



Information Identification Skills And Research Output of Academic Librarians In Universities in South-South Geopolitical Zone of Nigeria

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Abstract

This study investigated the relationship between information identification skills and the research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria with a corresponding specific objective, research question, and research hypothesis. To effectively drive the study two theories were adopted. The theory of social-cultural learning for the independent variable (information identification skills), and the theory of self-efficacy for the dependent variable (research output of academic librarians). More so, a conceptual review of literature on information identification skills and research output was carried out and a specific empirical review of the literature with extrinsic similarity and dissimilarity to the study was also done. The study adopted the correlational research design as the research design while the study area was the South-South Geopolitical Zone of Nigeria. The population of the study comprised 252 academic librarians from 14 libraries and faculties. The census technique was used to select the research participants 252. The researcher-developed questionnaire entitled: "Information Identification Skills and the Research Output of Academic Librarians Questionnaire (IISROALQ)" was used to collect data while the reliability test results using the Cronbach Alpha formula in SPSS showed an average coefficient of .83 which signified that the instrument was reliable for the study. Data was collected from the various universities by the researchers and their trained assistants by following the requisite ethical procedures. The data collected was analysed using frequencies and percentages for the research question, while the test of hypothesis at ≤ 0.05 level of significance was carried out with the Chi-Square Test of Independence. The result showed that information identification skills have a positive significant relationship with the research output of academic librarians with p -value = 0.00, and Phi coefficient of 2.49 indicating a very large extent of a positive relationship. In conclusion, it was recommended that the National University commission should make proficient utilization of information literacy skills by academic librarians as part of the requirement to assess their suitability for performance within the scholarly communities. Also, the university management should give attention to constant information literacy skills programs to enhance the literacy skills of the academic staff to be able to produce quality and rich research output.

Keywords: Motivation, Motivation strategy, Work productivity and Library staff

Introduction

Education is very crucial in the advancement of an individual and society, and it cuts across various stages of human growth and development with specific and achievable goals. These goals, especially at the tertiary level are to train individuals for productive living within the academic community by offering

a diversified curriculum and research culture to cater to the differences in talents, opportunities, and future roles. The developments of these talents and opportunities by individuals within scholarly communities lie majorly on research and innovation (Nwosu, 2018). In Nigerian universities, academics are required as part of the standards for development to

engage in research activities; an exercise that requires seeking data and information to create knowledge. Therefore, seeking data and information for productive research output depends not only on the accessibility of information resources in the academic libraries but on the expertise of academic librarians to participate actively and effectively in the research cycle to create new knowledge or build on an existing one. The creation of new knowledge is a core objective of the university and results from huge investments in research and researchers by universities aimed at improving and benefiting society. Nevertheless, an academic librarian is rewarded by the volume of research work he/she produces; and the outcome of these research works is regarded as research output.

Research output (RO) can be referred to as the effort that has been investigated and published in different formats such as journals, technical reports, working papers, books, book chapters, monographs, articles, bulletins, short communication papers, conference papers, patents, standards, indexes, abstracts, and bibliographies (Bapte, 2020). The research output of an academic librarian in any university is a major yardstick of a librarian's quality and the yearning for advancement with regards to recognition for creative thinking, prestige, salary increase, promotion, and acceptability in the university setting (Adetomiwa 2018). Besides, research output gives a good justification for librarians to turn out to be successful academics because research activity builds academic knowledge and reinforces the skills for efficient knowledge transfer. These skills as submitted by SCONUL (2015) are information literacy skills, in which information identification skill is core among them in aiding academic librarians to achieve desired goals and objectives in research work.

Information identification skill is the ability to locate, get, report, change, or delete precise information without uncertainty, most especially information stored in databases. In carrying out academic research, an academic librarian can identify a need for information and find such information that will assist him/her to respond to research questions. The academic librarians will use the information identification skills to know how the data is constantly created with the research title under review; consequently, the academic librarians develop an information search habit so that new and existing information in that field will be appropriately and adequately identified. Academic librarians as a researcher also know that there are published and unpublished information research

output that could be useful for the research work thereby identifying the authority of the search inputs (Omar and Urhiewhu, 2019). Academic librarians use information identification skills to identify a lack of knowledge in a subject area, and also classify a search topic/question and define it using simple terminology.

