



ICT Proficiency and Mentoring as Panacea to Low Research Productivity among LIS Educators in Lafia, Nasarawa State, Nigeria

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Abstract

This study is aimed at assessing the effect of Information and Communication Technology (ICT) proficiency and mentoring on research productivity of Library and Information Science (LIS) Educators in Lafia, Nasarawa State, Nigeria. Descriptive survey research design was used for the study. The study was located in Lafia, Nasarawa State, Nigeria. Four (4) research questions were asked and answered. The total population for the study was 12 LIS Educators from the six (6) higher institutions of learning in Nasarawa State. Only two (2) of the institutions run LIS programme. Specifically, Federal University 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 ICT proficiency and mentoring greatly enhanced the research productivity of LIS Educators in the two higher institutions running LIS programme in Nasarawa State Nigeria, as revealed in their mean scores. The study recommended that LIS Educators should be trained and imparted with ICT skills and to engage in mentoring relationships since all these are panacea to low research productivity. In addition, the university management should endeavour to provide Internet connectivity, office computers and constant power supply for enhanced research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria.

Keywords: *ICT Proficiency, Mentoring; LIS Educators, Research Productivity, Lafia, Nasarawa State, Nigeria*

1. Introduction

Research is one of the core missions of a university. In fact, research is one of the major differences between universities and other institutions of higher learning including polytechnics and colleges. Research is the systematic process of making inquiry or discovering the solutions to problems. Productivity of faculty however, connotes the impact of the faculty in terms of efficiency and effectiveness in carrying out job responsibilities. Productivity is the quintessential indicator of performance of faculty members including LIS Educators. Abramo and D'Angelo (2014) defined research productivity as the number of publications per researcher. Similarly, Rawls (2018) submitted that



research productivity refers to the quantity and quality of scholarly output produced by a faculty. Research productivity denotes the measure of the quality and quantity of the research outputs of a searcher or scholar. Research productivity of faculty members has become important especially now that universities publish their institutional repositories to gain visibility and high ranking, as Haliso, *et al* (2020) corroborated that the quality and quantity of research output has become one of the most important criteria for the global ranking of tertiary institutions worldwide. Research is a complex process. The complex processes involved in research demand special skills and guidance including mentoring and Information and Communication Technology (ICT) proficiency in this digital era. ICT proficiency and mentoring are essential qualities in developing a strong, vast and skilled researcher in Library and Information Science (LIS) education. Research and researchers are now becoming increasing vital resources in modern society. A powerful and internationally competitive research base depends fundamentally on strong cohorts of highly skilled researchers, hence the need for ICT proficiency and mentoring for improved research productivity of faculty members (Weijden et al., 2015).

ICT proficiency is an indispensable and veritable tool for enhancing research productivity in this digital era. ICT in an omnibus term which encompasses telecommunication networks (telephone lines and wireless signals), computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information. ICT also refers to the generic term used for technologies which are being used for collecting, storing, editing and disseminating information in various forms through various media. Iroaganachi and Izuagbe (2018) opined that a personal computer is a great tool used in education. It is the contemporary personal assistant for LIS Educators in their quest to search for new information on the World Wide Web (WWW). ICT has now dominated the academic and research worlds; first as a medium for teaching and learning – the medium through which LIS Educators can teach and students can learn, and second, as an ‘assisting tool’ for LIS Educators to use while doing assignments, collecting data, communicating and carrying out researches. The National Institute of Multimedia Education in Japan reported that an increase in faculty exposure to educational ICT tools has a significant and positive impact on the faculty research productivity and job performance, especially in terms of knowledge comprehension, practical skills and presentation skills. ICT can be of great help to LIS Educators in conducting their research work. The following points show various ways in which ICT proficiency enhances the research productivity of LIS Educators:

