Mentoring as a Facilitator of Research Productivity of LIS Educators in Tertiary Institutions in Lafia, Nasarawa State, Nigeria

By

Gideon Adesina Babalola (PhD)

Department of Library and Information Technology, Federal University of Technology Minna, Nigeria. Email: <u>g.babalola@futminna.edu.ng</u>

Ugochukwu Darlington Imeremba

Department of Library and Information Science, Abia State University, Ututu, Nigeria. Email: ugochukwuimeremba@gmail.com,

and

Isaiah Michael Omame (CLN)*

University Library, Federal University of Lafia, Nasarawa State, Nigeria. Email: <u>omameazy@yahoo.com</u>

Abstract

This study investigated mentoring as a facilitator of research productivity of LIS Educators in tertiary institutions in Lafia. The study was conducted in two tertiary institutions in Lafia, Nasarawa State using descriptive research design. Three (3) research questions were raised to elicit responses from for the analysis. The total population for the study was 12 LIS Educators from the two (2) higher institutions of learning in Lafia, Nasarawa State. Only two (2) of the institutions run LIS programme. Specifically, Federal University of Lafia and Nasarawa State Polytechnic Lafia, hence they were purposively selected for the study. Total enumeration (census) technique was used to cover the entire target population. Twelve (12) copies of the questionnaire administered were all returned, having a response rate of 100%. The research questions were analysed using mean and standard deviation. The findings of the study revealed that all the LIS Educators in tertiary institutions in Lafia, Nigeria are engaged in mentoring relationship. In addition, mentoring greatly facilitated the research productivity of LIS Educators in the two higher institutions running LIS programme in Lafia, Nasarawa State Nigeria, as revealed in their mean scores for all the items/constructs outlined to demonstrate qualities of mentoring. This study recommended that LIS Educators should expand their scope of mentorship to international scale so as to get fresh mentorship perspectives and stay abreast with global best practices.

Keywords: Mentoring; Research Productivity; LIS Educators.

Introduction

Library and Information Science (LIS) is a discipline that is concerned with the principles, theories and methods used in managing libraries. LIS is a discipline that trains library and information science professionals through a library school. A library school is quite different from a library. Succinctly, a library connotes a collection of print and non-print or electronic materials that have been selected, acquired, processed, organised, and systematically arranged by experts trained for such a course, for easy accessibility by clients. A library school on the other hand refers to the course or department of library and information science where a certificate, degree or higher degrees are offered in the field of librarianship. This can be in a university, polytechnic or other institution of higher learning that confer and award degree(s) in library science. Librarianship is a professional course and a service profession, the library school helps imparts students with the knowledge and skills of the entire operations, roles and functions of the library in a society (Myburgh & Tammaro, 2022).

Lecturers in the department of LIS are referred to as LIS Educators. In Nigeria, LIS Educators have a minimum qualification of bachelor degree in library and information science (BLIS) or equivalent. Over the years, staff development programmes have not received the much-needed impetus in different categories of libraries especially in academic libraries. Savage & Olejniczak (2021) and Hanaysha (2016) regrets the low research productivity among faculty members, especially the senior faculty members, LIS Educators inclusive, emphasising the persistent need for increased research productivity by paying more attention to staff development, in which mentoring is a strategic and veritable tool that facilitates the research productivity among LIS Educators. Iqbal and Mahmood (2017) maintained that, extra teaching load, performance of administrative duties along with academic duties, lack of funds, nonexistence of research leave, negative attitude of the faculty towards research, lack of research skills, non-availability of latest books, absence of professional journals, a smaller number of university owned journals are among the causes of low research productivity of the faculty members.

Mentoring as a process involves an experienced individual (mentor), who gives advice, assistance, care, guidance and tutoring time to foster the professional development and learning outcomes of a less experienced person (mentee) (Atanda, 2017). In other words, a mentor is a

senior faculty member who engages in a professional relationship with a junior faculty member with the aim of providing support, nurturance and guidance. Put succinctly, a mentor can be regarded as a familiar and well experienced person that is beneficial to one's academic, professional, or personal development (Mollica & Nemeth, 2014). Mentoring functions include: stimulating intellectual growth, assisting with research and grant-writing skills, encouraging problem identification, assisting with publishing and helping to acclimatise to an academic environment.

