

*Original Research*

## **Teachers' Awareness of Knowledge Management and Knowledge Sharing behaviour in Secondary Schools-Nigeria**

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### **Abstract**

The study investigated teachers' awareness of knowledge management and knowledge sharing behaviour in secondary schools-Nigeria. Three objectives/purposes guided the study and the hypothesis was tested at significance level of 0.05. Descriptive survey research design was adopted for the study. The population comprised 283 teachers. The sample of the study was the 283 though 244 returned copies were fit for analysis. One formulated hypothesis was tested with t-test statistical technique. The collected data were analyzed with the use of SPSS version 23. The major findings of the study include; the level of awareness of knowledge management by experienced and less experienced teachers in Isoko South Local Government Area of Delta State was high. Knowledge sharing behavior of both experienced and less experienced teachers was positive and commendable; Among the implication of the study is the fact that government at all levels will be adequately informed why there is need to provide a conducive environment for teachers to thrive in the area of knowledge management. It was recommended that all categories of teachers' trainers should ensure that the concept of knowledge management is captured in teachers' curriculum. Equally, school authorities should have an open door policy that will boost the level of knowledge sharing behaviour and management among secondary school teachers.

**Keywords:** knowledge, knowledge management, knowledge sharing, knowledge sharing behavior, secondary school, teachers, Nigeria.

### **Introduction**

It is on record that premium is usually placed on knowledge in the 21<sup>st</sup> century and there is now what is called a knowledge economy where knowledge is seen as a corner stone of the society. In a knowledge economy, significant part of an organization's value consists of intangible assets, such as the value of its workers' knowledge (intellectual capital). The importance of knowledge in schools and businesses should always be recognized. Unfortunately organizations before now do not give credence to this lofty concept. This is because they neither understand the problems and opportunities nor the strategies and solution.

The picture is gradually changing as models, methods, tools and techniques for effective knowledge management are becoming available; and as organizations realize the importance of knowledge, it therefore becomes necessary to adopt it in order to adapt to the changing world (Igbeka, 2008).

In an attempt to explain knowledge, Mutuala & Mooko (2008) referred to knowledge as information that is relevant, actionable and based at least partially on experience. Knowledge is a product of information put into use. This therefore means that it is an advanced state or level of information sequel to this; knowledge is better or more regarded than information. Owing to this fact, Robert & Davis (2019) provided quite a comprehensive definition of knowledge which is derived from information but it is richer and more meaningful than information. It includes familiarity, awareness and understanding gained through experience or study, and results from making comparisons, identifying consequences and making decisions. Knowledge can be divided into two types, namely explicit and tacit knowledge. Explicit knowledge is used to mean codified and formalized knowledge; it is seen as 'know what', it is easily seen, read and understood, this type of knowledge is easily gathered and managed. While explaining the typology of knowledge, Uriarte (2008) opined that explicit knowledge comprises anything that can be codified, documented and archived. These include knowledge assets such as reports, memos, business plans, drawings, patents, trademarks, customer lists and methodology. These epitomize a synthesis of organization's experience kept in form that can readily be accessed by interested parties and replicated if desired. Explicit knowledge is regarded as that knowledge that can be readily articulated, accessed and verbalized. It can be easily transmitted to others, most forms of explicit knowledge can be stored in certain media like encyclopedias and textbooks. Simply put, explicit knowledge is recorded and well documented information that helps in taking action, and also expressed in a formal language (Dhamdhare, 2015)

Tacit knowledge is known to be intuitive and hard- to- define knowledge that is largely experience based, because of this, tacit knowledge is often context dependent and embedded in its nature. Sometimes, it is hard to manage and often rooted in action, commitment and involvement. Tacit knowledge is simply a person's ideas, conceptual understanding, expertise, skills, and valued intention among others. It is inherent in the heart or brain. Tacit knowledge is one of the major types of knowledge and if knowledge must be fully generated and utilized, its management ought to be given credence. Explicit and tacit knowledge go concurrently and simultaneously, since explicit knowledge deals on externalized or codified knowledge, one needs the tacit knowledge to be able to comprehend the explicit one. Explicit and tacit knowledge play very vital role in managing organizations effectively. In order to give room for explicit and tacit knowledge and its easy access in any organization, the term knowledge management must therefore come to one's mind as this will make institutions and organizations alike to have a knowledge base or store house. Knowledge Management (KM) though defined differently by different authors according to their standpoints, all refer to a deliberate act to collect, store, retrieve and share both tacit and explicit knowledge in an organization.