- Desktop publishing tools: The advent of ICT has greatly helped the publishing industry through the creation of desktop publishing tools. These tools have expanded the scope for researchers and LIS Educators to be involved in not only the authoring and reviewing of papers, but also in the typing, markup, typesetting and production of their papers. Possession of these ICT skills by LIS Educators will greatly speed-up and enhance their research productivity.
- Internet and the World Wide Web (WWW): The Internet is an important product of ICT; it is a collection of vast information resources of inter-linked computer networks. It is usually referred to as the network of networks. Millions of computers worldwide are interconnected and the information resources in each computer are made available to users who have access to the Internet. The WWW is the hub for these resources hosted on the Internet. Today, there are lots of online databases both full-text and bibliographic that are available for researchers. Furthermore, the Internet hosts many educational forums, listser, usenet, blobs and social media platforms where LIS Educators can network and collaborate with their colleagues around the world and share ideas. Example of these is Researchgate online platform where researchers upload their papers, comment and discuss on subject matters. The technical know-how on how to access or subscribe, manipulate and utilise these facilities can greatly enhance the research productivity of LIS Educators.
- Data Analysis Software Applications and Packages: A lot of educational software applications and packages are now available. Example is the Statistical Package for the Social Science (SPSS), Microsoft Excel and many others. These data analyses software packages can greatly enhance the research productivity of LIS Educators. In addition, it will save them the cost of having to pay statisticians for their data analyses.



Furthermore, accessing information is the crux of ICT to LIS Educators. For instance, access to the Internet means access to an entire world of educational literature. Access to the Internet provides access to apparently endless arrays of educational literature, consequently, what LIS Educators need to enhance their research productivity is information – information for research and personal development. In this regard, access to the Internet and the availability of suitable peripherals are important factors in enhancing the research productivity of LIS Educators. However, in choosing the right educational ICT tools, LIS Educators need to explore the advantages and the disadvantages so as to discover what kind of educational ICT tool(s) is suitable for their needs (Michael, 2005).

In addition to ICT proficiency, another factor that could be a panacea to low research productivity among LIS Educators is mentoring. 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). According to Ekpoh and Ukot (2018), mentoring is a close, symbiotic and deliberate relationship between a senior faculty or experienced members and a rookie faculty member, tailored towards providing emotional and moral and academic guidance and support to the rookie on specific task accomplishment, knowledge, productivity and challenges as the case may be. 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.

Consequently, Ekpoh and Ukot (2019) opined that the herculean and stressful work in the university which often lead to poor teaching effectiveness and low research productivity of faculty members would have been prevented if proper orientation and mentoring programmes were put in place for lecturers at their entry point. 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 leaning 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 can be an effective tool for scholarly/research productivity among LIS Educators.

According to Spence *et al* (2018) mentoring can greatly help a junior faculty in securing grant funding and obtaining resources to support their career development and research productivity especially in a highly competitive environment of academics. It should be added that although more emphasis is placed on the growth and development of the mentee in a mentoring relationship, however, the reputation and leadership skills of the mentor is also enhanced in a mentoring relationship. That is, both the senior faculty mentor and junior faculty mentee who were in a mentoring relationship were more productive than senior faculty non-mentors and junior faculty non-mentees. 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 & Apaydin, 2016). In addition Waddell (2016)



asserted that mentoring helps a new faculty or mentee to navigate the political structure of the university and obtain support for efficient functioning in the institution.

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

Consequently, 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 ICT proficiency and mentoring on research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria.

2. Statement of the Problem

Research productivity is the ultimate goal of LIS Educators and indeed all faculty members who wish to enjoy promotion and career advancement in the academia. This is because research productivity is mandatory for LIS Educators' appraisal and assessing their performance for promotion. Research of faculty members including LIS Educators is important especially now that universities publish their institutional repository to gain increased visibility and ranking across the globe. Moreover, 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 ICT proficient and mentored appropriately. However, it has been observed by Okeji (2018) that only few authors/educators are productive in the field of library and information science. Corroborating this observation, Simisaye (2019) maintained that both the quantity and quality of research output LIS Educators in Nigeria are generally too low to make the desired impact on national development. This might have been due to low ICT proficiency and lack of mentorship as Babalola (2019) and Njoku (2017) reported that mentoring and knowledge sharing are indispensable tools for increased networking skill, high level of self-confidence, reduced job turnovers and better problem solving skill, which are enhancers of research productivity of LIS Educators. Coupled with these problems is the dearth of literature on ICT proficiency and mentoring as panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria. It is against this backdrop that the researchers deem it fit to undertake this study and examine the effect of ICT proficiency and mentoring on the research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria.

