lawal (2002) and Pelizzari (2003) reported an indifferent attitude of lecturers towards open access copyright issues.

By categorizing perceived reasons for users' interaction with open access and by identifying common patterns, we can gain a more realistic understanding of those interactions. There is no doubt that a better understanding of authors' attitude towards the use of open access to scholarly publications is a prerequisite for a successful open access usage. Indeed, published articles require much effort and because they form the basis for academic rewards such as tenure, promotion or future research grants, decisions about where to publish are not lightly taken by lecturers. By identifying LIS lecturers' attitude and how it influence their decision to publish in open access platforms, the study will help illuminate issues that may encourage or discourage their support or improve their perceptions of open access publications.

2. Research Objectives

The specific objectives are to:

1. Ascertain the level of usage of open access publications by senior and junior lecturers of library and information science in southern Nigeria.

2. Find out the attitude of senior and junior lecturers of library and information science to the use of open access publications.
3. Find out the relationship between attitude and use of open access publication by library and information science lecturers in southern Nigeria.

3. Research Method

The descriptive survey design was adopted for this study. The census sampling method was employed hence the entire population of 141 lecturers from the Departments of Library and Information Science of the fourteen (14) universities in Southern Nigeria were used as sample for the study (Nworgu, 2006). The questionnaire was used as the research instrument to elicit responses from the respondents. The questionnaire was constructed based on a 3-point Likert scale (i.e. Agreed, Undecided and Disagreed). Descriptive statistics such as frequency counts, percentages and Mean were used to analyze the data collected for the research objectives 1 and 2. While Regression analysis was used to establish the relationship between attitude and use of open access publications for research objective 3.

4. Review of Related Literature

Attitude is an individual's overall affective reaction to using a system (Venkatesh, Morris, Davis & Davis, 2003). Respondents' attitude about open access has been evaluated in several studies and their general comments with respect to open access provided some insights regarding the acceptance of this mode of scholarly communication. According to Driscoll (2009) some educational institutions look at which journals a scholar has published in to determine merit. Over the years this practice has influenced scholars' attitude in carefully selecting the journals to which they submit their articles. They often rule out OA journals due to a perception of lesser quality which could negatively impact their bid for tenure or academic promotion.

Dulle, Minishi-Majanja and Cloete (2010) found in their study that most (80 percent) of respondents considered open access as beneficial and publishing in it was seen as plausible. In the same vein, Swan & Brown (2004) on evaluating the attitude of researchers towards OA, reported that 92 percent of the respondents agreed that OA guarantees the principle of free access for all readers; 87 percent perceive OA journals to have faster publication times than other types of journals; 71 percent perceive OA readership to be larger than subscription-based journals; 64 percent claimed their articles will be more frequently cited in an OA journals while 56 percent are concerned about the cost of non-OA journals to their institution. Swan and Brown (2004) found that 81 percent of the

respondents are confident that articles published in open access journals would be archived so that they are available to future generations of scholars.

The University of California Office of Scholarly Communication (2007) conducted a survey among faculty members from its campuses, to understand faculty perspectives and behaviour regarding scholarly communication issues. They found a large gap between positive attitudes towards OA publishing and actually publishing in an OA journal. In other words, a positive opinion on OA, does not translate to publish in OA journal. Mann, Walter, Hess & Wigand (2009) have attempted to identify reasons for the existence of this gap between the appreciation and the use of OA, and publishing in OA journals. One of the findings was that 61 percent of the respondents fear that OA might jeopardize their chances of tenure and promotion. To determine why authors chose to publish in OA journals, Coonin and Younce (2010) found that 49.4 percent of respondents thought that OA journals were not less prestigious than subscription-based journals, while, 69.1 percent responded that publishing in OA journals would not adversely affect their chances of promotion.