Information identification skills are further used to articulate current knowledge on the research topic. However, the researcher must recognise a need for information and data to achieve a specific end and define limits to the information need before articulating current knowledge. Nevertheless, using fundamental information to classify the search process and taking personal authority for an information search, and managing time efficiently to complete a search are core efforts of information identification skills in initialising an academic research output by academic librarians (Ogunbodede and Oniovosa, 2019). Although, the application of information literacy skills in the research process is not a linear exercise as some other related activities can take place side by side. It is noteworthy to state that it is not just enough that an academic librarian identifies an information need in research work, he/she must establish the extent to which such information needs will be covered.

Statement of the Problem

Information identification skill (IIS) is essential to identify the information needs of academic librarians for research. Information identification skills can assist academic librarians in the plan of information systems on broad-spectrum, and the provision of effective information services in particular. Nevertheless, it is a difficult task. The employment of information identification skills requires the deployment of various methods to gather information. No single method or tool will serve fully. This effort has been observed by Okiki (2013) as challenging for academic librarians and has affected the quality of their research. More so, any slip or inappropriate identification of information needs of a research work by academic librarians will affect the standard of the research output. Lack of self-sufficiency frames deficiency in meeting information needs in daily life. This information needs to represent gaps in the current knowledge of the user. The information needs an identifier. It was against this argument that this study was undertaken to establish the association between information identification skills and the research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria.

Purpose of the study

The overall goal of this study was to ascertain the extent to which information identification skills relate to the research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria.

Research question

The study provided an answer to the following research question: To what extent do information identification skills relate to the research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria?

Research Hypotheses

The following null hypothesis was tested at a 0.05 level of significance: There is no extensive significant association between information identification skills and academic librarians' research output in universities in the South-South Geopolitical Zone of Nigeria.

Significance of the Study

This study would have huge benefits to major stakeholders in the academic community such as the information literacy providers, academic librarians, academic libraries, other academics, researchers in the universities, and the universities leadership. The results of this study provide a platform for information literacy providers to take logical decisions to facilitate information literacy. Academic libraries and librarians will benefit from this study as it has created a robust atmosphere for institutional decision-making in terms of setting up library outreach centres for information literacy and enabling academics to invest more in developing information identification skills as a means toward unlocking great opportunities in research output.

Scope of the Study

This study focused on the extent to which information identification skills relate to the research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria. It covered the following information identification skills: the ability to identify inadequacies of knowledge in a subject area, the ability to use simple terminology to classify a research topic/question, the ability to search out current knowledge on a topic, ability to identify a limit to an information search requirement, ability to recognize an information need to achieve a specific end, ability to retrieve background information to

underpin an information search, ability to identify information needed from different formats, and ability to recognise the authority of search inputs in published and unpublished information resources and determine their relationship with the research output of the academic librarians. This study covered the academic librarians in the federal and state universities in Akwa Ibom State, Cross River State, Rivers State, Bayelsa State, Delta State, and Edo State in the faculties and libraries. A total of thirteen (14) universities were covered in this study.

Review of Literature

Theoretical Framework

This study adopted the Lev Vygotsky theory of sociocultural learning for the independent variable(s) (information identification skills) and the Albert Bandura theory of self-efficacy for the dependent variable (research output of academic librarians).

The Theory of Sociocultural Learning (Vygotsky, 1934)

The theory of sociocultural learning was propounded by Lev Vygotsky in 1934 and the theory of socio-cultural learning posits that "learning has its basis in interacting with other people, once this has occurred the information is then incorporated on the individual level". The sociocultural standpoint on learning forms the relationship between individuals and other forms of shared practices. For example, a student is part of a university programme, which in turn makes part of a discipline which is situated in a specific university; a librarian is dynamic in a place of work and is at the same time a member of a work-related group. Practices are shaped through interaction between tools and people and, at the same time, the significance of these tools varies across diverse practices. While people always act concerning the tools that are easy to get to within a practice these tools are reformed through a practice's frequent activities. Tools and practices are neither static nor predetermined; as collective resources, they are always active and evolving. Hence, within the context of this study, these tools as assured above are information identification skills and the practice is academic librarianship. Thus, tools are not neutral to academic librarianship activities; they are conceptualised with perspectives, norms, and values that arbitrate understanding of the academic world. For information literacy education, this means that it is important to reveal and make unequivocal the

perspectives, values, and beliefs connected to specific skills for information seeking, and how the appliance and understanding of these skills differ in different practices.

This theory guided this study because it explains not just how the academic librarian can use information identification skills to control the output of their research activities, but also to increase research output productively.

The Theory of Self-efficacy (Bandura, 1977).

