Relationship between Job Satisfaction and Research Productivity of Librarians in Public University Libraries in South-South Nigeria

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Abstract
The study examined the relationship between job satisfaction and research productivity of librarians in public university libraries in South-South Nigeria. Two research questions and two null hypotheses tested at 0.05 level of significance, guided the study. The study adopted correlation research design. 203 librarians in the twelve public university libraries in South-South Nigeria comprised the population of the study. There was no sampling as the population was manageable. The instrument for data collection was a self-constructed questionnaire titled "Job Satisfaction and Research Productivity Questionnaire (JSRPQ). A total of 203 copies of the questionnaire were distributed, out of which 181 copies of the questionnaire were returned, yielding a response rate of 89.2 percent. The instrument was validated by three experts in Nnamdi Azikiwe University, Awka. It was administered to 36 librarians on pilot testing. Cronbach Alpha method was used to determine the reliability of the instrument and it yielded an alpha value of 0.772**.** Data collected were analyzed using Spearman Rank Correlation Coefficient and Z-Test. The result of data analysis revealed that there was a direct (positive) relationship between job satisfaction and research productivity of librarians in federal university libraries and an inverse (negative) relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria. It also indicated a significant relationship between job satisfaction and research productivity of librarians in both federal and state university libraries. Based on the findings, it was recommended that federal university management and their university librarians should improve on job satisfaction of their librarians, with emphasis on maintaining their intrinsic job satisfaction. On the other hand, it was recommended that librarians in state university libraries should cultivate the habit of regularly attending and participating in conferences, seminars and workshops and engaging in collaborative authorship while their management and their university librarians should provide them with research grants and constant free internet services to boost their research output.

Keywords: University libraries, research productivity, job satisfaction, librarians

Introduction

Job satisfaction, in the context of this study, is seen as the fulfillment librarians derive from their job. Gamlath and Kaluarachchi (2014) defined job satisfaction as the rate at which employees like or dislike their work and the extent to which their expectations concerning work have been fulfilled. Simitwa (2011) also sees job satisfaction as a function that is positively related to the degree to which one's personal needs are fulfilled in the job situation. There are different sources of job satisfaction.

Job satisfaction may come from within an employee or from outside the employee. Thus, Cekmecelioglu, Gunsel and Ulutas (2012) classified job satisfaction into intrinsic and extrinsic job satisfaction. The authors used intrinsic job satisfaction to mean an internal desire of an employee to perform a particular task. They further explained that it is an inbuilt factor within an employee that enables him or her to perform a given task in the organization. They identified intrinsic job satisfiers to include self-concept, perception, desire, interest, achievement and so on. On the other hand, extrinsic job satisfaction was used by the authors to denote those external benefits or facilities provided to the employees by the organization to carry out a given task. They further stated that extrinsic factors are external to the individual. They listed the extrinsic job satisfiers to include money, good grades during employee assessment and other rewards offered by the organization. According to Mbua (2003), job satisfaction has uni-dimensional and multi-dimensional definitions. In the first sense, job satisfaction is seen as a single entity while the second notion sees it as consisting of several aspects. From a multi-dimensional standpoint, Mbua defined job satisfaction as the fulfillment acquired by experiencing various job activities and rewards. Jex (2002) also grouped job satisfaction into three components: an affective component, a cognitive component and a behavioural component. While the affective component refers to a feeling about a job, the cognitive component represents a belief in regard to a job. The behavioural component is an indicator for behavioural intentions towards a job such as getting to work in time, working hard and so on. Whatever the classification of job satisfaction, a number of factors make librarians satisfied with their job. Amos, Acquah, Antwi and Adzifome (2015) found that creativity, flexibility and recognition of librarians' skills and knowledge were sources of high job satisfaction. Job satisfaction is likely to result in some desirable attributes in librarians.