Harley, Earl-Novell, Arter, Lawrence and King (2006) explored how academic value systems influence the publishing behaviour of faculty. They found that younger faculty members perceive online-only publishing as a threat to the tenure process as they feared that material thus published would be of lesser quality, and would therefore not weigh up to the tenure review. Faculty members in general feared that quality control would be absent in OA journals, that lower standards of scholarship would be used, and that there would be no peer review process. Hence there is a perceived necessity for traditional publication methods for advancement and achieving tenure, and a fear that reviewers will not accept newer forms of publication.

Dulle (2008) investigated open access usage to find the extent to which researchers accessed and disseminated scholarly content through open access in Tanzania. It was found that a majority of the respondents (71.7 percent) claimed to access scholarly content through open access and 21.2 percent disseminated their research findings through open access avenues such as open access journals and open access repositories. These same trends have been reported in other studies such as those of Pelizzari, (2003) and Schroter & Tite, (2006). Antleman (2004) observed that a majority of academics, who disseminate their research, do so in web-based outlets; and through the use of open access initiatives. Based on the

foregoing, it should be noted that, many researchers accessed open access content than they published in open access outlets.

Dulle, Minishi-Majanja & Cloete (2010) reported in their study that fewer Tanzanian researchers disseminated their findings through open access channels than those who accessed free online content. Specifically, less than 20 percent of the respondents published in open access outlets as compared to 62 percent of those who accessed free scholarly content from the Internet. The situation whereby researchers publish less than they access content in open access outlets is not peculiar to public universities in Tanzania. In the study done by Gadd, Oppenheim & Probet (2003) they found that 57.8 percent of the respondents reported to have submitted papers to open access journals in comparison to 88 percent who acknowledged to have accessed free online content made available by other scholars. Similarly, a survey by Deoghuria & Roy (2007) also revealed that out of 125 respondents, 80 percent of them accessed open access literature and 20 percent used OA for publishing their research output. Similar findings indicated that despite the fact that 66 percent of the respondents claimed to have used open access publication media to access scholarly content at least once in their academic career, only 28 percent of them had actually published using the same media (Mann, Walter, Hess, & Wigand, 2008).

5. Discussion of Findings

This section presents the findings of the study in line with the research objectives using the inputs from the analyzed data gathered from the research questionnaire administered to the respondents. The data collected were subjected to both descriptive and inferential statistics involving frequency counts, percentages, Mean and regression analysis.

Table 1 Response Distribution

The response distribution is as presented in Table 1.

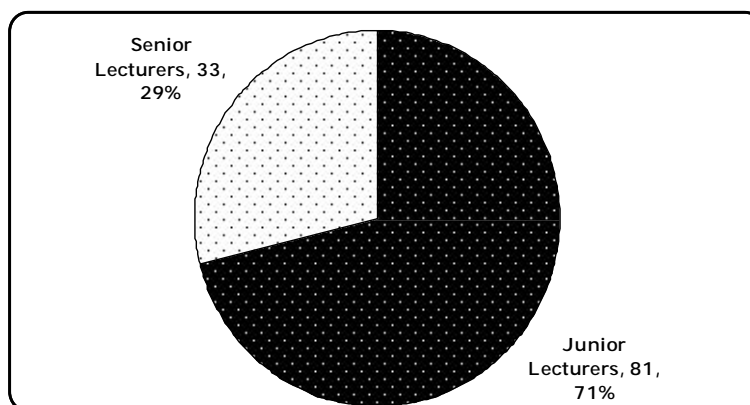
S/N	Universities with LIS Department	Questionnaire Administered	Questionnaire Retrieved
1	Abia State University (ABSU)	13	7
2	Ambrose Alli University (AAU)	7	6
3	Babcock University (BU)	9	8
4	Delta State University (DELSU)	17	16
5	Enugu State University of Science & Technology (ESUT)	9	7
6	Imo State University (IMSU)	11	10
7	Madonna University (MU)	7	7
8	Nnamdi Azikiwe University (NAU)	6	6