The theory of self-efficacy was propounded by Albert Bandura in 1977, and the theory of self-efficacy posits that “seeing people similar to oneself thrive by sustained effort elevates the observers’ beliefs that they too possess the competencies to master comparable activities to achieve success”. Perceived self-efficacy is defined as people’s values about their abilities to produce selected levels of performance that implement influence over events that affect their lives. Self-efficacy beliefs decide how people think, feel, behave, and motivate themselves. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective, and selection processes.

Academic librarians can utilise self-efficacy judgments because of the likely prediction of success in research outputs. Overall, self-efficacy is positively and strongly associated with the research output of academic librarians because an academic librarian understands that using information identification skills effectively in research work will lead to constructive outcomes, therefore, they will become self-efficacious through cognitive, motivational, affective, and selection processes, subsequently, taking responsibilities for their actions and inactions and deploying the required resources to achieve the desired results in their research output. Self-efficacy theory in this study connotes that university leadership should provide accurate descriptions of tasks and deliver crystal and concise instructions and the necessary helpful elements for academics most especially academic librarians to be successful in the pursuit of research output.

This theory is also related to this study as it provides an understanding of various attributes and efforts required of a person to succeed in a job. It measures efficiency on the job as a product of personal intensive efforts and influence from immediate work environments. The self-efficacy theory revealed that if academic librarians believe in their ability to succeed in specific situations or accomplish a task such as the

research works, then develop skills that are entirely or primarily within a social group and get information clues from various sources through self-efficacious actions their research output will yield maximum proceeds. Moreover, with the proper articulation of self-efficacy ideals, academic librarians will be better skilled, make better choices on the job and overall develop improved efforts towards achieving standard and productive research output.

Conceptual Framework

Information Identification Skills and Research Output of Academic Librarians

Information identification is a concerted attempt to seek information through various channels using different retrieval methods to satisfy an information desire or need. The appliance of skill into the information-seeking practice requires discretion and understanding of its usage (Omekwu et al., 2019). According to Rafique (2014), the need for information identification comes whenever individuals discover themselves in a situation demanding knowledge to deal with the situation as they consider fit. Information identification skills are the fundamentally required skills by academic librarians in their explorative process. Information identification could be regarded as the extent to which information is required to solve problems, as well as the degree of expressed contentment or discontentment with the information.

Anwar (2014) argued that academic librarians’ information needs are influenced by varied factors such as the range of information sources available, the uses to which the information will be established, the background, motivation, professional point of reference, and individual features of the user while other factors according to Rafique and Khan (2018), are the socio-political, economical, legal and regulatory systems adjoining the users, as well as the penalty of information use. Also, very crucial to note is the quality of information sources that are obtainable to the academic librarians because of their originality. Information sources that could provide relevant, useful, specific, and accurate information that could help academic librarians solve their problems are considered to be effective. Information identification stems from the acknowledgment of a desire to solve a need. When an individual undertakes to identify a search request that satisfies information perceived need, thus, information identification begins. Information identification also begins when an individual perceives that the current state of possessed knowledge is less

than that needed to deal with the problem at stake (Jan and Warriach, 2016).

Ojedokun (2014) defined information identified as the investigation of how people search to identify the need and use of information in different contexts, including the workplace and everyday living. In the context of this study, I used information identification as it applies to academic librarians as they seek, search for, and use the information to support their scholarly exercise – research output. Information identification is a deep-seated concept, which includes the creation of new knowledge and new meanings, the transformative act of moulding decisions and influencing others, and the exodus and exchange of information that challenge the request to satisfy a search need by academic librarians (Dubicki, 2013). When analysing identified information use comes to mind as information acquired by a person satisfies the need that it is put into use.

In identifying information, academic librarians who are saddled with the responsibility to meet and satisfy library users' needs, require functional library service to meet his/her research needs. Hence, understanding academic librarians' information needs is crucial to the leadership of academic libraries and the academic communities in tertiary institutions. Salaam and Fatokun (2010) submitted that academic libraries acquire materials principally to make the materials available and accessible to users and academic librarians are part of this community of users. Lawal-Solarin (2013) affirmed that a library's efficacy is measured by how well the library satisfies the needs of its users, relative to the library's goals and objectives. Popoola et al., (2009) opined that the information resources and services available in institutional information systems must be capable of supporting research activities among students and faculty.

