Chapter One

Introduction

1.1 Background to the Study

Research is considered to be an integral part of growth of institutions and the importance of research to academic environment cannot be overlooked.Research productivity is expressed by the entirety of researches conducted by researchers over a specified time frame which results in the publication of articles in peer review journals, books or chapter in a book published, and seminar papers delivered among others[1].Research productivity is manifested through the publication of articles in reliable scholarly journals all over the world, registration of patents, or documentation after theoretical and practical studies[2].Research productivity also include intangible outputs such as, editorial duties, obtaining research grants, engaging in public debates and commentaries on public interest issues, supervision of students' dissertations and class projects, teaching, and community service[3].

The concept of research productivity is complex, and can be measured by tangible indicators such as; publication counts (peer reviewed articles published in reliable scholarly journals all over the world, published textbook, chapter in books of reading); filing patents; research grants income; supervising of research students i.e. PhDs and others; serving as a peer-reviewer (of grants and papers); giving lectures and other presentations, especially as an invited (keynote) speaker; contributing to national and international committees, for example to produce practiceguidelines and examining PhDs, acting as a member of an editorial board or documentation after theoretical and practical studies. In addition, research productivity can also be measured by paper presented in

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seminars, conferences, workshops and proceedings because these are products of intellectual activities and involve use of information resources.

The popular measurement of research productivity include the following; publication counts as one of the major indicators of research productivity may be regarded annual compilation and reporting an institution's or individual research output which include; peer reviewed books, peer reviewed published conference proceedings, peer reviewed articles in scholarly journals, and chapter in books of reading[4].Research grant incomes are competitive (peer-reviewed and non-competitive) credit given for research grants awarded for funding all or part of the research endeavours within a specific period of time. These are weighted by grant-holder positions. Grant "points" are calculated using grant income.Research grants are commonly used to measure the research productivity of researchers in different fields. A research grant can refer to anything from a sum of money given to a researcher or individual by government or organization for all expenses, to a grant that is limited to only funding certain parts of research, such as a first or second trial[5].

Peer-reviewed publication is an activity which enables researchers to measure research productivity. It is equally a system used in the assessment and determinationof the quality of manuscripts before they are published. Independent researchers in the relevant research areas assess all the submitted manuscripts for originality, validity and significance to help editors determine whether a manuscript should be published in their journals. Lecturers serve as peer-reviewers (of grants and papers), examining PhDs, and acting as members of editorial boards[6].

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Furthermore, another metric related to this is the supervision of students, PhD and others' dissertations, theses and class projects. Lecturers, in their role as research supervisors, collaborate closely with students to improve the quality of their dissertations or theses, as well as their educational experiences.

Every effort that leads to the successful completion of a thesis or dissertation has contributed to the lecturers' productivity. Even when the effort does not yield a written document from the lecturers or their students, there are still scholarly activities that are regarded as integral part of research productivity[7].

Teaching activities which also forms a part of measure of research productivity include public debates and commentaries. Lecturers are often invited to media houses or interactive sessions about issues of public interest or relating to their areas of expertise. Renowned scholars are also sought out for commentary and expression of opinion on current affairs. These avenues are used to disseminate knowledge and educate the general public. Experts believe that these contributions are valuable and they are veritable products of the scholarly mind,contributing to national and international committees by producing practice guidelines; and filing patents, debates and commentaries can be categorised under community services that lecturers often render outside their core responsibilities. These services also include guidance mentoring and motivation for young people, health outreach for the aged and the poor, public awareness campaigns and work done for professional associations and their university communities.

This category also includes, but is not limited to, entries in encyclopedias, dictionaries, and reference works, entries in textbooks incorporating significant research content,

entries in scholarly editions, editorials, introductions, prefaces, and chapter-length translations that contain significant editorial work in the nature of research.

While these result in tangible outputs bearing the name of the author, there are other intangible outputs which often require as much research effort as needed to produce a book or journal article.

Furthermore, theyalso include curriculum development, editorial works, patent and certified invention, applying for and winning research grants, contribution to national development through debates and commentary, supervision of students' research, teaching and community services. Often times, lecturers are often called upon to contribute to an existing curriculum or develop a new one. Curriculum development is a multi-step process for developing and refining a school or university course. While the specific procedure varies every institution, the basic framework includes stages such as analysis, construction, implementation, and assessment, the broad framework includes stages of analysis, building, implementation, and evaluation. Apart from this, some lecturers often serve as editors to professional journals or book publishers. Some lecturers are on the editorial boards of peer reviewed journals or work as consultants to publishers. It also includes the occasional book of reading that is a collection of articles around a particular theme.Whiledebates and commentaries are done occasionally, every lecturerteaches regularly**.**

Teaching, as one other major metric of research productivity can be defined as engagement with learners to enable their understanding and application of knowledge, concepts and processes. To teach is to engage students in learning; thus teaching consists of getting students involved in the active creation of knowledge. Most crucially, for a

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scholar to advance in their career, the quantity and quality of their research output are crucial, which is what gave rise to the adage "publish or perish" among scholars. Research productivity does not only benefit the researchers, it also benefits their institutions. Institutions with significant quality of researches often attract grants and donations from various sources[8].

However, it has been noted that research productivity among Nigerian lecturers is low. Few lecturers often engage in all the activities that constitute research productivity and even fewer among those who do often have something to show for their efforts. It was reported that majority of research articles submitted by Nigerian lecturers to international journals often get rejected for lack of quality. Also, most of the textbooks used by students in Nigerian tertiary institutions are written by foreigners from countries such as India and others. Indeed, it was observed that many professors in Nigeria are unknown beyond their immediate environment due to lack of engagement in community services, such serving as editors, commenting on national issues or attending international conferences. Among the factors that have been identified as responsible for this imbalance are information seeking behaviour and the use of electronic information resources by lecturers[9].

Information seeking behaviour includes those activities an individual engages in when identifying his or her own need for information, searching for such information in any way and using or transferring of information. Information behaviour is defined as the sum total of human behaviour regarding the sources and channels of information, including both active and passive information seeking and information use. This definition has encompassed both the offline and online information sources as it includes face to face

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and online communication with others as well as the passive reception of information. Information seeking behaviour refers to how information users come to realise their needs for information and how they pursue and eventually make use of information. Information seeking behaviour is also regarded as an umbrella concept which encompasses information seeking and information use. Information seeking refers to a conscious effort to get information in an attempt to fill a perceived need knowledge gap. Information seeking is regarded as a deliberate activity. However, scholars have shown that information users can come across information while not actively searching forinformation or particular Information. This happen through serendipity, chance encounters, or when people share information that they believe may be useful to others.

From this perspective, it is clear that an investigation of information seeking behaviour attempts to understand the reasons why individuals seek for information, the kind of information to be sought, and the means and sources by which information needed is being sought. In the context of this study, the focus is on how lecturers behave when they have to use electronic information resources and how this behaviour influence research productivity. This includes their preferred sources of information, information search strategies, ability to evaluate information and make proper references to information sources[10].

Modern information users usually have to navigate through an overwhelming quantity of information before picking up some small piece, and user's satisfaction is perceived through the full-text download. The opportunity of searching through the variety of information before picking the relevant is part of the several advantages and features of electronic information resources over the print ones.

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User information behaviour means the approach followed in seeking information and information user actions toward electronic information resources retrieved. Users identify needs or wants and go via a process to satisfy the needs which consists the type of information resources, amount spent, frequency of use, and what influences them to make such decision. Therefore, during information search and evaluation stages, users work through processes designed to arrive at several information resources[10].

Studies report why users behave in a particular way towards electronic information resources. Based on the authors' observations and the reports from literature, severalfactors determine use of electronic information. One of such factors is the information literacy skill level of the potential electronic resources user. For instance, effective utilization of electronic information resources requires that the information user is skilled in analyzing, planning, searching, and organizing information resources[11].

Information seeking behaviour could be affected by age, educational level and linguistic ability of the user as well as other job related factors such as level and extent of experience, the nature of work(i.e. management, research or teaching) the subject area, the stage and level of a project achieved, number of immediate work team involved, nature of the establishment of user workplace (university or industrial), size of the institution and the communication structure within the institution.

The point taken from all the studies and interests in information behaviour as outlined here is that information seeking behaviour is a dynamic concept which must be examined in the context of each situation and as it relates to a particular group of users in order to obtain a proper understanding and ensure that each category of user is able to access the needed information resources[12].

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Information resources needs by users varied and research productivity as the quality and quantity of productivity that determined by the inputs. The inputs that are regarded as necessary for research productivity include an enabling environment, organizational support, well stocked laboratories, financial resources, and information resources obtained from libraries and other information systems. Of all the types and formats of information resources available to the modern researcher, electronic information resources appear to be very important in research productivity[13].Quality researches are factor functional access to electronic information resources. If lecturers are to conduct quality researches, they require access to a wide range of information resources that are relevant, up to date and easily accessible. Electronic information resources that can be found in various online scholarly databases and from subscription through the library are a vehicle to research productivity. These databases such as (EBSChost) Elton B. Stephen Company, Science Direct, (AGORA) Global Online research in Agriculture, research4life,(HINARI) Health Inter-Network Access to Research Initiative,Online Access to Research in the Environment(OARE), DOAJ(Directory of Open Access Journals),EMERALD(Environmental Management Exchange And Resource Alliance For Local Development), and Journal Storage (JSTOR), among others hold millions of scholarly articles in diverse areas of human endeavour. As the body of knowledge grows, the electronic information resources also increase because the platforms provide visibility for published research works quickly with ease and give researcher global recognition.

In the modern scholarly environment, electronic information resources have become the dominant sources of information for a wide category of information users including lecturers who need a rich and deep source of information for their researches. Electronic

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information resources are regarded as indispensable to libraries and researchers because of their comparative ease of use, economy of space, speedy accessibility and easy back file access. Electronic information resources have become very important these days as they come in multi- dimensional formats and can also be accessed as well as used anywhere without any geographical or time restrictions. Electronic information resources are different from print resources both in terms of access and format. Also, the ease of producing information resource made possible by ICT and the networked nature of online information sources has caused information explosion which has made a tremendous amount of information resources available to the information user. With the explosion in information, electronic information resources are essential resources necessary to supplement print information in order to provide information seekers the choice to have access to more convenient and reliable information sources to meet their information needs[14].

Apart from this, access to electronic information resources is not restricted by time and space as it is the norm in use of printed library resources which can only be accessed in the library and restricted to the library opening hours. Experts have also reported that electronic information resources are more current than print resources because they are being constantly updated which ensures that information users can get the latest information on any subject that interest them. The use of electronic information resources has also been made popular by the fact that no library in the current era can acquire all the information resources needed by its clientele. The use of electronic information resources may be restricted when the resources is not adequately available, due to obsolete the hardware and software, Inadequate ICT skills of library staff or lecturers,

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intellectual property right or copyright issues, poor or slow Internet network and complex electronic database language. All these factors will affect lecturer research productivity directly or indirectly[15]. It is based on this premise that this study seeks to examine the information seeking, electronic information resources use and research productivity of lecturers in private universities, Oyo State.

1.2 Statement of the Problem

Lecturers play vital role by assisting their institutions to meet the set goalsof academic activities to include teaching, learning and research.

However, previous studies have revealed that research productivity of lecturers in Nigeria is low compared to their counterparts in other parts of the world. This has great implications not only for the lecturers but their institutions and the nation at large. This is because research drives development and when research productivity is low; it can affect the level and quality of ideas available for both government and citizens. In view of this, several attempts have been made to identify factors that could significantly be responsible for this low rate of research productivity of lecturers in Nigeria. This could be a function of factors like information seeking behaviour and electronic information resources use.

Evidence from literature and observationhave indicated that there could be deficiencies in lecturers' searching habits, searching requirements, patterns and methods in information seeking while conducting research[17]. Also, it was revealed that lecturers rarely have opportunity to attend formal training programmes that could enhance their use of information resources. The consequence of which is that lecturers possess low information seeking skills which might limit access to relevant information desired as component of research information that may need to be disseminated to their audience in their research productivity. In addition, previous studies acknowledged that, despite the

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provisions of current information resources, lecturers failed to search and retrieve the appropriate resources, even if they had access to information resources, refused to utilise them, thereby led to low turnout of research productivity among them[18].

In addition, relevant researches have also shown that information seeking behaviour and electronic information resources use have positive relationship with lecturers' research productivity, but could be limited by factors such as information overload, inadequate search skills, power outages, poor internet connectivity and others, which make adequate lecturers' use of electronic information resources barely possible. These constraints interfere with expected quantity of research productivity required by lecturers to qualify for career advancement. Again, despite the inherent qualities of electronic information resources and information seeking behavior to support teaching, learning, research, and other academic activities, some of the lecturers may require training and skills needed to effectively use electronic information resources to enhance their degree of research productivity. Several studies have been conducted on this research topic but very few have been done in the area of private university[19]. In order to empirically validate these postulations, this study will therefore examine information seeking behaviour, electronic information resources use and research productivity of lecturers in Lead City University, Ibadan and Ajayi Crowther University, Oyo state, Nigeria

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1.3 Aim and Objectives of the Study

The aim of the study is to determine the influence of information seeking behaviour and electronic information resources use on research productivity of lecturers in Private Universities in Oyo state. The objectives are to:

i. determine the level of research productivity of lecturers in Private Universities, Oyo state;
ii. investigate the level of information seeking behaviour of lecturers in Private Universities, Oyo state;
iii. examine the level of electronic information resources use by lecturers in Private Universities, Oyo state;
iv. ascertain the frequency of use of electronic information resources by lecturers in Private Universities, Oyo state;
v. determine the purpose of use of electronic resources in the library by lecturers in Private Universities, Oyo state;
vi. determine the influence of information seeking behaviour on research productivity of lecturers in Private Universities, Oyo state;
vii. ascertain the influence of electronic information resources on research productivity of lecturers in Private Universities, Oyo state;
viii. establish the combined influence of information seeking behaviour and electronic resource use on research productivity of lecturers in Private Universities, Oyo state;

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1.4 Research Questions

This study seeks to answer the following research questions:

1. What is the level of research productivity of lecturers in Private Universities, Oyo state?
2. What is the level of information seeking behaviour of lecturers in Private Universities, Oyo state?
3. What is the level of electronic information resources use by lecturers in Private Universities, Oyo state?
4. What is the frequency of use of electronic information resources by lecturers in Private Universities, Oyo state?
5. What is purpose of use of electronic information resources in the library by lecturers in Private Universities, Oyo state?

1.5 Hypotheses

The following hypotheses will be formulated and tested at 0.05 significance level.

Ho1: There will be no significant influence of electronic information resources use on research productivity of lecturers in Private Universities, Oyo state;

Ho2: There will be no significant influence of information seeking behavior on research productivity of lecturers in Private Universities, Oyo state;

Ho3: There will be no significant combined influence of information seeking behaviour and electronic resource use on research productivity of lecturers in Private Universities, Oyo state.

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1.6 Scope of the Study

The study will focus on the information seeking behaviour, electronic information resources use on research productivity of lecturers in Private Universities, Oyo state, Nigeria.

The measures of research productivity are publication counts (peer-reviewed and non-competitive) credit, research grant incomes, peer-reviewed publications, supervision of students on dissertations and others, teaching activities. The measures for information seeking behaviour which concentrate on defining information problems, sources of seeking information, applying search strategies, evaluating information, referring to information and regulation activities. The use of electronic information by lecturers in Private Universities, Oyo state is measured by purpose of use and frequency of use. While the respondents of this study will be lecturers (professors, associate professors, senior lecturers, lecturer I, lecturer II, assistant lecturers and graduate assistants) in Private Universities, Oyo state. The population of this study is the Lead City University, Ibadan and Ajayi Crowther University, Oyo. The reason for choosing only the two universities in Oyo State is because the other private universities in Oyo state e.g. Koladaisi University, Precious Cornerstone University and Atiba University have very few faculties and lecturers for my study. The total population of Lead City University Ibadan and Ajayi Crowther University is 520 which I believed to be large enough for generation of the findings.

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1.7 Significance of the study

The study findings will prove useful to library administrators and librarians by providing them with necessary data useful in developing effective strategies for the maximum utilization of the available electronic information resources. It will also help them to enable users appropriately achieve their purpose of using electronic information resources such as lecture, research and other academic activities and which serve as a baseline for frequency of use of information resources by researchers worldwide.

Lecturers and other categories of information users are also going to find the research illuminating in understanding their personal information behaviour such that users can understand easy methods or actions to satisfy their needs through the use of appropriate source of information, search strategies, evaluating information, referring to information in Oyo State Private Universities, Nigeria and global university community.

Also, the study will provide useful information for researcher and add to existing literature on research productivity and will help to design a policy that will influence information seeking behaviour and to consider constant electronic information resources use training programme for institutions that will influence research productivity through the following research productivity measuring indicators such as Publication count, Research grant incomes, Peer-reviewed publication, PhD students supervision, Teaching activities, Peer reviewing. The outcome will add more to the body of knowledge in the field of library studies.

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1.8 Operational Definition of Terms

***Research Productivity*:** This refers to the number of publications produce per researcher. It can also be seen as product of research activities carried out by lecturers in Private Universities in Oyo State.

Publication Count: This refers to accumulation and reporting of higher institution research output which may be within three years.

Research Grant Income: This is referring to the income that come from money that is giving to a researcher to pay as expenses needed for carrying out a research project.

Peer-reviewed Publication: It refers to evaluation of work by one or more people with similar competences as the producers of the work.

PhD students' Supervision: This refers to the process of engaging students in the activities that will improve their knowledge or quality of their dissertations or theses, as well as their educational experiences.

Teaching activities: It is referring to scholarly activities and interactive session through which knowledge is imparted to students to become professionals in their fields or to general public.

Electronic Information Resources: This refers to computer-based information collections such as professional databases, peer-reviewed journal articles online that are organized in a systematic way with searchable elements of fields through technological devices in Private Universities in Oyo State

Purpose of Use: This can be seen as a certain reason for which electronic information resources seeking for and what can resources be used for e.g. Teaching, research, supervision etc.

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Frequency of Use: This refers to how often are lecturers or researchers use electronic information resources for their academic activities.

***Information Seeking Behaviour*:** This refers to a willful seeking for information as a sequence of a need to satisfy some goals. It is also referring to actions and methods that users taking towards seeking for information to satisfy their needs in Private Universities in Oyo State.