3. Objectives of the Study

The general objective of the study was to assess the effect of ICT proficiency and mentoring on research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria. However, the specific objectives were:

- To determine the extent to which ICT proficiency is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria.
- To ascertain the extent to which mentoring is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria.
- To fathom the challenges affecting ICT proficiency as a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria.
- To discovery the challenges affecting mentoring as a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria.



4. Research Questions

The following research questions were raised to guide the study:

- i. What is the extent to which ICT proficiency is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria?
- ii. What is the extent to which mentoring is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria?
- iii. What are the challenges affecting ICT proficiency as a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria?
- iv. What are the challenges affecting mentoring as a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria?

4. Significance of the Study

This study would be of great significance to LIS Educators in Lafia, Nasarawa State and institutions of higher learning. It would enlighten them on the importance of ICT proficiency and mentoring as panacea to low research productivity, so as to help them to be up and doing by putting more effort on publications, which if done devotedly would accentuate their promotion and career advancement. Institutions of higher learning would equally benefit as their visibility would be enhanced. 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.

5. 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 ICT proficiency and mentoring as panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria. According to Salaria (2012), 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. In addition, descriptive survey design involves a number of steps such as planning the survey, questionnaire design, sampling, data collection, data processing and drawing conclusion (Sharma, 2017). The area of the study is Lafia, 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 two (2) higher institutions across Lafia, Nasarawa State, Nigeria. Furthermore, total enumeration (census) was used for the study because the population is small and manageable, hence, the entire population was used as the sample (Molenberghs, n.d). This is in line with the assertion of Raghunathm (2017) and Gołata (2016) who opined that complete enumeration (census) is used to count all individuals in the unit. Table 1 gives an outline of the total population for the study. Moreover, a structured (closed-ended) questionnaire was used to collect data regarding the study. Twelve (12) copies of the questionnaire were administered to the LIS Educators in the higher institutions in Lafia, Nasarawa State, Nigeria. The copies of the questionnaire were administered within a period of one week through the help of a research assistant. The generated data from the copies of the questionnaire were analysed based on the research questions and objectives. The research questions were analysed using descriptive statistics, specifically mean and standard deviation.

Table 1: Population and Response Rate of LIS Educators in Higher Institutions in Lafia, Nasarawa State, Nigeria
(Source: Authors' Field Survey, 2020)



S/No	Institutions	Institution Type	LIS Programme	No of LIS Educators	Response Rate (%)
1.	Federal University, Lafia.	University	Available	8	8(100%)
2.	Nasarawa State Polytechnic Lafia	Polytechnic	Available	4	4 (100%)
Total				12	12 (100%)

5. Results and Data Analysis

Research Question 1: What is the extent to which ICT proficiency is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria?

Table 2: The extent to which ICT proficiency is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria (Source: Authors' Field Survey, 2020)

S/N	ICT Proficiency Items	Federal University Lafia							Nasarawa State Polytechnic Lafia						
		VHE	HE	LE	VLE	Mean	St. Dev.	Decision	VHE	HE	LE	VLE	Mean	St. Dev.	Decision
1	I type my research works on the computer system by myself	5	1	2	0	3.38	0.86	Accepted	3	1	0	0	3.75	0.433	Accepted
2	I search/browse the Internet for electronic resources by myself	6	1	0	1	3.5	1	Accepted	1	3	0	0	3.25	0.433	Accepted
3	I access online databases for e-books, e-	6	1	0	1	3.5	1	Accepted	1	3	0	0	3.25	0.433	Accepted



	journals and other e-resources for my research work by myself															
4	I use CD-ROM and other multimedia products in doing my research work	1	3	3	1	2.5	0.87	Accepted	3	1	0	0	3.75	0.433	Accepted	
5	I take part in the typesetting, editing and formatting of my research papers myself	4	2	0	2	3	1.22	Accepted	2	2	0	0	3.5	0.5	Accepted	
6	I connect with other researchers/research bodies/publishers via new media tools such as Facebook, Twitter, Blogs, Whatsapp, Research gate and websites by myself	3	3	0	2	2.88	1.17	Accepted	2	1	1	0	3.25	0.83	Accepted	
7	I send/receive emails	5	2	1	0	3.5	0.71	Accepted	2	2	0	0	3.5	0.5	Accepted	



	from other researchers/research bodies/publishers for conferences, workshops, seminars and journal publications by myself															
8	I am proficient in using statistical packages such as SPSS, Microsoft Excel or others for my data analyses	2	2	3	1	2.63	0.99	Accepted	0	3	1	0	2.75	0.433	Accepted	
	Mean	4	1.88	1.13	1				1.75	2	0.25	0				