Figure 4. Motivational strategies

S/n	Motivation features	Mean	Rank
i	Office infrastructure	3.52	3
ii	Salary and bonus	3.61	1
iii	Organisation support	3.60	2
Security needs			
i	Job security	3.51	3
ii	Staff evaluation	3.60	2
iii	Effective policies	3.62	1
Social need			
i	Healthful relation with others at work	3.54	1
ii	Social responsibility	3.52	2
Esteem Needs			
i	Recognition at work	3.51	2
ii	Sense of responsibility	3.50	3
iii	Respected opinion at work	3.60	1

However, the availability of information in various sources requires an understanding of how best to identify and retrieve such information in online or offline channels. The use of information identification skills gives an academic librarian in the research process the know-how that new data and information are constantly being produced and that there is a need to learn more. According to Okenedo et al., (2015) this perspective is more fully-inclusive, emphasising both "informal" and "formal" channels of communication and information retrieval. It also differentiates between "regular needs," which must be satisfied on an in-progress basis, and "periodic needs," which occur

infrequently. In this system, structured consultation of library reference sources, as well as indexes, falls into the formal and episodic categories. To the extent that academic librarian researchers in scholarly communication pay attention to structured literature searching, maintain the scholarly requirement for research success. Consequently, the successes of the research output reflect the quality of the holistic approach. Demonstrating information identification skills also entails a process where an academic librarian understands that being information literate involves developing not just a learning habit but that the ideas and opportunities in the research circle are created by

seeking requisite information and also knowing the scope the world of published and unpublished data and information in the identification context (Ahmad, 2015).

Identifying a knowledge gap in a subject-specific area is critical to the advancement in the research process for an AL, which means being able to appropriately construct a search topic/question and define it using simple terminology. Dorodolu et al., (2013) affirmed that as information specialists, library and media teachers ought to provide know-how in acquiring and evaluating information resources in all formats, as well as be able to train students to gain access to and evaluate information within and beyond the library media resource centre. Asselin and Moayerim (2010) argued that expertise in retrieving information transcends beyond acquiring but that an AL must use background information to underpin the search. This leadership role of taking responsibility for an information search by an AL demands effective time management and utilization.

In the view of Stasko (2013), information technologies aid the promotion of opportunities for data, information, and knowledge sharing globally, thus, given the above; the knowledge of information literacy is relevant to modern academic librarians who desire successful teaching and research strategies suitable the modern academic environment. The available information in this modern time comes from sources very difficult to verify and confirm; these uncertainties can cast a shadow of doubt on the authenticity, validity, and reliability of information resources. Abubakar and Isyaku (2012) observed that doubtful quality and an ever-increasing quantity of information compounded the challenge of academic librarians who are supposed to guide students and faculty members on how to expand the frontiers of knowledge that are anchored on fact and reality, not fiction and speculation. The sheer large quantity of information does not automatically reflect the quality of information that is available to the citizenry. Consequently, the knowledge of information identification skills becomes necessary for academic librarians who are eager to play an illustrious role in 21st-century information usage most especially in research output.

The Concept of Research Output

The construction of new knowledge lies at the heart of a university and results from remarkable investments in research and researchers by universities designed at improving and benefiting society. In this

process, those research outputs also promoted further research and scholarship, along with the teaching and service missions of the university (Adeyemi, 2021). Ocholla et al., (2012), defined research to be a way of providing answers to unidentified problems emerging from natural and artificial phenomena, within our environment, through an organised, logical, and verifiable process. What motivates individuals and organizations to research the subject is not homogeneous. The ideal and perhaps, main reasons are to find solutions to the challenges or problems distressing humanity that come from natural and artificial phenomena, develop scientific and professional practices, confirm or contest or refute theories or hypotheses, and construct creative, analytical, and rational thinking for evidenced-based decision making (Ani and Okwueze, 2016). Individuals carry out research every day. They do so in various ways on diverse themes and in many different settings. One significant area is education. Researching an educational setting should be an important aspect of every educator's professional life and activities. On a more pragmatic basis, research is done to satisfy learning, domestic, and career needs; to fulfil curiosity; for egoistic reasons, such as recognition and visibility; for career-related rewards, such as promotion, securing tenure or permanent appointment; and for self-development or growth, among others (Ojeniyi and Adetimiri, 2016). The anthology of these researches over time by a researcher is regarded as research output.