Information Need of Lecturers: This is referringto a kind information resource that individual desire to find or locate to satisfy a goal.

Sources of Seeking Information of Lecturers: It can be seen as primary or secondary sources of information where lecturers retrieve knowledge for academic purpose.

Information Search Strategies of Lecturers: This is referring to the keywords or terms through which information is searched e.g. Boolean logic, phrases, wildcard etc.

Evaluating of Information by Lecturers: This can be seen as verification and evaluation of online information search by lecturers represented by author fact or opinion.

Referring to information by lecturers: This is referring to the way by many lecturers committing plagiarism by not citing their information source, thereby personalize the information.

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Chapter Two

Literature Review

This chapter is concerned with the critical analysis of existing literature that has bearing on the subject of this study. The review is considered essential to this study; it provides the researcher with insight into the state of the matter concerning the area of interest. It also provides a solid theoretical foundation for the present work and enables the researcher to demonstrate the justification for the research and clearly show the areas that are not adequately covered by existing literature which the present study intends to. The review is also useful to get an understanding of the methodologies that have been adopted by researchers conducting similar studies and the theoretical frameworks that have guided previous studies. This is useful for the researcher to justify his/her own approach. In a nutshell, the chapter is organized under the following subheadings;

2.1 **Conceptual Review**

2.1.1 Concept of Research Productivity

2.1.2 Concept of Electronic Information Resources

2.1.3 Concept of Information Seeking Behaviour

2.2 Theoretical Review

2.2.1 Wilson Model of Information Seeking Behaviour

2.2.2 Technology Acceptance Model (TAM)

2.2.3 Gilkey General Theory of Productivity

2.3 Review of Empirical Studies

2.3.1 Research Productivity of Lecturers

2.3.2 Electronic information resources

2.3.3 Information Seeking Behaviour

2.4 Conceptual Framework

2.5 Summary of Literature Reviewed

2.1 Conceptual Review

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This section reviews key concepts in the topic of the study to lay a foundation for the empirical review that follows

2.1.1 Concept of Research Productivity

Research refers to an attempt carried out by all professionals, regardless of their subjects of study; it is not just something that students and academics do. The term "research" has two syllables, "re" and "search," with "re" standing for "again" or "anew" and "search" standing for "to notice closely, to test, or to query."[1]Research has alternatively been defined as an investigation into the nature, causes, and effects of a certain set of circumstances, whether these conditions are experimentally controlled or really recorded as they happen[2]. All these are general description of a research that can be conducted by anyone, whether they are in an academic environment or carrying out some informal enquiries. In this bracket are examples such as students research into tertiary institutions they would like to apply to; a new employee finding out more information about his new employers or a politician conducting an 'opponent research'[3].

In the academic environment circles, research referred to a thorough investigation in a particular field of knowledge that aims to produce facts or principles. It went on to explain that analysis could be a structured process that makes use of accepted scientific methodology to resolve current issues and create new, broadly applicable knowledge.

Additionally, research is defined as "a methodical inquiry to find solutions to a problem". In order to uncover, interpret, or revise facts and hypotheses using knowledge that the researcher has acquired, the research process is intended to be systematic and methodological[4].

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It is widely recognized that research and experimental development (R&D), carried out by scientists worldwide, is essential to innovation, which in recent years, which in economic growth and poverty alleviation has become one of the main drivers and taken center stage. Research findings have been aiding policy makers by promoting growth in the fields of science and technology, policy can help disseminate the advantages of innovation. However, experts are of the opinion that third-world environments, like those in Nigeria, make research difficult. As a result, it is difficult to establish research institutions; nonetheless, those that are possible and available are public universities with a primary concentration on teaching[5].

Various studies have lamented the fact that the research culture is not properly entrenched in Nigerian tertiary institutions due to various problems, which has had an impact on the nation's overall development.

Leadership issues, administrative issues, funding issues, the complete lack of a clear national development philosophy (reflected in government policies and programs), political instability, mentoring, and the lax attitude of people toward research are just a few of the difficulties facing the country's research activities as well as access to the needed information resources[6].

In discussing research, it is also pertinent to discuss researchers who conduct them. Scholars pointed out that the existence of relevant and user research can only be made possible by a researcher who is more interested in the repeatability of results and their application to challenging and general settings than specific results. So, research continues to be a way to comprehend many issues, and the engagement of researchers in research boiling issues[7]. A researcher is known as a professional who engaged in the final

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result of research is typically beneficial to people seeking the answers to crucial problems and can be applied to the advancement of a country. Researches of all kinds either produce the fresh information in the shape of a new theory or lead to the development of new methods and procedures or an actual product. The can now be used by the general public to deal with problems and guide them in both academic and non-academic activities. However, research is able to solve societal problems because it was able to identify the presence of a problem and take active steps to understand the nature of the problem with the aim of solving it or recommend a course of action likely to result in the resolution of the problem[9].

Research, just like all other human activities is highly dependent on information. It is the availability of relevant, current and accurate information that identifying research problems is a professional responsibility for researchers (s) [10]. Therefore, researchers will always discover the requirement for information as they move through different stages of their investigation, that is, from the first stage of an idea to the last stage of an idea change[11]. In Researchers should look for and get the pertinent knowledge they require to address the hurdles they have already found or will find.

Researchers need knowledge to conduct, apply, and manage their research, and this need must be met for them to move forward successfully with their research operations[12].

The main source of information for researchers, especially in the academic environment is the academic library. Although the advent of Information and Communication Technology (ICT) has created multiple sources of information, the academic library still remains a key player in the provision of key information resources needed by researchers to bring gaps that arise in the course of their research. Whereas, the traditional library

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collection is made up of print resources such as books, encyclopedia, journals and research reports among other, the immense advantages offered by other electronic information resources and the wide appeal the hold among information users has encouraged libraries to integrate them into their collections[13].

2.1.2 Concept of Electronic Information Resources

In modern time, Libraries are now utilizing information and communication technology (ICT) and other electronic-driven services instead of conventional printed resources because their content is no longer limited to printed materials like books, magazines, or journals anymore[14]. Various studies have stressed the fact that development in ICT has widened the opportunity for academic libraries, as an integral part of the educational system which also adopts modern technologies as previously explained to make library items electronically accessible to users[15]. It describes why e-books are playing such a big part in libraries in this modern era of digital technology[16]. Researchers say that by utilizing digital technology, e-learning is providing the educational industry with a fresh perspective. Due to their useful benefits for general public use, libraries are increasingly adopting open source software in the 21stcentury.More people will be able to access and use electronic information resources as a result of this[17].

Researchers agreed further that electronic information resources due to their very easy use are crucial in the design of modern libraries[18]. This position is due to the universal agreement that e-resources make it easier to get access to current and relevant material for learning and research advancement[19]. Previous research has found that the library is frequently referred to as a scholar's laboratory. Libraries have been meeting the needs of researchers in this age of modern information and communication technology, which

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have changed the way information is kept and accessible dramatically. The concept of the global village was a new birth as a result of the technological revolution, and distance is no longer an impediment to obtaining information need. Users can communicate with one another as if they were in the same village or neighborhood. Digital technology has revolutionized the academic environment in the same way that it has changed other aspects of life. It has influenced academics' teaching styles and research approaches, as well as the sources and methods they employ in teaching and research. A vast number of electronic resources are available in the library. Researchers' information-seeking behaviour has been influenced by the increase in information available on the internet. There are numerous forms of information; all are available in one place, in different containers and in a variety of locations.

While believing that the results of many empirical research on the importance of using e-resources in academic libraries, researchers from India further indicate that the integration of ICT and the subsequent of electronic information resources have made it easier for librarians to perform routine tasks in libraries. They explained further that university libraries' use of e-resources makes experimenting with new features straightforward and easy[20].

Furthermore, libraries are evolving in rapid advancements in information technology and academic community behaviour. Libraries are using information technology into information processing, which has resulted in the introduction of new products and services. The Internet meets information needs and retrieval requirements rapidly and effectively. To better the administration of scholarly information, libraries have embraced new policies for collection development and service structure transformation. This is also

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necessary for bolstering and quickly accessing scholarly content that is not kept locally. Because university libraries are primarily used for research, must transition to digital e-resources, which are less expensive and more convenient to use. Distance learners with limited time to visit libraries can use generally available electronic resources, such as CD-ROMs and OPACs, from outside the library. The electronic version of materials is rapidly replacing the print medium.

Similarly, the desire for advanced information technology to repackage different alternate products, as well as the demand from users for an easy search, browse, retrieve, and revise method of facture rich non print information sources, have all contributed to the current trend of hybrid libraries. Documents in electronic or e-format that may be accessible via the internet in a digital library setting are referred to as e-resources. E-resources are commercially accessible electronic products that supply a collection of information, such as text, images, and other multimedia products such as numerical and graphical mode for libraries and information centers. These can be provided via CDROM/DVD, the Internet, and other means. There are two sorts of electronic resources: online and offline. E-books, e-journals, multimedia services, email, chat, and other online tools are examples. CD-ROM, floppy disk, and magnetic tape are examples of offline resources.

Furthermore, the rapid advancement of Information and Communication Technology (ICT) has brought a paradigm shift in the information scenario, allowing users to handle a variety of information sources conveniently and effortlessly, as a result of which e-resources have become a lively substance to the modern library's reserves in satisfying a variety of needs of teachers and researchers with minimal risk and time. E-books, e-

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articles, e-theses, e-newspapers, e-databases, and a variety of other electronic items are generally included in their scope. Furthermore, they are documents in digital formats that are made available to library users via a computer-assisted retrieval system. To begin, the internet is recognized as the most appropriate and widely used method for obtaining the majority of e-resources via search engines, online databases, and Web Opacs. The rise of online resources over the previous decade prompted a debate about why individuals would use an electronic version that looks to take longer to get and may be less user-friendly than the print version. When a resource is available on the desktop, it can save time by eliminating the need to go to the library. As a result, now is the time for information professionals to investigate the several main characteristics of electronic resources, as well as identify and address some of the challenges associated with their use.Besides, it was also argued that electronic resources have high tendency of attracting new users to libraries and satisfying their specific needs. It means that, if the library resources contents are universal in coverage via adoption of e-resources technology, will not variably improved user's satisfaction[1]. More importantly, researchers are of the opinion that the challenges of higher educational institutions, especially in developing countries where libraries and information centers face dwindling funding and acute shortage of the information resources needs, can be met via initiatives in electronic learning, by laying enormous emphasis on the critical role of e-resource utilisation in modern academic libraries[21].

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2.1.3 The Concept of Information Seeking Behaviour

In the current information age where information can be sourced from various information systems especially on electronic databases, a good understanding of information seeking is very relevant in order to understand information seeking behaviour. Information seeking regarded as a deliberate attempt to acquire information in response to a need or gap in the knowledge. Information seeking is also described as a process in which information seekers must make use of their cognitive ability, knowledge and skills regarding the search and retrieval of the needed information. In another context, information seeking refers to quite simply as the ability to scan literature efficiently using manual or computerized method to get a set of useful articles and books. So, Information seeking can be seen as the means via an information seeker undertakes in finding for suitable information to satisfy a desired information need. When an individual realises that he/she needs information, the next logical step is to make an attempt to find the needed information. In essence, the realization of an information need leads to information seeking. Conceptually, information seeking is the term which embraces all those activities that information users consciously participate in to gather information that they believe will meet their information needs or bridge a knowledge gap that has been discovered[22]. The generic nature of this definition is exhibited in another, broader definition which attempts to clearly highlight all aspects of information seeking.

Information seeking can also be defined as a type of information activity that is prompted by a user's information needs. Users can use both to satisfy their information needs, they may use both formal and informal sources of information or information services. In one of the related studies, information seeking means described as a situation- and person-

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specific action supported by information access and the most important information sources currently available[23]. Yet, scholar views information seeking as a deliberate action taken to fill a knowledge gap or satisfy an information need.

Users' actions when accessing information, the initiatives taken by information users to acquire information become visible in the actions they take to express their information needs, seek, evaluate and select information, and finally use it[24].

In the traditional sense, information seeking includes efforts of information seekers to consult manual information sources (e.g, newspapers and textbooks) and/or computer-based systems (e.g., the Internet) when they seek information. Subsequent researchers have further expand this view by adding the use of web search engines, consulting authorities, asking friends, going to the library and watching television to the list of information sources[2]. Another study also mentions research, experimentation and entertainment as information sources that could satisfy information needs[25]. In an attempt to outline the components that a definition of information behaviour should include, researchers identified context and users' mental structures or the personal dimension, which is seen as two of the core component parts that play a significant role in changing users' information-seeking behaviour[23].

In a recent study which examined the models that have been created to study information behavior, information seeking was defined based on the concepts laid down in an earlier study. Following this earlier conceptualization, information seeking is defined as the purposive seeking for information as a consequence of a need to satisfy some goal, while information searching means the 'micro-level' of behavior applied by the searcher or information seeker in interacting with information systems of all types[24]. It is clear from

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this definition that information seeking is a broad concept as can be seen from its differentiation from information searching. Information search could be said to be a step in information seeking which began with the identification of information and the mental decision to seek for information. Once that decision is made it is translated to information searching.

In the process of seeking for information the individual needing information may consult various information sources in different formats such as print resources which include newspapers and text-books, digital or computerized information systems such as digital libraries, institutional repositories, scholarly databases as well as online sources such as internet websites, blogs, online chatrooms etc[25]. The list of sources can also be expanded by including the use of web search engines, consulting authorities, asking friends, going to the library and watching television. Experts have recognized the fact that information seeking is a dynamic and that all information seeking activities are dependent on the situation in which information seekers found themselves. Thus, access to information influenced information seekers' action, perceived quality of, and confidence in the information source. An ever-changing information-seeking environment creates by the combination of all these factors[26].

The term information seeking often is seen as a canopy all-embracing a set of related concepts and issues. Library in the world, discussions of construction and management of databases, community information needs of user community, reference services, and several other topics re the term. Though, a single, serviceable definition remains uneasy to find. As any other difficult concept, information seeking refers to diverse things to various settings. In simple definition, information seeking can be seen as the search,

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retrieval, recognition, and application of meaningful contents. Its seeking could be explicit or implicit, the retrieval could involve specific strategies or serendipity, the end result from information might be embraced or rejected as well, the entire experience may be carried through to a reasonable conclusion or failed in midstream, and a million several other potential results may be there[27]. Information seeking has been seen as a cognitive exercise, as a social exercise and cultural exchange, as separate strategies employed when confronting uncertainty, and as a fundamental condition of humanity in which all individuals exist. Actually, information behaviour becomes more appropriate phrase, and not information seeking, which could be best explained the multi-faceted relationship of information in the human beings lives, a relationship which would involve both active searching via formal information channels and other various attitudes and actions, including skepticism and uncertainty. This concept could not be meaningful if there is no need[28].

Therefore, in order to understand what concept of information users means, scholars asserted that it important to understand how it is situated within the general context of the rest of human needs research as well as within the evolutionary trajectory of Library and Information Science (LIS). "Needs" or "human needs" is a main concept in several disciplines. Information needs could be examined within the general context of "human needs" research so as to fully study the meaning of the term information needs[29].

A multidisciplinary examination of the importance of "needs" research offers an essential framework for understanding the term of "information needs" in the LIS and particularly from a user-centered perspective. Utilization of this concept will also be discovered as

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part of the historical development of the LIS discipline and its role in spurring new avenues of research findings in the field[30].

Information need can be defined that need originating from an unclean awareness of something missing and then culminating in locating information that contributes to understanding and meaning. For a person to experience an information need, there ought to be a motive behind it. From this, it may be seen that an information need is recognition that one's knowledge is insufficient to satisfy a goal that is at hand[7]. Information need is a person's or a group's want to search out and acquire information to satisfy an acutely aware or unconscious need. Thus, information need arises from a vague awareness of something missing and as ending in locating information that contributes to understanding and meaning.

Information need generally means the kind of information a specific library user is looking for at a specific point in time in other to fill any gap that arises in knowledge. Information need occurs when an individual identifies a problem or information gap and develop a desire to solve the problem or bridge the information gap. Such information perceived can result into information seeking and so the formulation of request for information. Hence, information need merely refers to demand for information. It can also be seen as a requirement and wish. Information needs are numerous and systematic dynamic and not agreeable to generalization. Hence, it varies among teams, individual and society[31].

Information is needed due to the fact that it has a direct impact on people's lives. People require information in order to find solutions to specific questions. When a person sees a gap in his or her state of knowledge and seeks to close that gap or, as one commentator

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put it, "an anomalous state of knowledge," as one commentator described it—information demands arise. Information is a logical representation of the nature of the environment in which humans live. Because each individual's information need is unique, and information demand is essentially subjective and occurs only in the mind of the seeker, all the approaches that have been adopted to study it have proved problematic[32].Information is needed by various users for various objectives.

Information is required depending on the viewpoint or situation in which it is required.

The academic contexts (environment) in which lecturers find themselves affect their information demands and information-seeking behavior. Lecturers are members of an information user group. Therefore, the primary goals of their information-seeking behavior are to acquire access to information that will help them prepare for lectures, write academic papers for seminars, workshops, or conferences, and conduct in-depth research on certain topics related to their field of study. An information needs which arises due to recognition of a gap in knowledge has been examined by various scholars due to its influencing information behaviour[33]. Researchers in the field of information studies have created various conceptual vantage points in an effort to explain the concept of information needs. One of such perspective is that information need is cognitive in nature thus; he degree to which information users understand and describe their information needs determines how those needs are characterized. Due to this, scholars have identified four categories of information needs: visceral, conscious, formalized, and compromised needs. The manifestations of each level are shown in unconscious vague feelings, Statements that are unclear, formalized, or compromise between codified user needs and system capabilities (such as queries).

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Similar to this, researchers categorize information demands into three categories based on how well-defined and stable/variable they are: muddled topical information needs, conscious topical information needs, and verificative information needs[34].

What can be inferred here is that information needs are perceived and they arise out of uncertainty; something that theorists have referred to as the Anomalous State of Knowledge. As a result, expressing information need is often difficult for information users. Contemporary researchers have referenced past works on information behaviour where scholars had extended the conceptualization of information needs to the emotive component, arguing that information needs are a condition of knowing that is unambiguous and is marked by both hazy ideas and unease feelings. Similarly, several Researchers now contend that information needs cannot be explained without taking into consideration the context in which they arise[35].

