Knowledge Management Practices and Skill Acquisition Among Academic Staff in Selected Federal Universities in Southwest, Nigeria

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Abstract

In achieving sustainable organisational goals, efficient Knowledge Management Practices (KMP) are crucial to managing businesses and educational institutions as KMPs focus on bridging the skill gaps among the employees. However, the challenge of Poor knowledge management which has consistently plagued the workforce at public universities, leading to a lack of required skills has necessitated research into the core area of educational development in Nigeria. This study investigated the effect of Knowledge Management Practices (KMPs) on the skill acquisition of academic staff of selected Federal Universities in South-West, Nigeria. The study adopted a survey research design and data were collected using a structured questionnaire from 884 respondents out of the total population of 5720 academic staff of the Federal University in South West Nigeria. The stratified sampling technique was employed in the selection of the sample size. The study objectives were analyzed using both descriptive (Mean and Standard Deviation) and inferential statistics Partial Least Square in Structural (PLS) Equation Modelling. The result of the first objective showed a significant and positive relationship between academic knowledge management practices and skill acquisition in higher institutions in South West, Nigeria. The path coefficient revealed (β =0.461, t = 14.589, P < 0.05). The study concludes that KMPs are a strong predictor of skill acquisition. Therefore, the study recommends that University management should endeavour to improve their knowledge management practices to improve the skill acquisition among their academic staff. They should provide support for developing their academic staff through training which can improve their knowledge base.

Keywords: Knowledge application, Knowledge creation, Knowledge discovery, Knowledge sharing, Knowledge management practices, Skills acquisition

1. Introduction

Knowledge builds on knowledge and past events help in generating new knowledge. All knowledge-generating organizations like industries, research and development centres, and higher education academics from colleges to universities search for new concepts in their subject of interest and contribute to knowledge through various means (Dhamdhere, 2015). Universities worldwide are mandated to perform three core functions, namely teaching, research, and community service, aiming to produce trained manpower for essential areas of social development. In the process of performing these functions, universities generate, accumulate, and transfer knowledge through research and scholarship (Okiki & Mabawonku, 2013).

Higher education is pressed to reconcile its traditional role with market requirements and the change brought about by globalization. Knowledge is no longer pursued for its own sake (Idrus, Dahan & Abdullah, 2009). Since they are centers for the production and distribution of knowledge, they need to have sufficient potential for both greater dynamism and stability. Later, the establishment of innovation and consequently the creation of new knowledge have been regarded as important achievements for academic institutions, and such institutions have mainly focused their attempts on promoting knowledge and enriching intellectual capital through the implementation of their existing resources (Anvari, et al., 2011).

In Industry 4.0, higher education is required to overcome the change that occurs due to transformation (Wibowo, et al., 2020). This is the reason why the ability of an organization to improve existing skills requires new technology, information, and experience in organizational culture (Anvari, et al., 2011). Like every other human activity, skilled performance is crucial (Langan-Fox, et al., 2002). As the volume of information is constantly increasing, search skills are required not only in order to gain access to the available information resources, but also to sift from the large quantity and utilize the most appropriate information resources (Okiki & Mabawonku, 2013). The acquisition of skills relevant to knowledge management is needed by university lecturers to continue to make improvements in the performance of their institutions and the stocks of human capital. Increasing knowledge resources (like skills) is a strategy for the development of educational institutions in the future, especially lecturers, which provide room for innovation and growth (Wibowo, et al., 2020) through knowledge management. ICT skills in tertiary

institutions of learning play a vital role in enhancing lecturers' competence and facilitating global context across the globe regarding research and other academic activities (Gombe, et al., 2016).

Knowledge Management (KM) in the educational institution makes good sense and is a good combination of the intellectual output of the academic organization if preserved well-using technology (Dhamdhere, 2015). When employees from other organizations lack knowledge or want to upgrade their skills, they may use internal sources available or external sources like universities and professional training institutions for knowledge. In the universities, both explicit and tacit knowledge may be acquired, and this may create a competitive advantage for the learners and their respective organizations (Boateng, Dzandu and Tang, 2016). However, the nagging challenges such as low information literacy skills among academics in developing countries as reported in the literature can be noted (Okiki & Mabawonku, 2013). This limitation will prevent the optimum use of university lecturers to improve the manpower development of respective nations through their knowledge base.