One of such attributes could be improved productivity. Yaya, Opeke and Onuoha (2016) stated that job satisfaction enhances the productivity of employees in any organization, especially in the public university libraries. Job satisfaction could also enhance the research productivity of librarians as it is an aspect of productivity of librarians. Research productivity is used in this study to refer to the totality of publications a librarian has as a result of research activities. According to Okonedo, Popoola, Emmanuel and Bamigboye (2015), research productivity is often used interchangeably with publication output, publication productivity, research output and sometimes knowledge productivity. Research productivity is often seen as a process and as a product. As a process, research productivity has been defined by Okafor (2011) as a means by which academics contribute their own knowledge to the existing body of knowledge. As a product, Okonedo, Popoola, Emmanuel and Bamigboye (2015) described research productivity as the entirety of researches conducted by academic librarians in universities in their career over a specified time frame. The authors stated that research productivity of librarians in Nigeria rests largely on the quality and often the quantity of research published as textbooks, chapters in books, journal articles, conference/workshop proceedings, occasional papers, monographs, edited books, bibliographies, abstracts, and indexes published. On their part, Anyaogu and Iyabo, (2014) see research productivity as output published in chapters in books, co-authored textbooks, occasional papers, monographs, conference papers, articles in learned journals, and international peer-reviewed journals. Research productivity offers librarians in universities a great deal of benefits.

Promotion is the core benefit. Okonedo (2015) affirmed that research is important to librarians in the university because their promotion and tenure are tied to publishing and research like their teaching counterparts. Ogbomo (2010) observed that publication requirement is an entirely new one for librarians in Nigerian universities and further stated that previously, librarians had only three requirements for promotion. These were 2-4 years work experience after the last promotion, availability of vacancies and certification performance. Ogbomo, however, stated that the publication requirement for librarians varies from university to university in Nigeria. Whether the publication criterion is new or not, it is in the interest of librarians in university libraries to do research and publish as the practice of "publish or perish" is applicable to librarians like the lecturers (Oloruntoba & Ajayi, 2006).

In spite of the relevance of research productivity in the career life of librarians, Ogbomo (2010), however, noted that librarians in state university libraries in South-South Nigeria do not publish adequately. It has also been observed that there has been a persistent decline in research productivity of librarians in federal universities in Nigeria even with the abundance of open access publications (Okoye & Ejikeme, 2011). This has been a source of concern to scholars in the field of Library and Information Science. Scholars have claimed that this ugly trend is a result of lack of job satisfaction of librarians (Nzotta, 2004; Babalola & Nwalo, 2013). Yaya, Opeke and Onuoha (2016) observed the marginalization of librarians in terms of payment of earned allowances and lack of recognition by the university authorities, a practice which the authors believed could reduce the morale of librarians and consequently affect their productivity. In her study on publication output of librarians at Delta State University library, Abraka, Ogbomo (2010) observed that most of the librarians have not been promoted for more than ten years. These librarians are victims of the practice of "publish or perish". It was against this background that this study examined the relationship between job satisfaction and research productivity of librarians in public university libraries in South-South Nigeria.

Statement of the Problem

As academics, librarians in university libraries are expected to carry out meaningful research and publish their findings with a view to justifying their status and enhancing their chances of promotion. Unfortunately, many librarians in public university libraries in South-South Nigeria seem not to carry out adequate research and publication probably as a result of lack of job satisfaction. This may have resulted in lack of promotion of such librarians, career stagnation, causing them to lose interest in their job.

A few studies have attempted to investigate the relationship between some variables and research productivity of librarians in university libraries, but none to the best of knowledge of the researcher has examined the relationship between job satisfaction and research productivity of librarians in public university libraries in

South-South Nigeria. This study, therefore, determined the relationship between job satisfaction and research productivity of librarians in public university libraries in South-South Nigeria.

Purpose of the Study

The study had the general purpose of determining the relationship between job satisfaction and research productivity of librarians in public university libraries in South-South Nigeria. Specifically, the study:

1. examined the nature of relationship between job satisfaction and research productivity of librarians in federal university libraries in South-South Nigeria.
2. found out if there was a significant relationship between job satisfaction scores and research productivity scores of librarians in federal university libraries in South-South Nigeria
3. determined the nature of relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria.
4. ascertained whether there was a significant relationship between job satisfaction scores and research productivity scores of librarians in state university libraries in South-South Nigeria.

Research Questions

The following research questions guided this study:

1. What is the nature of relationship between job satisfaction and research productivity of librarians in federal university libraries in South-South Nigeria?
2. What is the nature of relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria?

Hypotheses

The study tested the following two null hypotheses at 0.05 significant level:

HO_1: There is no statistically significant relationship between job satisfaction and research productivity scores of librarians in federal university libraries in South-South Nigeria.

Ho_2: There is no statistically significant relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria.

