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Exploring the Interaction Between Genuine Collaboration and Research Productivity of Academic Librarians in Kaduna State University (Kasu), Kaduna

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EXPLORING THE INTERACTION BETWEEN GENUINE COLLABORATION AND RESEARCH PRODUCTIVITY OF ACADEMIC LIBRARIANS IN KADUNA STATE UNIVERSITY (KASU), KADUNA

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ABSTRACT

Research productivity is an essential and non-negotiable requirement for the career advancement of academic librarians. Genuine Collaboration is a factor that is crucial for enhancing research productivity. Hence, this study investigated Genuine collaboration and research productivity of academic librarians in Kaduna State University (KASU), Kaduna. The study adopted quantitative method and survey research design. The population comprised 41 academic librarians from university library in KASU Kaduna (Source: Registry record, 2021). Total enumeration was used for the study. A self-structured questionnaire was used to collect data. Data collected were analyzed using descriptive statistics. Finding revealed that research productivity of academic librarians in terms of quantity of publication is low judging by the overall mean score of 2.54 on the scale of 5. This implies that the respondents are not productive in their research. The study concluded that Genuine collaboration enhance research productivity of academic librarians in Kaduna State University (KASU), Kaduna Nigeria. The study recommended that University administrators should encourage Genuine research collaboration in universities, clauses in promotion policy which gives more points to first named authors during promotion exercise should be removed.

Keywords: Academic Librarians, Collaboration, Research productivity, KASU

INTRODUCTION

Research productivity is derived from two words, 'research' and 'productivity'. While research may be described as careful observant and vigilant study or investigation of phenomena, particularly to search and find out new knowledge, information and facts, productivity is concerned with production or output produced within a given period of time. Thus, research productivity is an index which refers to the publication of papers in professional journals in form of peer-reviewed articles, books, chapters in books as well as presentation of research papers in conference proceedings that are cited and acknowledged by experts in the field of study. (Kpolovie & Dorgu, 2019) Similarly, Okonedo, Popoola, Emmanuel and Bamigboye (2015) defined research productivity as the quality and quantity of research published as textbooks, chapters in books, journal articles, conference and workshop proceedings, occasional papers, monographs, edited books, bibliographies, abstracts and indexes. Research provides the basis for knowledge that makes innovation and advancement in larger society, thereby creating social, economic, political, cultural and environmental impacts (Odeyimi, Bamidele & Adebisi, 2019).

Research productivity is an essential and fixed requirement for the career advancement of academic librarians. Academic librarians like other academics, are required to show their research productivity in terms of the quantity and quality of their research. From a global perspective, Africa's research productivity, especially Nigeria, has been described as abysmally low, representing less than one percent of the world's research productivity (Mba & Ekechukwu, 2019). AU-NEPAD (2014) referred specifically to Nigeria as a large research system which produces so little. South Africa with 20 universities had a research output of about forty-seven thousand (47, 000) publications, Egypt had thirty thousand (30,000) publications while Nigeria's research output stood at only ten thousand (10, 000) publications despite having over one hundred and seventy (170) universities apart from research and allied institutes, polytechnics and colleges of education (Mba & Ekechukwu, 2019; Fonn, Ayiro, Cotton, Habib, Mbithi, Mtenje & Ezeh, 2018).

Looking specifically at the field of Library and Information Science (LIS) from a global point of view, it was revealed that more than 43% of LIS publications between years 2003–2012 were authored in the United States and the United Kingdom. Canada also made great contributions followed closely by Chinese researchers (Weller, Hurd & Wiberley, 2014; Jabeen, Yun, Rafiq & Jabeen, 2015). Similarly, after analyzing scholarly contributions in LIS journals between 2007 to 2012, Walters and Wilder (2015) reported that the most prolific academic librarians were from Europe and Asia. In Africa, South Africa is reported to be in the lead in LIS publication output (Muia & Oringo, 2016). Looking at South-East, Nigeria, from a study of four university libraries by Anyanwu (2013), it was revealed that

academic librarians from this region have poor research and publication output and that they published mainly in local journals. In the same vein, research productivity of academic librarians in Northern Nigeria was found to be quite low (Kabir, Dahiru & Amishe, 2017; Tsafe, Chiya, & Aminu, 2016).