Given the importance of knowledge management practices, it is expedient to ascertain how the pursuit of the function within an organization can lead to skill acquisition. Without adequate ICT skills, university instructors would not be able to cope with the information explosion of today's information society (Udo-Anyanwu & Emmanuel, 2019). However, it appears this has not received prior attention in the literature especially as it is related to higher institutions. Studies that specifically investigate this relationship are virtually non-existent. Although some studies have been done in the area of digital/ICT skills, information literacy skills in Nigeria Universities (Bakare, Ariyo & Ojo, 2021; Eromosele, 2019; Okiki & Mabawonku, 2013; Soyemi, Ojo, Abolarin, 2018;); and soft and hard skills (Tang, 2020; Wibowo, et al., 2020) while the effects of ICT Skills in Knowledge Sharing (Onuoha, Akidi & Chukwueke, 2019) was also studied but this do not consider the knowledge management practices and their effect on skills acquisition in university settings. This study, therefore, tries to fill the knowledge gap. The objective of this study is to ascertain the effect of knowledge management practices on skills acquisition in the university among university staff in southwest Nigeria. The null hypothesis was tested in the study:

Ho: *There is no significant relationship between Knowledge Management Practice (KMP) and skill acquisition of academic staff of Federal Universities in South-West, Nigeria.*

The rest of the study is divided into four sections. The section focuses on a review of relevant literature, while the third section addresses the methodology used. The fourth section entails the data analysis and discussion of findings. The fifth section provides the conclusion and recommendations.

2. Literature Review

2.1. Knowledge Management Practices in the University System

Andreeva and Kianto (2012) defined knowledge management practices as the set of management activities conducted in a firm with the aim of improving the effectiveness and efficiency of organizational knowledge resources. Knowledge management processes play an important role as potential enablers of working skills and improve the capacity of the teams to enhance the ways they share knowledge and the tools that they use (Wang, 2006). The essence of knowledge management is to create new knowledge and timely apply such to maintain strategic and competitive advantage. Organizations whether education or business that succeed in knowledge management are those that view knowledge as an asset and most important resource for developing organizational norms and values, which support the creation and sharing of knowledge (Akuegwu & Nwi-ue, 2015; Rowley, 2000).

Universities are considered as "Knowledge Houses" where knowledge flows from teachers to students and new knowledge is created. The information generated is covered in different forms and sources like books, journal articles, thesis or dissertations, technical reports, fact-finding reports, case studies, patents, development of test methods and standards, different scholarly communications, etc (Dhamdhere, 2015). The bulk of academic business revolves around the process and practices of knowledge sharing. In this process, the educator is on one end sharing the knowledge, whereas the learner is on the other end receiving the knowledge (Onuoha, et al., 2019). The identified knowledge management practices are presented in the next paragraph. Ogunyemi, Ajayi & Ayedun, (2023). The study analyses the dimensional effects of knowledge management practices on the performance of the academic staff of Federal Universities in the South-West, of Nigeria and it was revealed that Knowledge application and Knowledge discovery were relevant among sub-constructs of KMPs. The result of the study revealed that there are positive and significant relationships between knowledge management practices and the performance of academic staff. The study concluded that the application and discovery of knowledge in our various higher institutions is a significant factor in academic performance. Therefore, training and workshops relevant to individual

academic staff should become the focus of attention rather than spending resources on knowledge not vital to academic performance

According to Si Xue (2017), knowledge creation is a process that involves applying new knowledge or replacing current content in the organisation's explicit and tacit knowledge, this requires Organizations to seek new knowledge and information, both inside and outside the organisation. It comprises discovering existing knowledge to know what we know, gaining knowledge from outside resources, and creating new knowledge. Before gathering and acquisition of knowledge, there is a process called knowledge identification Dhamdhere (2015).

Knowledge sharing involves patterns and methods. The pattern and method to be adopted largely depend on the experiences and skills of the sharer as well as the environment, and the receivers/audience, among other factors. These methods could be through personal conversation, teaching in the classroom, preaching in religious settings, presenting papers at conferences and seminars, undertaking radio/television programmes, parents at home, and lots more (Onuoha, et al., 2019). Trivellas, Akrivouli, Tsifora, & Tsoutsa (2015) states that a culture of knowledge sharing can develop new general competencies in individuals and sharpen existing competency, such as communicating, creating new ideas, solving problems, prioritizing things, interpersonal relationships, creativity, planning, and teamwork. The main reason for sharing individual knowledge with the entire organisation is that knowledge should not disappear if that employee leaves the organization (Dhamdhere, 2015).

Knowledge transfer is a compelling process of knowledge management that contributes to and improves the competence of Organizations in order to facilitate the management to take advantage of specific knowledge (Hassan, Noor & Hussin, 2017). The main purpose of knowledge transfer is to make accessible knowledge for new generation users (Hassan et al. 2017).

Once knowledge has been acquired, it must be preserved carefully. The knowledge acquired, gathered, and created needs to be organized and stored in the form of a database which enables to access it at any time and utilize it. The application of technology and indexing skills requires along with adequate infrastructure (Dhamdhere, 2015). Chan (2014) while integrating knowledge management and customer relationship management argued that along with other elements, knowledge storage is a key element of the knowledge management process. Knowledge storage can be defined as an activity that includes

separating knowledge into various categories, transferring knowledge, and storing knowledge in organisational databases (Mahdi, Nassar, & Almsafir, 2018).