Moreover, mentoring is an approach to learning traditionally used to increase faculty productivity in various disciplines such as education, psychology, medicine and nursing, engineering, librarianship etcetera. Mentoring of LIS educator is expected to assist a junior staff socialise in an academic environment, learn various researches and teaching skills, improve on communication and presentation skills especially in conferences, workshops and academic seminars, in order to meet institutional tenure requirements, under the leadership or guidance of a senior or experienced colleague. The approach of learning via mentoring is pervasive and not limited to the academic circle; it also thrives in the occupational circle. Mentoring helps career development in many fields and it could be an effective tool for scholarly/research productivity among LIS Educators (Tan & Main, 2021). It should be added that although more emphasis is placed on the growth and development of the mentee in a mentoring relationship, several literatures reviewed have shown that, both the senior and junior faculty who were in a mentoring relationship were more productive than senior faculty non-mentors and junior faculty nonmentees. Furthermore, the length and time of mentorship and type of support also influenced the research productivity of LIS educators. The longer the mentoring relationship, the more productive the mentee. Mentoring support during the early stages of an academic career increases the research productivity through sponsoring the mentee's ideas and including the mentee on research teams and publications. It should be added that, working on indirect mentoring tasks, such as serving as an advocate for a junior faculty, helping the mentee to understand the academic circle and the politics of academia, and encouraging the mentee might somewhat prove effective in increasing social and research productivity (Anafarta & Apaydın, 2016).

Mentoring of LIS Educators is a strategic and veritable tool for enhancing the research productivity of members. These include: productivity in scholarly work as publishing, paper presentation at conferences, workshops and seminars, submitting and accessing research grants, designing and conducting researches, and serving on editorial boards (Cross, 2019). Furthermore, mentoring provides an opportunity to help LIS Educators attain developmental assets or life skills needed to better deal with life's challenges. According to Michael (2015), the role of a mentor is to encourage the personal and professional development of a mentee through the sharing of knowledge, expertise and experience. The mentoring relationship is built on mutual trust, respect and communication, and involves both parties meeting regularly to exchange ideas, discuss progress and set goals for further development (Peiser, 2018). Mentoring of LIS Educators is one of the most valuable and effective development opportunities for LIS education. Having the guidance, encouragement and support of a trusted and experienced individual can provide a mentee with a broad range of personal and educational benefits, which ultimately facilitates the research productivity of the LIS Educator. Mentoring is more than the transfer of advice, knowledge and insights. The relationship offers reciprocal benefits for mentors willing to invest their time in developing another professionally, as well as the personal satisfaction of sharing their skills and experience with a willing learner. Being involved in mentoring also provides some tangible benefits that can reward mentors professionally. Michael (2015) outlined some of the benefits of mentoring to both the mentors and mentees. The author reported that, the benefits of mentoring to the mentees include but not limited to (i) exposure to new ideas and research methodologies; (ii) advice on developing strengths and overcoming weaknesses; (iii) guidance on educational development and advancement; (iv) increased visibility and recognition within the academia; and (v) opportunity to develop new skills and knowledge. To mentors, mentorship is beneficial to them in terms of: (i) recognition as a subject matter expert and leader; (ii) exposure to fresh perspectives, ideas and approaches; (iii) extension of their educational and professional development record; (iv) opportunity to reflect on their own goals and practices; and (v) development of their personal leadership and coaching styles.

Research productivity evaluates the research strength and weakness of LIS educators. Research productivity of LIS Educators is an important criterion for institutional outcomes and success especially now that schools publish their institutional repositories online to gain visibility. Iroaganachi and Izuagbe (2018) asserted that LIS Educators are due for promotion every three and four years at all levels based on their research productivity (output) especially in the form of publications made in referred journals and conferences. It is against this backdrop that the researchers deem it fit to conduct this survey in order to x-ray the effect of mentoring on research productivity of LIS Educators in tertiary institutions in Lafia.

Statement of the Problem

Following the 'publish or perish' syndrome in the academia, attaining high research productivity is one of the ultimate goals of LIS Educators. Research productivity is not only necessary but mandatory for promotion of LIS Educators and for assessing their performances. Hence, if the cost of hiring and maintaining LIS Educators would not be a waste, then it becomes necessary for LIS Educators to attain optimum in their research productivity. It should be added that, the research productivity of LIS Educators would attain optimum if they are mentored properly. It has been observed that the research productivity of certain LIS Educators are below average as Okeji (2018) and Simisaye (2019) reported that only few researchers are productive in the field of library and information science, consequently, both the quantity and quality of research output of LIS Educators in Nigeria are generally too low to make the desired impact on national development. This might have been due to lack of lack of mentorship as Babalola (2019) and Njoku (2017) opined research productivity of LIS Educators could be greatly improved through mentoring, since it leads to increased networking skill, high level of selfconfidence, reduced job turnovers and better problem-solving skill. Consequently, this study examined mentoring as a facilitator of research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria.