However, there seems to be an inconsistency in literature as regarding the quantity of research productivity of academic librarians in Nigeria. Before 2012, some researchers reported that the research output of librarians in Nigeria was at a very poor level (Moahi & Ogbomo, 2010; Okoye & Ejikeme, 2011; Onohwakpor &Tiemo, 2006). More recently, some scholars reported an increase in research productivity (Okonedo, Popoola, Emmanuel, & Bamigboye, 2015). Most recently however, Okeji, (2018) reported a decline in librarians' research productivity. From these studies, it is clear that the zeal of academic librarians and their capacity to achieve and maintain their research productivity has not been consistent, a situation best described as fluctuating.

In terms of quality of research productivity, it is clear that academics (not just academic librarians) in developing countries are not really concerned about publishing in quality or prestigious outlets (AU-NEPAD, 2014); this is due to a number of reasons, most notably the fact that tenure and promotion decisions typically rely on publication counts rather than impact in most Nigerian Universities (AU-NEPAD, 2014). Therefore, many academics are concerned about having their articles published to meet up with promotions criteria irrespective of the quality of the outlet of publication (AU-NEPAD, 2010; AU-NEPAD, 2014; Egwunyenga, 2008). Consequently, this has led to the practice of floating temporary substandard journals by faculties within academic institutions. According to AU-NEPAD (2014), a large number of journals published in Africa, in which research from Africa appears, are fairly obscure, these journals are often not well distributed or circulated, do not measure up to international standards and even die when the pioneer originators attain their desired academic positions. From literature, it appears that many scholars who have investigated research productivity of librarians in Nigeria have not been able to differentiate between 'international journal' outlets and globally recognized prestigious publishing outlets.

Research provides an opportunity for collaboration and networking among scholars, it also allows communication with peers and experts across the world. The increasing pressure on academics to be productive in research or face stagnation is prompting the need for collaboration which entails team or group approach to research. Collaboration involves researchers working together to advance scientific knowledge. Collaboration has a long history and tradition in the experimental sciences but has also emerged in the social sciences and humanities. In a team or group, members can never be equally endowed. However, through collaboration, researchers interact, pull efforts and resources together

among themselves to conduct and produce research and achieve what only an individual may not easily achieve. This underscores the importance of collaboration in research productivity. Co-authorship has been justified in literature as a viable means for measuring research collaboration. This is based on the premise that it is the most verifiable form of research collaboration (Kumar, 2018).

Collaborative research has advantages and is believed to enhance research productivity. Doing research as a team involves division of labour, which leads to multiplication of efforts and creation of more time for engaging in more researches and by implication, increased productivity/ output at a faster rate. It also fosters flexibility such that a researcher may belong to various research clusters/collaboration teams at the same time. Collaboration is expected to result in the accomplishment of higher number of research publications (quantity) and also better quality. This is corroborated by the studies from Hector, James, Nathalıe, Erika, and Francisco (2016). These authors tracked and studied scientists who were not part of a research group and discovered that the average production from each researcher per year was a mean of 1.48 documents in a Knowledge Management Journal, while the average output per researcher per year who belong to a research group in the same journal was 3.47 articles. This reflects an increase of 133 percent in their research productivity. Many universities are encouraging faculty to increase their research collaboration as it also has the potential to increase publication output and even citations (Blom, Lan & Adil, 2015).

Statement of the Problem

Based on the importance of research productivity for universities' reputation and ranking, many universities regularly review the quantity and quality of scholarly publications required for appointment and promotion of academics with each review more stringent than the previous. To this end, academic librarians, like every other academic, must either publish or perish or better still, publish and flourish. The situation, however, is not reflective of flourishing. Research productivity is a debt which every academic librarian must pay to be promoted and recognized. Despite the fact that research productivity is a major requirement for every academic librarian in public universities in Nigeria, a number of studies such as Okonedo (2015); Mba & Ekechukwu, (2019) shows that there were academic librarians from the Nigerian University without a single publication to show in a whole year. Furthermore, a number of scholars have also described the research productivity of librarians as low, unstable and fluctuating (Ani, Ngulube & Onyancha, 2017; Okeji, 2018; Popoola, 2012). Therefore, such librarians would be unable to meet up with the requirements for promotion. Hence, career stagnation, career dissatisfaction and turnover intentions become an inevitable end. Relatedly, the growing emphasis on quality of publication and not just quantity prompts the need for investigation. Whether academic librarians' research productivity would experience a boost could be influenced by their genuine collaboration.