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

Table 2 shows the responses on the extent to which ICT proficiency is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria. The results for Federal University Lafia show that out of the eight (8) total responses, the highest responses fall within Very High Extent (VHE) with a mean score of 4.0 across the eight ICT proficiency items outlined for the study. The second is High Extent (HE) with a mean score of 1.88, followed by Low Extent (LE) which has a mean score of 1.13 and lastly Very Low Extent (VLE) has a mean score of 1.0. In addition, the individual mean scores for the eight ICT proficiency items are 3.38, 3.5, 3.5, 2.5, 3.0, 2.88, 3.5 and 2.63 respectively, which revealed that ICT proficiency is a panacea to low research productivity of LIS Educators in Federal University Lafia, based on the decision rule of 2.5 set.

Similarly, the results obtained from responses of LIS Educators in Nasarawa State Polytechnic revealed that out of the four (4) total responses from the LIS Educators therein, the highest responses fall within High Extent (HE) with a mean score of 2.0 for the eight ICT proficiency items outlined for the study. The second is Very High Extent (VHE) with a mean score of 1.75, followed by Low Extent (LE) with mean score of 0.25 and lastly Very Low Extent (VLE) has a mean score of zero (0). In addition, the individual mean scores for the eight ICT proficiency items are 3.75, 3.25, 3.25, 3.75, 3.5, 3.25, 3.5 and 3.75 respectively, which revealed that ICT proficiency is a panacea to low research productivity of LIS Educators in Nasarawa State Polytechnic, Lafia, based on the decision rule of 2.5 set.

Consequently, the graphical representation of the extent to which ICT proficiency is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria is shown in Figures 1a & 1b for Federal University Lafia and Nasarawa State Polytechnic respectively. The line charts showed that ICT proficiency is a



panacea to low research productivity of LIS Educators in both institutions, as reflected in high points for High Extent (HE) and Very High Extent (VHE) accordingly.

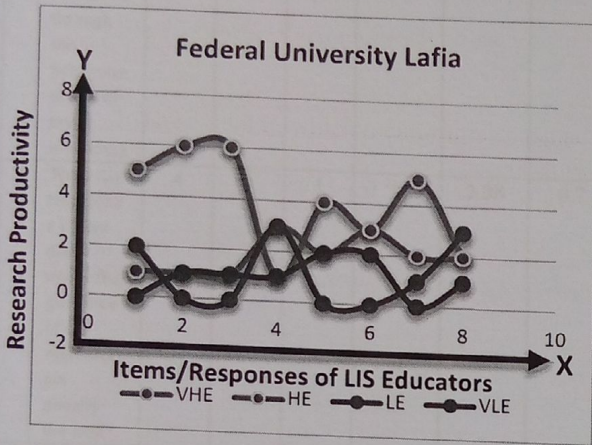


Figure 1a. Extend to which ICT Proficiency is a Panacea to Low Research Productivity among LIS Educators in FULafia

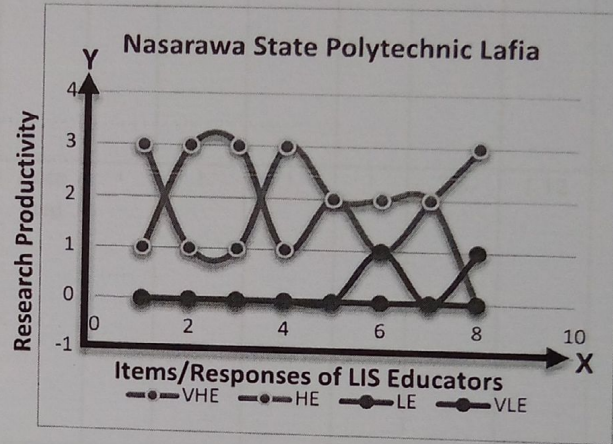


Figure 1b. Extend to which ICT Proficiency is a Panacea to Low Research Productivity among LIS Educators in Nasarawa State Polytechnic

Research Question 2: What is the extent to which mentoring is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria?