Once the knowledge is shared among different groups of people that knowledge should be applied for better return and create new knowledge and add new innovation to the knowledge database. If the gathered, stored, created and shared knowledge will not be applied properly the whole process will be in vain. So proper application knowledge and KM process should be communicated to users (Dhamdhere, 2015). Effective application of knowledge helps Organizations to improve their efficiency level and reduce their costs.

2.2. Knowledge Management Practices and Skills Acquisition

The major goals of education is to gain appropriate skills and the development of mental, physical, and social abilities and competencies for people to live and add to the development of society. There is a great need for skilled personnel in Nigeria today, who will be self-reliant and enterprising (Okolocha, John-Akamelu & Muogbo, 2020). In particular, knowledge management-related skills are required in universities as institutions for knowledge generation and dissemination, and the extent these skills are applied determines the effectiveness of their administrations in realizing their missions (Akuegwu & Nwi-ue, 2015).

With recent advancements in information technology, the creation and sharing of knowledge are easier to achieve. Thus, ICT skills are imperative such that, they now have an enduring impact on career development (Udo-Anyanwu & Emmanuel, 2019). University teachers use a smart board for teaching the contents of a curriculum. It improves students learning and in most cases improves skills acquisition among students (Bakare, et al., 2021). According to Dhamdhere (2015), a knowledge Manager in higher education institutions needs the following skills: Leadership to assemble information and policy development; friendly association with staff and students to share views regarding knowledge repository; creating the knowledge base by involving contributors to add their knowledge of ICT and Web designing technology to be sheltered for the proper growth and management; Data analysis, mapping, mining, linking and repackaging to be practiced; Knowledge of copyrights; and Dissemination of knowledge through various means to be practices

In terms of openness, skills in Massive Open Online Courses (MOOCs) provide a platform for experts to share knowledge with a variety of learners notwithstanding background or location, thereby, democratizing knowledge (Soyemi, et al., 2018). Universities are today making substantial investments in ICT to meet their goals with a view to increasing the effectiveness of their operations. They are striving to, if not to meet up with their peers in other parts of the world, but at least, to stay not too far away from them. Even at that, the emphasis on change in the global environment puts knowledge management at the heart of what universities need to do to cope with today's fast changing environment (Akuegwu & Nwi-ue, 2015; Ichijo K, Nonaka I., 2006).

Eromosele (2019) investigated ICT skills as determinants of utilization of Institutional Repositories (IRs) in a university environment. The study revealed higher usage IRs among university lecturers that possess adequate ICT skills. The reverse is the case where ICT skills are low. Okiki and Mabawonku (2013) on information literacy skills of academic staff in Nigerian federal universities revealed high information literacy skills in academics of Nigerian federal universities but the study did not link it to knowledge management practices.

Head of departments was effective in their applications of knowledge sharing and knowledge capturing but were not effective in their applications of knowledge mapping and knowledge storing aspects of knowledge management skills in university administration. This was the output of the study on knowledge management as a consideration of information, culture, skills, and technology (Akuegwu & Nwi-ue, 2015). The study further found that gender does not significantly influence HODs' application of knowledge management skills in university administration.

Onuoha et al. (2019) examined the effects of ICT skills on knowledge sharing by Library and Information Science (LIS) educators at the Michael Okpara University of Agriculture, Umudike, Nigeria. The study revealed possession of some ICT skills such as social media utilization skills, and web navigation skills, among others, which were gained through personal reading/research and attending seminars/conferences, among other sources. Adoption of lectures, use of meetings, delivering/presentation of papers at conferences is the top-most pattern adopted by LIS educators for knowledge sharing.

Udo-Anyanwu and Emmanuel (2019) examined the Acquisition of ICT skills by LIS educators for effective knowledge sharing in universities in the Imo and Rivers States. The study revealed that tacit and explicit

knowledge are usually shared in the study area with computers, and the internet among others being the common resources needed for the acquisition of ICT skills such as word processing, and networking. The study further highlighted that on-the-job training and, conferences/workshops are some ways of acquiring ICT skills.

According to the study of Wibowoa, et al. (2020), hard skills, soft skills, organizational learning, and innovation capabilities have a positive and significant direct effect on lecturer performance of which soft skills have the greatest influence. Bakare, et al. (2021) studied the Constraints and performance gap analysis of lecturers in utilizing smart boards for improving students' engagement, motivation and learning outcomes. The study found a lack of skills and competencies in setting up, operating and solving technical problems arising from Utilizing smart boards for teaching technical education courses. They believed that packaging the identified skills and competence into training programs through workshops, seminars and short-term training in tertiary institutions will help to ameliorate this challenge.

