Knowledge Sharing and Research Output among Academic Staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria

Dr Bamigboye*, Olusola Bamidele, Adenekan Fauznah Nihinlolawa and Olude Busayo Abimbola

Associate Librarian, Federal University of Agriculture, Abeokuta Ogun State Nigeria

*Corresponding Authors: Dr Bamigboye, Associate Librarian, Federal University of Agriculture, Abeokuta Ogun State Nigeria

ABSTRACT

This study examines knowledge sharing and research output among academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria. A total of 127 academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria were used for the population for the study. Questionnaire was used as instrument for data collection. The questionnaire was on knowledge sharing and research output of academic staff. Data was analysed using analysed using descriptive statistics such as frequencies, percentages, mean and standard deviation. Findings of the study revealed that the channels through which academic staff shares knowledge is high, also shows that the level of research output among academic staff is also high and that there is significant relationship between knowledge sharing and research output among academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria. Some of the recommendations were that the university management should provide avenue for academic staff to embrace knowledge sharing among the academic staff through training and conferences, academic staff should be encouraged to send all their research findings in the institution repository in order for others to have access to them and finally, academic staff should further be encouraged to engage in research and publication through the provision of research grants.

Keywords: Knowledge Sharing, Research Output, Academic Staff, University

INTRODUCTION

There is no single universal definition for knowledge sharing; various scholars look at Knowledge Sharing from different angles based on their professional background. Knowledge can be viewed as individual or collective, individual knowledge exists in the heads of individuals, while collective knowledge exists in the collective actions of the groups and organizations. Some researchers even considered knowledge sharing; knowledge flows and knowledge transfer as exchangeable terms and defined them as such. For instance, Alavi and Leidner (2001) liken knowledge sharing to knowledge transfer and define it as the process of disseminating knowledge throughout the organization. The dissemination can happen between individuals, groups or organizations using any type or number of communication channels.

Nonaka (1994) regards organizational knowledge creation as “knowledge spiral” in which there is a continuous interaction among individuals and continuous conversion of explicit knowledge to tacit knowledge and vice versa. This incessant interaction and conversion in turn results in joint creation of knowledge by individuals and organizations. Organizations play an important role in activating the explicit and tacit dimensions of knowledge and in providing a forum for the knowledge spiral through four modes of knowledge creation: socialization, externalization, combination and internalization.

Gupta and Govindarajan (2000), equating knowledge sharing to knowledge flows theorize that knowledge flows comprise of five elements: value of the source knowledge, willingness of the source to share knowledge, media richness of the communication channel, willingness of the recipient to acquire knowledge and the absorptive capacity of the recipient. Researchers have divided knowledge into two types: explicit and tacit knowledge. Explicit (or codified) knowledge exists in the forms that can be transmitted through formal means such as
Knowledge sharing and research output among academic staff of Federal University of Agriculture, Abeokuta, Ogun State Nigeria

Language. Tacit knowledge on the other hand resides in people and cannot be readily transmitted through formal communication. Most of the knowledge exists in the tacit form. Benefits from tacit knowledge can only be achieved if knowledge is shared through socialization process (Nonaka, 1994).

Knowledge sharing is thus an important issue in modern organizations (Teng & Song, 2011). Since knowledge is a source of competitive advantage, high level of motivation would be required for an individual to share his or her knowledge. It requires a platform, culture and certain amount of trust between individuals of a collective to induce them to share their knowledge. It is believed that the most significant aspect of knowledge management is knowledge sharing among the employees of any organization. Knowledge sharing is that activity where agents (individuals, communities or organizations) exchange their knowledge (information, skills or expertise). It is intrinsically linked to the knowledge management process, which can be broadly characterized by five activities; creation, storage, retrieval, transfer and application of knowledge. Whilst knowledge sharing is fundamentally concerned with the transfer activity, it cannot be isolated from the other activities (Ireson & Burel, 2010).

The benefits of knowledge sharing to organizations are quite known, but while human knowledge can be the most valuable asset of an organization, often a lot of that knowledge is never shared. The importance of knowledge sharing and the technology supporting the activity is vital in organizations where knowledge brings all the value to the organization and employees are in different locations (Ismail & Yusuf, 2010).

Knowledge sharing is a key process in translating individual learning into organizational capability. But facilitating knowledge sharing is a difficult task. The willingness of individual to share and integrate their knowledge is one of the central barriers (Lemmetyinen, 2007).

Knowledge sharing not only improves competence of the employees that are involved in the process but it also benefits the organizations by speeding up the deployment of knowledge (Shih & Lou, 2011). Research productivity is the extent to which lecturers engage in their own research and publish scientific articles in refereed journals, conference proceedings, writing a book or a chapter, gathering and analyzing original evidence, working with postgraduate students on dissertations and class project, obtaining research grants, carrying out editorial duties, obtaining patents and licenses, writing monographs, developing experimental designs, producing works of an artistic or a creative nature, engaging in public debates and commentaries. Academic staff members conduct research and their productivity is measured in various ways (Middaugh, 2001).