Table 3 shows the extent to which mentoring is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria.

Table 3: The extent to which mentoring is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria

S / N	Mentoring Items	Federal University Lafia							Nasarawa State Polytechnic Lafia						
		VHE	HE	LE	VLE	Mean	St. Dev.	Decision	VHE	HE	LE	VLE	Mean	St. Dev.	Decision
1	The guidance, support and assistance I get from my mentor(s)	4	4	0	0	3.5	0.5	Accepted	1	2	0	1	2.75	1.1	Accepted



	are usually helpful															
2	I get opportunities to access information resources through the help/connection of my mentor(s)	3	3	1	1	3	1	Accepted	1	2	0	1	2.75	1.1	Accepted	
3	The researches I have done under the guidance of my mentor(s) are usually the best	4	3	1	0	3.38	0.7	Accepted	1	1	1	1	2.5	1.12	Accepted	
4	Mentorship speeds up my research work	2	6	0	0	3.25	0.43	Accepted	1	1	1	1	2.5	1.12	Accepted	
5	I get research grants often through mentoring relationship	1	3	2	2	2.38	0.99	Rejected	1	2	0	1	2.75	1.1	Accepted	
6	I get opportunities to present papers in conferences and workshops through mentoring	1	6	0	2	3	1.06	Accepted	2	2	0	0	3.5	0.5	Accepted	
7	I get opportunities to publish research papers through the	4	3	0	1	3.25	0.97	Accepted	2	1	0	1	3	1.22	Accepted	



	help/connection of my mentor(s)														
8	I get opportunities to write books/book chapters through the help/connection of my mentor(s)	4	4	0	0	3.5	0.5	Accepted	1	2	1	0	3	0.71	Accepted
	Mean	2.88	4	0.5	0.75				1.25	1.625	0.375	0.75			

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

Table 3 shows the responses on the extent to which mentoring is a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria. The results for Federal University Lafia shows that out of the eight (8) total responses, the highest responses fall within High Extent (HE) with a mean score of 4.0 across the eight mentoring items outlined for the study. The second is Very High Extent (VHE) with a mean score of 2.88, followed by Very Low Extent (VLE) which has a mean score of 0.75 and lastly Low Extent (LE) has a mean score of 0.5. In addition, the individual mean scores for the eight mentoring items are 3.5, 3.0, 3.38, 3.25, 2.38, 3.0, 3.25 and 3.5 respectively, which revealed that mentorship is a panacea to low research productivity of LIS Educators in Federal University Lafia, based on the decision rule of 2.5 set, except for 'getting research grants often through mentoring relationship', which scored a mean value of 2.38 below the decision rule, and therefore not considered to be a panacea to low research pro-activity among LIS Educators in Federal University Lafia.

Similarly, the results obtained from responses of LIS Educators in Nasarawa State Polytechnic revealed that out of the four (4) total responses from the LIS Educators therein, the highest responses fall within High Extent (HE) with a mean score of 1.63 for the eight mentoring items outlined for the study. The second is Very High Extent (VHE) with a mean score of 1.25, followed by Very Low Extent (VLE) with mean score of 0.75 and lastly Low Extent (LE) has a mean score of 0.38. In addition, the individual mean scores for the eight mentoring items are 2.75, 2.75, 2.5, 2.5, 2.75, 3.5, 3.0 and 3.0 respectively, which revealed that mentorship is a panacea to low research productivity among LIS Educators in Nasarawa State Polytechnic, Lafia, based on the decision rule of 2.5 set.

Consequently, the graphical representation of the extent to which mentoring is a panacea to low research productivity among LIS Educators in Nasarawa State, Nigeria is shown in Figures 2a & 2b for Federal University Lafia and Nasarawa State Polytechnic respectively. The radar charts show that mentoring is a panacea to low research productivity of LIS Educators in Federal University Lafia, and Nasarawa State Polytechnic, Lafia, as reflected in their mean scores and wider polygons (points) for High Extent (HE) and Very High Extent (VHE) respectively. Essentially, the elements of mentoring as outlined in Item 1 – Item 8 in Table 3 above is graphically shown in the radar/polygon graphs of Figures 2a and 2b. The wider/bigger polygons show high research productivity while the smaller polygons show low research productivity using the center/middle of the polygons as zero or point of reference. From the graphs, High Extent (HE) – the brown line and Very High Extent (VHE) – the blue line, have the wider polygons, while Very Low Extent (VLE) – the red line and Low Extent (LE) – the purple line have smaller polygons; which shows that LIS Educators in Federal University Lafia, and Nasarawa State Polytechnic, Lafia are productive.