Genuine Collaboration in research seems to be considered as an instrumental in improving the productivity of research. Adegbaye, Okunlaya, Funom, and Amalahu, (2017) reported that Nigeria's academic librarians have a high percentage of co-authored publications, but their research productivity is still lagging. The efficacy of any collaboration in research largely depends on the different characteristics of co-authors that are likely to promote new ideas and creativity, but there seems to be a lack of research that has thoroughly examined this phenomenon to demonstrate the extent of different characteristics of co-authors in relation to the productivity of academic librarians in Nigeria.

However, the researcher discovered from observation and previous studies that little or no attention has been paid to collaboration and research productivity. More so, no empirical study has focused on collaboration and research productivity of academic librarians in Kaduna State University (KASU) Kaduna.

Consequence to the above-mentioned submissions, this study investigated the nexus among genuine collaboration and research productivity of academic librarians in Kaduna State University (KASU) Kaduna, Nigeria.

Research Questions

The following research questions were answered in this study:

1. What is the level of research productivity of academic librarians in Kaduna State University (KASU), Kaduna, Nigeria?
2. What is the pattern of genuine research collaboration by academic librarians in Kaduna State University (KASU), Kaduna, Nigeria?

Literature Review

In a study carried out in universities in the South-eastern part of Nigeria, Ibegbulam and Jacintha (2016) used Purposive sampling to survey 85 academic librarians who have published 20 publications and above. Twenty publications served as the basis or benchmark for their selection. The study reported that respondents perceive that collaboration contributes to the librarians' high publication output to a very high extent (mean = 3.50). They also reported that possession of an enabling organizational/library environment an advanced degree, conference attendance, mentorship were factors which contributed to a high extent high publication among the academic librarians. The study recommended that similar studies should be carried out on academic librarians in other regions of the country.

Also, Podsakoff, Podsakoff, Mishra and Escue (2018) carried out study using bibliometric technique, searched through 33 journals of management using the Web of Science (WoS). They streamlined for only articles with 1,000 citations and above. Their study report that more than 50% authors of high-impact articles were mostly those in their career earlier stages. The study confirms that research

productivity can be increased by co-authoring with early career authors and not just by coauthoring exclusively with senior faculty members. In a bid to ascertain the extent to which academic librarians collaborate with LIS faculty, White and Cossham (2017) carried out a bibliometric analysis on 4313 research articles in forty-seven LIS journal titles on the Scopus database for the years 2013 to 2015. The study found that only 6% of academic librarians collaborated with LIS faculty. The study further recommended that academic librarians should engage in more research partnerships as this is necessary their survival in the profession.

Al-Ahmad and Yousef (2016) carried out a survey using semi-structured interview and questionnaire which was distributed to six public university libraries in Jordan. The population of the study constituted of 345 librarians, out of which 155 representing 45% responded. The study found an overall positive attitude toward collaboration with the librarians and the author interpreted this as willingness by non-LIS faculty to collaborate with librarians. They recommended that university management should show support to academic librarians by establishing relevant collaboration workshops and programs.

 Also, Adegbaye, Okunlaya, Funom, and Amalahu, (2017) employed a survey to investigate the pattern of research collaboration of academic librarians in Nigeria. The authors carried out a multistage sampling which helped them to select one university from the six geopolitical zones in Nigeria. In all, 146 librarians were selected for the study. Their study revealed that collaborative research dominates single-authorship. The result found that co-authorship with colleagues within the same library was high with 624 co-authored publications from within the same library, 342 publications as products of sole authorship, 177 publications co-authored with librarians outside the respondents' institutions, 31 co-authored with international colleagues and 74 publications accounted for co-authorship with academic supervisors. The study recommended librarians should endeavor to collaborate more with colleagues outside their immediate domain. The librarians were also urged to harness the advantages of ICT tools for international collaboration so as to increase their research productivity and visibility. They also recommended that librarians should attend international conferences as this would also expand their collaboration network.