Review of Related Theoretical Studies

Nature of Relationship between Job Satisfaction and Research Productivity of Librarians in Public University Libraries

Determining the nature of relationship is very essential in correlational studies. Nworgu (2015) stated that one way of interpreting correlation coefficients is in terms of the nature of relationship, which the author described as either direct or indirect relationship. According to Nworgu, a positive correlation coefficient indicates a direct relationship while a negative correlation coefficient shows an inverse relationship. A number of scholars contend that job satisfaction leads to high productivity. This notion is a reflection of a direct relationship. For example, Addady (2015) affirmed that a happy worker is a productive worker. Similarly, Leviticus (2014) posits that an unhappy worker is an unproductive one. Environment constitutes an extrinsic aspect of job satisfaction and some scholars are of the view that the quality of the environment in which employees do their job has the potential to make employees more productive. In connection with this, Newsham, Brand, Donelly, Veitch, Aries and Charles (2009) asserted that better environment means a happier worker and happier workers make a more productive workplace.

In terms of the nature of relationship between job satisfaction and research productivity, Albert, Davia and Legazpez (n. d.) argued that there is a positive relationship between job satisfaction and research productivity. They explained that this relationship may be direct or indirect. In their view, the direct one relates with workers being satisfied with their self-achievement while the indirect one comes because more productive academics have more chances of promotion and therefore, higher levels of income. They added that if more productive academics are shown to be more satisfied, universities which provide effective incentives and tools to improve this kind of productivity may achieve not only a wider social impact via research outputs but also more stable and positive staff. Scholars claim that job satisfaction increases the productivity of librarians. In this regard, Yaya, Opeke and Onuoha (2016) opined that job satisfaction enhances productivity of workers in any organization especially in the public university libraries. In the same vein, Gowda (2009) asserted that a satisfied librarian is a productive professional. Hyder and Batool (2013) concluded from an extensive review of studies that had compared and correlated different facets of job satisfaction (demographic variables, working in different library units and job status) with

professional output, that job satisfaction is positively correlated with librarians' professional output. More elaborately, Yaya, Opeke and Onuoha (2016) opined that if librarians are well catered for by the university authorities in the area of giving them due recognition for a job well done, put in place a good leadership style for the administration of the university library coupled with a career development opportunity for librarians to enhance development of their managerial skills and conducive work environment as well as improved remunerations (good salaries and wages); their level of productivity will be greatly improved from what is presently existing in most Nigerian public universities. On the contrary, Saari and Judge (2004) argued that individuals with low satisfaction may be very productive if they perceive that such performance will be rewarded by a promotion, pay increase or a chance for another job elsewhere and so management attempt to improve job satisfaction may not result to improved staff performance.

Review of Related Empirical Studies

Nature of Relationship between Job Satisfaction and Research Productivity of Librarians in Public University Libraries

A number of researchers have reported on the nature of relationship between job satisfaction or related variables and research productivity of librarians. Umar, Kabir, Dahiru and Dauda (2016) explored the factors that influenced the use of open access resources for research productivity by academic librarians in federal universities in Northwestern States of Nigeria, using a population of two hundred librarians and a sample of one hundred and seventy four librarians. The study reported among other things that lack of enabling environment, positive working area and good facilities, low level of education, skills, training and low level of motivation hindered the research product of the librarians.

Fennewald (2008) investigated the factors that contribute to research productivity of a cross section of Penn State librarians using a sample of 38 librarians. The study revealed that many of these librarians were motivated by personal satisfaction (intrinsic job satisfaction), suggesting that the relationship between their intrinsic job satisfaction and their research productivity was positive. Sulo, Kendagor, Kosgei, Tuitoek and Chelanagat (2012), in their study of factors affecting research output of lecturers in Moi State University using a population of 1424 lecturers and a sample of 242 lecturers, reported that research environment ($r=0.417$, $p < .000$),

funding (r=0.367, p = <0.000) and researcher's qualification (r=0.486, p = .000) were positively and significantly related to research output while time (r= -.0.383, p = .000) was negatively related to research output. The study also indicated that the staff qualifications positively influenced research output the most (β = .441), followed by research environment (β = .200) and lastly funding (β = .145) whereas time negatively influenced research output (β = -.433).