3. Methodology

The study adopted a survey research design. The population of the study consisted of 5720 academic staff in the 4 selected Federal Universities in Southwest Nigeria. A stratified sampling technique was employed with a sample size of 884 academic staff in the study area. The instrument for data collection during the study was a questionnaire. The instrument was subjected to face validation by experts in measurement and evaluation. The reliability of the instrument was established through Cronbach's Alpha coefficient with the aid of Statistical Package for Social Science (SPSS) version 25. The coefficients obtained were 0.72 for knowledge sharing, and 0.82 for knowledge capturing, 0.88 for knowledge mapping, and 0.90 for knowledge storing. These figures confirmed that the instrument was reliable for use in achieving the research objectives since Hinton, Brownlow & McMurray (2004) suggested that a value within 0.70 - 0.90 is reliable. The instrument was administered by the researcher and assistants to the respondents in their various institutions. Copies of the questionnaire were filled out and returned on the spot. All the copies of the instrument were retrieved and found valid for analysis. Thus, a 100 percent return rate was achieved. Descriptive statistics (mean and standard deviation) and Structural Equation Modeling were used to analyze the data collected. Summaries of results were presented in tables, followed by interpretations. The structural equation model is represented below:

The effect of knowledge management practices (KMPs) on the skill acquisition of academic staff in selected Federal Universities in South-West, Nigeria.

cSKILL= $\alpha 0 + \alpha 1 baCreate + \alpha 2 BbShare + \alpha 3 BcStore + \alpha 4 BdApply + \alpha 5 BeDiscov + e$ ...(1)

where: cSKILL- Skll acquisition, $\alpha 0$ - constant term, $\alpha 1 \dots \alpha 5$ - Parameter coefficient, e - error term, baCreate - knowledge creation, BbShare - Knowledge sharing, BcStore -Knowledge storage, BdApply - knowledge application, BeDiscov - Knowledge discovery.

4. Results and Discussion of Findings

This section of the study presents the outcome of the survey which provides information on the characteristics and objectives of the study. Therefore, this section contains the characteristics of the respondents, and the results of the objective of the study are presented accordingly.

4.1. Characteristics of Respondents

This section of the study revealed that the population is one way or another balanced as the male recorded 470 (53.2 percent) and females recorded 414(46.8 percent). This is an implication that there is no gender bias associated with the study.

The observation on the age distribution of the respondents indicated that the majority were within the age of 41-45 years which represents 340 out of 884 (representing 38.5 percent) this was followed by 36-40 age distribution with 177   (20.0 Percent) representing the age distribution of 46 and above were closely followed with 163 (18.4 percent) academic staff which were also followed by 25. Table 1 revealed 31-35 years as the last age distribution in the sample with 89(10.1%) academic representatives. This implies that the majority of the academic staff were either within or above the middle-aged category, as a result, they were able to understand issues of Knowledge Management Practices and the Performance of academic staff, which is suitable for this research.

Also, the study recorded that the population for the study recorded more of 6-10 years of working experience with 309(35.0%) academic staff. This was followed by 11-15 years and 1-5years of working experience with 221(25%) and 216(24.4%), respectively. On the years of working experience, 16 - 20 years were recorded to have fewer representatives with 138 representing 15.6%. This implies that the respondents

are quite experienced field of academics and be able to relate to the subject under investigation. Lastly, table 1 revealed the Educational qualifications of the study's respondents. The table showed that there were 566 (64.0%) academic staff with Ph.D. in the sample, followed by Masters of Science/Masters of Technology with 189 (21.4%), and the first-degree staff occupied the last position with 129 representatives 14.6%. These compositions reinforce the authenticity of the results and information provided in the study as a larger proportion of the sample have a Ph.D. as their highest qualification. This might be an implication that they are well informed, and possessed the ability to assess and process information towards making a decision in line with the concepts of this study.

Table 1. Characteristics of the respondents

Items		Frequency	Percentage (%)
Sex	Male	470	53.2
	Female	414	46.8
	Total	**884**	**100**
Age	25-30	115	13.0
	31-35	89	10.1
	36-40	177	20.0
	41-45	340	38.5
	46 above	163	18.4
	Total	**884**	**100**
Years of work experience	1-5years	216	24.4
	6-10years	309	35.0
	11-15years	221	25.0
	16-20years	138	15.6
	Total	**884**	**100.0**
Educational Qualification	B.Sc/B.Tech	129	14.6
	M.Sc/M.Tech	189	21.4
	PhD	566	64.0
	Total	**884**	**100**

Source: Researcher's Field Survey (2023)

4.2. Analysis of Knowledge Management Practice (KMPs) and Skill Acquisition Among Academic Staff in the Area

The section provides information for the study, which is the effect of KMPs on the skill acquisition of the academic staff. Two constructs are involved in the model, first is the KMPs with five (5) sub-constructs namely: knowledge creation, sharing, storage, application, and discovery. Secondly, the endogenous construct is skill acquisition with five indicators. The representation of the result for the objective follows the order of descriptive analysis for each of the sub-constructs of KMPs and skill acquisition and thereafter, the representation of the partial least square structural equation modeling (PLS-SEM).