9	Osun State University (OSU)	8	7
10	Tai-Solarin University of Education (TSUE)	7	7
11	University of Calabar (UNICAL)	13	9
12	University of Ibadan (UI)	13	9
13	University of Nigeria Nsukka (UNN)	11	9
14	University of Uyo (UNIUYO)	10	6
Total		141	114
Response Rate		80.9%	

From Table 1, a total of 141 questionnaires were distributed to the respondents and 114 copies were successfully retrieved indicating a response rate of 80.9 percent. According to Baxter & Babbie (2004), a 50 percent response rate is considered adequate for analysis and reporting. Based on this, the 80.9 percent response rate for the current study was deemed adequate and as such was used for analysis.

Figure 1 Distribution of Respondents by Rank

Figure 1 shows the pie-chart distribution of the respondents according to their rank.



As could be observed, there are more junior lecturers (i.e. Lecturer I and II, Assistant Lecturer and Graduate Assistants) 83 (73 percent) than Senior Lecturers (i.e. Professors, Associate Professors and Senior Lecturers) 31 (27 percent) in universities offering library and information science in Southern Nigeria.

Findings and Discussion of Findings from Research Objectives

The findings from the analysis of data collected for the research objectives are discussed in this section.

Note that in the analysis of data retrieved from the respondents the values of 3, 2 and 1 were assigned to the options; Agreed (**A**), Undecided (**U**) and Disagreed (**D**) respectively using a 3-point Likert scale.

In analyzing responses for the research questions, a benchmark of mean ≥ 2.0 which implies "Agreed" else "Disagreed" was set for this study.

Research Objective 1: *What is the level of usage of open access publications by senior and junior lecturers of library and information science?*

The result of the analysis is presented in Table 2.

Table 2: Level of usage of open access publications by senior and junior lecturers

Table 2 presents the responses depicting the level of usage of open access publications by LIS lecturers in southern Nigeria.

SN	Usage of open access publications	Rank	N	A	U	D	Mean
1	I often use OA publications in my research	Senior	31	9	7	15	1.8
		Junior	83	41	11	31	2.1
2	I have some publications in open access outlets	Senior	31	24	7	-	2.8
		Junior	81	44	21	16	2.3
3	I usually retrieve scholarly content from OA	Senior	30	19	11	-	2.6
		Junior	82	67	12	3	2.8
4	I have submitted many papers to open access journals	Senior	31	10	7	14	1.8
		Junior	83	43	24	16	2.3
5	I usually self-archive my works on the internet	Senior	30	-	4	26	1.1
		Junior	81	1	6	74	1.1
6	I only cite and not publish in OA publications	Senior	31	15	4	12	2.1
		Junior	82	18	20	44	1.6
7	OA is usually my first priority when sourcing for materials for my work	Senior	31	21	9	1	2.6
		Junior	82	52	24	6	2.5
8	OA is usually my first priority when deciding on where to publish my work	Senior	31	-	9	22	1.3
		Junior	83	52	5	26	2.3
9	I usually peruse contents from OA journals, repositories, electronic theses and dissertations	Senior	31	13	12	6	2.2
		Junior	83	66	13	4	2.7

The results show that in most of the 9 items listed against the level of usage of OA publications junior lecturers ranked high in more of the items (7 items) than senior lecturers (5 items) thus, it could be deduced that

junior lecturers in LIS use open access publications more than senior lecturers. This finding is supported by that of Norwick (2008) in a study on academic rank of authors publishing in open access journals where they reported that senior faculties were found to author a fewer 46 percent of OA journal articles than 63 percent for junior faculties. Norwick concluded that there was a significant tendency for junior faculty members who are untenured to publish in OA journals more than for senior faculty members.

The current study reported that both senior and junior lecturers exhibit a similar level in terms of high priority in sourcing OA materials for their work and also in their rate of retrieving OA contents. This finding conforms to that of Azubogu & Madu (2007), where they asserted that academics in Nigeria are embracing open access resources since libraries cannot satisfy their information needs. In a similar fashion, Renwick (2005) in a study on the knowledge and use of open access resources by academics in the medical sciences of the University of the West Indies found that there is a high level of usage of open access resources by faculty in their research and professional growth.