Significance of Relationship between Job Satisfaction and Research Productivity of Librarians in Public University Libraries

Nworgu (2015) asserted that if two variables are highly related, it should not be necessarily interpreted to mean that one causes the other. The author further opined that their strong relationship may be the result of another variable which actually caused the two variables. Edem and Lawal (1999) determined the influence of intrinsic and extrinsic aspects of job satisfaction on publication output of librarians in public university libraries in Nigeria using a population of librarians in 35 university libraries and a sample of 202 librarians in 22 university libraries. The researchers reported that out of six dimensions of job satisfaction used in the study, only three dimensions (librarians' levels of satisfaction with their achievement, responsibility and recognition) had a significant influence on their publication output. Other dimensions including salary, university library policies and administration and supervision were found to have no significant influence on their publication output. The study also indicated that the intrinsic job satisfaction dimensions had the greatest influence on the number of publications of the librarians. Yaya, Opeke and Onuoha (2016) investigated the relationship between job satisfaction and research productivity of librarians in Nigerian public universities using a population of 1254 librarians in 54 public university libraries and a sample of nine hundred and twenty three librarians. The study revealed that there was a significant relationship between job satisfaction and research productivity of librarians (r = 0.025, P< 0.05). *Okonedo and Popoola (2012) examined the effects of self-concept, knowledge sharing and utilization on the research productivity of librarians in South-West Nigeria using a* population of 174 librarians in 16 public universities and sample of 134 librarians. The study reported a*mong other findings that the effect of self-concept on research productivity of the librarians was significant (F (3,130) = 6.067; R = 0.350, R2 = 0.123, Adj. R2 = 0.103; P< 0.05). Madu and Dike (2012) examined the extent to which information*

literacy correlates with academic productivity of academic staff in Nigerian universities in North-Central Nigeria using a population of 2,810 academic staff from 12 universities and a sample of 421 academic staff from 6 universities in North-Central Nigeria. The study found that there was a significant relationship between information literacy and academic productivity as indicated by a t-test value of 17.025. Ani, Ngulube and Onyancha (2017) explored the perceived effect of accessibility and utilization of electronic resources on research productivity in Nigerian universities using survey research design. The researchers reported that accessibility and use of electronic resources had a significant perceived positive effect on research productivity. However, there was no significant perceived effect of accessibility and use of electronic resources by discipline on research productivity. It was also found that there was no significant perceived effect of accessibility and use of electronic resources by gender on research productivity. Okiki and Mabawonku (2013) examined the influence of information literacy skills on academics research productivity in federal universities in Nigeria using a sample of 1,057 academic staff from federal universities in the six geo-political zones of Nigeria. The result of the study showed that the academic staff acquires information literacy skill mostly through attending workshops/seminars, self-study and assistance from other colleagues, trial and error, guidance from library staff and faculty/departmental training. It was also found that the research productivity of the academic staff was higher in journal publications, technical reports, conference papers, working papers and occasional papers. However, the research productivity of the academic staff found to be lower in textbook publications, monographs, patents and certified inventions. The result further indicated that the academic staff possessed high information literacy skills.

Method

The study adopted correlation research design. This study was conducted in public universities libraries in South-South Nigeria, comprising six states which are Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers State. The population of the study comprised all the 203 librarians in the twelve public university libraries in South-South Nigeria. One hundred and six librarians in federal university libraries and 97 librarians in state university libraries comprised the population of the study. **N**o sample was done because the population of the study was small and manageable. The instrument for data collection was a questionnaire designed by the researcher, titled "Librarians' Job Satisfaction and Research Productivity

Questionnaire". The questionnaire, which comprised 39 items, was divided into three sections. Section A collected data on demographic information of the respondents. Section B covered 20 items, measuring job satisfaction of librarians. Section C, which contained 18 items, gathered data on research productivity of librarians. The instrument was weighted on a 4-point rating scale of Strongly Agree (4), Agree (3), Disagree (1) and Strongly Disagree (2). The instrument was validated by two lecturers in the Department of Library and Information Science and one expert in Measurement and Evaluation in the Department of Educational Foundations of Nnamadi Azikiwe University, Awka. Modifications suggested by the validators were duly effected in the instrument after which the final draft of the questionnaire was drawn. The Cronbach alpha Coefficient was used to determine the reliability of the instrument with the aid of Statistical Package for Social Sciences (SPSS). Pilot test was conducted by administering copies of the draft of the validated questionnaire on **36** librarians of Anambra State University, Uli and Nnamdi Azikiwe University, Awka**.** These universities were chosen for the pilot test because they were also public university libraries but located in South-East Nigeria which is outside the study area (South-South Nigeria). Cluster A on job satisfaction produced a reliability coefficient of 0.732 while Cluster B on research productivity produced a reliability coefficient of 0.812. Overall, the reliability test produced an internal consistency reliability of 0.772 and this was considered appropriate for the study based on George and Mallery's (2003) notion that reliability coefficient of 0.7 and above is acceptable. The researcher then visited the university libraries and distributed two hundred and three copies of the questionnaire to the respondents. Copies of the questionnaire completed on the spot were collected immediately by the researcher while the rest were later retrieved through the help of research assistants. Out of the 203 copies of the questionnaire distributed, only 181 copies were properly filled and found usable for data analysis. This represented a response rate of 89. 2%.