Researchers seeking to understand information needs have emphasised the need to understand the situation that leads to the realization that causes an individual to realise that they need information. Towards this end, information need is defined as gaps that emerges in physical, natural, and/or social reality. People get off-balance as a result of these gaps, and they must seek information in order to regain their sense of the world and their role within it[36].

In addition, Information needs are not something that humans have always had in their minds, according to those who view information needs from a social constructivist perspective. People do not always realise that they need information until they get to the point where they find they cannot proceed with the information at their disposal. As a result, people find it difficult to articulate their information needs. Rather, information

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needs are negotiated and co-constructed by the participants through conversations and discourses in actual information-seeking encounters[37].

The continuous attention being paid to the concept of information by researchers all over the world attests to its theoretical significance. Understanding information needs also has a practical application. A proper understanding of information needs enables librarians and information service providers to effectively design and develop information programs, systems, and services that are centered on users. For example, according to a study, by gathering more information about the information needs of a group of information users during search sessions, such as their familiarity with the topic, any prior knowledge they may have about it, and their motivation for searching, researchers were able to significantly improve information retrieval performance[38].

In another study, the relationship between information needs and information behaviour was outlined. It was submitted that information needs can be classified into physiological, affective or emotional and cognitive needs[39]. Each class of need drives the user to search for information from two different forms; formal information systems such as online resources or/and information exchange and transfer from other people[40]. If the information needed is found via these resources, it ought to bridge the information gap and satisfy the perceived need. Otherwise, the user will have to look search more information. The information seeking behaviour of users is very crucial toward their needs. Therefore, information seeking behaviour can defined as those activities an individual engages in when identifying his or her own need for information, searching for such information in any way and using or transferring of information. Information behaviour refers to the complete or totality of human behavior about the sources and

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channels of knowledge, including active and passive information seeking and information use. So, it includes face to face and online communication with others as well as the passive reception of information. Information seeking behaviour revolves around personal causes for seeking information, the different types of information which are being sought, and the ways and sources in which needed information is being sought. Information seeking behavior is explained in various forms, from reading printed material to research and experimentation. Scholars, students and faculty actively get current information from the many media out there in libraries, e.g. Reference Encyclopedias, journals and more currently, electronic media databases[41].

An individual user has several other ways for accessing his desired information. There are several factors that decide his information seeking behaviors. These factors include the time spent in search of information, knowledge about information sources, the way of expressing his information need etc[42].

The fundamental elements that have a significant impact on how users behave when seeking information as identified by scholars are context and users' mental structures[8]. Obviously, these components were the product of many factors that have been considered by previous researchers as influencing information seeking behaviour. For instance, it was pointed out that context has always been represented in information behaviour in different coinages such as 'frame of reference'; 'frame-works of meaning'; 'setting' and 'information use environments'[43]. With these descriptions of context in mind, we can say that contexts involve the interaction of information users with the environment in which they work.

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The context of a user includes a variety of components that may influence information seeking, including setting, scenario, background, and surroundings.

In the field of library and information science studies, context "generally means any factors or variables which are seen to affect individuals' information-seeking behaviour". In this way, we can see apply context to what and where people are at a particular moment in time. The 'what' and the 'where' have been tagged as environment and task by information behaviour theorists.

The environment in which a user operates is expected to influence the way they search for information. The academic environment is an illustration of an information-rich setting that may influence its members' information searching; in this case, lecturers. The socio-cultural environment, the physical environment, and the climate of the environment are some of the environmental characteristics that theories emphasize universities and lecturers' homes are two examples of the settings Wilson identified for knowledge seeking and usage by academics. The capabilities of the academic library, the information sources it gives access to, as well as the digital environment, must all be taken into account in the academic setting (environment). As noted in a related study, the digital environment hassled to changes in the creation, storage, distribution, access and delivery of information. The studies revealed that the majority of information consumers in tertiary institutions were impacted by the evolving ICT landscape. Electronic information formats and electronic databases were among the modifications that most significantly impacted these users.

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Information must be used to adapt to these shifting surroundings, lecturers require a totally new set of skill and equipment[45]. Information seeking in the digital age has been transformed by Information and Communication Technology (ICT).

For instance, old challenges such as the distance to the library and library opening hours have given way to new ones such as lack or slow internet connectivity[9]. The Internet has suddenly become a key element in academic institutions' teaching, learning, research, and access to information sources. Today, information users like lecturers rely on the Internet to find knowledge that will help them with their research and other academic activities[46]. Researchers also revealed that bandwidth and network-related issues continue to affect students' utilization of Internet resources even when they have access to them. In addition, the dynamic ICT (atmosphere) environment has an impact on information seeking in terms of a lack of needed computer and information literacy skills and an inadequate ICT infrastructure.

Also, Tasks or situations may also be contextual components that influence users' information needs and, in turn, the way in which they seek information. Tasks influence users' information-seeking behaviours in addition to just inspiring them to do so. In the study carried out on the information needs and information seeking and use of information resources by lecturers, it was reported that information seeking behavior were influenced primarily by their official duties which include mainly of teaching and research. The types of information seeking by lecturers can be determined by the type of tasks in which they are engaged, such as the completion of a research article, preparing lecture note, seminar papers, keynote addresses and feature articles. Lecturers are also scholars who are called upon to review scholarly works, compile information about a

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particular subject and supervise student researchers at various levels. The information-related behaviour of fashion practitioners is fundamentally distinct from educational disciplines, according to prior study the humanities are book-focused because the sciences rely substantially on recent journal articles, but the creative disciplines are distinct.

A study of art, music, theater, and dance highlighted the importance of the need for vast collections, extremely multiple formats and specialized resources. As within The information needs of the fine arts and architecture faculty may vary greatly and be quite individualized in terms of observation, research, and teaching[47]. Lecturers therefore primarily do information searches and use it for study in support of their scholarly endeavors. Those activities all need for certain data. The reportable literature demonstrated that the various task types that lecturers deal with have an impact on their information-seeking behaviour. The listed tasks are of: Coursework preparation for class talks overseeing final-year project theses or dissertations, and conducting research getting seminar papers ready as a result, their information-seeking behaviour is determined and shaped by the tasks at hand. Moreover, the three categories of personal elements are biological, psychological, and socio-cultural. These characteristics are what set consumers apart on a personal level and influence how they search for information.

Researchers found that users' information-seeking behavior is influenced by a variety of variables, including their professional and educational background, their knowledge of how to access information sources, and the amount of time they have to spend searching information systems.

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One study found that a variety of personal factors, such as age, information skills, personal preferences, knowledge, and emotions, have an impact on graduate students' information behavior[10].

Indeed, age of information seekers have been emphasized alone of the key variables that influence or affect information-seeking behaviour[48]. It has been ascertained that younger lecturers are ready to use local web sources and gain access to local information a lot quickly than their older counterparts. Researchers often refer to these younger generations of lecturers as the 'Google generation'. This position on the technology savvy nature of younger lecturers has also been buttressed by various independent studies on people's Internet-related knowledge and behavior. Researchers found that young people have higher expectations for ICTs than older people do in one of the linked studies, and they are more proficient users of technology[49].

More to the point, Information-seeking behavior can be affected by users' personal capabilities, such as their IT and information literacy abilities, which include their search and library abilities. Information literacy is the capacity to quickly read literature using manual or automated methods and to recognize groups of useful books and articles. Researchers have argued that completely the information-seeking behaviors of lecturers have been impacted by varying levels of IT proficiency and information literacy.

Studies have shown that in addition to information literacy also identify the following factors which may affect information seeking behaviour in the electronic information resources environment. These include the availability (or otherwise) of facilities such as computers connected to the Internet at university libraries, as well as the type of user education programs provided by the library, lecturers' attitude towards electronic

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information resources and the use of manual information retrieval techniques, which results in slow retrieval and poor filing. Studies have also cited the ineffective use of library resources and services is hampered by a lack of knowledge about these resources and services.The aforementioned elements imply that lecturers' use of electronic information sources may be influenced by their level of information literacy, IT proficiency, and user training programs. Furthermore, the researcher notices that users' information searching abilities, including keyword searching, the usage of Boolean operators, and truncation, have an impact on information seeking. Studies have shown that search experiences, computer and online experiences, perceived search ability, and frequency of usage of e-resources all affect information-seeking behavior in addition to information-searching abilities. One particular study emphasized the difficulties international students have in accessing and obtaining information. Their study indicate that international students are not necessarily ready to use the library, the most reasons for this being cultural barriers and a scarcity of skills[50].

In another study, researcher attributed negative information behavior of lecturers to the possibility of the lecturers experiencing technical problems in accessing information resources. It was discovered that some libraries are not providing proper access to electronic resources but they are still using card catalogue, there's a chance that the catalog doesn't provide enough access to the library's holdings. In addition, Personal preferences and familiarity with particular information sources can also affect how lecturers use information. Studies revealed based on lecturers' preference for reading in libraries over finding information in books or periodicals.

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This preliminary study's conclusions are distinct from those of prior studies that found lecturers favor information sources such books, internet databases, and journals.

Similarly, the findings of other studies, teachers in the modern era heavily rely on the Internet. Additionally, research has attempted to explain the preference for using electronic sources in what sequence. The Internet, academic libraries, and colleagues were preferred in that study, whereas databases, online catalogs, and e-mail were preferred in a different study.

Similar to this, a study conducted by a Nigerian academic revealed that research researchers at the University of Lagos made good use of electronic resources to the point where they were dependent on them to find the pertinent information they needed[51].

Personal experience can influence how people behave when looking for information. For instance, subject areas have a substantial impact on information consumption and preferences, whereas user knowledge affects the choice of information sources. In another study, it was discovered that graduate students in the physical sciences and engineering used online resources more frequently than their peers in other academic disciplines. Similar research revealed that faculty members in the humanities and social sciences tended to use the Internet less frequently than those in the sciences or agriculture.

2.2 Theoretical Framework

When it comes to information behaviour research, there are numerous models and theories that have been developed by professionals in the field. It is opined that the most theory/model rich aspect of Library and Information Science research is information behaviour with a researcher identifying up to 72 theories of information behaviour[52]. However, researchers have noted that each of the models that information behaviour researchers have created thus far are usually targeted at a particular user groups with little

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application for other groups. However, each model has aspects with general applications and researchers often combine several models and theories to guide their information behaviour research. Therefore, with simply models being stated briefly, the current study finds a number of the effective information behaviour models from various teams of authors that are pertinent to researchers' information needs and information-seeking behaviour.

2.2.1 Wilson Model of Information Seeking Behaviour

This Wilson's model was first developed in 1981. It is one of the most cited models in information behaviour studies. Wilson's first set of three models was published in 1981 but a revised general model on information-seeking behaviour (based on the second and third models of 1981) was published in 1996. The original model is based on two main ideas: firstly, that the need for information is not a primary need but rather a secondary need that results from more fundamental needs; and secondly, that when trying to find information to meet a need or necessity, the information seeker is likely to run into various types of impediments. Wilson's theories information-seeking behavior arises from the user's perception of a need, which can take many different forms[53]. For instance, the user may develop requirements for formal information systems (such as libraries, online services, or information centres). The assertion above clarifies the developing information need of an individual which will lead to making a demand on available information systems if there is an identifiable information need to be met. At this phase the individual displays varying behaviour based on the kind and the level of prior knowledge and the skill that he/she possesses that assists in making useful information choices. In the context of this research, lecturers' research information need is also refer

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to secondary because if they do not have need to conduct researches, no information need will arise. But, once they realise the need for research, they soon realise that they do not know all the published works in their area of interest so they start to 'make demand on formal and informal information systems'.

Wilson model recommends classifying the primary information requirements as physiological, cognitive, or emotive. In addition, he looks at how these demands are affected by the individual, the role that person's job or life must play, or the settings (political, economic, technical, etc.) in which that life or work takes place. Several scholars have praised the Wilson is regarded as one of the top theoretical information-seeking models. They admit that the idea of information, information needs, information seeking, and information use is deeply ingrained in the model. However, it was pointed out that despite the fact that it does not closely examine specific job tasks, events, or contexts, the model is aware of a wide range of elements influencing information behaviour.

Another group of researchers observed that the documentary information sources, which make up the majority of information sources, are given little to no weight in the model.

Wilson claims that the model only applies to specific jobs for which the information sought is applied because it does not account for the information seeking behavior of a particular group of people. Moreover, the model ignores the questions of sources, characteristics and personal preferences of users and it also generalize information seeking without considering the type and scope of information sources or the suitability of the accessible information to fit information users' needs.

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Wilson's information behaviour model has flaws that make it unsuitable for this study since it does not adequately address the application and sharing of information among experts. Additionally, the approach disregards individual information preferences, disregards the issue of individuals, and undervalues documentary sources. The model does not additionally take into consideration the success or failure of information use as a result of satisfaction or non-satisfaction relevance job outcomes.

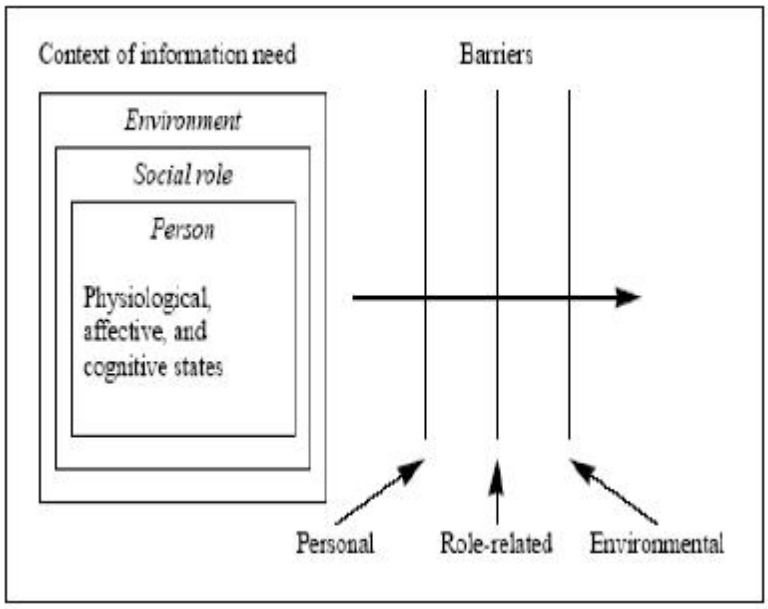

Figure 2.1: Wilson's 1981 Model

A review of models of information seeking behaviour. In 2019 Sixth HCT Information Technology Trends (ITT) 2019, Nov. 20 (pp. 147-153). IEEE.[52]

2.2.1.1 Wilson's 1999 Model of Information Behaviour

Wilson's models of information behavior from 1981 (the earliest model) through 1999 were revised to create Wilson's 1999 model (the latest form of the model was originally published in 1996).When a user has trouble finding information, they can utilize the updated generic model, which is compatible with earlier version. By proposing information-seeking behaviour as a novel perspective, in conjunction with information

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use, to study the dynamic method experienced by users for satisfying information needs, the model also drives the direction of information behavior research from "system-centric" to "person-centric" investigations. The author proposed a problem-solving model as a means of integrating the information behaviour study[54]. The following steps of an intentional downside-solving process, problem detection, downside definition, downside resolution, and downside resolution statement are regarded by the model as being related to information seeking, searching, and uses. The model claims that whenever a particular type of knowledge aids in the resolution of a group of problems, information-seeking behaviour is viewed as a goal-determined behaviour. A user can interact with three categories of information—problem information, domain information, and problem-solving information—while seeking, searching, and using it to overcome a barrier[55]. Problem information is information on the layout, characteristics, and requirements of the problem (the issue) at hand, wherever users would access it in the problematic environment or document. Domain knowledge relates to facts, ideas, laws, and theories, whereas the problem-solving approach offers strategies for removing impediments, how a selected issue ought to be developed and solved. This can be important for determining the matter and may solely be enforced by specialists. Wilson's model explains how information demands develop and highlights the elements that may make finding information difficult.

Some elements are heavily reliant on resources, such as the accessibility of knowledge, awareness of accessibility, problems associated with the convenience of information resources is used in terms of spreading knowledge, researchers emphasize the significance of marketing and promoting the library resources that are available[56].

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Wilson's model goes beyond simply describing a series of events; instead, it also illustrates a series of human behaviors concerning crucial factors, as shown below;

Wilson's 1999 model, the process of examining many sources of information involves a variety of information-seeking patterns and frequently a user's needs are numerous.

The model revealed that information users have requirements, and those needs may result from a previous level of satisfaction or dissatisfaction with the information they needed.

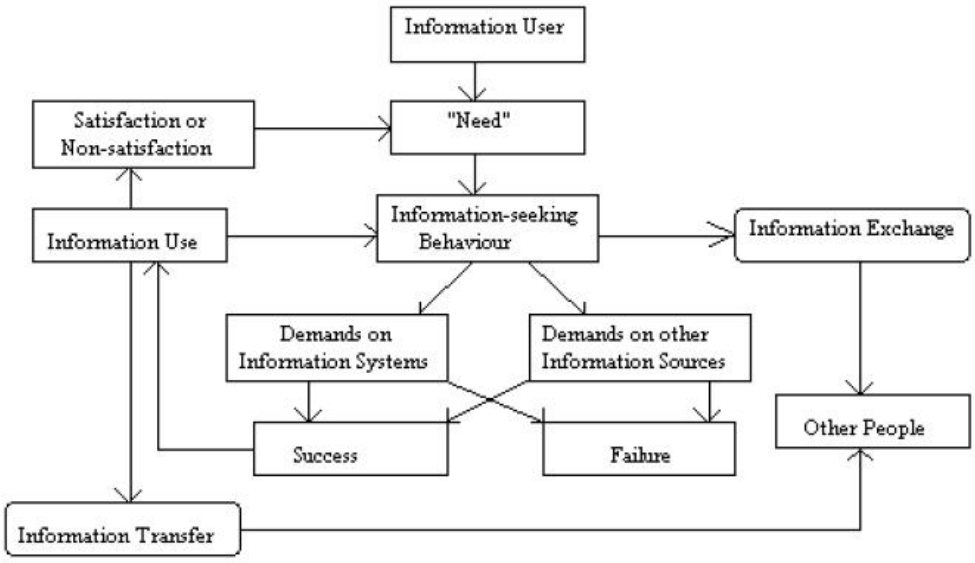

Figure 2.2: Wilson's 1999 Model of Information Behaviour

Information need as trigger and driver of information seeking: a conceptual analysis. Aslib Journal of Information Management, 2017.[56]

The information user as researcher in this study's setting is the model's first core variable to put it another way, information use and requirements are influenced by the goals and objectives of information users. The model made it clear that information needs choose the sources and systems that will be used for information, and decide how information will be used or transmitted (information exchange).An information user may utilize information for personal purposes or share information with others (information

transfer).A person use of information (information use) found and should either absolutely or partly satisfies the perceived need[57].