Methodology

The study is quantitative in nature, survey research design was adopted. The population for this study was all the forty-nine (41) academic librarians working with the Kaduna State University (KASU), Kaduna (Source: Registry record, 2021). There will be no sampling technique involved in this study because the researcher is interested in the total population, therefore total enumeration or census method was adopted for this study. This is because the researcher considered the population as not too large to manage and that the use of the total enumeration can eliminate any potential bias that may occur if a

sample is selected and allowed for the generalization of the findings from the study. Total enumeration can be adopted when the population size is small and shares a common characteristic (Lund Research, 2012; FAO, 2018). This is affirmed by Afolabi (1999) as cited in Obaje (2014) that the whole population can be used if it is manageable in terms of cost and accessibility to the participants of the study. The instrument used for data collection was a self-designed questionnaire. In order to accurately provide answers to the research questions, descriptive statistics were used to interpret data obtained through the questionnaire. Frequency counts, means, ranges and standard deviation were descriptive statistics that were used to explore the two research questions.

Results and Discussion

This section presents data on descriptive statistics for research questions 1-2. Meanwhile, the data collected and coded were analyzed using frequency distributions, mean values and standard deviation.

Research Question 1: What is the level of research productivity of academic librarians in Kaduna State University (KASU) Kaduna, Nigeria?
Table 1 Research Productivity

S/N	Please indicate the level of your research productivity	7 & above	5-6	3-4	1-2	0	Mean	SD
		VH	H	AV	L	VL		
1	The total number of all types of publications (conference papers, book chapters) within the last three years (i.e. the total output within three years)	76(23.3)	41(12.6)	96(29.4)	86(26.4)	27(8.3)	**3.16**	**1.28**
2	My annual research publications	34(10.4)	41(12.6)	126(38.7)	104(31.8)	21(6.4)	**2.88**	**1.05**
3	The total number of peer-reviewed journals publications	100(30.7)	47(14.4)	101(31.0)	46(14.1)	32(9.8)	**3.42**	**1.32**
4	The total number of my peer-reviewed conferences proceedings	8(2.5)	24(7.4)	76(23.3)	112(34.4)	106(32.5)	**2.13**	**1.02**
5	the total number of my peer-reviewed conferences proceedings	15(4.6)	14(4.3)	57(17.5)	124(38.0)	166(35.6)	**2.04**	**1.05**
6	the total number of peer-reviewed textbooks published	9 (2.8)	5 (1.5)	48 (14.7)	51 (15.6)	213 (65.3)	**1.61**	**0.98**
Average Mean							**2.54**	

VH= Very High; H = High; AV = Average; L = Low; VL = Very Low.

Table 1 (a) shows that research productivity of academic librarians in terms of quantity of publication was low judging by the overall mean score of 2.54 on the scale of 5. This implies that the respondents are not productive in their research endeavours. This implies that the respondents may experience career stagnation due to inadequate number of publications which may be required for promotion. The total number of all types of publications by academic librarians is on the average judging by the mean score of 3.16 and standard deviation of 1.28. The librarians' annual publication is also on the average as indicated by the mean score of 2.88 and standard deviation of 1.05. An attempt to understand the prevalent format of research output by the respondents reveal that research output in peer-reviewed journals was high as indicated by the mean score of 3.42 and standard deviation of 1.32. This implies that journal publications were the most popular form of research output by the respondents. Followed by peer-reviewed conference proceedings with a mean score of 2.13 and standard deviation of 1.02. The next is peer-reviewed Chapters in books which had a mean score of 2.04 and standard deviation of 1.05. The least popular form of research output was whole book publication with a mean score of 1.61 and standard variation of 0.98. This implies that the majority of the respondents had not published whole books at all. This may be due to the time it will take to write a whole book. It could also mean that books were not weighted as high as journals in terms of scoring during promotion exercise. The findings on the level of research productivity of academic librarians indicated that majority of academic librarians have a low level of research productivity.

The findings of this study is consistent with the findings of Ogbomo (2010) which revealed that the majority of respondents they studied (58.6 %) did not carry out any research and had not published during a two-year period. It is also consistent with the study of Okeji (2018) who reported that only a few academic librarian authors in Nigeria were productive in research. Similarly, the finding also corroborates that of Tsafe, Chiya and Aminu (2016) who revealed that majority of librarians they studied (56.9 %) had at least one publication within three years. The findings of this study also conforms with the findings of Obinyan, Aidenojie, Ebunuwele and Amune (2013) which found that research performance of women in academics was very low, as majority (98 %) of respondents reported publishing between 1 and 5 articles in three years The finding of this study is however at variance with that of Okonedo, Popoola, Emmanuel and Bamigboye (2015) which revealed that librarians' research productivity was significantly high during the period 2009-2014.