Matins and Marion (2005) maintained that universities work as the basis for researches, teaching and learning, as a result there is need for constant knowledge sharing among the faculty members because the academic staff are the major player in the knowledge based society. Nwagwu (2006), opined that South Africa and Nigeria were the only two African countries whose scholarly works had dominated the developing countries with a 13% contribution to the publishing of 140, 000 periodical titles listed in Ulrich’s Periodicals Directory. Many studies have been conducted on the research productivity of academic staff members in Nigeria. Nwagwu (2006) carried out a bibliometric and documentation analysis of biomedical articles by Nigerian authors published between 1967 and 2002, using Lotka’s law. He averred that only the co-author category differs from the inverse power of the law while the other categories do not.

In the same vein, Chiemeke, Longe, Longe and Shaib (2009) conducted an empirical study on the research output from Nigerian tertiary institutions and found that publication remained a yardstick for promotion in the academia in Nigeria. Braimoh (1999) reviewed the role of African universities in national and continental developments. He emphasized upon the significance of research and publication efforts among university lectures in improving their teaching and demonstrating their abilities to create and disseminate knowledge to solve societal problems. Most of the methods for measuring research productivity involve measuring the number of journal articles published. Research productivity has been mentioned in several studies relating to higher education. The most pervasive issue regarding the measurement of research productivity is the confusion of quantity of publications with quality of publications, either in the publications themselves or in the publication outlets (Lawrence and Green, 1980).
Knowledge Sharing and Research Output among Academic Staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria

This study is therefore, to examine knowledge sharing and research output among academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria.

OBJECTIVES OF THE STUDY

The main objective of this research work is to examine knowledge sharing and research output among academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria; while the specific objectives are:

- To examine the pattern of knowledge sharing among the academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria;
- To ascertain the research productivity level of academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria;

Research Questions:

The following research questions will be answered in the study.

- What is the pattern of knowledge sharing among academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria?
- What is the research productivity level of academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria?

METHODOLOGY

The population for this study comprised of all (536) academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria. Stratified random procedure was used to select the respondents for this study. All the ten (10) Colleges in Federal University of Agriculture, Abeokuta Ogun State Nigeria was purposive selected. Secondly, Simple Random Sampling technique was used to select 20% of the academic staff from each College. Thirdly, all 23 Academic Librarians in Federal University of Agriculture, Abeokuta Ogun State Nigeria was purposive selected for this study. Structured questionnaire was used for the study. Data obtained was analysed using descriptive statistics such as frequencies, percentages, mean and standard deviation.

DATA PRESENTATION AND INTERPRETATION

What are the patterns of knowledge sharing among academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria?

Table 7. Channels of Knowledge Sharing

<table>
<thead>
<tr>
<th>S/N</th>
<th>Statement</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Through face-to-face interaction</td>
<td>6.70</td>
<td>1.56</td>
<td>Significant</td>
</tr>
<tr>
<td>2</td>
<td>Through the use of mobile phone</td>
<td>6.60</td>
<td>0.53</td>
<td>Significant</td>
</tr>
<tr>
<td>3</td>
<td>Through e-mail and news letter</td>
<td>6.30</td>
<td>0.48</td>
<td>Significant</td>
</tr>
<tr>
<td>4</td>
<td>Through internal memo</td>
<td>6.50</td>
<td>1.92</td>
<td>Significant</td>
</tr>
<tr>
<td>5</td>
<td>Through web forum</td>
<td>6.10</td>
<td>0.77</td>
<td>Significant</td>
</tr>
<tr>
<td>6</td>
<td>Through bulletin and discussion board</td>
<td>5.98</td>
<td>0.35</td>
<td>Significant</td>
</tr>
<tr>
<td>7</td>
<td>Through the use of social media e.g. WhatsApp, Facebook messenger, Twitter, Instagram, etc.</td>
<td>5.73</td>
<td>0.84</td>
<td>Significant</td>
</tr>
<tr>
<td>8</td>
<td>Through blog</td>
<td>5.41</td>
<td>0.22</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Grand mean</td>
<td>6.17</td>
<td>0.84</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Decision: It has adjudged that means score of X = 2.00 and above is significant.

Table 7 shows that the grand mean of 6.17 is greater than the accepted mean of 2.00 indicating that all the items in research question one have been accepted by the respondents as the channels through which academic staff share knowledge in Federal University of Agriculture, Abeokuta Ogun State Nigeria. The results show a mean and standard deviation score of (χ = 6.70; SD = 1.56) shows that they share knowledge through face-to-face interaction, (χ = 6.60; SD = 0.53) through the use of mobile phone, (χ = 6.30; SD = 0.48) through e-mail and news letter, (χ = 6.50; SD = 1.92) through internal memo, (χ = 6.10; SD = 0.77) through web forum, (χ = 5.98; SD = 0.35) through bulletin and discussion board, (χ = 5.73; SD = 0.84) through the use of social media e.g. WhatsApp, Facebook messenger, Twitter, Instagram, etc. (χ = 5.41; SD = 0.22) through blog. This determine the channel through which academic staff share knowledge in Federal University of Agriculture, Abeokuta Ogun State Nigeria, the result
Knowledge Sharing and Research Output among Academic Staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria

shows the items of measuring the channel through which academic staff share knowledge is high and were significant, hence the channel through which academic staff share knowledge is high.