The origin of KM can be traced to about twenty years ago. According to Wee & Chua (2015), knowledge management is referred to as tools, techniques and strategies to retain, analyze, organize, improve and share business expertise. KM constitutes a technology for information capturing, optimizing, delivering and maintaining information that are of value to the organization (Roknuzzaman, 2012). The essence of managing knowledge is to ensure that

the organization, firm or institution as the case may be, is acceptably above board in meeting the needs of its primary patrons and at the same time achieving institutional goals/objectives. In line with this, Omotayo (2015) defined knowledge management as the various actions taken by both employers and employees to encourage knowledge flow within an organization for effective realization of results. It is always advisable to ensure that information and expertise within an organization is effectively and efficiently utilized. In bringing this to fruition in order to realize institutional objectives, the term knowledge management must be given its proper position.

To this end, Uriarte (2008) defined the concept of knowledge management as a broad process of locating, organizing, transferring and using the information and expertise within an organization and institution of learning. To others, KM is seen as a discipline on its own that is targeted at improving the performance of individuals, organizations and in the long run, adding value to whatever job done. KM promotes innovations and also increases productivity and competence. Yaghoubi, Khaksar, Banihashemi, & Jahanshahi (2011) stated that knowledge management is a process that helps identify, select, organize, disseminate and transfer important information and expertise that are part of the organization's memory and that typically resides within the organization in a hasty manner. They went further to state that through a supportive organizational climate and modern information technology, an organization can bring its entire organizational memory and knowledge to bear upon any problem anywhere in the world and at any time. To the researcher, knowledge management also is the collection, exploitation, development and manipulation of the available knowledge assets of a teaching/learning institution with the intention or intent of furthering or advancing knowledge for better performance. Bontis & Choo (2002) stated that knowledge may be accessed at three stages: before, during or after knowledge management related activities. Snowden (2002) listed some strategies and instruments for managing knowledge which are knowledge sharing, storytelling, cross project learning, after-action reviews, knowledge mapping, expert systems, best practice transfer, knowledge fairs, master apprentice relationship, knowledge repositories, knowledge brokers, inter-project knowledge transfer.

The management of knowledge cannot be effectively discussed if its awareness is not given credence. Organizations ought to know/ be aware of knowledge management practice. This will lead to proper utilization and application. Awareness is seen as the ability to know that a particular thing exists; it is one thing to be aware of something and another to apply that which one is aware of. According to Turnbull (2010), awareness is to directly know and perceive, to feel, or to be conscious of events, objects, thoughts, emotions, or sensory patterns. At the level of awareness, sense data can be confirmed by any observer without necessarily appreciating or understanding it. Furthermore, it is the state or process of being aware of something. Awareness of events in academics is not only key but a necessity if success is to be achieved. The awareness and management of both tacit and explicit knowledge in our post –primary schools cannot be overemphasized. Awareness of a given technology or means of doing things better is very important, when a particular concept is in vogue (for instance, knowledge management) and its understanding is not in sight, its usefulness will be difficult to embrace.

While one would suppose that educational organizations are relatively knowledge intense organizations, there has been little awareness of knowledge management as a means for improving organizational practice, programme implementation and teaching and learning within education, furthermore, there is little/low awareness within education of the potential of

scaling-up the opportunities to create more systematic and systemic system for codifying and cataloguing knowledge outcomes in secondary schools, this is according to the observation of the researcher. A teacher otherwise referred to as an educator is simply that person who provides formal teaching or education to pupils or students as the case may be. It could be at the primary, secondary or tertiary levels of education. Sometimes a teacher may pass through some required standards in order to be professionally qualified for the job. Yusuf, Ikorok, Ekpu & Ogunjimi (2010), defined a teacher in a more professional term as a person trained or recognized and employed to facilitate teaching and learning in classroom situation in order to achieve set goals.

The duty of a teacher is basically formal and on continuous platform, carried out at a school or other places of formal education. Harden and Crosby in Aiyebelehin (2012), stated that the teacher performs basically six tasks which are: information provision, role modeling, facilitating learning, assessing student's performance, planning academic activities and resource development. These he said are central in achieving the objective of secondary education in any country. A teacher is ideally expected to be vast. This is to enable him to discharge his functions more effectively and creditably. This could be threatened if knowledge management is not given attention most especially at the secondary school tier of education. There are experienced and less experienced teachers in secondary schools today. The definition of experienced teacher seems to hinge principally on the number of years taught, time related can range from 3 years to 10 years or more (Atay, 2008; Bastick, 2002). Atay (2008) further stated that experienced teachers manage their classrooms more effectively than less experienced teachers. Knowledge management helps educational institutes to improve their capacity of gathering and sharing information and knowledge and apply these to problem solving and support the research, teaching and continual improvement of their work. KM of the educational system must reflect and comprise information at all levels starting from management level to student level in order to improve professional knowledge of employees to achieve the quality of teachers and students. Knowledge management gives most effective medium to transfer efficient methods, models, ideas and practices, the exchange of information and knowledge in network like mutual newsletters, meetings, conferences, seminars and symposiums can serve as an instrument for knowledge management and good practice (Dhamdhare, 2015). Knowledge identification, acquisition and management start from the schools. Therefore, effective KM practice, awareness and knowledge sharing can go a long way in repositioning the 21<sup>st</sup> century secondary schools, thereby making secondary school teachers and students not just to be academically sound but also to be ready to provide solutions to disturbing issues. This by extension is to improve and encourage competitive performance. The study therefore focuses on teachers' awareness of knowledge management and knowledge sharing behaviour in secondary schools- Nigeria.