Initially, Wilson's concept was founded on two important points. First, according to the paradigm, a desire for information is a secondary need that results from a more fundamental or primary need. Second, while seeking information, the seeker frequently encounters obstacles of various kinds, such as personal, interpersonal, and environmental obstacles. If the information source is via a person, interpersonal concerns are likely to be at issue. Needs can be classified into two categories: consciously expressed (articulated) needs and subconsciously unexpressed (unarticulated) needs. Unexpressed needs are not recognized as information demands, whereas expressed or articulated needs are true observed needs that typically demanded a response. The paradigm states that information users can only determine and meet needs that have been explicitly stated, either independently or with assistance from others, typically information professionals. Where information demands are frequently poorly or ineffectively communicated, information experts have attempted to appropriately assist information consumers or seekers in understanding their information needs. Model stated that when many information-seeking patterns are present in the procedures for examining various sources of information, an information consumer typically has distinct needs.

The Wilson's 1999 general model involves three main views of information seeking and these include: the context of the seeker, the system utilised (manually or electronically) and then, information resources that might be drawn upon. Wilson's 1999 model conjointly highlights the information-seeking method and provides a circuit wherever the information seeking is believed of as 'iterative' in numerous phases, instead of

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'successive'. Wilson's 1999 model reflects key elements of Wilson's revised general model with relation to its focus on information users, their information needs, their information-seeking behaviour and their context. Particularly, it emphasises the impact of private and cultural influences on information use which relate to Wilson's intervening variables (psychological, demographic, role related/interpersonal, environmental and source characteristics).

Basically, a researcher consults or needs numerous information systems or other sources of information. The result of these demands (needs) leads either to success/satisfaction because of helpful information received or to failure/dissatisfaction because of unhelpful information or poor service. When seeking to satisfy (succeed) a need that has been indicated, information users frequently explore formal or informal information sources. From the standpoint of environmental scanning, formal searches include methodically gathering information relevant to a certain issue or purpose, whereas informal searches are more loosely structured and come in a variety of forms.

Undoubtedly, both official and informal sources are used by academics to gather knowledge. The success of the information-seeking process outlines the utilization of information and then identifies the satisfaction of a perceived need. Finding pertinent information may or may not be successful for the information seeker[58].

If successful, the person uses the knowledge that will completely or partially meet the demand or need. While Wilson has explicitly noted that failing to meet the perceived need typically results in the search technique being continued and that the present study is now of interest, there isn't a clear arrow connecting the "failure" component to the "need" component in terms of graphics. Additionally, regardless of the level or step at which the

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information seeker experienced the failure while seeking knowledge to satisfy a perceived need, the failure of the searching process essentially results in the beginning of a new research process.

The involvement of other individuals and other offices through information sharing in information-seeking behaviour is taken into account in Wilson's 1999 model of information behaviour. As a result, researchers at FIIRO invariably interact with a wide range of individuals and offices to find the information they need.

Wilson (1999:250) states that models can be conceptualized or represented on paper; as a result, using a model enables the study's ultimate goals to be achieved as well as the research questions to be successfully addressed. For the purposes of the current investigation, we shall specifically apply Wilson's 1999 model of information behavior.

2.2.2 Relevance of Wilson's 1999 Model

Scholars believe that while almost all information behaviour models and theories have acknowledged strengths in certain areas, they also have one or more weaknesses. Here, the strengths and weaknesses of the Wilson model are examined[59]. The rigor, relevance, and utility of Wilson's models within a rapidly changing information environment are demonstrated by their ability to serve as frameworks for the development and testing of novel combinations of information behaviour constructs and theories with a wide range of user groups from all over the world (environment). As a result, the model has a lot to do with studies like the one at hand, which look at how researchers use information when working online. Wilson's 1999 model's strength lies in the fact that it represents a sequence of human behaviour by making reference to pertinent variables, rather than merely designating a sequence of events[60].

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Information users, information needs, information-seeking behaviours, needs on information systems, and other information sources are among the characteristics of the model. Success or failure, information use, information transfer or interchange, other people, and satisfaction or dissatisfaction are some more aspects. Wilson's 1999 model, it is one of the macro-behaviour models due to its development and the addition of other theoretical models of behaviour, making it a richer source of hypotheses for future research than Wilson's earlier model[61]. Researchers also note that Wilson's 1999 model of information behaviour is a very clear representation of the connections between information behaviour, information seeking, and information retrieval, and it is a much-needed model. Wilson's 1999 model, which offers a framework for describing goal-oriented information-seeking behaviour is the last step[54].

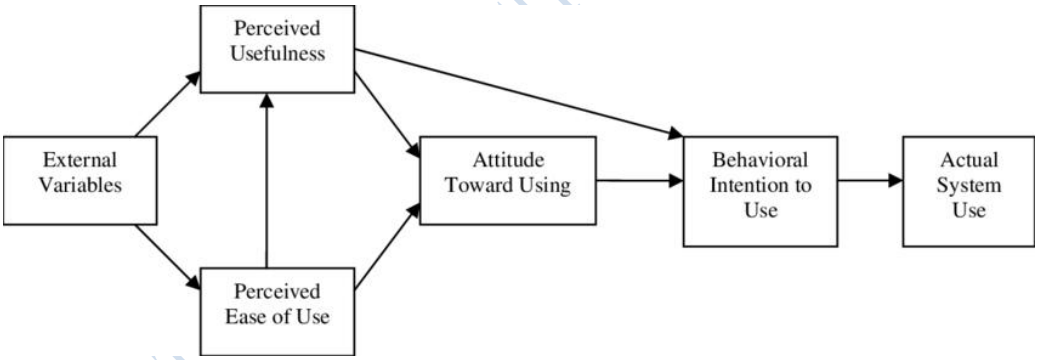

Figure 2.3: Original Technology Acceptance Model (TAM) (Davis, 1989)

"Adoption of technology acceptance model in Technical Universities Libraries: Implication to higher education in Ghana." ***J EduPsyc Res 3(2), 247*** **251, 2021[62].**

There is an information science theory that can be used to explain how people use electronic information sources. Technology Acceptance Model is the theory (TAM).The Technology Acceptance Model (TAM) is an information systems theory that explains how users of technology accept and use it. When consumers are introduced with new

technology, the model argues that a numerous factors affect their choice of when and how to utilize it, for example; individual intention and enabling or organizational conditions, behavioral intentions, attitude, and perceptions of the system's use and usability [62].

The most significant extensions of the Theory of Reasoned Action (TRA) in the literature are those based on the Technology Acceptance Model (TAM). He suggested that whether a system would be used or rejected depended critically on the user's attitude toward it. The user's attitude was thought to depend on two fundamental ideas: perceived utility and perceived usability, where perceived utility directly affects perceived utility[63].

Relevance of Technology Acceptance Model

Technology Acceptance Model (TAM).In the following aspects, this theory is related to the study "Information Seeking Behaviour, Electronic Information Resources Use, and Research Productivity of Lecturers in Private Universities in Oyo State, Nigeria": the Davis study's Perceived Utility (PU) factor is relevant because lecturers are in the opinion that using a computer system connect them to a local database or the Internet, when compared to conventional approaches, the use of telephones and other electronic devices for information searching enhances academic activities, notably research productivity[65].That is, lecturers may teach, supervise, and do research more quickly with the use of technology. Another component of the theory that is pertinent to the investigation is perceived ease-of-use (PEOU). The researcher's capacity to accept and utilize electronic machine tools will facilitate their usage of electronic information resources (EIRs), make learning more convenient for them, and have an impact on their academic activities in daily life. That is, the use of technology reduces the work required

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to look for information in traditional ways because of its connection to the subject under inquiry, the researcher chose this idea. Use of Electronic Information Resources (EIRs): It is common knowledge that lecturers at higher educational institutions who want to improve their performance and increase their research productivity must be able to navigate the electronic world. It was mentioned that lecturers' capacity to efficiently discover and retrieve knowledge is a transferrable skill that will benefit them in providing them with successful and uplifting electronic resources use while at enabling environment their future[66]. Lecturers' use of information systems can be in the form of communicating or posting of information or material by electronic means, World Wide Web or other such electronic tools. Electronic information resources serve as a motivating factor to lecturers as it allows them to send, acquire, download, process, and disseminate information in their field. Electronic information resources offer today lecturers greater opportunities that are quite different from their predecessors[67].Other advantages include that "consulting electronic information resources is often faster than consulting print indexes, especially when searching retrospectively, and they are straightforward when seeking to employ a combination of keywords." They make it possible to search many files at once, something that is much easier to do than with printed counterparts[68]. "Improved data transfer facilities will go a long way toward alleviating the continual strain faced by researchers in the collecting and generation of data that serves as the foundation for research and academic performance improvement," it may be argued. This is thus because modern professors do better in academic tasks when they employ electronic information[69].

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It is also made clear that the academic community has embraced the influence that electronic information resources have on their work. However, many of the services that are currently available to researchers and students are not being utilized to their fullest capacity[70].

2.2.3 Gilkey General Theory of Productivity

The general productivity theory proposed by CharlieGilkey2008.His productivity model was called "effectiveness-oriented" by him. It makes sense that a model of efficiency cannot be used to analyze research output. In its entirety because it only considers quantity (number of publications) while ignoring impact (quality)[71]. Theoretically, this was supported by his claim that engaging in a number of activities in a short period of time without making any major headway toward a goal would be analogous to going backwards.

As a result, every system that wants to operate at its best needs to have the proper balance of efficacy and efficiency. Ideal time consequently became a dimension in the theory.

The seven (7) dimensions of Gilkey's productivity model are denoted by the formula

$$P = \frac{(C+F+M+A+T)}{(Dt+D)}$$

The following is a list of the alphabet's meanings:

P stands for productivity, C for creative energy, F for focus, M for motivation, A for aptitude, T for the ideal time, D for Difficult task, and D for distraction.

The capability or aptitude to conduct work is referred to as "creative energy." The job that is done with energy can be either constructive or detrimental. Creative energy is defined as an intangible force moving an intangible load that is oriented toward improving human existence in general and any sphere of endeavor. Academic staff members at Nigerian universities, like all people, are a reservoir of energy. All that is

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required is for it to be directed toward creativity. According to theory, there are periods when humans are intrinsically crazy inventive.

Focus - It refers to a person's capacity to focus on a task against all odds until their goals are met. Academic personnel productivity increased when they had a clear deadline and were completely committed to a particular project or idea. According to theory, focusing causes bodily needs to fade away. This is in line with what he said in another article about the qualities required for research productivity.

Motivation - Theory emphasizes the importance of motivation in task completion. The more your motivation, the more likely you are to stick with a task and finish it.

Aptitude - Even with practice, people can complete tasks in varying amounts of time. A person with innate or natural ability will complete a task more quickly. When training and natural talent are combined, expertise is increased. Experts are significantly more productive than novices at a task. When a task's execution and completion take longer than expected, productivity falls because the time needed to complete various projects varies, researchers must account for the appropriate time while organizing their work and carrying it out.

Difficult task (Work difficulty) - Some works are intrinsically more difficult to complete. As a result, such jobs may necessitate additional creative creativity, concentration, drive, aptitude, and of course the necessary amount of time. To make a task easier to perform, complex or tough tasks should be divided into smaller components.

Distractions - Anything that has the potential to reduce or interfere with a researcher's focus. They mainly come from outside the person. Distractions include illness, marital

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duties, A few examples include a lack of resources and even bad habits. Academic personnel at universities must endeavour to manage distractions properly and efficiently in order to remain productive[72].

The numerator dimensions were referred to be ENABLERS in theory. When these characteristics are readily available, they have a favorable impact on production. He verifies that the facilitators are INTERNAL and are a fundamental aspect of a person's character. The enabling dimensions are intertwined in complex ways. The impact of this interconnection on productivity might be either positive or negative. To the extent that one dimension tends to enhance the others and vice versa, this is true. The result is that a researcher needs to find discover his or her low facilitators and strive hard to improve them.

The denominator dimensions, on the other hand, are referred to as DETRACTORS by Gilkey, and they have the power to impair productivity when the magnitude is large. EXTERNAL influences are the critics. As researchers, academic personnel in Nigerian universities must learn how to deal with and overcome critics. Researchers should not rely on other sources to solve complex problems. Instead, the researcher should rely on their description of facilitators. If the analyst does not do so, he or she may become more distracted. Researchers can benefit from Gilkey's hypothesis since individuals can: - Develop practices that boost enablers.

- Examine the assignment and schedule a suitable time for completion. This can address efficiency as a component of productivity.

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- Avoidable distractions should be avoided, and the consequences of unavoidable distractions should be minimized.

- Simplify difficult and time-consuming processes.

- Provide useful responses to the question, "Why am I either productive or not?" "How can I increase my productivity?"[73].

Relevance of Productivity Theories

The most notable approach is that of Taylor. The productivity and income earned by manual workers increased by 50% as a result of his technique. The early or developed economies of the globe were improved in the 20th century by others, like Deming.

Another piece of literature from the turn of the century claimed that the output of knowledge workers would need to shift in the 21st century, as well as how to manage knowledge-worker productivity. The literature claimed that the productivity of knowledge workers in developing economies will determine survival and competitive advantage. Knowledge workers use intangible resources, such as their knowledge capital to complete their responsibilities. It was referring to the technologists, the second group of knowledge workers. This is the group of workers whose professions involve both manual labor and the application of knowledge that is growing the fastest[65]. The two categories of knowledge workers are core and peripheral knowledge employees. Academic Staff at Nigerian Universities, according to recent study, are part of the core group. To be a successful academic, you must have a high level of education, experience, and competence that you can use to create and disseminate information. Six important elements that affect knowledge-worker productivity were found and discussed in the

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literature. These include clear task definitions, autonomy for knowledge workers to manage and collaborate among themselves, sustained and ongoing innovation to develop the organization where they work, learning and teaching as a continuous process of self-improvement and goal attainment, high regard for quality (not just quantity of product) as a knowledge worker's responsibility, and, last but not least, management and leadership must see knowledge employees as assets rather than liabilities[74].

The researchers attempted to clarify the section on integrating the academic staff of Nigerian universities into Drucker's model highlights areas of divergence and convergence in the roles and duties of organizations and knowledge workers.

The experts contend that managers and owners of Nigerian universities should be in charge of task definition. Academic staff should be hired based on their projected talents, and their performance should be evaluated based on their research output as assessed by publication count, research grant income, peer-reviewed publications, PhD students' supervision, and teaching activities. University owners must give authority to institutions, and institutions must grant academic staff autonomy because they are the fundamental knowledge workers. Academic staff will be in charge of things like quality, learning and teaching, and constant innovation.

To support the enormous resources at their disposal, they can show their expertise in these fields by showcasing their knowledge, experience, and abilities. The researcher claims that institutional owners see institutions as assets and institutional management sees academic staff in a similar light[75].

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The emphasis is on usefulness of Gilkey's General Theory of Productivity. Out of the seven factors that affect productivity, five are regarded as enablers and the other two as detractors. The factors (enablers) in his strategy that are directly within the individual researcher's control include creative energy, attention, motivation, aptitude, and optimal time. The denominator, which consists of the work's complexity and distractions, is a detractor.

He also contends that whereas critics are extrinsic, facilitators are essential to a person's productivity. The model demonstrated that having a high proportion of supporters and a low proportion of opponents can increase scholarly or research output. As a result, academic personnel at Nigerian universities must work hard to improve their level of enablers. Manage challenging activities efficiently and keep distractions to a minimum. Academic personnel in using this strategy, universities in Nigeria can learn how to increase the productivity of their research[76].

2.3 Review of Empirical Studies

2.3.1 Research productivity and Information Seeking Behaviour

Research is essential for a country's prosperity and the well-being of its population. Universities contribute significantly to the expansion and improvement of industry and governmental enterprises through research, so promoting regional, national, and international development. Around the world, universities are regarded as sources of new knowledge. Universities are seen as contemporary knowledge producers and research-based entrepreneurial engines. As a result, academics' responsibilities go beyond teaching[77].

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Academics are at the center of intellectual and scholarly research analysis square measure teachers inquisitive about the creation dissemination, or preservation of information, teachers' square measure lecturers starting from graduate assistant cadre to Academician cadre within the context of Nigerian universities. Lecturers in tertiary institutions of learning, especially Universities are given the chance to specialize in a subject of study, create a research program, and then share the information with other people in the effort to advance professional abilities and have an impact on a field and society at large. Research offers educating faculty members a better foundation for academic success. This is so that academic knowledge may be improved and the skills required for efficient knowledge transfer can be strengthened.

It also motivates researchers to put in a lot of effort, closes research gaps, and opens up new research possibilities[78]. Any university's primary activity is research because investigation has been done on it, this is obvious that the finest way to push growth forward and broaden the boundaries of knowledge in an effort to improve the world[79].

The fact that institutions all over the world are evaluated based on the quality and quantity of research output[80]. Additionally, the researcher benefits from doing research as well. Research articles influence lecturers' ability to gain reputation in local and global educational communities. As it relates to promotions, tenure, and compensation, research productivity frequently played a significant influence in academic achievement. Through cutting-edge and significant research among their colleagues, researchers are able to advance their careers more quickly[81].

It has been highlighted that lecturers themselves, who are driven by the possibility of enhancing their professional standing, leaving a lasting impression on their profession,

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improving their compensation, and expanding their job mobility, also put pressure on academic staff to produce more publications.[82]This claim is supported by a different study that found that academic staff members' advancement and recognition in universities are strongly influenced by the volume and caliber of their research outputs, which are disseminated through journal articles, books, technical reports, and other types of publications.