What is the level of Research Output among Academic Staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria?

<table>
<thead>
<tr>
<th>S/N</th>
<th>Research Productivity</th>
<th>Number</th>
<th>Number of Publications</th>
<th>Percentage Rate of Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Textbooks</td>
<td>127</td>
<td>985</td>
<td>102.1%</td>
</tr>
<tr>
<td>2</td>
<td>Chapters in Books</td>
<td>127</td>
<td>244</td>
<td>74.1%</td>
</tr>
<tr>
<td>3</td>
<td>Co-authored Textbooks</td>
<td>127</td>
<td>239</td>
<td>60.8%</td>
</tr>
<tr>
<td>4</td>
<td>Patent &amp; Certified Invention</td>
<td>127</td>
<td>162</td>
<td>59.7%</td>
</tr>
<tr>
<td>5</td>
<td>Monographs</td>
<td>127</td>
<td>363</td>
<td>66.1%</td>
</tr>
<tr>
<td>6</td>
<td>Occasional Papers</td>
<td>127</td>
<td>485</td>
<td>71.5%</td>
</tr>
<tr>
<td>7</td>
<td>Articles in learned Journals</td>
<td>127</td>
<td>1003</td>
<td>108.8%</td>
</tr>
<tr>
<td>8</td>
<td>Technical Reports</td>
<td>127</td>
<td>292</td>
<td>91.9%</td>
</tr>
<tr>
<td>9</td>
<td>Scientific Peer-reviewed</td>
<td>127</td>
<td>899</td>
<td>96.9%</td>
</tr>
<tr>
<td>10</td>
<td>Conference Papers</td>
<td>127</td>
<td>914</td>
<td>99.8%</td>
</tr>
<tr>
<td>11</td>
<td>Patents</td>
<td>127</td>
<td>275</td>
<td>86.4%</td>
</tr>
<tr>
<td>12</td>
<td>Working Papers</td>
<td>127</td>
<td>182</td>
<td>84.1%</td>
</tr>
<tr>
<td>13</td>
<td>Abstracts</td>
<td>127</td>
<td>1102</td>
<td>109.8%</td>
</tr>
</tbody>
</table>

Table 9 shows the highest percentage rate of publication of the respondents was abstracts write-up 1102 (109.8%), followed by articles in learned journals 1003 (108.8%), textbooks 985 (102.1%) and conference papers 914 (99.8%) respectively.

**DISCUSSION OF THE FINDINGS**

The findings show that the channels through which academic staff shares knowledge is high. The finding is in line with Alavi and Leidner (2011) observe that the distinguishing factor between information and knowledge is not found in the content, structure, accuracy or utility of the information or knowledge. Rather, knowledge is simply information that exists in the individual’s mind with high level. It is personalized information associated to facts, procedures, concepts, interpretations, ideas, observations, and judgments.

The finding also shows that the level of research output among academic staff is high. This is in line with the finding of Arunachallam (1992), cited by Nwagwu (2006), while reporting on research output in developing countries. He opines that South Africa and Nigeria are the only two African countries whose scholarly works dominate developing countries and have high level of research output.

This study shows that there is significant relationship between knowledge sharing and research output. This is the agreement with Hughes (2006) which remarked that as a multifaceted experience, the use of knowledge covers the user’s behavior, connecting (to the source of the knowledge), searching for knowledge, knowledge skills, knowledge utilization, knowledge need, reactions and effects, as well as results (of learning). The use of knowledge can be characterized as intellectual activity which is manifested through various thoughts and deeds then have effects on research output.

**CONCLUSION AND RECOMMENDATIONS**

This study concluded that majority of the academic staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria were aware that knowledge sharing is a good idea and also contributed to their research output. High number of respondents maintained that knowledge sharing make them to be current and abreast with the latest information in their various professional areas. The following recommendations are made:

- University administrations need to provide forums for knowledge sharing such as increased team work and discussion rooms through ICT packages.
- The university management should provide avenue for academic staff to embrace knowledge sharing among the academic staff. This can be done through training, conferences, and seminars etc. on the need for knowledge sharing among them.
- Academic staff should be encouraged to send all their research findings in the institution repository in order for others to have access to them.
Knowledge Sharing and Research Output among Academic Staff of Federal University of Agriculture, Abeokuta Ogun State Nigeria

- Academic staff should further be encouraged to engage in research and publication through the provision of research grants.

REFERENCES


Copyright: © 2018 Dr Bamigboye,. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.