### **Problem Statement**

Knowledge management and knowledge sharing makes it possible and easy to timely locate and utilize information. Many cooperate organizations have seriously taken advantage of the KM and knowledge sharing concepts. Gustafson (2018) noted that knowledge has a way redefining societies and organizations. He stated that human organizations and societies depends fully on it in order to thrive. Being reservoirs of knowledge, schools are supposed to be active in projecting or popularizing knowledge sharing for effective results to be achieved. Little wonder that Eftekhari & Shakeryari (2018) hinted that knowledge as it stands today

remains a competitive resource in dynamic societies and organizations as it builds and develops nations all over the globe. Despite the benefits of knowledge sharing, there appears to be little or nothing done to fully adopt KM and knowledge sharing in Nigerian secondary schools. This is sequel to personal observations and discussions with some teachers at the secondary school level which indicate that reasonable number of teachers are not familiar with the concept of knowledge management, and they barely share their knowledge with their colleagues. This is very appalling as there are different types of knowledge, which need to be managed and shared in secondary schools for instance, knowledge for effective service delivery by teachers, information about students' performance and so on. Knowledge management is not supposed to be jettisoned at the secondary school level as this has a way of intellectually contributing to the students' knowledge base via their teachers thereby developing them at a younger age. This work therefore sought to determine teachers' awareness of knowledge management and knowledge sharing behaviour in secondary schools-Nigeria

### **Purpose of the Study**

The main purpose of this study was to determine the level of awareness and application of knowledge management by secondary school teachers in Isoko South Local Government Area of Delta State. The study specifically sought to determine the following:

1. Level of awareness of knowledge management by experienced and less experienced teachers in public secondary schools in Isoko-South LGA of Delta State.
2. The knowledge sharing behaviour of experienced and less experienced teachers in secondary schools in Isoko-South LGA of Delta State.
3. There is no significant difference in the knowledge sharing behavior by experienced and less experienced teachers in Isoko-South Local Government Area of Delta State.

### **Literature Review**

#### **Awareness**

In order to define awareness, one can only use another word such as consciousness. For instance, awareness means you are conscious of something. It is directly opposed to inertness, which means one is not inert. Block (2010) stated that the word awareness has traditionally been used synonymous with the term "consciousness" which has been called a "mongrel" concept owing to the variety of its definitions. Plank (2012) opined that awareness requires an intentional event that is added to the simple act of attending to an external object or event. Awareness involves the agent or actor whose cortical representation is activated when attention is directed to it. In the view of Adams (2010), awareness means knowledge and knowledge is seen as understanding of how everyday world is constituted and how it works. Awareness can also be seen as a state of ability to receive, know, to feel or to be conscious of events, objects or sensory pattern. The above definition therefore contains three keywords; which are events, objects and sensory pattern. Event means the focus of cognition or feelings and sensory pattern involving or derived from the sense in which a model is considered worthy of imitation when any events or technology come new. It is awareness that will help to bring its development and also its importance. Without the term awareness, so many things could go wrong leading to a state of ignorant society or dispensation. In connection with this, Gao, Chai & Liu (2018) averred that awareness means a common knowledge or understanding about a social, scientific or political issues. Individual as well as users need awareness in order to know things happening

around them. It is awareness that will keep somebody relevant in this world where information and knowledge are fast becoming prerequisite for every society. Having explained what awareness is, based on other people's ideas, the researcher summarily sees awareness as a state of not being an "ignoramus" but simply launching oneself into an environment of being knowledgeable.

### **Knowledge**

Knowledge has grown to be a major concept in the 21<sup>st</sup> century; it comprises strategy, practice, method or approach. It is a prerequisite for production and economic growth for individuals and national development. Nnadozie (2015) opined that knowledge can be correctly described as information that is relevant and contextual having evolved from experience gained over a period. Knowledge is a very important variable in any organization be it school, business or personal life which helps to reform and recreate the mind. Knowledge works with the human mind. hence, Gurteen (2020) explained that knowledge is more of fluid laced with values, contextual information, experience and expert insight that is capable of providing a framework for assessing new ideas and information. Knowledge as stated comes to be applied in "knowers'" minds. The term knowledge makes its possessor intellectually richer than before which by extension leads to individual and organizational transformation. The concept of knowledge is an exchangeable resource; this makes it an integral part of the social intellectual heritage. It is made up of ideas, skills and experiences all of which build up progressively overtime. Based on this classification, certain attributes of this concept (knowledge) becomes manifest. These characteristics include the fact that knowledge can be purposeful and useful, flexible, transferable, invisible yet portable and have economic value (Maponya, 2005).