Objectives of the Study

The general objective of the study was to determine if mentoring facilitates the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State. However, the specific objectives were to:

1. ascertain the number of LIS Educators engaged in mentoring relationship in tertiary institutions in Lafia, Nasarawa State, Nigeria.

- establish the extent to which mentoring facilitates the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria.
- 3. find out the challenges militating against mentoring in facilitating the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria.

Research Questions

The following research questions were raised to guide the study:

- 1. What is the number of LIS Educators engaged in mentoring relationship in tertiary institutions in Lafia, Nasarawa State, Nigeria?
- 2. What is the extent to which mentoring facilitates the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria?
- 3. What are the challenges militating against mentoring in facilitating the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria?

Significance of the Study

This study would be of great significance to LIS Educators in tertiary institutions in Lafia, Nasarawa State and institutions of higher learning. It will enlighten them on the importance of mentoring as this would go a long way in helping them to be up and doing by putting more effort on publications, which if done religiously would accentuate their promotion and career advancement. Institutions of higher learning would equally benefit as their visibility would be facilitated. Their productivity would be in the global limelight if the LIS Educators and other educators in higher institutions of learning are highly productive in terms of research productivity.

Methodology

The research design adopted for this study was descriptive survey research design. Descriptive survey research design is most suitable for this study because the researchers hope to describe the effect of mentoring on research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria. Sharma (2017) defined descriptive survey as a research method that deals with describing the state of a given population using some characteristics or features common among them. Furthermore, descriptive survey design involves a number of steps such as planning the survey, questionnaire design, sampling, data collection, data

processing and drawing conclusion. According to Sharma (2017) descriptive survey research design is concerned with the collection of data on and describing in systematic manner, the characteristics, features or facts about a given population. Moreover, descriptive survey research denotes studies that are aimed at collecting data on and describing in systematic manner, the characteristics, features or facts about a given population. The area of the study is Nasarawa State, Nigeria. Nasarawa State is located in the north central geopolitical zone of Nigeria. The total population for the study is twelve (12) LIS Educators from Federal University of Lafia and Nasarawa State Polytechnic Lafia. Furthermore, total enumeration (census) was used for the study because the population is small and manageable (Raghunathm, 2017). Table 1 gives an outline of the total population for the study. Moreover, a structured (closed-ended) questionnaire was used to collect data regarding this study. Twelve (12) copies of the questionnaire were administered to the LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria. The generated data from the questionnaire were analysed based on the research questions and objectives. The research questions were analysed using descriptive statistics, specifically mean and standard deviation.

Presentation of Results

Research Question 1: What is the number of LIS Educators engaged in mentoring relationship in tertiary institutions in Lafia, Nasarawa State, Nigeria?

Table 1 shows the number of LIS Educators engaged in mentoring relationship in tertiary institutions in Lafia, Nasarawa State, Nigeria.

S/No	Institutions Institution Total No Type of LIS		No of LIS Educators in	Response Rate	
		5 F -	Educators	Mentoring Relationship	
1.	Federal University of Lafia.	University	8	8	8 (100%)
2	Nasarawa State Polytechnic Lafia	Polytechnic	4	4	4 (100%)
	Total		12	12	12 (100%)

 Table 1: Number of LIS Educators engaged in mentoring relationship in tertiary institutions in Lafia Nasarawa State, Nigeria

Table 1 shows the responses on the number of LIS Educators in mentoring relationship in tertiary institutions in Lafia, Nasarawa State, Nigeria. The results for Federal University of Lafia shows all the eight (8) LIS Educators therein are in a mentoring relationship, given a percentage of 100. Similarly, the results obtained from responses of LIS Educators in tertiary institutions in Lafia, Nasarawa State Polytechnic revealed that all the four (4) LIS Educators therein are engaged in mentoring relationship, giving a percentage of 100, which implies that LIS Educators therein are aware of the importance and significance of mentoring in the academics.

Research Question 2: What is the extent to which mentoring facilitates the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria?

Table 2 shows the extent to which mentoring has facilitated the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria.