Research Question 2: What is the pattern of genuine research collaboration by academic librarians in Kaduna State University (KASU) Kaduna, Nigeria?

Table 2 Collaboration and Research Productivity of Academic Librarians

S/N	Which of the following best describes your research collaboration pattern in terms of	V F N%	F N%	O N%	R N%	N N%	Mean	SD
	Academic Qualification							
1	I co-authored with researchers who have a master's degree.	123(37.)	123(37.7)	44(13.5)	25(7.7)	11(3.4)	3.98	**1.07**
2	I co-authored with researchers who have a PhD	91(27.9)	111(34.0)	72(22.1)	38(11.7)	14(4.3)	3.69	**1.12**
3	I co-authored with researchers who have both PhD and master's degrees	100(30.)	121(37.1)	43(13.2)	47(14.4)	15(4.6)	3.74	**1.19**
	Average 3.80							Mean
	Career Stage							
4	I co-authored with researchers in their early career stage	53(16.3)	98(30.1)	104(31.9)	55(16.9)	16(4.9)	3.36	**1.20**
5	I co-authored with researchers in their mid-career stage	57(17.5)	124(38.0)	95(29.1)	33(10.1)	17(5.2)	3.52	**1.08**
6	I co-authored co-author with researchers in their late-career stage (near retirement)	31(9.5)	86(26.4)	77(23.6)	82(25.2)	50(15.3)	2.89	**1.22**
7	I co-authored with researchers in their early and mid-career stage	41(12.6)	132(40.5)	72(22.1)	52(16.0)	29(8.9)	3.32	**1.15**
8	I co-authored with researchers in their mid-career and late-care	40(12.3)	98(30.1)	73(22.4)	73(22.4)	42(12.9)	3.06	**1.22**
9	I co-authored with researchers in their early and late-career stage	27(8.3)	95(29.1)	75(23.0)	84(25.8)	45(13.8)	2.92	**1.20**
10	I co-authored with researchers in all the career stage	36(11.0)	98(30.1)	63(19.3)	92(28.2)	37(11.3)	3.01	**1.19**
	Average Mean						3.15	
	Discipline							
11	I co-authored with only researchers from LIS and LIS related disciplines.	156(47.)	109(33.4)	25(7.7)	14(4.3)	22(6.7)	4.11	**1.15**
12	I co-authored with researchers from other disciplines, not LIS related.	29(8.9)	55(16.9)	64(19.6)	80(24.5)	98(30.1)	2.50	**1.31**
13	I co-authored with researchers from a mixture of the two above.	28(8.6)	73(22.4)	39(12.0)	103(31.)	83(25.5)	2.57	**1.31**
	Average Mean						3.06	
	Spatial Proximity/ Location							
14	I co-authored with researchers within the library	150(40)	116(35.6)	32(9.8)	14(4.3)	14(4.3)	4.15	**1.05**
15	I co-authored with researchers outside the library but within my university.	34(10.4)	72(22.1)	65(19.9)	98(30.1)	57(17.5)	2.77	**1.25**
16	I co-authored with researchers from other universities in Nigeria.	69(20.6)	107(32.8)	80(24.5)	46(14.1)	26(8.0)	3.44	**1.19**
17	I co-authored co-author with researchers from other types of libraries apart from	28(8.6)	56(17.2)	73(22.4)	94(28.8)	75(23.0)	2.58	**1.24**

		VF	F	O	R	N	Mean	Std. Dev
	academic libraries.							
18	I co-authored with researchers from outside Nigeria but in Africa.	23(7.0)	44(13.5)	34(10.4)	52(16.0)	173(53.1)	2.03	**1.31**
19	I co-authored with researchers outside Africa	23(7.0)	33(10.1)	32(9.8)	35(10.7)	203(62.3)	1.83	**1.27**
20	I co-authored with researchers from all the categories above	26(8.0)	40(12.3)	40(12.3)	100(30.7)	120(36.8)	2.21	**1.26**
	Average Mean						**2.72**	