Knowledge is now seen as prerequisite if productivity and economic growth must be realized. The term knowledge according to Caena (2011) is very significant because of its significant characteristics which are:

- I. It can be used often by different users without being consumed permanently.
- II. It can be used by many individuals at same time.
- III. It can be accessed at different locations concurrently

Knowledge is primarily of two types: explicit knowledge and tacit knowledge. Explicit knowledge is characterized by external appearances and can be expressed in the form of books, the web and speech. This type of knowledge is easy to store and circulate, through the use of technology. Another type of knowledge is tacit knowledge. This type of knowledge resides in the minds and behavior of individuals, the internal intuition and common sense. Also, this type of knowledge is hidden and often is based on experience and difficult to express through technology. Park, Vertinsky & Becerram, (2015), made clear distinction between explicit and tacit knowledge. They averred that explicit knowledge is written in documents electronically or manually, books, manuals, work or procedures, tapes, reports. It can be passed down from one generation to another, easy to share, easily expressed in different forms. On the part of tacit knowledge, the authors listed thus: Tacit knowledge is in the minds of individuals, it has to do with experiences, mental models, beliefs and skills, if this knowledge is not captured, then it will be forgotten, difficult to exchange and share, the knowledge cannot be easily expressed.

### **Knowledge Management (KM)**

The management of information and knowledge in any environment is not a rosy task. The manager/administrator should have a fair idea of the operations of the establishment and its corporate objectives. Gurteen (2020) opined that knowledge management in organizations is always domiciled in organizational practices and routines. In some processes of KM, it involves knowledge acquisition, creation, refinement, storage, transfer, sharing and utilization. The knowledge related aspects of an organization has to do with tacit and explicit forms. Organizational tacit knowledge includes employees' knowledge that is held by teams within the organization. The relevant explicit knowledge of the organization is usually conditioned and store in documents of various types, and in electronic repositories/databases for easy access. Knowledge management according to Omotayo (2015) is a deliberate organizational culture that involves collective commitment in order to achieve success while tapping all the intellectual resources. KM as it is, means organizing, assessing and sharing relevant information assets to members of organizations. On their own part, Moballeghi & Moghadam (2011) argued that knowledge management is the sharing of what we know with others. It is the name given to a set of systematic and disciplined actions that an organization can take to obtain the greatest value from the knowledge available to it. Knowledge management has a way of increasing productivity, hence, Mutula & Mooko (2008) pointed out that knowledge management is not managing or organizing books or journals, searching the Internet for clients or arranging circulation materials, but it is about enhancing organizational productivity through sound practices and organizational learning. On his part, Vincent (2008) identified two knowledge management processes: knowledge creation and knowledge sharing. Knowledge creation is the process by which organizations gather information and turn it into useful knowledge by analyzing the knowledge processes of an organization, and identifying areas that are most in need of attention. Knowledge sharing involves two basic mechanisms: codification which is the conversion of knowledge to a more explicit form- in documents, processes, databases.... so that it is available to everyone at any time; and personalization which the diffusion of knowledge around the organization through human interaction, or sharing directly through person-to-person contact as and when needed. With proper management of information and knowledge, success, innovation and creativity can be easily realized at the educational sector. KM according to El-farr & Hosseingholizadeh (2019) is the process of introducing a number of interrelated actions and steps that should be monitored and supported by effective leadership; this will no doubt lead to organizational success. Knowledge management is concerned with the systematic and effective management and utilization of an organization's knowledge resources and its associated processes of creation, organization, diffusion, use and exploitation.

While explaining KM, Chen & Huang (2012) defined as an act of bringing ideas and knowledge together for proper consolidation and effective access. From another standpoint, Chen & Huang (2012) see KM as a concept which every 21<sup>st</sup> century organization should adopt. In the researcher's opinion, knowledge management is a systematic process of propagating and managing knowledge in people's brains (tacit) and by extension already codified or externalized (explicit knowledge). Knowledge management is a critical factor if future organizations/enterprises must succeed. Primary, secondary and tertiary institutions will literally be left in the dark if knowledge management is not given cognizance. To the researcher, knowledge management simply means the art of organizing and harnessing the knowledge assets of an individual or organization with the sole aim of achieving set goals.

### **Awareness of Knowledge Management by Teachers**

Many people may think knowledge management is only applicable to enterprises. In fact, the inventor of knowledge management, For Cheng & Chu (2018) KM in schools is defined as deliberate attempt by school management or leaders to support and encourage teachers and students by acquiring information, encouraging members to use information, share information and periodically evaluating results. According to the authors, schools are the cradles of innovative knowledge and contain an abundant amount of intangible assets; hence it can only be more gratifying for teachers to be adequately aware of knowledge management. Knowledge management is very instrumental to the success of every organization most especially to an institution of learning. While one would suppose that educational institutions are relatively knowledge intense organizations, there has been little discussion of knowledge management as a strategy for improving organizational practice, programme implementation and teaching and learning within education. The effective application KM in schools according to Cheng & Chu (2018) is yet to become popular compared to other business and corporate organizations. This is in spite of many interventions for KM to be properly captured in schools in order to boost educational organizations.