S/N	Mentoring Items	VHE	HE	LE	VLE	Ν	Mean	St. Dev.	Decision
		4	3	2	1				
1	The guidance, support and assistance I get from my	5	6	0	1	12	3.25	0.3125	Accepted
	mentor(s) are usually helpful								
2	I get opportunities to access information resources through the help/connection of my mentor(s)	4	5	1	2	12	2.92	0.076388 89	Accepted
3	The researches I have done under the guidance of my mentor(s) are usually the best	5	4	2	1	12	3.08	0.09	Accepted
4	Mentorship speeds up my research work	3	7	1	1	12	3.00	0.33	Accepted
5	I get research grants often through mentoring relationship	2	5	2	3	12	2.50	0.08	Accepted
6	I get opportunities to present papers in conferences and workshops through mentoring	3	7	0	2	12	2.92	0.09	Accepted
7	I get opportunities to publish research papers through the help/connection of my mentor(s)	6	4	0	2	12	3.17	0.14	Accepted

 Table 2: The Extent to which Mentoring has facilitated the Research Productivity of LIS

 Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria

8	I get opportunities to write books/book chapters through the help/connection of my mentor(s)	5	6	1	0	12	3.33	0.61	Accepted
	Total	33	44	7	12	96			

Key: **VHE**=Very High Extent (4), **HE**=High Extent (3), **LE**=Low Extent (2), **VLE**=Very Low Extent (1). Decision rule: Mean ≥ 2.5 = Accepted, Mean < 2.5 = Rejected.

Table 2 shows the responses on the extent to which mentoring facilitates research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria. The results showed that out of the twelve (12) total responses, the highest responses fall within High Extent (HE) with a value of 44 across the eight mentoring items outlined for the study. The second is Very High Extent (VHE) with a value of 33, followed by Very Low Extent (VLE) which has a value of 12 and lastly Low Extent (LE) has a value of 7 out of 96 total responses across the eight mentoring items indicated for the study. In addition, the individual mean scores for the eight mentoring items are 3.25, 2.92, 3.08, 3.00, 2.50, 2.92, 3.17 and 3.33 respectively, which revealed that mentorship has greatly facilitated the research productivity among LIS Educators in tertiary institutions in Lafia, based on the decision rule of 2.5 set.

Research Question 3: What are the challenges militating against mentoring in facilitating the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State?

S /	Challenges	SA	Α	D	SD	N	Mea	St.	Decision
Ν							n	Dev.	
		4	3	2	1				
1	Lack of communication between the me and my mentor has militated against my mentoring relationship	6	4	2	0	12	3.33	0.44	Accepted
2	Barrier of distance has militated against my mentoring relationship	6	4	2	0	12	3.33	0.44	Accepted
3	Busy schedule of my mentor has militated against my mentoring relationship	6	4	1	1	12	3.25	0.15	

 Table 3: Challenges militating against mentoring in facilitating the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria

4	My busy schedule (office work)	5	3	3	1	12	3.00	0.00	Accepted
	has militated against my								
	relationship with my mentor								
5	Pride – I thought I knew better	0	1	5	6	12	1.58	0.60	rejected
	than my mentor, and it affected								
	my mentoring relationship								
6	Lack of motivation and support	4	3	4	1	12	2.83	0.03	Accepted
	from my mentor has militated								
	against my mentoring								
	relationship								
	Total	27	19	17	9	72			

Key: SA=Strongly Agree (4), A=Agree (3), **D**=Disagree (2), **SD**=Strongly Disagree (1). Decision rule: Mean $\geq 2.5 =$ Accepted, Mean < 2.5 = Rejected.

Table 3 shows the responses on the challenges militating against mentoring in facilitating the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State. The results showed that out of the twelve (12) total responses, the highest responses fall within Strongly Agree (SA) with a value of 27 across the six mentoring challenges outlined for the study. The second is Agree (A) with a value of 19, followed by Disagree (D) which has a value of 17 and lastly Strongly Disagree (SD) has a value of 9. In addition, the individual mean scores for the six mentoring challenges are 3.33, 3.33, 3.25, 3.00, 1.58 and 2.83 respectively, which revealed that all of the mentoring challenges outline have militated against mentoring relationship of LIS Educators in tertiary institutions in Lafia, Nasarawa State, based on the decision rule of 2.5 set, except for 'Pride – I thought I knew better than my mentor, and it affected my mentoring relationship' which scored a mean value of 1.58 and behaved differently.