VF= *Very frequently*; F = *Frequently*; O = *Occasionally*; R = *Rarely*; N = *Never*.   *Source: Field survey, 2021*

Table 2 shows that the respondents occasionally collaborated based on career stage, academic qualification, spatial proximity/ location and discipline, judging by the overall mean score of 3.18 on the scale of 5. The responses show that academic librarians pattern of collaboration was homogenous in nature. The respondents collaborated with people who have similar demographic characteristic with them. The result reveal that majority of the respondents' frequently collaborated across with researchers who possess both masters and PhD judging by the sub group mean score of 3.80. However, majority of research collaboration was carried out with researchers who possess master degree (3.98, Std. Dev. = 1.07). This implies that the respondents collaborated frequently with those who possess both master and PhD degrees.

Findings on the varied constructs for measuring the extent of research collaboration by career stage reveal that majority of the respondents occasionally collaborated with researchers in different career stages judging by the sub group mean of 3.15. The results indicated that the respondents frequently co-authored with researchers mostly in their mid-career stage with a mean score of 3.52 and a standard deviation of 1.08. This implies that the prevailing pattern of collaboration across career stage was with those in their midcareer stages. The result also shows that the respondents frequently co-authored with researchers in their early career stage with a mean score of 3.36 and standard deviation of 1.20. However, co-authorship with researchers in their late-career stage was done occasionally as indicated by the mean score of 2.89 and standard deviation of 1.22. This implies that collaboration with researchers who were in their late-career stage (near retirement) was not popular among the academic librarians.

In terms of collaboration based on discipline, the results show that majority of the respondents occasionally collaborated across disciplines judging by the subgroup mean of 3.06. However, most of the respondents frequently collaborated with colleagues from LIS and LIS related disciplines (mean = 4.11, Std. Dev. =15). This implies academic librarians were not collaborating so much with researchers from other disciplines that are not Library and Information Science related. In terms of the pattern of

collaboration by spatial proximity/location, it was discovered that majority of the respondents occasionally collaborated across the different locations as indicated in the study based on the sub group mean of 2.72.

The respondents also indicated that they occasionally collaborated with researchers from other types of libraries apart from academic libraries judging by the mean score of 2.58 and standard deviation of 1.24. This implies that academic librarians occasionally coauthored with librarians who are not in the academia. Collaboration with researchers from outside Nigeria but in Africa was rare as shown by the mean score of 2.03 and standard deviation of 1.31. This means that the respondents rarely collaborated with other researchers from Africa. The responses show that collaboration with researchers outside Africa is rare as indicated by the mean score of 1.83 and standard deviation of 1.27.

The research found that the pattern of academic librarians' research collaboration was homogenous in terms of the career stage of co-authors. Majority of the respondents in this study were in their middle ages and also in their mid-career stage as shown in the demographic results and these persons have indicated that they collaborate more with people like them who are also in their mid-career stages. This correlates the findings by Marcella, Lockerbie, Bloice, Hood and Barton (2018) who reported that while researchers at the later stage, are usually too busy for research rigours, early career researchers and mid-career researchers often consent to productive collaborations. This finding also corroborates the findings of Podsakoff, Podsakoff, Mishra and Escue (2018), Sabharwal (2013) whose studies indicated that research productivity is higher at mid-career and early career stages. It is however at variance with the findings of Shin, Jung and Kim (2014) whose studies found that mid-career academics in Korea collaborated more with academics in their late career stage.

Conclusion

The research established that various indicators of genuine collaboration influence research productivity of academic librarians in Kaduna State University (KASU), Kaduna Nigeria. The study found that academic librarians' research productivity is low of publications. To this end, ability to effectively collaborate with researchers in the right pattern will enhance the research productivity of the academic librarians. The study concluded that genuine collaboration is important factor for increasing the research productivity of academic librarians in Kaduna State University, Kaduna.

Recommendations

The following recommendations were made to address these challenges based on the findings of the study. Based on the findings of this study, the following recommendations were hereby proffered as the way forward:

1. Librarians should publish in journals that are indexed by reputable indexing bodies. The quality of research produced by academic librarians should also be improved by publishing in journals that are reputable and have visibility.
2. University administrators should encourage genuine research collaboration in universities, clauses in promotion policy which gives more points to first named authors during promotion exercise should be removed.

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