Leung (2010) conducted a knowledge management study on schools in Hong Kong. He found that knowledge management not only provides a platform for teachers to discuss different ideas for teaching and to post resources for student learning, but also to retain the expertise of experienced teachers, increase their effectiveness in terms of teaching and learning performance, supports the development of a knowledge community in schools, and fosters the culture of learning. In conclusion, Leung states that there is high level of knowledge management awareness by Hong Kong teachers. Teachers are prime examples of knowledge workers, being that they have considerable personal discretion and responsibility in analyzing, developing, and implementing their curricular goals. A notable step for successful KM by schools is for teachers to be aware of the key factors that encourage knowledge creation, storage and sharing in schools (Nair & Munusami, 2019). Schools need to encourage capturing and consolidating knowledge through effective metaphors, analogies and models, to integrate and disseminate knowledge to people throughout the organization, and to present explicit knowledge as experience for vivid learning. Nair & Munusami (2019) noted that teachers have always been aware and involved in knowledge management. This the authors said KM is linked to the core functions of teachers which are research, education and society service. These functions are said to be related to knowledge generation and knowledge dissemination within a learning institution. Petrides & Nodine (2003) argue that teachers are barely aware of knowledge management despite its heartwarming benefits. They state that it is the most effective platform for target groups to access and exchange useful information across departments.

Therefore, knowledge management can be used to better manage knowledge for schools not only building up people network but by enriching knowledge in schools communities by process and technologies to improve school's competitive performance. In their opinion, Holsapple, Jones & Singh (2007) noted that there has been a phenomenal in the interest and activities in knowledge management, as seen in many new publications, conferences, IT products, and job advertisements. They further pointed out that knowledge management does not seem to have had much impact on secondary education sector so far, but there is some evidence of involvement. Mathew (2010) suggested that lack of KM awareness by teachers is

a major setback in the application of knowledge management in schools. The researcher conducted the study to find various application challenges in schools. The results are lack of awareness and learning about knowledge management, short of finance for the implementation of KM just to mention a few. Contrary to Mathew, Shaghaghi, Ghaebi & Ahmadi (2020) hinted that knowledge creation and knowledge awareness are key issues in the 21<sup>st</sup> century that must not be disregarded by any professional including the teachers who are also respected professionals. With the proper orientation, awareness and application of KM, the education institution will be able to provide better educational facilities, administrative services, and student retention, cost effective, data transfer and so on. Van de Bunt (2010) stated that the amount of information available in the world, in hundreds of languages, increases daily at an amazing rate. He therefore stated that everyone in the school (teachers, other staff, students, and the school information specialist) needs to be very aware and familiar with the concept of knowledge management; as this will enable them to identify reliable information and ensure its appropriate utilization.

### **Knowledge Sharing (KS) and Knowledge Sharing Behaviour of Teachers (KSB)**

Knowledge sharing according to Mohammadi & Boroumand (2016) is used to mean all kinds of activities and actions carried out to distribute information and ideas within an organization, including schools in order to realize organizational objectives. Sharing of knowledge is one of the most essential requirements in knowledge management. Generally speaking, sharing knowledge is about communicating knowledge within a group of people. The group may consist of members engaged in a formal institution, for instance, among teacher colleagues in a secondary school environment or informal, for example, among friends. The interaction may occur between a minimum of two individuals to a multiple of individuals. The underlying purpose is to utilize available knowledge to improve performance (Salisbury in Leung, 2010). Skyrme & Amildon (2003) identified some key characteristics of knowledge sharing culture which include top leadership support, availability of incentives and exploitation of knowledge assets; clearly defined tools and processes for managing knowledge, knowledge creation, sharing and use become a natural and recognized part of the organization's processes. Knowledge sharing (KS) is considered to be very effective if the organizational culture of managing knowledge is above board. To this end, Lin, Lee & Wang (2009), defined KS as a social interaction culture involving the exchange of employees' knowledge, experiences and skill throughout the whole department or organization. In any environment therefore, KS depends on social interaction among the staff as knowledge sharing is seen as the transferring of knowledge whether tacit or explicit knowledge from one person, or group to the other. Maponya (2005) opined that secondary school teachers need to prepare themselves for using and sharing knowledge. Through KS, schools can improve efficiency, promote innovations, reduce training cost and be competitive. It should be noted that, in order to determine the success of knowledge sharing in an organization, factors like the individuals themselves (willingness), technical (ICT) and organizational culture should be considered. Knowledge sharing is a set of behaviours that involves the exchange of information or assistance to others. Thus, in knowledge sharing, someone exchanges information or knowledge with others for various reasons. Sometimes, the receiver also gives out his/her own knowledge in return, thereby making it two-way traffic. Knowledge becomes useless when it is not shared; meanwhile it increases when it is often shared.