Researchers have taken a variety of perspectives on the value of their work. With the idea that the teacher knows everything and has a responsibility to impart that vast knowledge to the pupils, transmitting knowledge has traditionally been the primary responsibility of academic staff in higher education. The instructor actually learned his material by doing study and getting firsthand experience. He or she must keep doing research if they want to be taken as educated individuals[83]. Since computers and information technology have made it possible for students to access knowledge anywhere, including from the comfort of their rooms, this is even more crucial in the current digital age where lecturers are no longer the only source of scholarly information for them. As a result, the lecturer can no longer rely solely on the knowledge he has acquired in the past and must instead conduct regular research to update his body of knowledge and create new knowledge, which is then shared with peers and the rest of the world through scholarly conference presentations and journal publications[85].

Academics' whole research output is disseminated through published papers. The research output of lecturers is evaluated using their publications in a variety of media, including peer-reviewed journals, open access journals, digital repositories, and presentations at workshops and seminars[86].It is impossible to study research productivity

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in Nigerian universities in isolation. One method for assessing the output of research that researchers examined from primary or other sources is the evaluation of the research papers. Research activity and productivity are connected. Data collection and analysis are part of research.

Productivity is the result of creating, reading, and disseminating research papers to the public via the internet, professional refereed publications, or any other methods. Academic staff workers undertake research, and many metrics are used to assess their productivity[87].Books, including edited books and textbooks, book chapters, monographs, conference papers, and analytical proposals submitted to win external and internal grants could all be included in the publications[88].This has the result that only studies that are successfully published are taken into account when calculating a lecturer's research productivity. As a result, research that is completed over an extended period of time but is never shared or reviewed in any form is not included. For instance, out of all the African countries, Nigeria had the greatest percentage of papers submitted to the African Journal of Library, Archives and Information Science (AJLAIS) that were turned down for publication. These documents are nothing more than a waste of time[89].

Numerous studies have looked at the research output of scholars around the globe, particularly in emerging nations. In one of these studies, it was found that Nigerian scholars are not meeting expectations in terms of research and innovation, despite the fact that several policy documents have been released by governmental and educational authorities to emphasize the importance of research as a catalyst for national development[90].

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Scientists at Nigerian universities published an average of one research paper year, according to studies on research productivity in South-West and Northern Nigeria. Respectively, researchers found in another study that Nigerian lecturers' average research production is significantly poor when compared to academics in affluent nations. Researchers in Uganda also looked into the publication of academic staff members' research in the nation's private universities. The study discovered that lecturers produce very little research regarding the caliber of research conducted at Uganda's private universities are becoming more vocal[91].

Attitudes are the feelings and convictions that largely shape how people see their surroundings, commit to ostensible behaviors, and ultimately behave. In addition, attitudes have been defined as biases or prejudices created by mental acts, thoughts, ideas, fears, and convictions regarding any certain topic[92].

According to another definition, attitude is a mental, impartial state of readiness formed via expertise that directs or impacts a person's response to all things or objects with which it is associated[93]. Another writer defined attitude in the context of reading by characterizing reading attitude as an individual's perception of reading and advising readers to approach or avoid a given situation. He went on to say that attitudes and a desire to read are frequently connected.

In this situation, it is frequently best to use the readers' spirit to read in conjunction with feeling and with the learners' spirit of inquiry. Proceeding from this perspective we can contextualize attitude towards the use of electronic information resources as catalysts for the type of behavioral intent of information users towards the adoption and use of electronic information resources[94].

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The attitudes of students and faculty toward using library resources have been the subject of extensive investigation. It is widely believed that lecturers still value using the resources offered in the academic libraries to which they are connected. A comprehensive study of lecturers' views about library information resources and services is being conducted by researchers in collaboration with stakeholders. The majority of respondents believed that the library was essential for faculty research and student instruction, so they were less enthusiastic about collection development or funding for research grants[95].

A recent study revealed that 88% of education faculty members believed that library research was crucial to their field. Similarly, researchers examined faculty attitudes on funding for scholarship and research, coming to the conclusion that financial resources were crucial. On the other side, it was discovered that while art history professors could become ardent library users, their studio counterparts were scarce, suggesting that working artists would place a lesser importance on libraries. In contrast, other research on how artists utilize information found that they are significant Internet, social media, print resource, and physical library users[96].

Academic libraries are changing as a result of the growing popularity of the idea of information as inspiration. It has been argued that libraries now offer experiences that spark ideas rather than products. Scholars have provided examples such as interdisciplinary panel discussions, thematic displays, and design studio emphasis on interaction. Others have stated that there is a gap between conventional academic research and the reality of design scholarship, and researchers have also highlighted the significance of knowledge as inspiration in the design disciplines in their recent study[96].

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Researchers in India who evaluated the attitudes and approaches of information users towards electronic information resources and services. There is an increasing interest in electronic information resources among information users, according to research conducted in the nation's academic libraries in Indian universities[97].

On the contrary, another study conducted to measure the attitude of lecturers and students in a Sri-Lankan Medical schools towards the electronic resources available in the library revealed that the users have a poor attitude toward the electronic information resources available in the library. According to the t-test results, there is a statistically significant mean difference in readers' attitudes toward using electronic information resources between students and lecturers (t = 3.199, p According to the t-test results, there is a statistically significant mean difference in readers' attitudes toward using electronic information resources between students and lecturers (t = 3.199, p According to the t-test results, there is a statistically significant mean difference in readers' attitudes toward using electronic information resources between students and lecturers (t = 3.199, p 0.05). But when it comes to gender, readers of both sexes have about the same level of opinion about using electronic information resources, which is negligible at 0.05 levels[98]. While attitudes among people have the same level of perception as mean differences were observed, according to the t-test, user category (Lecturer, Senior Lecturer, Professor, and students) and the year of study of the students have shown significant mean differences towards the use of electronic information resources.0.05). But when it comes to gender, readers of both sexes have about the same level of opinion about using electronic information resources, which is negligible at 0.05 levels[98]. While attitudes among people have the same level of perception as mean differences were observed, according to the t-

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This is given context in a longitudinal study of information behaviour of early career researchers around the world. The study is a 3-year longitudinal study of early career researchers (ECRs) to determine their current and changing habits with relevance information finding, use, sharing, and publication. It recruited 116 researchers from seven countries (UK, USA, China, France, Malaysia, Poland, and Spain) and performed in-depth interviews by phone, Skype, or face-to-face to search our behaviours and opinions. Findings showed that the researchers have positive attitude towards electronic information resources and are regularly accessed them through various sources[101].

An equal study in Federal Republic of Nigeria still disclosed that 55% of lecturers showed that the Library Management is only very slightly aware of the subscription to

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electronic information resources[102]. The research reveals that the website is referred to as a strengthening significant reading source. Academic programs, types of reading materials, and reading resources specifically used on websites all differ significantly from one another. The reading interests and attitudes of male and female participants varied somewhat as well. Researchers who examined perception of polytechnic lecturers about electronic information resources found that majority of them (97%) preferred using the electronic information resources because they perceived that it increased access to current materials and makes it easy for them to conduct research[103]. 95% respondents agreed that electronic information resources provide platform of having access to wide range of books while 92% respondents agreed that electronic information resources provide access to reliable information resources. Coming next was 77% responses for both Information retrieval is quick and immediate and there is access from my comfort zone. 74% agreed that electronic information resources enable one to make use of library resources remotely and outside opening hours[104].

In a study of information behaviour of Architecture lecturers in an American university, it was revealed that the importance of information resources to the profession and pedagogy of architecture is widely acknowledged.

Though, this was made clear that the lecturers would approach both formal and informal information sources for research, teaching, and they have varied attitude toward different sources of information. In many cases, e-books, discussion lists, and conversations with librarians were rated low, while personal books, Internet resources, and conversations with peers were rated high. Library books were used for all activities, whereas bookish journals were less significant for inspiration[105].

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Internet resources and private libraries were regarded by the lecturers because the most significant sources for each analysis and artistic inspiration whereas personal communication with peers was the foremost vital resource for subject field education. Across the board, e-books were rated comparatively low, with an average score of 2.6 out of 5. Personal book collections were notably widespread, with 93 percent of respondents reporting they had a non-public library for academic purposes[106]. Therein lecturers reported purchasing an average of 16 books per year, though numbers ranged widely from 2 to 100. Amazingly, faculty that had more experience were less likely to collect books; only faculty with more than 16 years of teaching experience reported they did not own a personal library. In spite rated low in perceived importance, 62 percent of respondents made personal subscriptions to scholarly periodicals. The average number of subscriptions made for those choosing to subscribe was 3.5 per person. Whereas administrators usually viewed scholarly journals as more valuable, there was no significant variation in perceived value `of other research resources by position at institution[107].

2.3.2 Research Productivity and Electronic Information Resources

In a study of usage of electronic resources by lecturers at a private institution in Nigeria, it was revealed that the e-resources' usage frequency, email (81.4%) and search engines (80.2%) are the most frequently utilized on a daily basis, whereas CD-ROM usage is the lowest. online journal (33.7%) on a weekly basis[108].

Another study measuring the awareness and use of electronic information resources among academic of a Nigerian Polytechnic, the frequencies on the usage of these electronic information resources was also investigated. Results show that online

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databases were mostly used as indicated by 41% of the respondents followed by the E-book which had 24% responses. E-journal comes next with 16% responses while the CD-ROM and Institutional repository had 7% and 4% responses. It was also revealed that the E-journal is mostly used on a weekly basis with 50% responses while the institutional repository is the least used EIR consulted weekly. For monthly usage, Institutional Repository is mostly used with 24% responses, followed by the E-journal with 12% responses while online database and CD-ROM had 8.2% responses each[109].

Furthermore, researchers investigated the frequency of use of electronic information resources by lecturers in two private universities in Oyo state (Lead City University, Ibadan and Ajayi Crowther University, Oyo). The result indicated that E-Mail and website were the most effective typically used e-resources among lecturers of each universities with response rate of 60(76.9%) and 55(70.5%) in ACU and 115(87.8%) and 101(77.1%) in LCU respectively. Most often used resources involve search engine 50(64.1%) in ACU and Web Blog 85(64.9%) in LCU. It was conjointly discovered that in LCU, there was no lecturer who had seldom used E-journals, E-Books program, Search Engine, E-Mail and Websites[110].

Although they use various techniques and approaches, there are numerous empirical studies of the information needs of various user groups in various contexts. For instance, Inskip and colleagues used extensive semi-structured interviews to study the information needs of folk music information seekers (s). Westbrook (2009) examine the information requirements of victims of domestic abuse using in-depth interviews. However, systematic knowledge is scarce in the existing studies regarding how the need for information has been quantified in order to review the material that is currently available

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in empirical research and close the gap; we used a systematic review approach in this study[120].

As was already mentioned, various techniques have been used to investigate information needs. Interviews, or alternatives such as manual or automatic text analysis of user-generated content, and surveys, are the main techniques. Each approach has benefits and drawbacks. The results from interviews are based on small samples, are qualitative in nature, and are difficult to generalize, but they do allow researchers to delve into the respondents' difficult life circumstances that lead to their information needs.

As a result, it has proven difficult to translate interview results into either practical information system or program design. Contrarily, surveys allow the identification of information needs from a variety of users despite the limitations in the ability to elicit detailed participant accounts of their life situations. As a result, the findings are frequently deemed to be more representative and suitable for guiding practice[121].

Additionally, surveys have advantages. They make it possible to quantify information needs, which then make it possible to examine connections between information needs and other pertinent notions (e.g., demographics and information seeking behaviors).

To increase the concept's conceptual clarity, an analysis of these relationships is required[122].

One of studies focusing on faculty staff members at the Islamia University of Bahawalpur, eighty-80%of the respondents signify their purposes of seeking information is for teaching purpose (preparing class lectures), 68 percent for literature searches, 43 percent for borrowing books or journal articles, fifty-four percent of faculty staff members use the library for research and 43 percent for keeping their knowledge up to date, and 27

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percent go to the library for newspapers and magazines reading (recreational purposes). This clearly depict that nearly all the respondents access library resources or seek for information for teaching while more than half seeking for research and a lower number for different other purposes. Researchers reported the results of two empirical studies which explored the information seeking behavior of engineering and law lecturers in Ireland. The findings reveal similar patterns in the information seeking behaviour between students studying to become professionals and information seeking patterns of these groups[123].

A related study conducted in Ghana investigated the issues affecting faculty information seeking behaviour in an ICT environment. The study was conducted in Koforidua technical university (KTU), in Ghana. The study adopted a survey approach. A structured questionnaire was designed and administered to ensure information is elicited from the respondents. A total of 98 copies of the questionnaire were strictly administered to the respondents with 96 (98%) duly answered and returned. Data collected were analysed using simple descriptive statistics. Results showed that the reasons why the lecturers seek for information include; to prepare their teaching lessons, (43.7%), to write papers for publication (21.9%), Preparing PhD Thesis (15.6%), conducting Literature search (9.4%), Updating of self-knowledge (5.2%), Browse internet for pleasure (2.1%), and Others reasons (2.1%)[124].

2.3.3 Information Seeking Behaviour and Electronic Information Resources use

The decision to make use of any information system is often predicated on the knowledge of the existence of such system. Several studies revealed that when users are aware of the availability of e-resources in the Library, this clear correlation shows that awareness

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improves usage since they were likely to make use of them. This was emphasized buy a scholar who also maintained that there must be a strong awareness of Electronic Information Resources before they are acquired and put to use. The awareness of available information resources is very essential for any lecturer or researchers to possess before they can fully utilize or use the intended information resources[125]. It was further stated that research is replete on awareness and use of information resources. Awareness precedes use. Though, a basic think about information resources utilization is that 'perceived' information need, awareness of the existence of an information resource could be a major determinant of use. Awareness of the availability of resources is so a significant variable that has been discovered to have a positive association with use of information resources[126].

In line with this, various studies have been conducted to evaluate the awareness and knowledge of various groups of information users regarding electronic information resources. One of similar studies examined the awareness and use of electronic resources among the faculty members of Afe Babalola University, Ado-Ekiti (ABUAD). The study used a standardized questionnaire to gather information from the faculty of the university. With 120 questionnaires given out, 86 were returned.[106]The study reveals that one of the e-resources on the list of which the lecturers were very aware include EbscoHost (37.2%) Email (2.3%) made up the least amount of the e-resources used by faculty members, followed by LexisNexis (34.9%), Compulaw (34.9%), Law Pavilion (33.7%), and Access Engineering quite aware of. The investigator finalized that, although there were many resources for academic staff to use in ABUAD, some lecturers are unaware of some of

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the electronic resources, and some lecturers do not use the electronic resources even though they are very helpful for their study[127].

Also, in an exceedingly survey on awareness, accessibility and use of electronic databases among Babcock University researchers discovered that respondents were generally receptive to (aware of) 9 out of 13 databases under study[11]. Additionally, a study on the use and awareness of electronic information sources at IIT Roorkee in India found that users are aware that electronic journals are available and can make the best use of them for a variety of tasks like teaching and research[128].

One of such study, researchers measured the level of awareness of postgraduate students of the University of Ibadan Nigeria. The result showed that most of the respondents (79.4%) were not aware of EBSCO Host and DOAJ respectively. Whereas a large number of the respondents (48.9%) were aware of JSTOR which was rated highest as the most electronic database they were aware of. Many of the students (71.8%) were not aware of HINARI; some of them (44.3%) were aware of AGORA; few of the respondents (20.6%) were aware of DOAJ; a good number of the respondents (41.2%) were aware of AJOL. The researcher further conducted a test of norm on the research data which also revealed 66.4% respondents were generally aware of the seven electronic databases under consideration while 33.6% were not aware. This finding corroborated with the finding of University Ibadan which showed that majority of respondents were aware of Academic Journal 69.4%, followed by JSTOR 56.5% and EBSCO host 50.6%[129].

Furthermore, the study carried out by researchers in Dubai which is a survey of the awareness and use of electronic information resources by the faculty members of Indian

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Institutes in Dubai International Academic City, showed that majority of the faculty members were aware of and used e-resources. The study all the same verified lack of knowledge and use of library particular resources like e-theses, patents and CD-ROM databases[130].

In Ghana, researchers also evaluated the awareness of researchers about the available electronic information resources in academic libraries. One of such studies examined the utilization lecturers from the University for Development Studies' Washington campus' use of electronic resources. Using a straightforward random sampling technique, 80 academic staff members were contacted for their primary data. A questionnaire was used to gather the data, which was then analyzed using a binary logistic regression model. The findings show that the majority of respondents (52) representing 65% of the samples were aware of the library's electronic resources. However, of the 28 respondents, 35% said they were unaware of the library's electronic resources. The writer contrasted this degree of awareness low as there was evidence that in other parts of the world, the level of electronic information resources among lecturers is 100%[131].

Another Ghanaian study focusing on the information behavior of business management lecturers also assessed faculty awareness of available electronic information and services in the library. The result indicated that 67.7% of the lecturers were aware of photo copying service being offered by the library, 29% knew all about e-resources access training, research writing support and guidance(10.4%). also, (4.2%) chose reference service while only (3.1%) of respondents are aware of the availability of federated access of resources. Other respondents (2.1%) area unit aware of selective dissemination of information, whereas just (1.0%) respondent is aware of current awareness[132].

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The researchers also made effort to understand the source of awareness for the respondents. The results showed that 40.6% of respondents became aware about e-resources through discussion with their colleagues, 31.3% became aware from interaction with library staff, and 14.6% get information during user training workshops and 7.3% from the library OPAC, 4.2% from their professional association platforms, while only 2.0% got information about e-resources they seek for from their own research. The results showed that majority of the respondents were aware of e-resources through discussion with their colleagues[133].

On the other hand, in spite of these several examples of increased usage of e-resources due to user awareness of those resources in the library, although some other researches have shown opposing results. Most library patrons are aware of the electronic information resources available in the university library, one of such studies conducted in Nigeria, but usage is still low[134].

A study by a group of Indian scholars suggested that expert guidance from librarians is required to assist users in meeting their information needs and to them become aware of the available resources in the Library and elsewhere. This suggests that user behavior is influenced by the library staff's availability to assist users, the scheduling of workshops and the dissemination of information about the library's e-resources in the use of electronic information resources. Towards this end, a study reported that librarians' use of social media to inform users about the resources available in the library and how to use them has a significant impact on how often people use the library's electronic resources. The difficulties faced by library users have been linked to other factors that determine how well e-resources are used[135].