From the Table 4 it could be observed that the high level of usage of open access publications by both senior and junior lecturers can only be accounted for in terms of sourcing and retrieving its content for their research work as the result show that both categories of lecturers (mean=1.1) rarely self archive their work on the Internet. This finding agrees with Mann, Walter, Hess, & Wigand (2008) where they found that despite the fact that 66 percent of the respondents claimed to have used open access publication media to access scholarly works, only 28 percent of them had actually published using the same media. In a similar study, Dulle, Minishi-Majanja & Cloete (2010) reported that fewer Tanzanian researchers disseminated their findings through open access channels than those who accessed free online content. Even at that, junior lecturers have more papers (mean=2.3) in OA journals than senior lecturers (mean=1.8). This result buttressed Koenig & Harrell (1995) study where they posited that, one advantage of OA journals is that they are faster to publish and speed of publication can be a significant concern for pre-tenured faculty (junior lecturer) with a ticking tenure clock. They further pointed out that there is the possibility for professors not to fancy OA journals which are relatively newer and less known than non-OA journals and that, professors are inclined to publish in a familiar journal with which they have established a working relationships.

Research Objective 2: *What is the attitude of senior and junior lecturers of library and information science to the use of open access publications?*

The result of the analysis is presented in Table 3.

Table 3: Attitude of senior and junior LIS lecturers to the use of open access publications

Table 3 presents the responses depicting the attitude of senior and junior LIS lecturers to the use of open access publications.

SN	Attitude of senior and junior lecturers to the use of open access publications	Rank	N	A	U	D	Mean
1	I feel that open access is beneficial to the scholarly community.	Senior	31	31	-	-	3.0
		Junior	82	79	3	-	2.9
2	I feel it is a good idea using OA publications for my works	Senior	31	21	10	-	2.6
		Junior	83	61	22	-	2.7
3	I feel it is a good idea publishing in OA	Senior	31	9	8	14	1.8
		Junior	83	21	40	14	1.9
4	I feel that OA possess high quality publications.	Senior	31	10	13	8	2.0
		Junior	81	52	26	3	2.6
5	I feel that OA guarantees the principle of free access for all readers.	Senior	31	22	7	2	2.4
		Junior	83	43	27	13	2.3
6	I feel that OA journals have faster publication times than other types of journals.	Senior	31	19	11	1	2.6
		Junior	83	41	35	7	2.4
7	I feel that OA readership is larger than subscription-based journals.	Senior	31	22	4	5	2.4
		Junior	83	55	12	16	2.4
8	I feel that articles are more frequently cited in OA journals.	Senior	31	13	8	10	2.1
		Junior	81	33	28	20	2.1
9	I feel that OA publications costs less than non-OA ones.	Senior	31	10	15	6	2.1
		Junior	83	39	23	21	2.2
10	I feel that OA will guarantee archiving for future readers	Senior	31	20	8	3	2.8
		Junior	80	47	25	8	2.5
11	I feel that OA is peer-reviewed	Senior	31	9	7	15	1.8
		Junior	78	51	11	16	2.4

The results presented in Table 3 show that in most of the 11 items listed against the attitude of LIS lecturers to the use of OA publications, both cadres of lecturers have a positive attitude to OA publications. This corroborates Dulle, Minishi-Majanja & Cloete (2010) where they concluded in their study that a majority of researchers had very positive attitudes towards open access publishing. That notwithstanding, junior lecturers

(with a Mean > 2.0 in 10 items) exhibits a little more positive attitude than senior lecturers (Mean \geq 2.0 in 9 items). This agrees with the study done by Norwick (2008) on academic rank of authors publishing in open access journals where he reported that there was a small but significant tendency for junior faculty members who are un-tenured to publish more in OA journals than for senior faculty members. Moreso, the survey conducted by the University of California Office of Scholarly Communication (2007) among faculty members from its campuses, noted that there is a large gap between positive attitudes towards OA publishing by junior and senior faculty members.