Knowledge sharing behaviour could be defined as a voluntary behaviour on the part of an individual to either allow or disallow other employees gain access to the wealth of knowledge or experience possessed (Hansel & Avital, 2005). This suggests that knowledge sharing behaviour should be the type that comes out of the willingness of the individual teacher to enjoy the maximum benefit it has to offer. KSB can also be perceived as a process of interaction by teachers in a given school through which ideas are exchanged that eventually give birth to new thoughts and processes of doing things in much better ways. Knowledge sharing is considered as one of the most important knowledge management processes in organizations (Alavi & Leidner, 2001; Bock, Zmud, Kim & Lee, 2005). As such mechanism should be introduced to encourage and motivate individuals and groups to improve knowledge sharing activities and behaviours in organizational settings. Organizations often attempt to motivate knowledge sharing behaviour (KSB) using extrinsic motivation such as monetary incentive. In most organizations, there is reluctance to share knowledge (Kai, Minhong & Yuen, 2011) and the organization becomes increasingly dependent on individual expertise. This dependence on individual expertise is often undesirable for the organization's overall performance as strategically the ability to share knowledge is required for problem solving and exploring opportunities (Zack, 1999). Both the monetary and non-monetary incentives are crucial to generate the passion towards knowledge sharing. Martins & Meyer (2012) noted that people either possess positive or negative attitude regarding sharing their knowledge. While some are liberal with their knowledge, others are reluctant to let their friends and colleagues to tap from their expertise. According to Martins & Meyer (2012), there is yet another group that does not share their knowledge at all because of previous ugly experiences. Despite the few ugly points highlighted above on knowledge sharing, a positive knowledge sharing behaviour remains an important goal in almost all types of organizations be it school, tertiary institution, banks etc. Recently, many organizations are encouraging the knowledge sharing behaviour among their employees in order to meet the organization's objective and goals. This is owing to the fact that virtually all organizations do/perform better after proper implementation of knowledge sharing behaviour. Some persons possess some learned behaviour accumulated from years of experience that either promote or hinder effective knowledge sharing. To this end, Bock & Kim (2002) outlined some reasons why people tend to share knowledge to include:

- 1) If he or she feels that by sharing knowledge, it will bring about increase in association with other members of the organization and
- 2) If the individual believes that the act of sharing would contribute towards the performance of the organization.

Another factor which encourages KS was found to be rewards, incentives and the level of IT usage in an organization (Davenport & Prusak, 1998). Dan & Sunneson (2012) listed some knowledge sharing behaviour to include but not limited to:

- i. Distributing knowledge to people around
- ii. Insincerity in sharing knowledge
- iii. Not bothered about sharing knowledge
- iv. Always happy while sharing knowledge
- v. Always greedy with friends
- Vi. Available for group discussion

Knowledge sharing behaviour is related to this research as it is also a subset of knowledge management itself, it facilitates the easy tapping of tacit knowledge which is the knowledge embedded in people's brains. KM involves the managing of both tacit and explicit knowledge in a particular school for example, while the management of explicit knowledge may be easy to realize, that of tacit knowledge could be hindered. To this end, positive knowledge sharing behaviour is very important in achieving holistic knowledge management practice.

### Materials and Methods

Descriptive survey design was adopted in this study. The descriptive survey design according to Nworgu (2015) refers to study which aim at collecting data on and describing in a systematic manner the characteristic features or facts about a given population. The study was conducted in Isoko South Local Government Area of Delta State, Nigeria. Isoko South is made up of twenty six (26) communities. The inhabitants of Isoko South of Delta State are predominantly farmers thus the area is referred to as agrarian society with a common Isoko language. The population for this study was 283 consisting of all categories of secondary school teachers in public schools across Isoko South Local Government Area, Delta State, Nigeria. Total enumeration sampling was used since the population is manageable. Therefore, the two hundred and eighty-three (283) teachers in the public secondary schools were involved in the study (that is census sampling method. The data collected were analyzed using arithmetic mean and standard deviation for all the research questions (descriptive statistics).

The research questions were calculated thus:

Very High Level (VHL)/Strongly Agree (SA)	3.50 - 4.00
High Level (HL)/Agree (A)	2.50-3.49
Low Level (LL)/Disagree (D)	1.50-2.49
Very Low Level (VLL)/Strongly Disagree (SD)	1.00-1.49

A higher value was indicated as positive response than a lower value. The mean of the points is 2.50 ( $(1+2+3+4) / 4 = 2.5$ ).