The researcher used Spearman Rank-Order Correlation (rho) and Z-test for data analysis. Spearman correlation was used to determine nature of relationship between job satisfaction and research productivity of librarians based on Tanner's (2012) view that Spearman's Rho helps one to identify the relationship between one ordinal variable and interval variable when it has been converted to ordinal data. The Z-test was used to test the two null hypotheses formulated based on the perspective of Onyeizugbe (2013) that the z-test is used when the number of respondents in a study is equal to or greater than 30. In the present study, the

respondents in federal university libraries studied were 94 librarians, while that of state university libraries were 87 librarians. The decision rule was that the stated hypotheses were to be rejected if the t-calculated was equal to or greater than the t-critical of 1.96, but to be accepted if less than the t-critical.

Results

The results of data analysis were presented in tables according to the research questions and hypotheses formulated for the study.

Research Question One

What is the nature of relationship between job satisfaction and research productivity of librarians in federal university libraries in South-South Nigeria?

Research question one was answered using Spearman Rank Correlation (rho) and the result is displayed in Table 1.

Table 1: Spearman rank correlation analysis of nature of relationship between job satisfaction and research productivity of librarians in federal university libraries in South-South Nigeria

N	N^2	ED^2	Rho
94	8836	38189.85	0.72

Table 1 shows Spearman Rank Correlation Coefficient (Rho) for the nature of relationship between job satisfaction and research productivity of librarians in federal university libraries in South-South Nigeria. The table reveals that there is a direct (positive) relationship between job satisfaction and research production of librarians in federal university libraries in South-South Nigeria. This is indicated by Rho=0.72.

Hypothesis one (Ho1)

There is no statistically significant relationship between job satisfaction scores and research productivity scores of librarians in federal university libraries in South-South Nigeria.

Hypothesis 1 was tested using Z-test and the result is presented in the table 2.

Table 2: Z-test analysis of significance of relationship between job satisfaction mean scores and research productivity mean scores of librarians in federal university libraries in South-South Nigeria.

	X	SD	N	Sig	DF	Z-cal	Z-crit	Decision
Job Satisfaction	60.4	4.90	94	0.05	92	43.08	1.96	Accept
Research Prod.	15.1	8.94	94					

Table 2 shows a summary of Z-test for the significant relationship between job satisfaction mean scores and research productivity mean scores of librarians in federal university libraries in South-South Nigeria. The table reveals that Z-cal (43.08) > Z-crit (1.96). Thus, Ho1 is rejected and it shows that that there is a significant relationship between job satisfaction and research productivity of librarians in federal university libraries in South-South Nigeria.

Research Question Two

What is the nature of relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria?

Table 3: Spearman rank correlation analysis of nature of relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria

N	N^2	ED^2	Rho
87	7569	208750.096	-0.90

Table 2 shows Spearman Rank Correlation Coefficient (r) for nature of relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria. The table indicates that there is a high inverse (negative) relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria. This is indicated by Rho=--0.90.

Hypothesis Two (Ho2)

There is no statistically significant relationship between job satisfaction scores and research productivity scores of librarians in state university libraries in South-South Nigeria.

The above hypothesis was tested using Z-test and the result is presented in the table below.