The study of research output has enticed growing attention in the library field for more than fifty years and particularly since issues of academic tenure have come to the fore (Makori, 2012). Andrew (2012) defined research output as the entirety of research performed by academics in universities and related contents within a given period. Øvern (2014) maintained that academic research represents the backbone of human activity in the way that it enhances the quality of life through expanding the frontiers of academic knowledge and making further research possible throughout the world. Academic researchers publish to establish their claim to a specific result at a definite point in time. When researchers publish their academic studies, their peers have to access their research and communicate with other academics interested in a similar subject area. Oduwole and Ikhizama, (2007); and Obaseki et al., (2010), opined that the publication of research results is an important link between the areas of communication and

academic awards. The research output of an academic librarian in any university is a major indicator of a librarian's quality and the determinant of advancement in terms of prestige, recognition for creative thinking, promotion, salary increase, and acceptability in the university setting (Salaam and Agboola, (2002); Bassey et al.,(2007); Okiki, (2013), Anyaogu and Mabawonku, (2014) and Adetomiwa, (2018). In addition, research output provides a good justification for librarians to develop into successful academics. This is so because research activity develops academic knowledge and reinforces the skills for effective knowledge transfer.

Empirical Framework

Igbinovia and Ikenwe (2014) engaged in academic research on the information-seeking behaviour of academic librarians for effective performance: A study of UNIBEN, AAU and AUCHI Polytechnic, EDO State, Nigeria. The overarching goal of the study was to examine the information-seeking behaviour of academic librarians in John Harris Library, UNIBEN (Federal), Ambrose Alli University library (State), and Auchu Polytechnic library, Edo state, Nigeria. Five specific objectives and five research questions were stated in the study. A descriptive survey research method was used to collate information from the population of the librarians in the libraries, while a purposive sampling technique was deployed to sample the respondents. A questionnaire was used to collect data from 48 academic librarians out of which, 42 were retrieved and found useable for the study. Frequency counts and the simple percentage were used to analyse the obtained data. Findings reveal that the internet was the major source of obtaining information in this 21st century and this consulted source is very rich as the academic librarians get what they wanted from the internet source. To this end, the librarians rated the general availability and access to information as highly accessible. It was therefore recommended that academic libraries should provide 24/7 internet facilities in the library accessible to all librarians to enhance effective feat and information service delivery to users. Management should support staff training and capacity building to facilitate their skills and the adequate fund should be provided by the government for effective management of the libraries.

This empirical work is related to this study because it underscores how academic librarians identify information needs that are used to enhance research output. However, the dissimilarity between this empirical work and this study is the fact that the

work by Igbinovia and Ikenwe (2014) did not focus on skill usage but information behaviour and its influence on the performance of academic librarians.

Similarly, Ogunbodede and Oniovosa (2019) carried out a study on the information-seeking behaviour of academic staff in three Universities in Bayelsa State. The main objective was to investigate the information needs and seeking behaviour of academic staff in three universities in Bayelsa State, Nigeria. The study used a descriptive research design and the population of the study was composed of 200 academic staff members from the University of Africa, Niger Delta University and Federal University, Otuoke, all in Bayelsa State out of which 120 were randomly selected using the simple random technique. Five research questions guided the study and data were collected using a structured questionnaire. The validity of the instrument was ascertained by checking the face and content validity and the instrument proved valid because the items in the instrument are appropriate in terms of subject contents. Cronbach Alpha technique of SPSS was adopted to determine the reliability coefficient of the instrument and an index of 0.87 was obtained. This indicates that the internal consistency of the instrument is high and good. Data were analysed with descriptive statistics such as frequency counts and simple percentages. The findings showed that the majority of the respondents need information 86(72%) for teaching, research and supervision, and information on self and professional development 74(62%). On the purposes of seeking information, it was observed that most of the respondents 100(83%) seek information for teaching and research and to develop competence 86(72%). It was also noted that most academics largely depend on both e-resources and the internet. The internet and electronic sources are the most vital and preferred sources of information used by academic staff. The findings revealed that work experience and age significantly influence the information-seeking of academic staff. Some of the problems encountered when searching for information include poor internet connectivity and lack of regular power supply. Based on the findings, it was recommended that the school management should provide adequate internet facilities, and improve on electricity supply so that academic staff can enjoy more access to the internet while they are in school and especially within the confines of their offices.

This empirical work is related to this study because it identified information needs, uses, and seeking behaviour of academics. The results also described a

lack of information search and identification skills. However, it is different from this study because it does not seek to predict the research output of the academics as a focus but rather on the general information search and identification for teaching, learning, and research of academics.