The results from Table 3 shows that both junior lecturers (Mean = 2.9) and senior lecturers (Mean = 3.0) agreed positively that open access is beneficial to the scholarly community. The result also showed that both senior lecturers "Mean = 2.6" and junior lecturers "Mean = 2.7" exhibit positive attitudes to the fact that it is a good idea using OA publications for their works. These results are in tandem to that of Dulle, Minishi-Majanja & Cloete (2010) where they found in their study that over three quarters (80 percent) of the respondents considered open access as beneficial to the scholarly community and accessing and use of open access was a good idea as well. Ironically, the results show that both cadres have a negative attitude (Mean < 2.0) about publishing their works in OA outlets. This poor attitude towards publishing in OA could be tied to the fact that OA publications lack popularity among university tenure and promotion committees. According Papin-Ramcharan & Dawe (2006), anecdotal evidence suggests low popularity of OA journals and archives amongst promotion committees. Furthermore, Driscoll (2009) reported that most educational institutions looked at specific journals a scholar has published in, to determine merit. And that this practice has influenced scholars' attitude in carefully selecting the journals to which they submit their articles, often ruling out OA journals due to a perception of lesser quality which could negatively impact their bid for tenure or academic promotion.

The result also show that both senior and junior LIS lecturers have positive attitude (Mean \geq 2.0) towards OA publications in terms of quality publications, guaranteeing the principle of free access for all, having faster publication times than other types of journals, larger readership than subscription-based journals, articles are more frequently cited than in non OA journals, costs less than non-OA publications and guaranteeing archiving for future readers. These findings corroborate previous studies

with similar reports such as Swan & Brown (2004); Coonin & Younce (2010) and Dulle, Minishi-Majanja & Cloete (2010).

However, the result in Table 3 indicated a mixed report in terms of OA and peer-review. Junior lecturers exhibits a positive attitude (Mean = 2.4) compared to a negative attitude (mean = 1.8) by senior lecturers. This finding partially agrees with Harley, Earl-Novell, Arter, Lawrence & King (2006) where they found that faculty members in general (both senior and junior) feared that quality control would be absent in OA journals, that lower standards of scholarship would be used, and that there would be no peer review process.

Research Objective 3: What is the relationship between the attitude towards open access publications and their use by library and information science lecturers in Southern Nigeria?

The result of the analysis is presented in Table 4.

Table 4: Regression Analysis of Attitude towards Open Access Publications and their Use by LIS Lecturers

Table 4 presents the result from the regression analysis of responses depicting the relationship between awareness of open access publication concepts and their use.

N	Mean for Attitude towards the use of open access	Mean for Level of Use of Open Access	<i>r</i>	Coefficient of Determination <i>r</i> ²
114	2.64	2.11	0.449	0.202

The results as shown in Table 4 depict a mean score of 2.64 and 2.11 for the respondents' attitude towards open access scholarly publications and use of open access respectively. Since the mean is greater than the benchmark of 2.0 (i.e. mean > 2.0), it implies that there is a positive attitude and usage of open access publications amongst LIS lecturers in universities in southern Nigeria. The result in Table 4 also show that the coefficient of determination $r^2 = 0.202$, this implies that 20.2% tendency for LIS lecturers to use open access publications can be predicted or accounted for by their attitude towards open access publications. Thus, usage of open access

publications by LIS lecturers is a function of their attitude towards open access.

This position corroborates those of Dulle, Minishi-Majanja and Cloete (2010), where they found that among 396 respondents (i.e. 80 percent) of the respondents considered open access as beneficial to the scholarly community and as such, publishing in open access was deemed plausible. Similarly, Swan & Brown (2004) on evaluating the attitude of researchers towards OA, found that most of the respondent reported various reasons for their positive attitude towards adopting open access publications which include faster publication time, guaranteed free access, large readership, high citation, cost etc. Brown (2004) also found that 81 percent of the respondents publish in open access because they are confident that articles published in open access journals would be archived so that they are available to future generations of scholars.