Table 4: Z-test analysis of significance of relationship between job satisfaction mean scores and research productivity mean scores of librarians in state university libraries in South-South Nigeria

	X	SD	N	DF	Sig	Z-cal	Z-crit	Decision
Job Satisfaction	48	13.26	87	85	0.05	7.37	1.96	Accept
Research Prod	25.1	25.70	87					

Table 4 shows a summary of Z-test for the significant relationship between job satisfaction scores and research productivity scores of librarians in state university libraries in South-South Nigeria**.** From table 4, Z-cal (7.37) > Z-crit (1.96). Ho2 is thus rejected. There is therefore, a significant relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria.

Discussion of Findings

The discussion of result in this study was made in line with the research questions and hypotheses tested under the following sub-headings:

Nature of Relationship between Job Satisfaction and Research Productivity of Librarians in Public University Libraries

The result of data analysis revealed a direct (positive) relationship between job satisfaction and research productivity of librarians in federal university libraries in South-South Nigeria. This finding supports the perceptions of Adday (2015), Newsham, Brand, Donelly, Veitch, Aries and Charles (2009), Albert, Davia and Legazpez (n. d.), Gowda (2009), Hyder and Batool (2013) and Yaya, Opeke and Onuoha (2016). Adday (2015) holds the view that a happy worker is a productive worker. Newsham, Brand, Donelly, Veitch, Aries and Charles (2009) asserted that better environment means a happier worker and happier workers make a more productive workplace. On their part, Albert, Davia and Legazpez (n. d.) opined that there is a positive relationship between job satisfaction and research productivity, which is direct relationship. The scholars explained that the direct relationship refers to the satisfaction employees derive from self-achievement. On his part, Gowda (2009) stated that a satisfied librarian is a productive professional.

Hyder and Batool (2013) observed that job satisfaction of librarians positively correlates with their professional output. Yaya, Opeke and Onuoha (2016) also opined that job satisfaction enhances the productivity of employees, especially in the public university libraries. The finding also supports the empirical result of Umar, Kabir, Dahiru and Dauda (2016) who reported among other things that lack of enabling environment, positive working area and good facilities and low level of motivation hindered the research product of the librarians in federal universities in Northwestern States of Nigeria.

The finding of the study, however, contradicts the opinion of Saari and Judge (2004) who argued that individuals with low satisfaction may be very productive if they perceive that such performance will be rewarded by a promotion, pay increase or a chance for another job elsewhere and so management attempt to improve job satisfaction may not result to improved staff performance. The researcher perceives that the above finding is a result of the fact that librarians in federal universities enjoy considerable level of job satisfaction. It is possible that these librarians are offered good wages, allowances, supervisory responsibility, good working conditions and cordial relationship in the work place and interesting work. The university administrators must have given adequate attention to provision of attractive incentives, opportunities for growth, education and advancement for librarians.

The result of data analysis also revealed an inverse (negative) relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria. This finding confirms the perspectives of Albert, Davia and Legazpez (n. d.) and Saari and Judge (2004), Davia and Legazpez (n. d.) and Saari and Judge (2004). Albert, Davia and Legazpez (n. d.) in their two-sided notion of the nature of relationship between job satisfaction and research productivity, asserted that the positive relationship can also be indirect, explaining that the indirect relationship comes from the fact that more productive academics have more chances of promotion and therefore, higher levels of income. On their part, Saari and Judge (2004) argued that individuals with low satisfaction may be very productive if they perceive that such performance will be rewarded by a promotion, pay increase or a chance for another job elsewhere and so management attempt to improve job satisfaction may not result to improved staff performance. However, the finding contradicts the empirical result of Sulo, Kendagor, Kosgei,

Tuitoek and Chelanagat (2012) who reported that research environment and funding were positively related to research output of lecturers at Moi State University.

The finding, however, varies from the views of Gowda (2009), Adday (2015), Leveticus (2014) and Hyder and Batool (2013) and Yaya, Opeke and Onuoha (2016). Gowda (2009) stated that a satisfied librarian is a productive professional. Adday (2015) also holds the opinion that a happy worker is a productive worker. On his part, Leveticus (2014) is of the notion that an unsatisfied worker is an unproductive worker. On their part, Hyder and Batool (2013) oberved that job satisfaction of librarians positively correlates with their professional output. Yaya, Opeke and Onuoha (2016) opined that job satisfaction enhances the productivity of employees in any organization, especially in the public university libraries.