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Researchers also beamed their search lights on the level of awareness of electronic information resources among polytechnic lecturers. In one of similar studies, researchers employed a descriptive survey research design while using a well-structured questionnaire as data collection instrument. It also employed Descriptive statistical techniques like table of frequency counts and percentages were employed in the analysis. 300 academic staff of Port Harcourt Polytechnic Rumuola, Port Harcourt, Rivers State, Nigeria were the targeted population for the study. Simple random sampling technique was used. A total of one hundred (100) structured questionnaires were administered of which seventy-three (73) copies were duly filled and returned, thereby recording a 73% return rate for data analysis and interpretation. The result showed that awareness of the E-book was the highest with 97% while those of E-journal, Online database and CD-ROM recorded 96%responses each. Institutional repository had the least response concerning the awareness of the electronic information resources with 73% responses while 27%responded that they were not aware of the institutional repository[136].

Despite the fact that ICT and electronic information resources were introduced to solve various problems for library and information users, there are still various challenges that can make it difficult or prevent information users from making effective use of electronic information resources and as a consequence, affect their research productivity. The role of scholars and librarians is to identify these challenges with the aim of finding working solutions which will facilitate improved utilization of e resources and also the research output of lecturers. Therefore, several studies about the use of electronic information resources have attempted to understand the challenges faced by users in their efforts to make use of these resources [137].

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In many of the studies that have been conducted in Nigeria and other parts of the world, researchers have discovered that inadequate library infrastructure, such as ICT tools, dramatically lowers the use of electronic resources.

Higher levels of awareness with poor utilisation may be caused by this submission, contrary to what other research have found difficulties that faculty members in ABUAD have reported, as shown by the information in the table, include internet problems as a serious problem affecting faculty members, recurrent power outages were cited by 65.1% (56) of those polled 15.1% (13) and difficulties finding relevant databases were the two issues faculty members struggled with the most, followed by 10.5%. (9)[138].

Further numerous empirical investigations have given evidence of the difficulties associated with using e-resources in libraries. For instance, a Nigerian study, the majority of users used electronic information resources mostly for research, assignments, current events, and other essential information. However, usage was found to be low, and additional interviews revealed that some issues like a large volume of irrelevant information, a slow network during download, a lack of search skills, and a high access fee were discovered as obstacles impeding library use.

Another study that evaluated the difficulties in using electronic information resources in academic libraries in the South West of Nigeria came to the constant conclusion that the use of electronic resources is limited by a lack of ICT and power problems[139].

In the same vein, few of the obstacles to using the electronic information resources at the Medical Library of the College of Medicine, University of Nigeria, Nsukka, were also examined by researchers. Their research revealed that challenges with using electronic

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resources included a lack of a sufficient ICT infrastructure and reasonable online access, a lack of in-depth ICT knowledge and information searching abilities among library employees, and the expense of using the cybercafé[140]. In the study of Polytechnic lecturers cited earlier, some challenges facing the use of electronic information resources were also identified by the respondents. Poor internet connection was regarded as the biggest constraint as 89% of the respondents stated their agreement with this constraint. The next mostly agreed constraint is inadequate or non-availability of the facilities to access the electronic information resources in the Institution's library. Poor power supply and poor searching skills were regarded as the least constraints as they recorded 53% and 52% respondents respectively[141].

Similar challenges were reported by researchers in Ghana and Tanzania. These data indicate that the ineffective use of e-resources is hampered by the restricted Library resources, such as technology. Lack of necessary trainings and lack of awareness of how to use it have also been proposed as the existing problems of using the University's digital library.

Lack of digital information literacy skill necessary to use the University's digital library is linked to the lack of adequate trainings which has been proposed as one of the problems with using electronic information resources by various categories of users.

Lack of sufficient information resources available in the database is also added to problems in the use of the University's digital library. This issue is directly related to the lack of correct and periodic assessment from lecturers and students of different disciplines which mean that the library does not conduct proper community assessment for its collection development. The viewpoints of faculty members of various disciplines

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are often not considered before supplying the electronic and this can lead to a collection that do not meet the needs of the users[142].

In a research work which examines the information behavior of African researchers in an online environment, the researcher reported that access to research information is tough for due to several barriers and difficulties for researchers in Africa. Several of such obstacles identified in the literature include economic, social, environmental, occupational and infrastructural challenges. It was argued that among other things, the digital divide and budgetary constraints prevent developing countries, especially those in Africa, from accessing goods produced in affluent nations. Other researches, factors such as accessibility, practicality, aptitude, and perceived usefulness of the material might also have an impact on information acquisition. Other challenges outlined in various studies include;

Lack of awareness - Information seekers and users may be unaware of the resources' existence simply because the function of libraries hasn't always been made obvious to them, especially in developing nations. Many researchers are reportedly uninformed of the resources and services that may be available to them, and they only request what they are already familiar with[143].

Complex Access Protocols -A library cannot succeed without accessible information resources. It is not enough to simply have them available or even bibliographically accessible; they must also be physically accessible to those who need them. Studies have shown that some library web interfaces are too complex for information users with average ICT skills to navigate. Also, some libraries have been known to subscribe to database which does not always provide full text documents to researchers. So after

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reading an abstracting and deciding that they need the information resources, researchers often found obstacles which prevent them from use such databases. These are:The rise of knowledge, or the "information explosion," is correlated with an increase in the quantity, scope, and variety of information transfer packages.An ever-expanding publishing sector produces hundreds of information packages each year, including journals, books, periodicals, and newspapers. Massive amounts of information are also produced by numerous electronic media outlets. The result is that no researcher can use all of the papers in their own research any longer. Even though the volume would be huge if that were possible[144].

Bibliographic obstacles - Bibliographic challenges can take many different shapes. Some instances lack a suitable bibliographic description, while others have one that is insufficient or inaccurate. Devices for information retrieval are typically lacking in some way. In poor nations like Nigeria, the lack of information retrieval technologies poses a particularly substantial barrier to information access and utilization. These are explained below:

Budget cuts and cost increases - Libraries are having trouble acquiring both primary and secondary publications to satisfy users' information demands as a result of budget cuts and rising costs. The cost of publications has significantly increased due to global inflation and the economic downturn. All of these hinder information access.

Costs to users - Many users do not have the financial means to move from location to location in search of information. Information gathered in remote locations or abroad is to reach, and getting such information may result in a costly logistics issue. This makes it harder to access and use information.

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Library staff - Access to information is hampered when professional librarians and other library staff members do not use their knowledge and abilities sufficiently (assuming that they have sufficient knowledge and abilities).

Shoddy construction - The postal service, a sufficient supply of power, as well as information communication tools like telephones, the internet, telex, fax machines, and computers: all of which are integrated into information technology—are necessary for effective information access and usage[145].

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2.4 Conceptual Framework

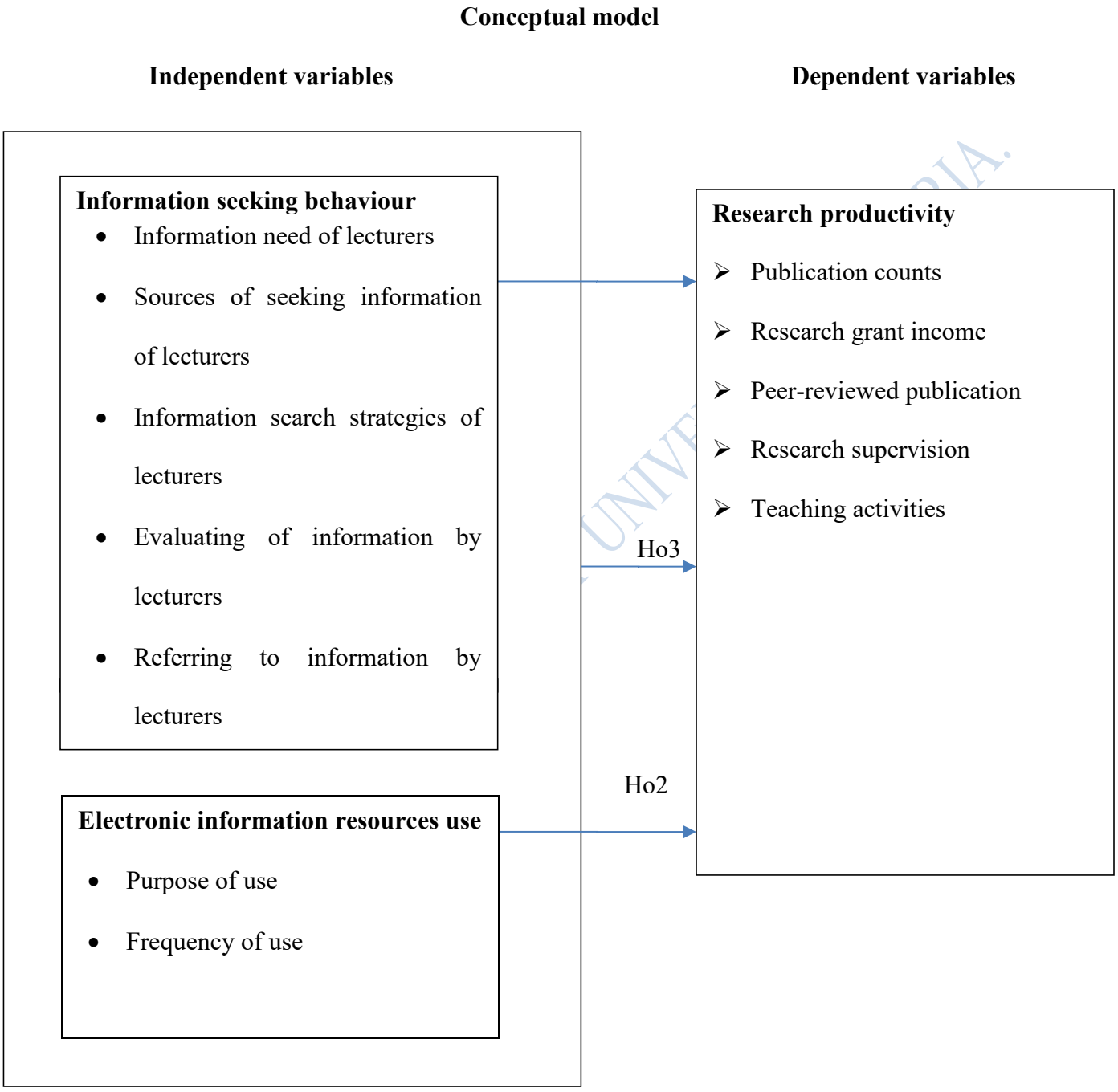

Figure 2.2: Conceptual Framework on Information Seeking Behaviour and Electronic Information Resources Use as Determinant of Research Productivity of Lecturers, developed by Researcher, 2021.

The model illustrates how information seeking behaviour and electronic information use affect the research productivity of researchers. Proceeding from the basis that electronic information is readily available and they are relevant to the need of the researcher, how lecturers use them will now determine whether they have high, moderate, low or no level of research productivity[145].

Taken separately, the attitude of the researcher towards the use of electronic information resources is an important determinant factor which can also affect other constructs in the model. Lecturers' attitude can be positive in which the perceived electronic information resources as relevant and would try their best to access them including acquiring the necessary skill to search and retrieve electronic information resources from information systems. The attitude can also be negative in which the researcher views electronic information resources as too complex and not really important. It is recognized that absolute negative perception may not be possible in the current environment but it is possible for researchers to also stay away from electronic information resources due to inadequate information retrieve. Whichever attitude a researcher adopts will affect others indicators such as awareness of the availability of electronic information resources.[146]

Awareness is regarded as the idea or knowledge of where a researcher can obtain the needed electronic information resources. While libraries and information service providers make efforts to create awareness about the available resources, researchers with positive attitude can be proactive and actively seek this information and when they come in contact with awareness programmes, they tend to be more responsive thereby becoming better information about the availability of electronic information resources from diverse source. Researcher with poor or negative attitude on the other hand can have

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low level of awareness about the availability of electronic information resources and thus become more convince that it is difficult to access them. If, we go by the principle that availability of information can serve as motivation and inspiration for researchers, then it possible that the level of awareness may affect research productivity[147].

The third indicator under information seeking behaviour is location. Ordinarily, location is not supposed to be a factor in seeking information resource in electronic format as a key feature is remote access which makes it possible to use electronic information resources in any location. However, it has been established that some locations are more conducive to research and information seeking than others. Locations such as university campuses and academic libraries where there are necessary facilities to access electronic information resources and where researchers can get technical support for their information search process are better than remote locations without power supply, internet, low bandwidth or any motivator[148].

The other part of the independent variables is electronic information resources use, which includes the purpose of use, the frequency of use and challenges. If the main purpose of using the electronic information resource is for research and the lecturers frequently make use of electronic information resources then there is the tendency that the research productivity of the researcher will be impacted. Whether research productivity will be high, moderate, low or nonexistent will be determined by the degree of influence of each independent variable or combination of all the independent variables.

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2.5 Summary of Literature Reviewed

This chapter focuses on information behaviour of researchers in academic settings, particularly universities, and encompasses needs for information, seeking for information, sources of information, disseminating information and its collaboration. This chapter used four theories for this study: Wilson's 1981Model of Information Seeking Behaviour and Wilson's 1999 Model of Information Behaviour and Technology Acceptance Model (TAM) Davis, 1989 is adopted for Electronic Information Resources use andCharlie Gilkey2008 theory of Research Productivity. The review of literature showed that, globally, the attentions of researchers have shifted to the use of electronic information resources due to certain advantages they have over print resources. Due to the fact that research is all about finding new things and making discoveries, the feature of electronic information resources that have attracted all categories of their users included the ability to access them remotely without having to come to the library. Electronic information resources are also easy to search, flexible to use. However, the availability and accessibility of electronic information resources various across developing and developed countries have access to electronic information resources from various sources and they also have access to services such as digital reference services; their counterparts in developing countries are not so lucky as they are often restricted to information resources from open access sources as their institutions may not subscribe to proprietary scholarly databases which provide access to more quality and quantity of information resources[137].

Moreover, the lecturers still are facing various challenges capable of preventing them from making effective use of the electronic information resource available to them. Some libraries have been known to put too much restriction on the access to their scholarly

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databases or fail to provide proper services to aid users who are having difficulties in using the electronic. Most of the lecturers on their part rarely visit the library or engage the assistance of information professionals in searching for information and they lack the required skills to verify and evaluate information available to make sure they are using the most appropriate information resources because some author's view are represented by opinions or facts. It was also clear from the literature that most lecturers start and end their information searches on search engines and they adopt the most rudimentary search strategies to search for information. This has led experts to be concerned about the quality of information they retrieve and used in their researches.

Indeed, it was reported that Nigerian researchers have some of the highest manuscript rejection rate due to low quality researches as a result of their seeking behaviour such as "Put my name syndrome is a vice that kills quality research productivity. It was reported that some academic staff solicit their colleagues to include their names in a research articles that that are ready for publication in which they did not make any contribution. This attitude affects quality research and high impact research productivity among lecturers. Established trade journals often set highly standards for researches they publish which are not often met by Nigerian researchers due to the use of substandard resources. If research productivity is thus measured by number of article published, then Nigerian lecturers may not be among the highly productive in the world. The study also find that the information behaviour which is capable of affecting their research productivity. The majority of the literature that was found and examined was focused on advanced countries. The small amount of literature reviewed in the setting of developing countries did not address the challenges surrounding the effect of electronic resources, information-

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seeking behaviouron the research productivity of lecturers especially in developing countries[138]. Finally, conceptual model is adapted for this study which models three variables that contained in the study: Information Seeking Behaviour, Electronic Information Resources Use and Research Productivity. The information seeking behaviour as independent variable which consists of measures such as source of information, search strategies, evaluating information, referring to information and electronic information resource use which includes measures such as frequency of use, purpose of use while research productivity is dependent variable that consists of measures like Publication counts, Research grant income, Peer-reviewed publication, PhD students' supervision, Teaching activities.

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Chapter Three

Methodology

This chapter presents the method adopted in carrying out the study. under the following sub-headings: research design, the population of the study, sampling size and sampling technique, sources of research data, research instrument, validity and reliability of the instrument, data collection procedure, and method of data analysis

3.1 Research Design

The descriptive survey research design of the cross-sectionalwas adopted in the study. Descriptive research of the cross-sectional type is considered appropriate because it focuses on the perception of existing situation, describes and interprets what is concerned with the issues, conditions, practices or relationship that exist within views, belief and attitudes that are held, processes that are going on and trends that are developing an event or situation. Thus, by the use of this research design, the researcher was able to identify and establish the relationship between information seeking behaviour, electronic information resources use and research productivity of lecturers in AjayiCrowther University, Oyo and Lead City, Ibadan, Oyo State, Nigeria.

3.2 Population of the Study

The population of the study consists of 333 lecturers in Lead City, Ibadan, and 187 lecturers in AjayiCrowther University, Oyo, Oyo State, Nigeria. According to the data obtained from the human resource unit and academic and planning unit of the institutions as at October 27, 2021, there were Seventeen (17) faculties in the universities with the total number of 520 lecturers. This is presented in table 3.1.

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Table 3.1: Population of lecturers in Lead City University, Ibadan andAjayi Crowther University, Oyo

S/N	Name of University	Faculties	Number of lecturers
	Lead City University		
1.		Faculty of Applied Sciences	118
2.		Faculty of Public Health	17
3.		Faculty of Law	20
4.		Faculty of Social &Management Sciences	73
5.		Faculty of Environmental Design & Mgt(Built Env.)	10
6		Faculty of Arts &Education	57
7.		Faculty of Engineering	13
8.		Faculty of Comm. &Infor. Science	25
Total			333

Source: Human Resource Unit (HR) of the institution(2021/2022 Session)

S/N	Name of University	Faculties	Number of Lecturers
	Ajayi Crowther University		
1.		Faculty of Natural Sciences	54
2.		Faculty of Humanities	27
3.		Faculty of Law	14
4.		Faculty of Management Sciences	17
5.		Faculty of Environmental Studies	10
6		Faculty of Education	18
7.		Faculty of Engineering	13
8.		Faculty of Social Sciences	25
9.		Faculty of Agricultural Science	9
Total			187

Source: Directorate of Academic Planning Unit (DAPU) of the institution(2021/2022 Session)

3.3 Sample and Sampling Techniques

Sampling is a process that allows a researcher to scientifically choose who or what is included in an investigation. Previous literatureis of view that sampling involves selecting units (e.g. people, organizations) from a population of interest so that one may fairly generalize the results of a study.The sample size this study is two hundred and seventeen (217) lecturers. A multistage sampling technique was used to select the sample. In the first stage, two universities; Lead City University, Ibadan, and AjayiCrowther University, Oyo were purposefully selected among the private universities in Oyo State they are the most developed universities among the rest with many faculties and full-timelecturers.In the second stage, seven similar faculties were selected from the two institutionsin the third stage, the sample for the study was selected using theKrejcie R.V and Morgan, D.W. (1970) table for sample size.