The hypothesis was tested at 0.05 level of significance using *t*-test statistical tool (inferential statistics). The decision rule for testing the hypotheses was based on the following: Accept Null Hypothesis ( $H_0$ ) if the *p*- value (2 tailed) is greater than the alpha value (0.05). Otherwise, do not accept Null Hypothesis ( $H_0$ ). Mean and standard deviation as well as *t*-test was computed for the study using SPSS version 23.0

### Results

This deals with the presentation, analysis and interpretation of data collected for the study. The data were collected and analyzed based on the research questions and hypotheses that guided this study. A total of 283 copies of the questionnaire were administered to respondents but only 244 copies of questionnaire were duly completed and returned. This indicates 83.22 % of response, and analysis was strictly based on this number.

#### Research Question 1

What is the level of awareness of knowledge management by experienced and less experienced teachers in secondary schools in Isoko-South L.G.A of Delta State?

Data used to answer this research question are analyzed and presented in Table 1.

Table 1

*The mean and standard deviation of the level of awareness of knowledge management by experienced and less experienced teachers in secondary schools (VHL - Very High Level; HL - High Level and LL - Low Level)*

Level of awareness of knowledge management by secondary school teachers. Knowledge management:	$\bar{X}$	SD	Remarks
deals with knowledge creation	3.51	.51	VHL
aims at circulating knowledge	3.49	.70	HL
deals with storage of knowledge	3.42	.62	HL
is a process through which organizations generate value from their knowledge based assets	3.37	.88	HL
equips teachers' with better skills to use information	3.34	.59	HL
encourages innovation	3.30	.78	HL
retains organizational knowledge for use	3.20	.77	HL
deliberately ignores organizational knowledge	2.06	.81	LL
discourages people from using knowledge	1.95	.69	LL
Grand Mean	3.07		High Level

The data in Table 1 show that, one out of the nine items indicated that respondents were aware of knowledge management to a very high level with a mean score of 3.51. Items 2, 3, 4, 5, 6 and 7 with mean scores ranging from 3.49 to 3.20 shows that respondents were aware of knowledge management to a high level and the remaining two items with mean scores of 2.06 and 1.95 indicated that respondents were aware of knowledge management to a low level. The grand mean score of 3.07 showed on the whole that, teachers were aware of knowledge management to a high level. The standard deviations for all the items are within 0.51 to 0.88. This shows that the respondents were not wide apart in their ratings.

## Research Question 2

What is the knowledge sharing behavior of both experienced and less experienced teachers in secondary schools in Isoko-South L.G.A of Delta State?

Data use to answer this research question are analyzed and presented in Table 2.

Table 2

*The mean and standard deviation of the knowledge sharing behaviour of both experienced and less experienced teachers in secondary schools*

As a teacher, I:	$\bar{X}$	SD	Remarks
Actively share knowledge with each other	3.50	.58	Agree
Usually participate in academic discussions that will benefit colleagues	3.40	.73	Agree
Usually spend time sharing knowledge with colleagues	3.37	.62	Agree
Voluntarily sharing knowledge with colleagues	3.34	.90	Agree

As a teacher, I:	X	SD	Remarks
Reluctantly sharing knowledge with colleagues	2.37	.82	Disagree
Hoard (hide) information from colleagues	2.17	.79	Disagree
Demands gratification from colleagues before sharing my knowledge	2.02	.69	Disagree
Usually deceive colleagues by distorting knowledge	1.74	.88	Disagree
Grand Mean	2.74		Agree

The data in Table 2 shows that, four out of the eight items listed with mean ratings ranging from 3.50 to 3.34 indicated that respondents agreed that there is positive knowledge sharing behaviour among colleagues while the remaining four items with mean scores ranging from 1.74 to 2.37 indicated that respondents disagree to negative knowledge sharing behaviour among colleagues. The grand mean score of 2.74 showed on the whole that, teachers agreed there is positive knowledge sharing behaviour among colleagues. The standard deviation for all the items is within 0.58 to 0.90. This shows that the respondents are not wide apart in their ratings.

### Hypothesis

H0: There is no significant difference in the knowledge sharing behavior by experienced and less experienced teachers in Isoko South Local Government Area of Delta State. The data in table 3 are used to test this hypothesis.

Table 3

*t-test showing the knowledge sharing behavior by experienced and less experienced teachers in Isoko South Local Government Area of Delta State.*

Variable	N	Mean	SD	df	P-value	A-value	Remark
Experience	156	54.81	3.46				
	242	0.04	0.05		Significant		
Less experience	88	34.29	4.40				

Table 3 shows that P-value of 0.04 is less than the Alpha-value of 0.05 ( $0.04 < 0.05$ ) at 242 degree of freedom, therefore the null hypothesis was rejected. This means that, there is significant difference in the knowledge sharing behavior by experienced and less experienced teachers in Isoko South Local Government Area of Delta State.

### Summary of Findings

Based on the analysis, the major findings that emerged from the study are summarized as follows:

1. The level of awareness of knowledge management by experienced and less experienced teachers in Isoko-South Local Government Area of Delta State is high. The hypothesis was tested at 0.05 alpha levels and found that the level of awareness of knowledge management by experienced and less experienced teachers in secondary schools in Isoko-South LGA does not

differ significantly based on their work experience.