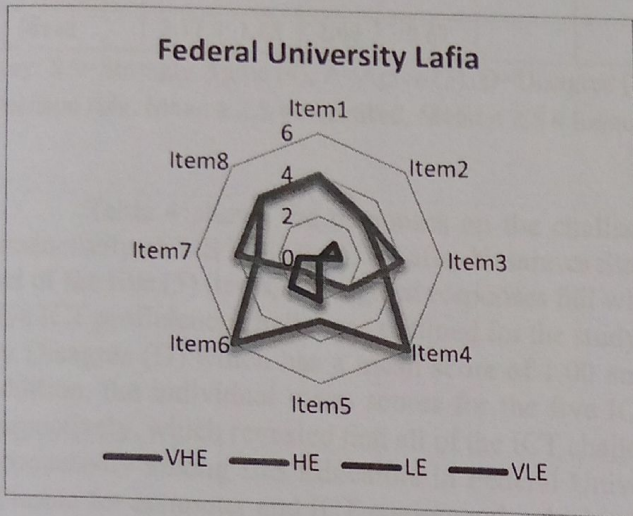


Figure 2a. Extend to which Mentoring is a Panacea to Low Research Productivity of LIS Educators in FULafia

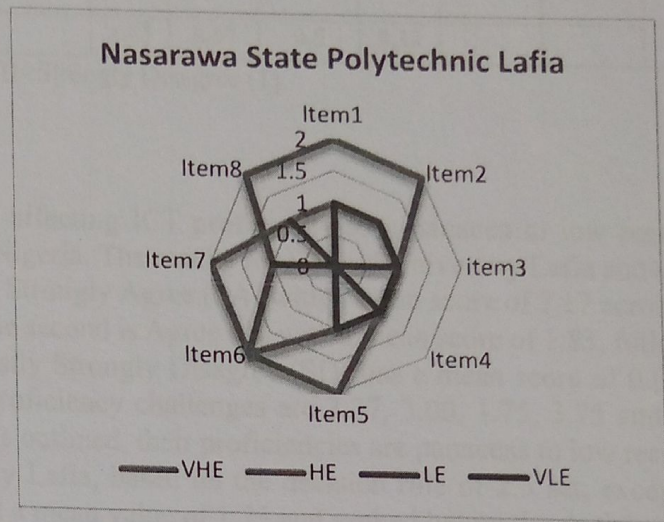


Figure 2b. Extend to which Mentoring is a Panacea to Low Research Productivity of LIS Educators in Nasarawa State Polytechnic

Research Question 3: What are the challenges affecting ICT proficiency as a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria?

Table 4: Challenges affecting ICT proficiency as a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria

S / N	Challenges	Federal University Lafia							Nasarawa State Polytechnic Lafia						
		SA	A	D	SD	Mean	St. Dev.	Decision	SA	A	D	SD	Mean	St. Dev.	Decision
1	Lack of adequate ICT training and constant practice	4	3	1	0	3.37	0.70	Accepted	3	1	0	0	3.75	0.09	Accepted
2	Lack of personal/official computer and other ICT equipment	3	3	1	1	3.00	1.00	Accepted	1	2	1	0	3.00	0.15	Accepted
3	Phobia for computer and ICT equipment	0	1	4	3	1.75	0.66	Rejected	0	0	2	2	1.5	0.11	Rejected
4	Epileptic power supply	6	2	0	0	3.75	0.43	Accepted	4	0	0	0	4.00	0	Accepted



5	Lack of Internet connectivity	6	2	0	0	3.75	0.43	Accepted	3	1	0	0	3.75	0.09	Accepted
	Mean	3.17	1.83	1.00	0.67				1.83	0.67	0.5	0.33			