The researcher is of the opinion that the emphasis on publications as a criterion for promotion in Nigerian universities accounts for this finding. The "Practice of Publish or Perish" in Nigerian universities could have compelled these librarians to buckle down to research and publish their findings regardless of their dwindling job satisfaction. There is the possibility that these librarians' interest in research, their knowledge and skills in research methodology, their aspirations for promotion to higher ranks and hankerings for higher incomes were the driving forces behind their high research output regardless of their low level of job satisfaction.

Significance of Relationship between Job Satisfaction and Research Productivity of Librarians in Public University Libraries in South-South Nigeria

The result revealed that there was a significant relationship between job satisfaction and research productivity of librarians in federal university libraries in South-South Nigeria. The result of the study corroborates the finding of Yaya, Opeke and Onuoha (2016) who reported a significant relationship between job satisfaction and research productivity of librarians in public university libraries in North-Central, North-West, South-East and South-West Nigeria. The finding is also consistent with the result of Edem and Lawal (1999) who reported that the intrinsic aspects of job satisfaction (achievement, responsibility and recognition) had a significant influence on publication output of librarians in Nigerian public universities.

The finding can be attributed to the priorisation of the welfare of librarians in federal universities by management and university librarians. While placing emphasis is on productivity of librarians, university management and university librarians might have realized the need to focus particularly on extrinsic aspects of job satisfaction such as good wages, flexible library policies, participative leadership style, job security, conducive working atmosphere etc. The presence of these factors in the workplace brings about job satisfaction and high productivity but their absence leads to job dissatisfaction.

Further, the result revealed that there was a significant relationship between job satisfaction and research productivity of librarians in state university libraries in South-South Nigeria. The result supports the empirical findings of Sulo, Kendagor, Kosgei, Tuitoek and Chelanagat (2012) who reported that research environment and funding were significantly related to research output of lecturers at Moi State University. The finding also confirms the opinion of Nworgu (2015) who asserted that if two variables are highly related, it should not be necessarily interpreted to mean that one causes the other. The author further opined that their strong relationship may be the result of another variable which actually caused the two variables.

The finding can be attributed to the consciousness of librarians in state universities to get recognition in their field, their regular participation at conferences, seminars and workshops. Furthermore, the fear of career stagnation could have driven them to commit themselves to research and publication activities. The librarians may have a burning desire to enhance their chances of promotion. These librarians probably have self-esteem and self-actualisation needs to fulfill in their career. This perhaps accounts for the massive publication output of the librarians in state university libraries despite the fact that they are not satisfied with their job.

Conclusion

The study ascertained the relationship between job satisfaction and research productivity of librarians in public university libraries in South-South Nigeria. Findings from the study revealed that there was a direct (positive) relationship and an inverse (negative) relationship between job satisfaction and research productivity of librarians in federal and state university libraries respectively. It was also revealed that there was a significant relationship between job satisfaction and research productivity of librarians in both federal and state university libraries

in South-South Nigeria. In view of the findings of the study, it was concluded that job satisfaction enhances research productivity of librarians in federal university libraries. On the other hand, job satisfaction does not necessarily improve the publication output of librarians in state university libraries. It was also concluded that job satisfaction is a predictor or determinant of research productivity of librarians in federal university libraries. However, job satisfaction is not a predictor or determinant of research productivity of librarians in federal university libraries.

Recommendations

Based on the implications of the findings of this study, the following recommendations were made:

1. Federal university management and federal university librarians should improve on the extrinsic job satisfaction of their librarians. This can be done by ensuring the presence of these factors in the library: favorable library policy and administration, technical supervision, cordial interpersonal relations among staff, good salary, job security, conducive working condition and providing opportunities to enhance one's status.
2. State university management and state university librarians should improve on research culture among librarians in state university libraries. This can be done by educating librarians in state university libraries on the need to attend conferences, seminars, workshops etc regularly to acquire research skills, the need to adopt new patterns of research such as collaborative authorship and the need to acquire digital literacy skills.
3. Federal university management and federal university librarians should put in place strategies to boost job satisfaction of librarians in federal university libraries. This can be executed by offering good wages, creating room for supervisory responsibility and cordial relationship in the work place, providing a good working condition, challenging job and interesting work.
4. State university management and state university librarians should put in place measures to boost research productivity of librarians in state university libraries. This can be done by supporting and encouraging research culture among librarians such as sponsoring librarians' attendance at conferences, workshops, seminars etc to improve their research knowledge and skills, encouraging collaborative authorship, providing opportunity for their educational advancement and providing constant power supply and free internet services.

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