2. Knowledge sharing behavior of both experienced and less experienced teachers in secondary schools in Isoko-South Local Government Area of Delta State is positive (the teachers share knowledge among themselves).

3. There is significant difference in the knowledge sharing behavior by experienced and less experienced teachers in Isoko South Local Government Area of Delta State. Therefore, the null hypothesis was rejected.

### Discussion

The research question investigated in this study is what is the level of awareness of knowledge management by experienced and less experienced teachers in secondary schools in Isoko-South L.G.A of Delta State? The study therefore revealed that the awareness level of secondary school teachers regarding knowledge management is high, the revelation can be seen in table 1 where the highest number of respondents with a mean score of 3.51 (VHL) stated that they are aware of knowledge management being used to mean knowledge creation, respondents with a mean score of 3.49 (HL) noted that knowledge management deals with circulating knowledge and the third immediate group with a mean score of 3.42 (HL) agreeing that knowledge management deals with the storage of knowledge, the other four categories of respondents also did affirm to a High Level (HL) that they know what knowledge management entails. To this very end, this study has confirmed the submission of Ling, Bakar & Islam (2014) when they opined that secondary school institutions for example, adapt to knowledge management even consciously by way of identifying a few existing facilities such as libraries, laboratories, archive, media resource centers, emails communication and a few others. These according to the authors of this research study constitute knowledge management that the teachers are definitely aware of.

A second research question asked in the course of this research is what is the knowledge sharing behavior of both experienced and less experienced teachers in secondary schools in Isoko-South L.G.A of Delta State? The finding to this research question revealed that teachers in secondary schools in Isoko South are always willing to share their knowledge among colleagues. The output to this can be found in table two above where the highest number of respondents with a mean score of 3.50 (Agree) noted that they Actively share knowledge with each other, respondents with a mean score of 3.40 agreed that they Usually participate in academic discussions that will benefit colleagues, including other two categories with affirmative responses. Four categories of the respondents also recorded negative (Disagree) response rate pegging the Grand mean at 2.74 (Agree). This finding has therefore contradicted that of Sun et al (2018) when they found out that the frequency at which teachers share knowledge is low especially among themselves as a teacher who was interviewed remarked that 'I haven't thought about myself not to talk about others' 'it doesn't make much sense to start thinking of developing others when you still lag behind in terms of knowledge'. This response simply indicated that the teachers in that area may not be too opened to the laudable culture of sharing knowledge among themselves.

Finally, the only hypothesis of the study is that there is no significant difference in the knowledge sharing behavior by experienced and less experienced teachers in Isoko South Local Government Area of Delta State. In table three above, the P-value of 0.04 is less than the Alpha-value of 0.05 ( $0.04 < 0.05$ ) at 242 degree of freedom, therefore the null hypothesis was rejected.

In other words, the study did reveal that there is significant difference between experienced and less experienced teachers in the area of knowledge sharing behaviour. This finding appears to be very apt as it is in sync with the assertion of Hood (2017) when he noted that the more years a teacher spends in the profession and classroom, the more knowledgeable he becomes. One can therefore deduce from the above opinion that knowledge is not idle and useless; it is powerful and taken seriously by those who possess and value it. To this end, experienced teachers who see knowledge to be a powerful tool always try not to only share it among colleagues but also apply it in whatever they do in and out of office.

### **Conclusion**

Knowledge is very important in schools and personal life which helps to reform and recreate the mind. Based on the findings of the study, teachers in secondary schools in Isoko South LGA of Delta State are aware of knowledge management to a high level. Their knowledge sharing behavior is firm owing to the fact that they share knowledge with their colleagues, and they usually participate in academic discussions that do benefit them. The findings of this study are to be built upon by way of, various governments taking it as a task to ensure that knowledge management and knowledge sharing are taken seriously. This is hinged on the fact that Nigerian economy is to a large extent knowledge based and any attempt by stakeholders to sideline teachers and librarians will spell doom to the developing African country (Nigeria). Teachers and librarians remain image makers and transformers in any country of the globe, sharing information among themselves and being aware of the importance of knowledge will make their task less tedious and by extension realizing organizational goals.

### **Recommendations**

Based on the findings and the conclusion reached in this study, the following recommendations were made:

(1) All categories of teachers' trainers should ensure that the concept of knowledge management and knowledge sharing is captured in teachers' curriculum. This is to consistently boost their awareness level and application of knowledge management.

(2) School authorities should have an open door policy of information system in order to boost the level of knowledge sharing behaviour and management among staff of secondary schools.

(3) The government should continuously organize seminars and conferences for teachers in areas of knowledge management and knowledge sharing in order to motivate them to apply knowledge management practices and also share knowledge among them.

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