4.2.1. Distribution of KMPs and Skill Acquisition Among Academic Staff

The frequency distribution for the knowledge creation with five (5) indicators in Table 2 showed that BA1 to BA5 recorded the highest frequencies ie agreement of all the knowledge creation indicators with BA3 (my institution pays attention to provisions experiences in several processes to generate new knowledge) recording 511 out of 884. This is an implication that most institutions would pay attention to previous experiences in several processes in order to generate new knowledge. This is in line with the study of Baath (2014) who opined that high-performing organisations learn how to develop strategies more effectively by learning from previous strategy development.

The differences in the trend provided in the frequency of knowledge creation were observed BS4 and BA5 where neither agreed nor disagreed were found to have a higher frequency than the strongly agreed. Table 3 presented the ranking of the mean found in Table 2. For knowledge creation, table 3 showed that BA1 recorded the best average of 4.055 with the first position and the last position for the sub-construct is the BA5 with a mean of 3.729. This implies that most institution creates knowledge through training, seminar, and conferences but are rather weak to monitor the knowledge that is generated through these means.

The descriptive results of knowledge sharing appeared in Table 2 and Table 3. This sub-construct also shared similar distribution as knowledge creation in terms of agreement of the indicators under it. Indicator, BB6 (my institution facilitates communication between employees, experts and specialists) has the most agreement with its statement with 537 respondents. Juxtaposing the results in Table 2 with that of Table 3, showed that for local ranking (ranking within the indicators of the same sub-construct) BB5 " my

institution seeks to implant that culture of knowledge sharing among its employees" is the highest ranked in the indicator while the least ranked is BB3 (the institution has policies and program that would share knowledge between its various departments). This is an implication that Universities which seek to implant a culture of knowledge sharing among their academic staff bit policies and programmes that should facilitate the knowledge sharing at various departmental levels are rather weak.

The third sub-construct under the knowledge management practices is knowledge storage with five(5) indicators similar to other KMPs discussed earlier, knowledge storage has the majority of the counts were in favour of the agreement option with BC1 (my institution flexible tools to store available knowledge) having the most agreed counts of 558 of total available 884 (table 1). On table 3 the averages were ranked, BC3 (my institution keeps records and documents of stored data) ranked first with a mean of 4.023, whereas, BC1 was the least ranked with an average of 3.790. The implication of the results is that the surveyed institutions actually keep records of academics in a depository like the university's libraries. There are few universities with both departmental, and school or faculty libraries which serve as a place of storage. It is also interesting to note that most institutions have set-up the intellectual property rights offices within the campuses to harness the potential of inventions among the university's scholars. The analysis further involved the knowledge application in the universities. It was gathered that the majority of respondents also agreed mostly to all five (5) items considered under the application as shown in table 2. The local ranking in table 3 showed that BD2 (my institution provides tools necessary to apply the knowledge in the best possible way) tops the list of the indicators under knowledge application with an average score of 3.867. The least ranked item was BD3 (my institution allows specialists and experienced persons to integrate their available knowledge into the institution) with an average score of 3.680. The logic becomes interesting as institutions provide the necessary tools to apply knowledge but failed to give room for specialists and experienced persons to integrate their knowledge. The researcher's personal interactions with academic staff provided more insight into this notion, as majorities believed that younger researchers who had obtained international exposure or improved skills are not given the opportunity to lead research but seniority in the cadre is more disposed to champion such/academic engagement. Finally, on the KMPs is the knowledge discovery, which also has five (5) indicators attached. The distribution of the frequencies was also skewed towards the agreed or disagreed and strongly agreed options as reported in table 2. Based on the local ranking BE1 (Employees are aware of the institution) was ranked highest with an average value

of 3.928, whereas, BE3 (there are processes for generating new knowledge from the existing ones) was the lowest ranked indicator with an average score of 3.795. This suggests that an academic staff agreed with the discovery to the overall success of the institution, however, the processes for generating such new knowledge from existing ones were not adequately available.