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 4 shows the responses on the challenges affecting ICT proficiency as a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria. The results for Federal University Lafia show that out of the five (5) items, the highest responses fall within Strongly Agree (SA) with a mean score of 3.17 across the five ICT proficiency challenges outlined for the study. The second is Agree (A) with a mean score of 1.83, followed by Disagree (D) which has a mean score of 1.00 and lastly Strongly Disagree (SD) has a mean score of 0.67. In addition, the individual mean scores for the five ICT proficiency challenges are 3.37, 3.00, 1.75, 3.75 and 3.75 respectively, which revealed that all of the ICT challenges outlined, their proficiencies are panaceas to low research productivity among LIS Educators in Federal University Lafia, based on the decision rule of 2.5 set, except for 'Phobia for computer and ICT equipment', which scored a mean value of 1.75 and ranked below the decision rule, hence, it is rejected and not considered as a challenge which affects ICT proficiency as a panacea to low research productivity among LIS Educators in Federal University Lafia.

Similarly, the results obtained from responses of LIS Educators in Nasarawa State Polytechnic, Lafia, revealed that out of the five (5) items, the highest responses fall within Strongly Agree (SA) with a mean score of 1.83 across the five ICT proficiency challenges outlined for the study. The second is Agree (A) with a mean score of 0.67, followed by Disagree (D) which has a mean score of 0.5 and lastly Strongly Disagree (SD) has a mean score of 0.33. In addition, the individual mean scores for the five ICT proficiency challenges are 3.75, 3.00, 1.5, 4.00 and 3.75 respectively, which revealed that all of the ICT challenges outlined, their proficiencies are panaceas to low research productivity among LIS Educators in Nasarawa State Polytechnic, Lafia, based on the decision rule of 2.5 set, except for 'Phobia for computer and ICT equipment', which scored a mean value of 1.5 and ranked below the decision rule, hence, it is rejected and not considered as a challenge which affects ICT proficiency as a panacea to low research productivity among LIS Educators in Nasarawa State Polytechnic, Lafia.

Research Question 4: What are the challenges affecting mentoring as a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria?

Table 5: Challenges affecting mentoring as a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria

S/N	Challenges	Federal University Lafia							Nasarawa State Polytechnic Lafia						
		SA	A	D	SD	Mean	St. Dev.	Decision	SA	A	D	SD	Mean	St. Dev.	Decision
1	Lack of communication between the me and my mentor has militated against my	4	3	1	0	3.38	0.70	Accepted	2	1	1	0	3.25	0.18	Accepted



	mentoring relationship															
2	Barrier of distance has militated against my mentoring relationship	5	3	1	0	3.88	0.86	Accepted	2	1	1	0	3.25	0.18	Accepted	
3	Busy schedule of my mentor has militated against my mentoring relationship	3	3	1	1	3.00	1		3	1	0	0	3.75	0.09	Accepted	
4	My busy schedule (office work) has militated against my relationship with my mentor	3	2	2	1	2.875	1.05	Accepted	2	1	1	0	3.25	0.18	Accepted	
5	Pride – I thought I knew better than my mentor, and it affected my mentoring relationship	0	1	2	5	1.5	0.71	rejected	0	0	3	1	1.75	0.09	rejected	
6	Lack of motivation and support from my mentor has militated against my mentoring	2	2	3	1	2.63	0.99	Accepted	2	1	1	0	3.25	0.18	Accepted	



relationships														
ip														
Mean	2.83	2.33	1.66	1.33				1.83	0.83	1.17	0.17			

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

Table 5 shows the responses on the challenges affecting mentoring as a panacea to low research productivity of LIS Educators in Lafia, Nasarawa State. The results for Federal University Lafia show that out of the six (6) total responses, the highest responses fall within Strongly Agree (SA) with a mean score of 2.83 across the six mentoring challenges outlined for the study. The second is Agree (A) with a mean score of 2.33, followed by Disagree (D) which has a mean score of 1.66 and lastly Strongly Disagree (SD) has a mean score of 1.33. In addition, the individual mean scores for the six mentoring challenges are 3.38, 3.88, 3.00, 2.875, 1.5 and 2.63 respectively, which revealed that all of the mentoring challenges outlined, affects mentoring as a panacea to low research productivity among LIS Educators in Federal University Lafia, based on the decision rule of 2.5 set, except for ‘Pride – I thought I knew better than my mentor’, which scored a mean value of 1.5 and ranked below the decision rule, hence, it is rejected and not considered as a challenge which affects mentoring as a panacea to low research productivity among LIS Educators in Federal University Lafia.