Abdullahi, et al., (2015) engaged in research titled: "Assessment of information needs and seeking behaviour of undergraduates in the University of Ilorin, Ilorin, Nigeria". The primary objective of the study was an assessment of how to identify information needs and seeking behaviour of undergraduate students at the University of Ilorin. A survey design was adopted using a questionnaire as an instrument for data collection, while a simple random sampling technique was employed to sample 20 respondents each from 12 faculties in the university. Moreover, to achieve these five specific objectives of the study, and five research questions were developed to guide the study. Descriptive statistics were used for data analysis. The results of the study indicate that undergraduate students use the information identified to prepare for the examination, tests, and assignments while the identified information major sources from the respondents seek information are books, journals, and the internet. In conclusion, it is therefore recommended that adequate and relevant information materials should be acquired by the library management to meet undergraduate information needs

This empirical work is different from this study because the population of the study is students. But this study's population is academic librarians. The empirical work is related to this study because it investigated the use of information identification skills by identifying information needs and seeking behaviour of students.

Summary of Reviewed Literature

This section undertook the review of literature on information identification skills and research output of academic librarians in universities in the South-South of Nigeria. Two theories related to this work were adopted which are Lev Vygotsky's theory of sociocultural learning and Albert Bandura's self-efficacy theory. The sociocultural standpoint on learning establishes the relationship between individuals (academic librarians) and various forms of collective practices (ILS), additionally, the sociocultural learning theory posits that learning has its basis in interacting with other people, once this has occurred the information is then integrated on the individual level, and the theory of self-efficacy posits that seeing

people similar to oneself succeed by sustained effort raises the observers' beliefs that they too possess the capabilities to master comparable activities to succeed. Self-efficacy beliefs determine how people feel, think, motivate themselves, and behave (in this context how academic librarians motivate themselves on research output). Literature on information identification skills was equally reviewed. The information literacy skills variables reviewed included: the ability to identify inadequacies of knowledge in a subject area, the ability to use simple terminology to classify a research topic/question, the ability to search out current knowledge on a topic, ability to identify a limit to an information search requirement, ability to recognize an information need to achieve a specific end, ability to retrieve background information to underpin an information search, ability to identify information needed from different formats, and ability to recognize the authority of search inputs in published and unpublished information resources. In addition, literature on the research output of academic librarians was equally observed. Three empirical works were reviewed which enriched the work and also gave a further academic boost to the present study by establishing explicit similarities and dissimilarities with the present study.

From the reviewed literature it was observed that although academic librarians have had successes and achievements in research output, they have also been confronted with certain challenges such as work overload, information overload, and poor funding among others. These challenges have affected the academic librarians' research output. It was opined by the various schools of thought in the reviewed literature that adequate use of information identification skill in carrying out research works will facilitate and enhances the research output of academic librarians. However, this study determined the veracity of these claims by ascertaining the extent of the relationship between information literacy skills (ILS) and the research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria using the appropriated theories and requisite research methods to fill the existing gaps of academic librarians publishing at a low rate, individually and mostly in local journals, and the lack of using modern methods in the research output process as revealed in the reviewed literature. Furthermore, from the reviewed literature there is no empirical evidence of a study conducted to investigate the influence of information identification skills on academic librarians' research output in Nigeria, this study filled these evidence, theoretical, empirical,

population, and practical-knowledge gaps.

Research Methodology

The research design for this study is a correlation research design. A correlational research design finds out the relationships between variables without the researcher domineering or manipulating any of them. A correlation reflects the strength and/or direction of the relationship between two (or more) variables. The study was carried out in the South-South Geopolitical Zone of Nigeria. Specifically, South-South states which included Akwa Ibom, Bayelsa, Cross River, Delta, Edo, and Rivers states. The population consisted of 250 academic librarians in the federal and state universities in the South-South Geopolitical Zone of Nigeria. The entire population size of 250 academic librarians was used for the study. This selection method of members of a population is regarded as a census technique. A census method is a statistical inquiry in which the data are collected for every part/unit of the population. It is important when case intensive study is required or the area is limited.