On the contrary, Mann, Walter, Hess & Wigand (2009) reported a decline in the appreciation of open access by scholars. They found that 61 percent of the respondents in their study fear that open access might jeopardize their chances of tenure and promotion. This position is not unconnected with the assertions of Harley, Earl-Novell, Arter, Lawrence and King (2006) in their study on how academic value systems influence the publishing behaviour of faculty. They found that younger faculty members perceive online-only publishing as a threat to the tenure process. They feared that materials thus published are of low popularity among tenure and promotion committee members, and would therefore not weigh up to the tenure review. There is also a perceived necessity of traditional publication methods for advancement and achieving tenure, and a fear that reviewers will not accept newer forms of publication (Papin-Ramcharan & Dawe 2006). Moreso, Driscoll (2009) reported that most educational institutions looked at specific journals a scholar has published in, to determine merit. And that this practice has influenced scholars' attitude in carefully selecting the journals to which they submit their articles, often ruling out OA journals due to a perception of lesser quality which could negatively impact their bid for tenure or academic promotion.

6. Conclusion

From the foregoing, it is obvious that though the level of usage of open access publications by both senior and junior lecturers of Library and Information Science in Nigeria is high. Junior lecturers appear to utilize open access publications slightly more than their senior colleagues. That notwithstanding, both cadre of lecturers exhibit similar positive attitude

towards open access publications and this situation was found to account for much of their tendency to use open access publications.

7. Recommendations

Based on the findings of the study the following recommendations were made by the researcher;

1. Management should equip schools with the enabling infrastructure and develop strategies that will promote use of open access channels.
2. Academic reward systems should be designed to encourage open access publications.
3. University management should formulate policies that would encourage mandatory deposit of scholarly works in open access archives.
4. Tenure and promotion review committee members should have a change of attitude in evaluating publications in open access.

References

- Antleman, K. (2004). Do open access articles have a greater research impact? *College and Research Libraries* (September Issue)
- Azubogu, N.C., & Madu, C. (2007). Use of computer and Internet technology among the teaching staff of Imo State University, Owerri. *H-JOLIS (Heartland Journal of Library and Information Science)* 1 (2): 38-49.
- Baxter, L. A. & Babbie, E. (2004) *The basics of communication research*. Retrieved August 20, 2011 From:<http://digilib.bc.edu/reserves/co350/lann/co35002.pdf>
- Berners-Lee, T. (1996). *The world wide web: past, present and future*. Retrieved 10 march, 2011 from: <http://www.w3.org/people/Berners-Lee.1996/ppf.htm>
- Björk, B. C. (2004). Open access to scientific publications-an analysis of the barriers to change. *Information Research*, 9(2). Retrieved 17 December, 2010 from:<http://InformationR.net/ir/92/paper170.html>
- Coonin, B., & Younce, L. M. (2010). Publishing in Open Access Education Journals: The Authors' Perspectives. *Behavioral & Social Sciences Librarian*, 29(2), 118-132.
- Deoghuria, S. and Roy, S. (2007). Open access: what scientists think? A survey of researchers attitude towards open access. *ICSD-2007*. Retrieved 17 March, 2010 from: http://drtc.isibang.ac.in/Bitstream/1849/314/1/081_P32_swapan_deoghuria_formatted.pdf