Table 4 presented the response characteristics of skill acquisition, which was the endogenous construct with five (5) indicators. Table 4 revealed a particular trend where the agreed option was observed to be highest among items labeled C1 to C4. But item C5 (my skill acquisition has improved my knowledge base) showed that the highest count was with a strongly agree option. Interestingly, C5 was ranked first among the five (5) items with an average score of 4.363, followed by C2 (I took extra program to develop my computing skills) with 4.281 average scores. At a near distance was C3 (I have the responsibility to develop the skill of my students) with an average score of 4.117. The item code C4 (my institution has a skill development mechanism that helped me) is next after C3 with a mean score of 3.956 which is ranked fourth. The least item was "C1" (my institution supports me to acquire new skills) with an average score of 3.691. This implies that most universities do not provide support for the development of their academic staff which has the capacity to improve the knowledge base of their staff.

Cumulatively knowledge creation ranked first followed by knowledge storage, knowledge discovery, and knowledge sharing and knowledge application as shown by their mean values (3.894, 3.891, 3.855, 3.827 and 3.743 respectively). This implies that the surveyed institutions are committed and give priority to the creation, storage, discovery sharing, and application of new knowledge among their academic staff, in that order. This result shows a distinction from the study of Hussin and Mohkta (2018) who in their study of Knowledge management practices and employee's performance showed that knowledge creation ranked the least among all other measures of knowledge management practices.

Table 2. Response characteristics of knowledge management practices

Knowledge Creation	SD	DA	NAD	AG	SA	TOT	MEAN	STD
BA1	13	72	84	399	316	884	4.055	0.953
BA2	9	26	151	450	248	884	4.020	0.813
BA3	2	65	122	511	184	884	3.916	0.809
BA4	4	70	213	455	142	884	3.748	0.834
BA5	4	83	148	563	86	884	3.729	0.780
Knowledge Sharing	**SD**	**DA**	**NAD**	**AG**	**SA**	**TOT**	**MEAN**	**STD**
BB1	4	43	188	454	195	884	3.897	0.812
BB2	7	50	213	420	194	884	3.842	0.857
BB3	9	99	146	511	119	884	3.715	0.871
BB4	11	106	161	422	184	884	3.749	0.959
BB5	10	87	112	422	253	884	3.929	0.951
BB6	13	76	109	537	149	884	3.829	0.860
Knowledge Storage	**SD**	**DA**	**NAD**	**AG**	**SA**	**TOT**	**MEAN**	**STD**
BC1	8	60	150	558	108	884	3.790	0.775
BC2	4	40	208	442	190	884	3.876	0.811
BC3	5	51	130	431	267	884	4.023	0.855
BC4	5	59	181	456	183	884	3.852	0.842
BC5	4	42	165	486	187	884	3.916	0.789
Knowledge Application	**SD**	**DA**	**NAD**	**AG**	**SA**	**TOT**	**MEAN**	**STD**
BD1	6	83	191	438	166	884	3.764	0.886
BD2	3	60	232	346	243	884	3.867	0.907
BD3	9	80	254	383	158	884	3.680	0.905
BD4	4	89	217	443	131	884	3.688	0.861
BD5	22	91	181	410	180	884	3.718	0.983
Knowledge Discovery	**SD**	**DA**	**NAD**	**AG**	**SA**	**TOT**	**MEAN**	**STD**
BE1	2	43	151	509	179	884	3.928	0.764
BE2	12	70	109	500	193	884	3.896	0.878
BE3	2	77	205	416	184	884	3.795	0.876
BE4	7	58	194	429	196	884	3.847	0.867
BE5	48	75	137	364	260	884	3.807	1.114

Note: SD-Strongly Disagree; DA-Disagree; NAD-Neither Agree nor Disagree; Ag-Agree; SA- Strongly Agree
Source: Researcher's Field Survey, (2023)

Table 3. Ranking of knowledge management practices

Code	Description	Local Ranking	Global Ranking	Sub-Construct Ranking
	Knowledge Creation (Mean= 3.894, STD= 0.850)			1st
BA1	My institution ensures the creation of knowledge through training, seminar, and conference.	1	1	
BA2	My institution motivates employees to innovate in order to produce new knowledge	2	3	
BA3	My institution pays attention to previous experiences in several processes to generate new knowledge	3	6	
BA4	My institution provides different mechanisms and ways to give employees the opportunity to acquire new knowledge	4	21	
BA5	My institution makes sure to monitor the knowledge that is generated	5	22	
	Knowledge Sharing (Mean= 3.827, STD= 0.889)			4th
BB1	My institution organises workshops and activities of importance in exchanging implicit knowledge among its members	2	8	
BB2	My institution invests modern technological means in transferring knowledge among its employees	3	14	
BB3	The institution has policies and programmes that would share knowledge between its various departments	6	24	
BB4	My institution provides various publications and documents to periodically disseminate knowledge to employees	5	20	
BB5	My institution seeks to implant a culture of knowledge sharing among its employees	1	4	
BB6	My institution facilitates communication between employees and between experts and specialist	4	15	
	Knowledge Storage (Mean= 3.891, STD= 0.818)			2nd
BC1	My institution has flexible tools to store available knowledge	5	18	
BC2	My institution keeps detailed remarks concerning the available knowledge in a way that makes it easy to use	3	10	
BC3	My institution keeps records and documents to store data	1	2	
BC4	My institution invests in modern technological means for storing knowledge	4	12	
BC5	My institution document opinions provided by different parties for future use	2	7	
	Knowledge Application (Mean= 3.743, STD= 0.911)			5th
BD1	Relevant knowledge is provided to employees when needed.	2	19	
BD2	My institution provides the tools necessary to apply the knowledge in the best possible way	1	11	
BD3	My institution allows specialists and experienced persons to integrate their available knowledge in the production	5	26	
BD4	My institution tracks the actual application of knowledge to determine the performance level.	4	25	
BD5	My institution provides the appropriate environment for her employees to exchange feedback on knowledge added to them	3	23	