The researcher-developed questionnaire entitled "Information Identification Skill and Research Output of Academic Librarians Questionnaire (IISROALQ)" was used to collect data. The instrument was face validated by three experts, one from the Department of Educational Foundation, Guidance and Counselling (Test and Measurement Unit), and two from the Department of Educational Technology and Library Science Department (Library and Information Science Unit), the University of Uyo who checked each item and ascertained if they agree with the research questions and objectives. To establish the reliability of the instrument, thirty (30) academic librarians in Ambrose Ali University, Ekpoma, Edo State, which are not part of the study were used. The instrument was administered, and the obtained data were subjected to Cronbach's Alpha formula using SPSS which produced average coefficients of .83 (see appendix B). According to Ursachi et al., (2015); and Hulin et al., (2001), a generally accepted rule is that α of 0.6-0.7 indicates an acceptable level of reliability, and 0.8 or greater, is a very good level. However, values higher than 0.95 are not necessarily good, since they might be an indication of redundancy.

Completed copies of the questionnaire were collected by the researchers and the research assistants. 252 copies of the questionnaires were distributed but 232 were returned and found useable, making a 92% response rate which is considered representative and

adequate for the study. The administration and data collection lasted for eight weeks. The data obtained were statistically analysed using percentages to answer the research questions by merging the responses of very great extent (VGE), and great extent (GE) as great extent (GE); and responses of little extent (LE), and very little extent (VLE) as little extent (LE) while Chi-Square Test of Independence was used to analyse the hypothesis. All the hypotheses were tested at the 0.05 level of significance, and Phi coefficient of $\geq +.40$ is considered a strong positive relationship. The research was conducted by following strict ethical procedures deemed necessary for research of this nature.

Results and Discussion

Data having satisfied the Kolmogorov-Smirnov test (see appendix C) the results of the data analysis are presented as follows:

Answering Research Questions

Frequency distribution and percentages were used for answering all the research questions raised.

Research Question One

To what extent does information identification skill relate to the research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria?

Result in Table 1 shows items 1-10 of the responses on information identification skill and research output of academic librarians where most of the respondents reveal that to a great extent there is a relationship between their information identification skill and research output with percentage scores as follows in descending order: Q5 (94.4%), Q1 (91.1%), Q6 (90.1%), Q7 (88.4), Q4 (86.9%), Q3 (86.25), Q8 (84.9%), 10 (Q82.8%), Q9 (75.4%), and Q2 (54.8%). These imply that in this study information identification skill has a major association with research output. Consequently, in answering the research question it is to a great extent that information identification skill relates to the research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria.

Hypothesis

There is no significant relationship between information identification skills and academic librarians' research output in universities in the South-South Geopolitical Zone of Nigeria.

Table 2: shows a Chi-Square test of independence

Table 1. Frequency distribution of information identification skill and the research output of academic librarians in universities in South-South Geopolitical Zone of Nigeria.

Constructs in order to carry out academic researches:	Great Extent		Little Extent	
	Freq.	%	Freq.	%
1. I can identify inadequacies of knowledge in a subject area	209	91.1	23	9.9
2. I can use simple terminology to classify a research topic/question	127	54.8	105	45.2
3. I can search out current knowledge on a topic	200	86.2	32	13.8
4. I can locate the limit to my information search requirement	208	86.9	24	10.3
5. I can recognize an information need to achieve a specific end	219	94.4	13	5.6
6. I can retrieve background information to underpin information search	209	90.1	23	9.9
7. I can take responsibility for information search	205	88.4	27	11.6
8. I can find information from different sources	197	84.9	35	15.1
9. I can retrieve information in different formats	198	75.4	34	14.7
10. I can recognise the authority of search inputs in published and unpublished information	192	82.8	40	17.2

Table 2. Chi-Square test of independence results for information identification skill and the research output of academic librarians

	Value	Df	Asymptotic Significance (2-sided)	Phi
Pearson Chi-Square	54726.473 ^a	615	.000	2.49
Likelihood Ratio	29225.385	615	.000	
Linear-by-Linear Association	1354.687	1	.000	
N of Valid Cases	8802			

to determine the extent of the relationship between information identification skills and the research output of academic librarians. There was a strong positive association between information identification skill and research output, which was statistically significant ($X^2 = 54726.473$, $df = 615$, $p = .000$, $\phi = 2.49$). The value of the phi-coefficient was 2.49 ($> +.70$) which indicated a very large effect size. With this result, the null hypothesis was rejected. This implies that there is a very strong positive relationship between information

identification skills and the research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria.

Summary, Conclusion, and Recommendation

Summary and Conclusion

Based on the findings of the study it was concluded that for academic librarians to thrive in their research output they need to fully utilize information identification skills as lifelong skills for advancement.

This study showed that information identification skill is a prerequisite skill academic librarians should possess to advance in the research process.