Similarly, the results obtained from responses of LIS Educators in Nasarawa State Polytechnic, Lafia revealed that out of the six (6) total responses, the highest responses fall within Strongly Agree (SA) and Agree (A) with a mean scores of 1.83 both across the six mentoring challenges outlined for the study. The second is Disagree (D) which has a mean score of 1.17 and lastly Strongly Disagree (SD) has a mean score of 0.17. In addition, the individual mean scores for the six mentoring challenges are 3.25, 3.25, 3.75, 3.25, 1.75 and 3.25 respectively, which revealed all of the mentoring challenges outlined, affects mentoring as a panacea to low research productivity among LIS Educators in Nasarawa State Polytechnic, Lafia, based on the decision rule of 2.5 set, except for ‘Pride – I thought I knew better than my mentor’, which scored a mean value of 1.75 and ranked below the decision rule, hence, it is rejected and not considered as a challenge which affects mentoring as a panacea to low research productivity among LIS Educators in Nasarawa State Polytechnic, Lafia.

4. Summary of Major Findings

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

1. ICT proficiency is a panacea to low research productivity among LIS Educators in Lafia, Nasarawa State, Nigeria.
2. Mentorship is a panacea to low research productivity among LIS Educators in Lafia, Nasarawa State, Nigeria.
3. The challenges affecting ICT proficiency as a panacea to low research productivity among LIS Educators in Lafia, Nasarawa State Nigeria include: lack of adequate ICT training and constant practice, lack of personal/official computer and other ICT equipment, epileptic power supply and lack of Internet connectivity.
4. The challenges affecting mentorship as a panacea to low research productivity among LIS Educators 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.

4. Discussion of Results

The findings of the study with regards to the extent to which ICT proficiency is a panacea to low research productivity among LIS Educators in Lafia, Nasarawa State, Nigeria agree with the findings of Fung (2013) who worked on the effects of ICT on social science research. The author studied the effect of ICT on the research productivity of social science researchers from three (3) angles: pre-data analysis, data analysis and post-data

analysis, and discovered that ICT proficiency improved researchers' productivity in terms of speed, quantity, quality, complexity and cost effectiveness.

Similarly, the findings of the study with regards to the extent to which mentoring is a panacea to low research productivity among LIS Educators in Lafia, Nasarawa State, Nigeria corroborates with the findings of Atanda (2017). Atanda (2017) who 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 Apaydin (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 studies of Atanda (2017), and Anafarta and Apaydin (2016) signifying that mentoring is a panacea to low research productivity among LIS Educators in Lafia, Nasarawa State, Nigeria.

4. Conclusion

The hallmark of establishing and sustaining organisations, enterprises including institutions of higher learning is productivity. Research productivity in particular is pivotal to the overall development of both the institutions of higher learning and of the individual faculty. To enhance the visibility of higher institutions of learning in this digital age, their research productivity are normally displayed in institutions' repositories. One of the indicators of progress and which is usually used as yardstick for career progression and elevation of faculties in higher institutions of learning is research productivity. From the foregoing discussion, it is apt to conclude that ICT proficiency and mentoring are panacea to low research productivity among LIS Educators in Lafia, Nasarawa State, Nigeria, as revealed in their mean scores for all the items/constructs outlined to demonstrate qualities of ICT proficiency and 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 ICT proficiency and mentoring are panaceas to low research productivity among LIS Educators in Lafia, Nasarawa State, Nigeria.

5. Recommendation

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

1. It is imperative to equip LIS Educators with ICT skills that would make them proficient and versatile in the use of both hardware and software packages especially academic packages as a panacea to low research productivity.
2. Mentorship at all levels should be encouraged among LIS Educators in order to learn, network, collaborate and connect with more experienced colleagues in the field since it is a panacea to low research productivity.
3. LIS Educators in Lafia, Nasarawa State, Nigeria should be adequately trained in ICT skills and endeavour to constantly practice. Furthermore, the university management should endeavour to provide Internet connectivity, office computers and constant power supply for enhanced research productivity of LIS Educators in Lafia, Nasarawa State, Nigeria.
4. LIS Educators 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.

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Online: ISSN 2645-2960; Print ISSN: 2141-3959

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