Summary of Major Findings

The summary of the major findings emanating from this study are as follows:

- 1. All LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria are engaged in a mentoring relationship.
- 2. Mentorship have greatly facilitated the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria.
- 3. The challenges militating against mentorship in facilitating the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State Nigeria include lack of

communication between the mentor and mentee, barrier of distance, busy schedule of both the mentor and mentee and lack of motivation and support from the mentors.

Discussion

The findings of the study with regards to the extent to which mentoring facilitates the research productivity of LIS Educators in tertiary institutions in Lafia, Nasaraw State corroborates the findings of Atanda (2017). Atanda (2017) investigated the extent to which mentoring impacted the career growth of junior faculty in Nigerian universities, and found out that mentoring had an impact on junior faculty career growth with an average mean score of 2.5. In addition, mentoring impacted the research productivity of junior faculties with an average mean score of 2.7.

Furthermore, the study of Anafarta and Apaydın (2016) which investigated the effect of mentoring on career success and career satisfaction of faculty members in Turkish higher education system revealed that academic and psychosocial mentoring greatly impacted faculty members' career satisfaction and career success. The study corroborates the study of Atanda (2017) and Anafarta and Apaydın (2016) signifying that mentoring greatly facilitated the research productivity among LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria.

Moreover, the results from this study agrees with the work of Abiodun-Oyebanji (2016) who opined that slow pace of building trust which could result from lack of communication, distance barrier or busy schedule is a serious challenge to mentorship relationship in the university system. The author explains that, with only a few hours of contact each week or month, it may be a bit difficult to build the kind of trust both the senior and junior academics would cherish or appreciate. A large part of the success of a mentoring relationship lies in the trust that builds up over time when mentor and mentee get to know one another this trust is what will allow the mentee to ask important questions about being effective as a faculty member and get honest and sincere answers. Davis *et al* (2021) also believed that negative mentoring, and lack of post-tenure mentorship among tenured faculty also constitute major challenges to mentorship relationship among faculty members.

Conclusion

From the foregoing, it is apt to conclude that mentoring facilitates the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria, as revealed in their mean scores for all the items/constructs outlined to demonstrate qualities of mentoring respectively. In addition, the responses to the items show that the mean values are high for High Extent (HE) and Very High Extent (VHE), and low for Low Extent (LE) and Very Low Extent (VLE), which implies that mentoring highly facilitated the research productivity of LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria.

Recommendations

The following recommendations are made in view of the findings of the study:

- 1. LIS Educators should expand their scope of mentorship to international scale so as to get fresh mentorship perspectives and stay abreast with global best practices.
- 2. Mentorship at all levels should be encouraged among LIS Educators in tertiary institutions in Lafia, in order to learn, network, collaborate and connect with more experienced colleagues in the field for enhanced research productivity.
- 3. LIS Educators in tertiary institutions in Lafia, Nasarawa State, Nigeria should deliberately maintain constant communication with their mentors, take advantage of Internet application to overcome the barrier of distance between them and their mentors and create time from their busy schedule in order to facilitate their mentoring relationship for enhanced research productivity.