3.4 Instruments for Data Collection

The main instrument that will be used for the study is a questionnaire titled Questionnaire on Information Seeking Behaviour, Electronic Information Resources Use and Research Productivity of Lecturers (QISBERUP). The instrument was adapted from various validated and tested studies. The questionnaire is divided into seven sections, A – F as follows,

Section A – Demographic information: This contains five items on personal data of each respondent such as name of faculty, qualification, position, age and gender.

Section B – Level of Research of Productivity of Lecturers: This contains 15 items adapted from literature[8]. It has a four likertscale type. The respond format for the level of research productivity is:Strongly Agree (SA); Agree (A); Disagree (DA); Strongly

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Disagree (SDA). Example: What is the level of your Research Productivity? i. Teaching, ii. Research publication.

Section C –Information Seekingbehaviour of lecturers: This contains 20 items on the Information need information-seeking behaviour. The instrument was adapted from a study[9]. Using 4- point scale: Very true of me; True of me; Somewhat true of me; Not true of me.

Section D – Frequency of use and purpose of electronic information resources: The items on frequency of use in the questionnaire were eleven (11) adapted from a study[10]. and were measured with modification on the response format of Likert type, 4-point scale: Always; Not always; Rarely; Never.

Purpose of use of electronic information resources: This contains information on why lecturers use electronic information resources. The items in the questionnaire were nine (9) and adapted from a questionnaire. It has a list of five self-generated items covering assignment, project work, term paper etc. measured on four-point scale: Always; Not always; Rarely; Never. (1). Example: What is your purpose of electronic information resources use? i. Prepare for lecture ii. Journal Article

3.6 Validity of the Research Instrument

In other to ensure face and content validity, the adapted measuring instrument was given to the supervisor and other lecturers in the department of Information Management of Lead City University who checked to ensure accuracy and precision of the instrument. Based on the criticisms and corrections of the experts, the instrument was modified to achieve the research objectives.

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3.7 Reliability of the ResearchInstrument

Reliability means the ability of a research instrument to be consistent in returning the same results when administered to a population similar in nature. The draft of the questionnaire waspre-tested on 30 lecturers at Precious Cornerstone University, Ibadan,Oyo State, Nigeria who were not part of the study sample size but share similar characteristics with the population of the study.To test the reliability of the questionnaire, the Cronbach Alpha reliability method was used at 0.05 levels of significance. The reliability tests result shows the following values; Research productivity, 0.72; Information seeking Behaviour, 0.78 and Use of electronic information resources, 0.81. These Cronbach alpha values are within the range accepted for reliability of research instruments.

3.8 Administration of the Instrument and Method of Data Collection

A letter of introduction was collected from the Head of Department of Information Management, Lead City University, Ibadan to introduce the researcher as Master students and to facilitate responses from the lecturers. The questionnaire was distributed by the researcher within a span of two weeks.

3.9 Methods of Data Analysis

Descriptive statistics was used to analyse the data. Descriptive statistics tools involving frequency count and percentage which werepresented in tables and charts where appropriate and will be used to describe the demographic characteristics and to answer the study research questions 1 –5. Linear regression analysis was used to test hypotheses one and two to determine the influence of the independent variables on the dependent

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variable. Ho^3 was tested using multiple regressions. All the Hypotheses were tested at 0.05 level of significance.

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Chapter Four

Results and Discussion of Findings

This chapter presents theanalysis of the empirical data collected to answer each research question and test the research hypotheses. The analysis of this study therein includes the demographic distribution of the respondents as well as the questionnaire return rate. Descriptive statistics was used to answer research questions and the decision rule is that allitems with mean score equal to or greater than 2.5 is accepted as significant while hypotheses are tested at 0.05 level of significance.

4.1 Questionnaire Return Rate

The study sample is made up of onehundred and twenty (120) lecturers from Lead City University and ninety-seven (97) lecturers from AjayiCrowther University, Oyo. Altogether, the sample of the study is two hundred and seventeen (217) lecturers. Accordingly, 217copies of the questionnairewere administered to the respondents. However, one hundred and forty-nine (149) copies were found useful and thus included in the analysis. This represents 69% return rate which is considered adequate for acceptable generalization[1]. The breakdown of the questionnaire administration and return rate is provided in Table 4.1.

Table 4.1: Questionnaire Return Rate

Institutions	Questionnaire Administered	Questionnaire Returned	Return Rate (%)
Lead City University, Ibadan.	120	68	56%
AjayiCrowther	97	81	83%

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University, Oyo			
Total	**217**	**149**	**69%**

Source: Fieldwork. 2022

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Table 4.2 Presentation of Demographics Data

	Items	Frequency	Percent
Gender	Male	59	39.6
	Female	90	60.4
	Total	149	100.0
Institutions	Lead City University	68	45.6
	AjayiCrowther University	81	54.4
	Total	**149**	**100.0**
Faculties	Basic Medical Sciences	13	8.7
	Comm. & Info. Sc.	7	4.7
	Education	27	18.1
	Engineering	12	8.1
	Law	13	8.7
	Natural & Applied Science	45	30.2
	Social Science	32	21.5
	Total	**149**	**100.0**
Position	Professors	13	8.7
	Senior Lecturer	8	5.4
	Lecturer I	30	20.2
	Lecturer II	35	23.5
	Asst. Lecturers	40	26.8
	Others	23	15.4
	Total	**149**	**100.0**
Academic	Ph.D	98	65.8
Qualification	M Phil/Masters	49	33

	Others	2	1.2
	Total	**149**	**100.0**
Work Experience	1 – 5 years	83	55.7
	6– 10 years	53	35.6
	11 – 15 years	11	7.4
	21 – 25 years	2	1.3
	Total	**149**	**100.0**

Source: Fieldwork. 2022

Table 4.2 shows the demographic composition of the respondents. Gender wise, there are more females than male respondents. There are 90 female respondents which constitutes 60.4% of the total respondents while there are 59 male respondents which means they constituted39.6% of the total respondents.In term of institutional affiliation, majority of the respondents, 81(54.4%) were from AjayiCrowtherUniversity, while the rest, 68(45.6%) are from Lead City University. This is despite the fact than Lead City has more Lecturers than AjayiCrowther University.

The table also shows the distribution of the respondents according to their faculties. Majority of the respondents, 45(30.2%) were from Natural and Applied Science followed by those in Social Sciences who are 32 (21.5%) andEducation27(18.1%). In addition, here were 13(8.7%) respondents from Basic Medical Sciences and Law respectively. Respondents from faculty of Engineering were 12(8.1%) while the faculty of Communication and information Technology contributed the least with 7 respondents which constitutes 4.7% of the total respondents.

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In term of academic attainment, there are 98 (65%) Ph.D. holders, followed by 49 (30%)MPhil/Masters and others 2 (1.2%). This data shows a diverse blend of qualification and educational backgrounds. This diversity was also shown in the positions held by the respondents. Majority of the respondents (40) are Assistant lecturers which is 26.8% of the total respondents. Those in the Lecturer II position are 35 which means they constitute about 23.5% of the respondents while those in the Lecturer I level (30) constitutes 20.2% of the total respondents. There are 8 Senior lecturers which represents 5.4% and there are also (13) Professors which constitutes8.7%of the total respondents.The demographic distribution is very important because some of the factors that determine information needs include gender, role played and experience[1].

Experience also has a role to play in the pressure or motivation of lecturers to conduct research. Among the study respondents, it can be seen that 83(55.7%) has between 1 – 5 years' experience; 53 (35.6%) of them has between 6 to 10 yearswhile 11 (7.4%) have been lecturing for 11 to 15 years. There a few who has experience of between 21to 25 years as lecturers. These are just 2 or 1.3% of the total respondents. The combination of academic attainment, work experience and others such as gender are important in investigating the information behaviour of lecturers. In addition, the rank of lecturers may determine whether they would conduct more or less research[2].

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4.2.1 Presentation of Research Questions

4.2.2 Research Question One: What is the level of research productivity of lecturers in Private Universities in Oyo State?

Table 4.3:Analysis of research productivity of lecturers in Private Universities in Oyo state.

Statement	SA	A	DA	SDA	Mean
Conference Presentations					
I do present papers in conference proceedings.	44 (29.5%)	59 (39.6%)	36 (24.2%)	10 (6.7%)	2.93
My institution does sponsor me to attend conferences from time to time.	4 (2.7%)	22 (14.8%)	58 (38.9%)	65 (43.6%)	1.77
I always look forward to attending conference proceedings.	92 (61.7%)	49 (32.9%)	7 (4.7%)	1 (0.7%)	3.56
Average Mean Score					**2.75**
Research Grant Income					
I have access to research grant always.	4 (2.7%)	9 (6.0%)	47 (31.5%)	89 (59.7%)	1.52
The numbers of research articles I have at the moment do qualify for accessing of research grants.	30 (20.2%)	66 (44.3%)	38 (25.5%)	15 (10.1%)	2.74
The institution I am working for has accessible grants for her lecturers.	22 (14.8%)	36 (24.2%)	43 (28.9%)	48 (32.2%)	2.21
Average Mean Score					**2.16**
Research Impact					
My publications on google scholar are highly rated.	39 (26.2%)	60 (40.3%)	36 (24.2%)	14 (9.4%)	2.86
My publication counts have attracted quite a good number of citations on google scholar.	27 (18.1%)	69 (46.3%)	38 (25.5%)	13 (8.7%)	2.75

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The findings of all my research works are very distinctive.	67 (45.0%)	64 (43.0%)	10 (6.7%)	8 (5.3%)	3.31
My research findings have been implemented by many organizations within my country.	24 (16.1%)	45 (30.2%)	54 (36.2%)	26 (17.4%)	2.43
The findings of my researches have been carried out overtime implemented by international organizations.	17 (11.4%)	55 (36.9%)	47 (31.5%)	30 (20.1%)	2.42
I am satisfied with the present number of publications I have at the moment.	15 (10.1%)	26 (17.4%)	31 (20.8%)	77 (51.7%)	1.88
Average Mean Score					**2.15**

Research Supervision

I think I can improve more on my research supervision skills.	98 (65.8%)	46 (30.9%)	1 (0.7 %)	4 (2.7%)	3.65
I see myself as a well rated, competent, research supervisor.	51 (34.2%)	81 (54.4%)	11 (7.4%)	6 (4.0%)	3.29
I have supervised numerous undergraduate and postgraduate students overtime.	34 (22.8%)	56 (37.6%)	21 (14.1%)	38 (25.5%)	2.59
Average Mean Score					**3.18**

Source: Fieldwork, 2022 Decision Rule: < 2.50

The research productivity of lecturers in private Universities in Oyo state is analysed in Table 4.3. The analysis shows that research productivity is measured under various dimensions such as conference attendance, research grant income, research impact, and research supervisions. The analysis showed that the dimension with highest mean score

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of the lecturers' research productivity is research supervision (Mean = 3.18). This means that the lecturers engage in regular research supervision high. This dimension is followed by conference attendance (Mean =2.75) which means that most of the lecturers have interest in attending conferences. However, the analysis also shows that, while the lecturers are enthusiastic about attending conferences (Mean = 3.56), the institutions rarely sponsor lecturers for conferences. (Mean = 1.77). This obvious affect other dimensions of research productivity such as research grant income.

The average mean score for research grant income is 2.16. This means that very few of the lecturers have access to research grant income, both locally and internationally. However, majority of the lecturers believe that the number of research articles they have produced so far qualify for accessof research grants (Mean = 2.74). However, this lack of access to research grant may be due to the low level of research impact of the lecturers. The average mean of research impact is 2.15 which is far below the decision rule. This means that the research impact of the lecturers is very low. Notwithstanding, the overall average mean for research productivity is 2.56 which is above the accepted value. The above average research productivity reported in this study is a divergence from previous studied where research productivity was reported as low among lecturers. However, it is consistent with previous findings which have reported that many lecturers usually publish in low impact journals.

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4.2.2 Research Question Two: What is the level of information seeking behaviour of lecturers in Private Universities, Oyo State?

Table 4.4: Analysis of information seeking behaviour of lecturers in Private Universities, Oyo State

	Very True of Me	True of Me	Somewhat True of Me	Not True of Me	Mean
Information Needs of Lecturers					
Information needs on how to carry out good research work.	82 (55.0%)	55 (36.9%)	9 (6.0%)	3 (2.0%)	3.50
Information needs on how to do citations properly.	75 (50.3%)	63 (42.3%)	9 (6.0%)	2 (1.4%)	3.43
Information needs on how to write good proposals for accessing grants.	69 (46.3%)	59 (39.6%)	16 (10.7%)	5 (3.4%)	3.30
Information need on how to teach effectively.	67 (45.0%)	65 (43.6%)	17 (11.4%)	--	3.34
Information need on how to carry out good and effective research supervision.	79 (53.0%)	54 (36%).	16 (10.8%)	--	3.43
Weighted Mean					**3.40**
					Decision Rule: <2.50

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Information Sources of Lecturers for Research					
Internet.	117 (78.5%)	26 (17.4%)	3 (2.0%)	3 (2.0%)	3.76
Online Databases.	115 (77.2%)	28 (18.8%)	6 (4.1%)	--	3.74
Books, Journals, periodicals, encyclopedia.	107 (71.8%)	34 (22.8%)	8 (5.4%)	--	3.68
Libraries.	75 (50.3%)	41 (27.5%)	29 (19.5%)	4 (2.7%)	3.27
Social media platforms.	59 (39.6%)	34 (22.8%)	43 (28.9%)	13 (8.7%)	2.97
Weighted Mean					**3.48**
					Decision Rule: <2.50
Information Search Strategies					
I use Boolean operators to search for information online.	25 (16.8%)	38 (25.5%)	32 (21.5%)	54 (36.2%)	2.21
I use phrase searching technique when looking for information online.	47 (31.5%)	65 (43.6%)	14 (9.4%)	23 (15.4%)	2.94
I use truncation/wildcards when searching for information online.	22 (13.7%)	32 (21.5%)	42 (28.2%)	53 (35.6%)	2.08
I use an interpolation search	24 (16.1%)	37 (24.8%)	32 (21.5%)	56 (37.6%)	2.24
I use Google scholar all the time when searching for information	69 (46.3%)	50 (33.6%)	15 (10.1%)	15 (10.1%)	3.11

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online.					
Weighted Mean					**2.44**
					Decision Rule: <2.50
Evaluating Information					
I always verify any information I come across when carrying out a research work.	88 (59.1%)	55 (36.9%)	4 (2.7%)	2 (1.4%)	3.55
I trust the information sources I use when gathering information for my research work.	72 (48.3%)	67 (45.0%)	6 (4.0%)	4 (3.7%)	3.41
I can categorically say that whatever information comes my way when carrying out a research work is highly reliable.	60 (40.3%)	68 (45.6%)	13 (8.7%)	8 (5.4%)	3.22
Information gathered for my research work is always accurate.	70 (47.0%)	72 (48.3%)	7 (4.7%)	--	3.42
I ensure that information used for my research work is always recent.	64 (43.0%)	73 (49.0%)	11 (7.4%)	1 (0.7 %)	3.34
Weighted Mean					**3.38**
Grand Mean					**3.18**

Source: Fieldwork, 2022

Table 4.4 presents data on the information seeking behaviour of the respondents. The information seeking behaviour was measured by information needs, information sources preferred, information search strategies and information evaluation. The data presented show that the most prominent information needed by the respondents is information on how to conduct quality research. This is followed by information on how to properly record citations and how to effectively supervise research students (3.43, respectively).

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Other information need include; information on effective teaching methods (3.34) and grant proposal writing (3.30). Overall, the respondents demonstrate the ability to identify their information need as the average mean is 3.40. The table also shows the preferred sources of information among the respondents.

The most preferred source of information according to the mean scores of the responses include; internet (mean = 3.76); online databases (mean = 3.74); printed information resources such as Books, Journals, periodicals, encyclopedia (mean = 3.68); libraries (mean = 3.27) and social media platform (mean = 2.97). The average mean of 3.48 shows that the respondents are well aware of various information sources. This awareness does not however translate to dynamic information search strategies.

The data presented shows that the respondents mostly type in research titles/topics onto google scholar and hope for the best (mean = 3.11) followed by use of phrases to search for information online (2.94). They rarely used advanced search techniques such as interpolation (mean = 2.24); Boolean operators (Mean = 2.21); and truncation/wildcards (mean = 2.08). As a result, the average mean of search strategy is 2.44 which is below the accepted level. This shows that majority of the respondents do not adopt advanced search techniques. This however does not affect their ability to evaluate the information retrieved.

The data shows that majority of the respondents usually verify the information they use for research activities (mean = 3.55). They also ensure that they use only accurate information in their research (mean = 3.42) and access only trusted information sources (mean = 3.41). In addition to these, majority of the respondents indicate that they always try to use recent information sources in their research (3.34). The average mean for

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information evaluation is 3.38 which shows that majority of the respondents are effective in evaluating the information resources used in research. The low level of information retrieval skills reported in this study was also found in previous studies[3].

Overall, the information seeking behaviour of the lecturers has a grand mean of 3.18. This is acceptable going by the decision rule. The mean score of 3.18 out of possible 4.00 is high and it indicates that the lecturers are sophisticated in their information seeking behaviour.

4.2.3. Research Question Three: What is the level of use of electronic information resources by lecturers in Private Universities, Oyo State?