- Driscoll, M. A. (2009). The Open Movement and Libraries. *LIBR* 287-05
- Dulle, F. W. (2008). open access Publishing: The Emerging Opportunity for Wider Dissemination of Scholarly Output. *A paper presented at PANTIL Annual Research Workshop, 06-09 October, 2008, Dodoma, Tanzania.*
- Dulle, F. W., Minishi-Majanja, M. K. & Cloete, L. M. (2010). Factors influencing the adoption of open access scholarly communication in Tanzanian public universities. *World Library and Information Congress: 76th Ifla General Conference and Assembly 10-15 August 2010, Gothenburg, Sweden* Retrieved 17 December, 2010 from: <http://www.ifla.org/en/ifla76>
- Gadd, E., Oppenheim, C. & Probet, S. (2003). *RoMEO studies 3- how academics expect to use open access research papers.* Retrieved 17 December, 2010 from: <http://eprints.rclis.org/archive/00001427/>
- Harley, D., Earl-Novell, S., Arter, J., Lawrence, S., & King, C. J. (2006). The influence of academic values on scholarly publication and communication practices. *Research and Occasional Papers Series* (13). Berkley, California: Center for Studies in Higher Education. Retrieved 17 December, 2010 from: <http://cshe.berkeley.edu/publications/publications.php?id=232>
- Koenig, M., & Harrell, T. (1995). Lotka's Law, Price's Urn, and Electronic Publishing. *Journal of the American Society for Information Science*, 46(5), 386-388.
- Lawal, I. (2002). *Scholarly communication: the use and non use of e-print archives for dissemination of scientific information.* Retrieved 17 December, 2010 from: <http://www.istl.org/02-fall/articles.html>
- Mann, F., Walter, B., Hess, T. & Wigand, R. T. (2008). *Open access publishing in science: why it is highly appreciated but rarely used.* Retrieved 17 December, 2010 from: http://openaccessstudy.com/Mann_et_al_2008_Open_Access_Publishing_in_Science.pdf
- Nworgu, B. G. (2006). *Educational Research: Basic Issues and Methodology*, (2nd Ed). Nsukka: University Trust Publishers. 71-79
- Obuh, A. O. (2010). Web Affinity: A study of undergraduate students in nigeria universities. *Library Philosophy and Practice*. November 2010. Retrieved 17 December, 2010 from: <http://unlib.unl.edu/LPP/obuh2-alex.htm>

- Papin–Ramcharan, J. I. & Dawe, R. A (2006). Open access publishing: A developing country view. *First Monday: Peer-Reviewed Journal on the Internet*, 11(6) Retrieved January 10, 2011. From http://firstmonday.org/issues/issue11_6/papin/index.html
- Pelizzari, E. (2003). Lecturers use, perception and expectations about open-access archives: *a survey of social science sector at Brescia University*. Retrieved 17 December, 2010 from:http://prints.rclis.org/archive/00000737/01/Academic_staff-perception_abot_arch
- Renwick, S. (2005). Knowledge and use of open access resources by medical sciences faculty of the University of the West Indies. *Journal of Medical Library Association* 93 (1): 21-31.
- Schroter, S & Tite, L. (2006). Open access publishing and author-pays business models: a survey of authors knowledge and perceptions. *Journal of the Royal Society of Medicine*, 99. Retrieved 17 December, 2010 from: <http://www.jrsm.org/cgi/content/full/99/3/141>
- Swan, A. & Brown, S. (2004). JISC/OSI Journal authors survey report, key prospects, *Truro*. Retrieved 17 December, 2010 from: http://www.jisc.ac.uk/uploaded_documents/JISCOAreport1.pdf
- The University of California Office of Scholarly Communication Program & Greenhouse Associates, Inc. (2007). Faculty Attitudes and Behaviors Regarding Scholarly Communication: Survey Findings from the University of California. *The University of California Office of Scholarly Communication*. Retrieved 17 March, 2010 from: <http://osc.universityofcalifornia.edu/responses/activities.html>
- Venkatesh, V., Morris, M. G., Davis, G. B. & Davis, F. D., (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly* 27 (3), 425-478
- Yiotis, K. (2005). The open access initiative: a new paradigm for scholarly communications. *Information technology and libraries*, 24(4), 157-162