References

- Abiodun-Oyebanji, O. J. (2016). Emerging issues in mentoring academics in Nigerian universities. In Akinwumi Feme Sunday & Olaniyan David Akinola (Eds). Global Perspectives in Education. 131-143. Accessed from: <u>https://www.academia.edu/43899133/Emerging_Issues_in_mentoring_Academics_in_Nig</u> erian_Universities
- Anafarta, A. & Apaydin, C. (2016). The Effect of Faculty Mentoring on Career Success and Career Satisfaction. *International Education Studies*, 8 (6), 22-31. doi:10.5539/ies.v9n6p22
- Atanda, A. (2017). Mentoring and career growth of junior faculty in the university of Ibadan. *Journal of Teaching and Education*, 07(01), 419–428. Retrieved from: <u>https://www.researchgate.net/publication/329428607_MENTORING_AND_CAREER_G</u> <u>ROWTH_OF_JUNIOR_FACULTY_IN_THE_UNIVERSITY_OF_IBADAN</u>
- Babalola, G. A., Uno, C.A., Saidu, A.A., Tsado, L.Y., Salubuyi, M.A & Abubakar, U. (2019). Mentoring, knowledge sharing, ICT versatility as influencing factors on research producitity and career advancement of LIS Educators. In Proceeding of the 21st Conference/AGM of Nigerian Association of Library and Information Science Educators (NALISE), held on 9th – 13th September, 2019, at Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt, Rivers State, Nigeria. pp. 262-267.
- Cross, M., Lee, S., Bridgman, H., Thapa, DK., Cleary, M., Kornhaber, R. (2019). Benefits, barriers and enablers of mentoring female health academics: An integrative review. *PLoS ONE* 14(4): e0215319. <u>https://doi.org/10.1371/journal.pone.0215319</u>
- Davis, T. M.; Jones, M. K.; Settles, I. H. & Russell, P. G. (2021). Barriers to the successful mentoring of faculty of color. *Journal of Career Development*, 1-19. DOI: 10.1177/08948453211013375
- Hanaysha, J. (2016). Improving employee productivity through work engagement: Evidence from higher education sector. *Management Science Letters* 6(1), 61-70, DOI:10.5267/j.msl.2015.11.006
- Iqbal, M. Z. & Mahmood, A. (2017). Factors related to low research productivity at higher education level. Asian Social Science, 7(2). Accessed from: https://www.ccsenet.org/journal/index.php/ass/article/view/9138
- Michael, P. (2015). *What are the benefits of mentoring?* Retrieved from: <u>https://www.michaelpage.co.in/advice/management-advice/leadership/what-are-benefits-mentoring</u>
- Mollica, M. & Nemeth, L. (2014). Outcomes and characteristics of faculty/student mentorship in PhD Programs. *American Journal of Educational Research*, 2 (9), 703-708. Retrieved from https://pdfs.semanticscholar.org/a14e/617d93fc66bc6c37dbb04ec2380cd86b13ad.pdf
- Myburgh, S. & Tammaro, A. M. (2022). What is the purpose of a school of library and information science in the 21st century? *Revue de l'Enssib*. Accessed from: https://bbf.enssib.fr/revue-enssib/consulter/revue-2013-01-007 ISSN 2268-5790.
- National Institute of Standards and Technology (2015). Kruskal-Wallis. *Statistical Engineering Division, U.S. Commerce Department*. Accessed from:

https://www.itl.nist.gov/div898/software/dataplot/refman1/auxillar/kruskwal.htm

- Njoku, I. S. (2017). Improving the performance of librarians through mentoring: the case of academic libraries in south-east and south-south zones of Nigeria. *Library Philosophy and Practice (e-journal)*. 1592. URL: <u>http://digitalcommons.unl.edu/libphilprac/1592</u>
- Okeji, C.C. (2018). Research output of librarians in the field of library and information science in Nigeria: Abibliometric analysis from 2000-March, 2018. *Collection and Curation*. doi: <u>https://doi.org/10.1108/CC-04-2018-0012</u>.
- Peiser, G., Ambrose, J., Burke, B., Davenport, J. (2018). The role of the mentor in professional knowledge development across four professions. *International Journal of Mentoring and Coaching in Education*, 7(1), 2-18, DOI:https://doi.org/10.1108/IJMCE-07-2017-0052
- Raghunathm, A. (2017). *Nonsampling errors*. In Raghunath Arnab (Ed.). Survey Sampling Theory and Applications, Academic Press. pp. 469-504. doi:https://doi.org/10.1016/B978-0-12-811848-1.00015-7.
- Savage, W.E. & Olejniczak, A.J. (2021). Do senior faculty members produce fewer research publications than their younger colleagues? Evidence from Ph.D. granting institutions in the United States. *Scientometrics*, 126, 4659–4686. Doi: <u>https://doi.org/10.1007/s11192-021-03957-4</u>
- Sharma, A. (2017). *Descriptive research: Survey*. Department of Management Studies, Maharshi Dayanand Saraswati University, Ajmer. Retrieved from: <u>https://www.slideshare.net</u>/anjalisharma731/descriptive-research-survey
- Simisaye, A. O. (2019). A study of research productivity of the academic staff in research institutes in South-West Nigeria. *Samaru Journal of Information Studies*, 19 (2), 75-99. Retrieved from: https://www.ajol.info/index.php/sjis/article/view/195467
- Tan, Li & Main, J. B. (2021). Faculty mentorship and research productivity, salary, and job satisfaction. 2021 ASEE Annual Conference. Retrieved from: https://peer.asee.org/faculty-mentorship-and-research-productivity-salary-and-job-satisfaction.pdf
- Weijden, I. V. D., Belder, R., Arensbergen, P. V. & Besselaar, P. V. D. (2015). How do young tenured professors benefit from a mentor? Effects on management, motivation and performance. *High Educ*, 69, 275–287. DOI 10.1007/s10734-014-9774-5