Educational Implication of Findings

The findings of the study are useful in making recommendations about future planning for library outreach as well as the utilization and delivery of library services by academic librarians. The outcome of this research is also useful as it has provided insights that academic librarians can benefit from in creating and developing customized support and library services for different groups of users and addressing related knowledge gaps and also to increase their research productivity. Moreover, the findings could be used in training units of academic libraries by identifying specific information literacy needs of librarians and reforming their in-service training programs accordingly. In addition, the information systems and utilities can be better designed regarding the information skills and preferences of academic librarians.

Contribution to Knowledge

This study has contributed the following:

i. Whereas other studies have been carried out on information literacy and research output, this is the first time a study is being conducted to determine the extent of the relationship between information identification skills and research output of academic librarians in universities in the South-South Geopolitical Zone of Nigeria.

ii. The findings from this research work reveal that information identification skills could be put in place for academic staff, most especially librarians as benchmarks. Consequently, information literacy skills could be used as metrics in assessing academic librarians in their research output and other career-related activities.

iii. It was also observed from the study that other related studies on information literacy skills use theories and models that are just skill-based or work-based but this study used the theories of socio-cultural learning and self-efficacy which amalgamate skill proficiency situated within a cultural (professional) contexts and the leveraging of human capital within the scholarly communities for better research output and standards.

Recommendations

The National University commission should

make proficient utilization of information literacy skills by academic librarians as part of the requirement to assess their suitability for performance within the scholarly communities. Also, the university management should consider constant information literacy skills programs to improve the literacy skill of the academic staff to be able to carry out sound and rich research output.

Training and retraining should be regularly carried out by the training units of academic libraries to identify specific information literacy needs of librarians and reform their in-service training programs accordingly.

The information literacy providers should through the findings of this research work decide the best way or means of providing adequate facilities and services that would enhance the research output of academic librarians in Nigerian universities. The information literacy providers who are those people that are saddled with the responsibilities of providing information literacy services and facilities such as the Internet Service Providers (ISP), website designers, and computer software packages programmers should provide professional support that could unveil the best information literacy skills hard and software packages that are needed for research by academic librarians, and could make the services and facilities available to them, and enhance their skill to carry out good research work that meets the standards of acceptance.

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Practice

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Appendix A

Information Identification Skills And The Resaerch Output Of Academic Librarians Questionnaire (IISROALQ)

INSTRUCTION: Please tick (Ö) where appropriate
KEY: IIS: Information Identification Skills; RO: **Research Output**; AL: Academic Librarian; (ROAL): Research Output of Academic Librarians

SECTION A

PERSONAL INFORMATION AND DEMOGRAPHIC DATA

Qualification: First degree (), Masters (), PhD ()
 University: _____

SECTION B

Note: In filling section B, the following 4-point scale and representations are given as: VGE (Very Great Extent); GE (Great Extent); LE (Little Extent); VLE

(Very Little Extent).

Information identification skill (IIS) and research output of academic librarians

S/N	ITEM	VGE	GE	LE	VLE
	Identification Skill In order to carry out academic researches:				
	I can identify inadequacies of knowledge in a subject area				
	I can use simple terminology to classify a research topic/question				
	I can search out current knowledge on a topic				
	I can locate the limit to my information search requirement				
	I can recognise an information need to achieve a specific end				
	I can retrieve background information to underpin information search				
	I can take responsibility for information search				
	I can find information from different sources				
	I can retrieve information in different formats				
	I can recognise the authority of search inputs in published and unpublished information resources				

APPENDIX B

Case Processing Summary

		N	%
Cases	Valid	30	93.8
	Excluded ^a	2	6.3
	Total	32	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.829	.841	10

APPENDIX C

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
I can report lack of knowledge in a subject area	.298	201	.000	.758	201	.000
I can use simple terminology to identify a research topic/question	.349	201	.000	.724	201	.000
I can articulate current knowledge on a topic	.350	201	.000	.724	201	.000
I can establish the limit to my information search requirement	.311	201	.000	.748	201	.000
I can recognise an information need to achieve a specific end	.415	201	.000	.642	201	.000
I can use background information to underpin the search	.352	201	.000	.734	201	.000
I can take responsibility for information search	.320	201	.000	.742	201	.000
I can locate information from different sources	.441	201	.000	.578	201	.000
I can retrieve information in different formats	.494	201	.000	.483	201	.000
I can identify the authority of search inputs in published and unpublished information resources	.242	201	.000	.794	201	.000

a. Lilliefors Significance Correction