	Knowledge Discovery (Mean= 3.855, STD= 0.908)			3rd
BE1	Employees are aware of the importance of knowledge discovery to the overall success of the institution	1	5	
BE2	Members of staff are encouraged to conduct novel research	2	9	
BE3	There are processes for generating new knowledge from the existing ones	5	17	
BE4	Employees are encouraged to identify and interpret new findings applicable to the work environment	3	13	
BE5	There is a conducive environment for discovering new ideas	4	16	

Source: Researcher's Field Report, (2023)

Table 4. Response characteristics of skill acquisition

Code	Description	SD	DA	NAD	AG	SA	MEAN	STD	Rank
	Skill Acquisition (Mean= 4.081, STD= 0.896, N= 884)								
C1	My organisation supports me to acquire new skills.	57	68	173	379	207	3.691	1.106	5th
C2	I took extra programmes to develop my computing skills.	0	19	92	395	378	4.281	0.735	2nd
C3	I have the responsibility to develop the skill of my students.	3	23	147	406	305	4.117	0.796	3rd
C4	My institution has a skill development mechanism that helped me	6	58	163	399	258	3.956	0.894	4th
C5	My Skill acquisition as improved my knowledge base.	2	8	96	339	439	4.363	0.728	1st

Source: Researcher's Field Survey, (2023)

4.2.2. Structural Model for KMPs and Skill Acquisition Among Academic Staff in Federal Universities

The evaluation of the structural model in partial least squares structural equation modeling (PLS-SEM) includes the significance of the path coefficient, the coefficient of determination, and the effect size (Hair et al., 2017).

Juxtaposing Table 5, Figure 1 and Figure 2, the study revealed that a path of coefficient of 0.461 was significant at 0.01. Figure 2 showed the bootstrapping of indicators and sub-constructs T – values as well as the coefficient of determination, (R squared) of 0.212. This translate to the independent variable, KMPs

predicting 21.2 percent of variances in the construct skill acquisition. According to Cohen in Tehnseen et al. (2019), suggested that R – square values 0.26, 0.13 and 0.02 should be considered as substantial, moderate, and weak, respectively.

Therefore, the R–square value is denoted as being moderate. Also, the effect size value of 0.270 is considered a medium effect size based on the reported values of 0.02, 0.15 and 0.35 which are denoted as small, medium and significant effect sizes (Tehseen et al. 2019). Above, the study has established a statistically significant and positive relationship between academic knowledge management practices and skill acquisition in the higher institution in South West, Nigeria. It implies that a unit increase in knowledge management practices improves the skill acquisition of academics by 46.1 percent. The model is adjudged moderate with medium size effect.

Hence, the null hypothesis (H01) which states that there is no significant relationship between Knowledge Management Practice (KMPs) and skill acquisition of academic staff of Federal Universities in South-West, Nigeria is hereby rejected. Therefore, accepted the alternate hypothesis (HA1) which states that there is a positive and significant relationship between Knowledge Management Practice (KMPs) and skill acquisition of academic staff of Federal Universities in South-West, Nigeria

This result is consistent with findings from Sabokrol et al., (2018) who investigated knowledge management's effect on managers' skills improvement and found that knowledge management has a positive and significant effect on human, operational and perceptual skills. The study further conformed to the findings of Brand, Novak, Reed, and Tortolero (2020) who examined the effects of Knowledge management variables, feedback accuracy and timing on skill acquisition and found both variables have a positive and significant effect on skill acquisition, with feedback accuracy having a greater effect.

This study's results provide support for other previous scholars' findings that established the relationship between knowledge management practices and skill acquisition in the field of academics. For instance, Matar and Raudeliuniene (2021) investigated the role of knowledge acquisition in enhancing Knowledge management processes, the findings confirmed the knowledge acquisition process's leading role with the highest impact on knowledge creation and provided valuable insights for scientists in the knowledge acquisition field. Gaines (2013) stressed that knowledge acquisition, with its technological tools, has facilitated the creation, utilization, and access of knowledge in a way that has never been known in this

millennia. Abker et al. (2019) emphasized that knowledge acquisition is crucial for new knowledge application as it permits replacing the existing content of the explicit and implicit knowledge possessed by the organisation. Bloodgood (2019) stressed that organisations should assess knowledge acquisition to attain the necessary knowledge critical for their work processes and not increase their knowledge application costs caused by the uncritical knowledge acquired. Jayashri and Kalaiselvi (2018) found that altering the Principle, techniques, and tools, created for knowledge acquisition, strengthens scholarly foundations with knowledge management. Jayashri and Kalaiselvi (2018). In general, imbibing the practice of knowledge management would improve organizational support for skill acquisition among academic staff.

Table 5. Structural model for KMPs and skills acquisition

Path	Beta	T Statistics (|O/STDEV|)	P Values	2.5%	97.5%	f Square	R Square
bKMPs -> cSKILL	0.461	14.589	**0.000**	0.398	0.524	0.270	0.212

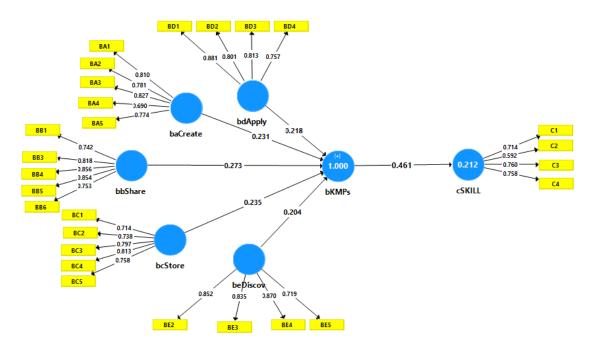**Source:** Researcher's Field Survey, (2023)

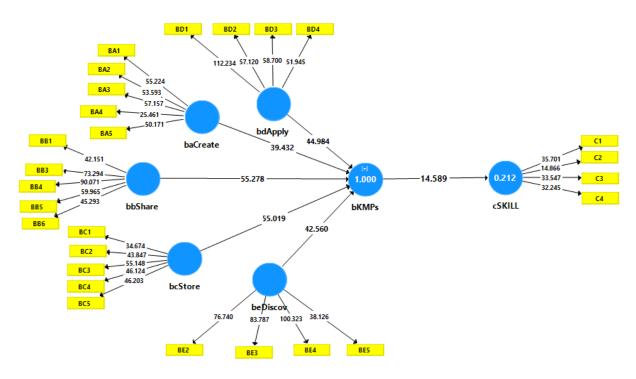**Figure 1.** Algorithm of KMPs and skill acquisition

Figure 2. Bootstrapping of KMPs and skill acquisition

5. Conclusion

The study has established empirically the relationship between knowledge management practices, skill acquisition, digital technology and the Performance of Academic Staff of Federal Universities in South-West Nigeria. This research has raised awareness of the dimensions of KMPs and the factors which are likely to determine the performance of academic staff in an unnatural environment with the support of the Resource-based View, Human Capital Theory, Sustainable capacity development model, and Learning organisation theory. These theories provided the vital theoretical foundation on the subject of the study by relating the study theme with study variables. This study first assessed the effect of KMPs on skill acquisition in the study area by determining the relationship among KMPs constructs (Knowledge creation, Knowledge sharing knowledge storage, knowledge application, and knowledge application) and their indicators with skill acquisition indicators. From regression analysis of the research objectives the indicators for the effect of KMPs on skill acquisition in the study area, revealed a significant and positive

relationship between academic knowledge management practices and skill acquisition in the higher institution in the study area, as shown in their path coefficient (β =0.461, t = 14.589, P < 0.05). Based on the result, it can be concluded that KMPs are strong predictors of skill acquisition in the study area as a path of coefficient of 0.461 was significant at 0.01 significance which implies that a unit increase in the knowledge management practices improves the skill acquisition of the academics by 46.1 percent.

6. Recommendations

The findings of this study have important policy implications on the Performance of Academic Staff of Federal Universities in South-West Nigeria. Based on the findings of the research, the following recommendations are made: As institutions create knowledge through training, seminars, and conferences, they should ensure adequate monitoring of the knowledge generated through these means, University should endeavor to improve its knowledge management practices to improve the skill acquisition among its academic staff, University management should put in place strategies to maintain and improve the digital skills and competence of the academic members and They should provide support for the development of their academic staff through training which can improve their staff's knowledge base.

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