Table 4.5:Analysis of the level of use of electronic information resources by lecturers in Private Universities, Oyo State

Frequency of Use	Always	Not Always	Rarely	Never	Mean
Peer-Reviewed Journals.	104 (69.8%)	26 (17.4%)	14 (9.4%)	5 (3.4%)	3.54
Online Databases (Google Scholar, Jstor).	101 (67.8%)	29 (19.5%)	13 (8.7%)	6 (4.0%)	3.51
Websites.	90 (61.1%)	35 (23.5%)	17 (11.4%)	6 (4.1%)	3.43
Magazines/Newspapers/ Textbooks.	75 (50.3%)	53 (35.6%)	16 (10.7%)	5 (3.4%)	3.33
Electronic Reference Sources (E-Dictionary, e-encyclopedia etc).	76 (51.0%)	32 (21.5%)	30 (20.1%)	11 (7.4%)	3.16
Online Public Access Catalogue.	65 (43.6%)	32 (21.5%)	40 (26.8%)	12 (8.1%)	3.01
Off-Line Databases (Encarta, Britannica	53	40	39	17	2.88

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encyclopedia).	(35.6%)	(26.8%)	(26.2%)	(11.4%)	
Open-Source Software.	56 (37.6%)	33 (22.1%)	46 (30.9%)	14 (9.4%)	2.88
Social Media platforms.	45 (30.2%)	31 (20.8%)	58 (38.9%)	15 (10.1%)	2.71
CD ROMS.	31 (20.8%)	42 (28.2%)	48 (32.2%)	28 (18.8%)	2.51
Weighted Mean					**2.81**
Purpose of Use	**SA**	**A**	**DA**	**SDA**	**Mean**
I use EIRs mainly for research.	89 (59.7%)	38 (25.5%)	13 (8.7%)	9 (6.0%)	3.42
I use EIRs for data gathering and analysis.	85 (57.0%)	30 (20.1%)	21 (14.1%)	13 (8.7%)	3.26
I use EIRs to learn how to teach effectively.	76 (51.0%)	34 (22.8%)	27 (18.1%)	12 (8.0%)	3.20
I use EIRs to prepare research grants.	67 (45.0%)	32 (21.5%)	20 (13.4%)	30 (20.1%)	2.95
I use EIRs to learn how to supervise research effectively.	62 (41.6%)	39 (26.2%)	22 (14.8%)	26 (17.4%)	2.92
Weighted Mean					**3.15**
Grand Mean					**2.98**

Source: Fieldwork, 2022 Decision Rule: <2.50

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Table 4.5 presents data on the frequency of electronic information resources use among the respondents. The results show that all of the listed electronic information resources are frequently used based on the decision rule. However, the most frequently used information resources are peer-reviewed journals (Mean = 3.55) followed by online databases (Mean = 3.51); Magazines/Newspapers/Textbooks (Mean = 3.43); Electronic Reference Sources(Mean = 3.33); Online Public Access Catalogue(Mean = 3.01);Off-Line Databases(Mean = 2.88);The least frequently databases include social media platforms (mean = 2.71) and CD ROMS (2.51). The frequent use of electronic information resources has been reported by others studies. Lecturer as creators, consumers and disseminators of knowledge have cause to be frequent users of electronic information resources from which they get the inspiration to add to their knowledge and also create new knowledge. However, studies have also reported low use of scholarly databases as contrary to the findings of this study[4].

The main purpose of using electronic resources by the respondents is also presented in Table 4.5. The data presented showed that the most prominent reason why the respondents seek information is for research (Mean = 3.42) followed by data gathering and analysis (Mean = 3.26); to acquire teaching skills (Mean = 3.26); writing grant proposal (mean = 2.95), and aiding research supervision (Mean = 2.92) which is the least significant. The results show that the information seeking of the respondents revolves around research and teaching activities.

From the data computed in Table 4.5, the level of electronic information resources use among the respondents can be seen. The level of use is determined by the grand mean scores of the frequency of use and purpose of use of electronic information resources.

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The grand mean is 2.98 which is well above the decision rule. This means that the level of electronic information resources use among the respondents is above average.

4.3 Presentation of Test of Hypotheses

4.3.1 Hypothesis One: There will be no significant influence of electronic information resources use on the research productivity of lecturers in Private Universities, Oyo State;

Table 4.8: Summary of result of the influence of electronic information resources use on the research productivity of lecturers in Private Universities, Oyo State

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.310[a]	.096	.089	6.288

a. Predictors: (Constant), Use of Information Resources

Source: Fieldwork, 2022

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	528.741	1	528.741	13.372	.000[b]
	Residual	4982.134	126	39.541		
	Total	5510.875	127			

a. Dependent Variable: Research Productivity

b. Predictors: (Constant), Use of Infor. Resources

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Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	27.946	3.233		8.643	.000
	Use of Information Resources	.220	.060	.310	3.657	.000

a. Dependent Variable: Research Productivity
Source: Fieldwork, 2022

The influence of electronic information resources use on the research productivity of lecturers in private universities in Oyo state is measured in Table 4.8. It can be inferred from the data presented in the table that the use of electronic information resources has a significant value which indicates that it has a positive influence on research productivity among the study respondents. In addition, the model also yielded a R-value of .310 and an adjusted R^2 of .089 which means that the use of electronic information resources can account for about 8.9% variation in the research productivity of the lecturers while the remaining 91.1% is explained by other factors not included in this study.

Table 4.8b presents the results of ANOVA (overall model significance) of regression test which revealed that electronic information resources use have a significant influence on research productivity of lecturers in private universities in Oyo state, Nigeria. This can be explained by the F-value (13.372) and low p-value (0.000) which is statistically significant at 95% confidence interval. Hence, the result posited that electronic information resources use have a significant influence on research productivity of lecturers in private universities in Oyo state, Nigeria.

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In addition, the results of regression coefficients in table 4.8c, revealed that electronic information resources use has significant influence on research productivity of lecturers in private universities in Oyo state, Nigeria. Specifically, the analysis showed that, at 95% confidence level, a unit change in job satisfaction will lead to a .220 increase in research productivity of lecturers in private universities in Oyo state, Nigeria.

The implication of this result is that when lecturers make effective use of electronic information resources, it can lead to improvement in their research productivity. On the other hand, those lecturers who are not making effective use of electronic information resources may not be producing up to their full potential. The null hypothesis which states that there will be no significant influence of electronic information resources use on the research productivity of lecturers in Private Universities, Oyo state, is therefore rejected.

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4.3.2. Hypothesis Two: There will be no significant influence of information-seeking behaviour on research productivity of lecturers in Private Universities, Oyo State;

Table 4.9: Summary of result of the influence of information-seeking behaviour on the research productivity of lecturers in Private Universities, Oyo State

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.472[a]	.222	.216	5.829

a. Predictors: (Constant), Information Seeking Behaviour

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.

1	Regression	1185.651	1	1185.651	34.896	.000[b]
	Residual	4145.123	121	33.976		
	Total	5330.774	122			

a. Dependent Variable: Research Productivity

b. Predictors: (Constant), Information Seeking Behaviour

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.102	4.220		3.578	.000
	Information Seeking Behaviour	.525	.089	.472	5.907	.000

a. Dependent Variable: Research Productivity
Source: Fieldwork, 2022

Table 4.9presents the results of the regression analysis on the influence of information-seeking behavior on the research productivity of lecturers in Private Universities, Oyo state. From the data presented in the table, it can be seen that information-seeking behavior has a significant value which indicates that it has a positive influence on the research productivity among the respondents. In addition to this, the research model also shows an R^2 value of 0.222 and an adjusted R^2 value of 0.216. This means that effective information-seeking behaviour can lead to a 21.6% variation in research productivity among the lecturers in the selected universities.

Table 4.9b presents the results of ANOVA (overall model significance) of regression test which revealed that information-seeking behavior have a significant influence on research productivity of lecturers in private universities in Oyo state, Nigeria. This can be explained by the F-value (34.896) and low p-value (0.000) which is statistically

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significant at 95% confidence interval. Hence, the result posited that information-seeking behavior has a significant influence on research productivity of lecturers in private universities in Oyo state, Nigeria.

In addition, the results of regression coefficients in table 4.9c, revealed that information-seeking behaviour has significant influence on research productivity of lecturers inprivate universities in Oyo state, Nigeria. Specifically, the analysis showed that, at 95% confidence level, a unit change in job satisfaction will lead to a .525 increase in research productivity of lecturers in private universities in Oyo state, Nigeria.

The null hypothesis which states that there will be no significant influence of information-seeking behaviour on the research productivity of lecturers in Private Universities, Oyo state, is therefore rejected.

4.3.2. Hypothesis Three: There will be no significant combined influence of information-seeking behaviour and electronic resource use on research productivity of lecturers in Private Universities, Oyo State;

Table 4.10: Summary of the result of the combined influence of information-seeking behaviour and electronic resource use on research productivity of lecturers in Private Universities, Oyo State

Model Summary

Model	R	ThR Square	Adjusted R Square	Std. Error of the Estimate
1	.345[a]	.119	.111	6.197
2	.474[b]	.225	.212	5.837

a. Predictors: (Constant), Information Seeking Behaviour

b. Predictors: (Constant), Information Seeking Behaviour, Use of Infor Resources

ANOVA[a]

Model	Sum of	df	Mean	F	Sig.

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		Squares		Square		
1	Regression	1128.604	2	564.302	16.562	.000c
	Residual	3884.319	114	34.073		
	Total	5012.923	116			

a. Dependent Variable: Research Productivity

b. Predictors: (Constant), Information Seeking Behaviour, Use of Information Resources

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.196	4.284		3.547	.000
	Information Seeking Behaviour	.414	.088	.462	4.691	.000
	Use of Infor. Resources	.066	.072	.095	.912	.363

a. Dependent Variable: Research Productivity
Source: Fieldwork, 2022

In Table 4.10, the results of the multiple regression analysis on the two independent variables versus the dependent variable are presented. It shows the combined influence of Information Seeking Behaviour and the Use of Electronic Information Resources on the Research Productivity of Lecturers in the Selected Universities. The result yielded a coefficient of multiple regression of R=0.474 and multiple R-square of 0.225. The result also revealed that adjusted R^2=0.212. The implication of the result is that the joint contribution ofInformation Seeking Behaviour and the Use of Electronic Information Resources account for about 22% variation in the research productivity of lecturers in the selected universities.

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Table 4.10b presents the results of ANOVA (overall model significance) of regression test which revealed that Information Seeking Behaviour and the Use of Electronic Information Resourceshave a significant influence on research productivity of lecturers in private universities in Oyo state, Nigeria. This can be explained by the F-value (16.562) and low p-value (0.000) which is statistically significant at 95% confidence interval. Hence, the result posited that information seeking behaviour and the use of electronic information Resourceshas a significant influence on research productivity of lecturers in private universities in Oyo state, Nigeria.

However, from the coefficient table, it can be seen that, individually, only Information Seeking Behaviour(ß=0.414, t=4.691, p>0.05) is the sole significant contributorto research productivity among the respondents while the use of electronic information resources(ß=0.066, t =0.912, p<0.05) is not a significant contributor to research productivity among the study respondents. This means that there is a significant perceived combined influence of only information-seeking behavior on research productivity among lecturersin privateuniversities in Oyo state.The use of electronic information resources by the lecturers has no significant joint contributionto their research productivity. The null hypothesis is therefore rejected.

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4.3 Discussion of Findings

This section discusses the study findings in line with the research questions and hypotheses. The discussion is based on the results of data analysed in the study.

The first research question seeks to find out the level of research productivity among the respondents. The finding showed that, while the overall research productivity among the lecturers is above average, there are fundamental issues such as inadequate institutional support for researchers to attend conferences and seminars, lack of access to research grants, and the absence of real research impact. This finding shows the wisdom of not measuring research productivity simply by the number of articles published or the number of theses supervised by lecturers. It aligns with the submission of scholars that multiple criteria should be deployed in evaluating the research productivity of lecturers[5,6]. In that way, areas that need improvement can easily be identified.

In the case of the current research, it is found that the lecturers are not often sponsored to conferences and seminars where they can present papers and acquire more knowledge about research. It was also revealed that most of the research produced by lecturers in Oyo state has little or no impact on society. These issues as identified in the current study have also be reported by previous researchers. It has been reported in previous studies that the challenges besetting research activities includesleadership issues, administrative issues, funding issues, the complete lack of a clear philosophy of national development (reflected in government policies and programs), political instability, mentoring, and the lax attitude of people toward research are among the challenges faced by lecturers in Nigeriaas well as access to the needed information resources[7].

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In addition to this, the relatively few research produced by lecturers often fails to have the desired level of impact due to poor research dissemination. It was reported that many research produced by Nigerian lecturers remains in the dark because they were not publicised through channels such as academic social networks[8]. This often result in low visibility and low citation of the published works[9]. The implication is that the knowledge created in these studies is not being used in creating new knowledge.

Research question two in this study seek to identify the level of the information-seeking behaviour of lecturers in Private Universities, in Oyo state. The result of analysis showed that the lecturers are capable of identifying their information needs. They are also aware of various relevant sources of information and they are capable of evaluating information obtained from various sources. However, the majority of the lecturer lack information retrieval skills. The study found that the respondents lack even the basic information search strategies such as the use of Boolean Operators and truncation. Related studies have also reported that, while Nigerian lecturers are aware and have a positive perception of electronic information resources, their lack of information retrieval skills often prevents them from making the best use of available resources[10].

When researchers exhibit poor information search strategies, the awareness of their information needs and sources where these needs can be met may be of little significance. This is because they may not be able to retrieve the needed information resources from available information systems[11]. The implication of poor search strategies is that lecturers may not find adequate relevant information resources for their research which can result in low research productivity or the production of low-quality research output[12].

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Research question three focused on showing the frequency of use of electronic information resources by lecturers in Private Universities, in Oyo state. The finding showed that the lecturers are frequent users of electronic information resources such as peer-reviewed journals and scholarly databases, social media platforms, and offline databases such as CD ROMS. This finding is similar to what has been reported in other studies. Researchers have reported that the use of electronic information resources has become widespread among lecturers across the world, particularly in Nigeria[13]. However, researchers have pointed out that it is not enough to be frequent users of electronic information resources, it also important to make use of the right resources. This is because indiscriminate use of electronic information resources may not yield the desired level of research productivity[14]. It is therefore important to be purposeful in using electronic information resources and ensure that the information resources used is relevant to the task at hand. This is addressed by research question four.

Research question four focused on the purposes for which the respondents make use of electronic information resources. The findings of the study showed that the lecturers used electronic information resources for purposes that mainly revolve around research and teaching activities. When they are not using the resources to write research papers, they are using them to make their research works better or to properly assess the research work produced by their students. This finding is in line with the assertion of scholars that the role played by individual determined their information needs and, by extension, the purpose for which they seek for information[15]. Studies have shown that demographic factors such as age, occupation/profession, academic attainment and gender are among the factors that affect the information needs of information users[16].

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The use of electronic information resources by lecturers for their main duties such as teaching and research shows their positive perception of electronic information resources as useful for their need. It is therefore important for them to be able to effectively and efficiently search, identify, retrieve, and use the information resources for those stated purposes. The findings of this study regarding the poor search strategy among the lecturers should therefore be a matter of interest. This is because studies have highlighted the importance of information retrieval skills in the effective use of electronic information resources among various categories of information users[17, 18]. The influence of information resource use and information-seeking behavior on research productivity was explored in the study.

The first hypothesis tested examined the influence of electronic information resources use on the research productivity of the respondents. The results of regression analysis showed that the use of electronic information resources has a positive influence on the research productivity of the respondents. This is in line with the findings of several studies where researchers have highlighted the comparative advantage of electronic information resources over printed resources. Researchers have pointed to the fact that electronic information resources are easily accessible and flexible to use compared to print resources[19].

Researchers in Pakistan reported that the opportunities offered by electronic information resources for researchers to access research findings from around the world as soon as they are produced is a stimulant to research productivity among researchers in the country[20]. Researchers in the Northern part of Nigeria also reported that the availability and accessibility of the global body of research through electronic databases is a great

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determinant of research productivity among Nigerian researchers[21]. This shows that the unlimited access to research information would go a long way to enhance research productivity and when the access to information is made difficult either by, institutional, technological or other factors related to the ability of the users, then the level of research productivity may be affected. Another important factor is that electronic information resources have transformed the information landscape. It has brought with it, the phenomenon referred to as information explosion. There are numerous sources and formats of information to choose from. There are also various strategies that can be adopted to obtain the needed from information from the vast amount of information available. The process of making decision on which information sources to approach and which format of information to use has therefore become a complex endeavour.

The second hypothesis formulated for the study consider the influence of information seeking behaviour of lecturers on their research productivity. The analysis showed that information seeking behaviour has a significant influence on the research productivity of the lecturers. This finding is consistent with the reports of other studies in which information seeking behaviour have also been found to be significant determinant of research productivity[22]. Information seeking behaviour encompasses the identification of information need, the appropriate information sources and adopting effective strategies to retrieve the needed information from information systems. All these are important for any lecturer who wishes to conduct successful challenge.

When lecturers are able to identify the actual information they need and where they can get them, it will save them a lot of time and energy that would have been spent in trial and error. Most importantly, when they are able to deploy effective information search

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and retrieval strategy, it ensures that they are able to obtain the needed information resources. This goes a long in easing the way for researchers to conduct research.

The third hypothesis was tested to determine the combined influence of both information resources use and information-seekingbehaviour of the lecturers on their level of research productivity. The multiple regression analysis conducted showed that both variables jointly combined to influence the research productivity of the lecturer. This means that when the lecturers apply the right information-seekingbehaviour and make use of electronic information resources, it contributes significantly to their research productivity. This finding is backed by the finding from other related studies that have all reported that the advent of electronic information has led to a vast increase in research output across the world[23].

On the other hand, the analysis also showed that when both variables are combined only information-seekingbehaviour has a significant influence on research productivity while the use of information resources is not significant. This shows that research is a systematic endeaviour and indiscriminate use of electronic information resources may not result in improved research productivity. However, when the researcher possesses effective information seeking behaviour, it will ensure that they are able to identify, find and make use of the right information resources which has been shown to enhance research productivity. The import of this result is that electronic information resources can only enhance research productivity after the research has shown the right information seeking behaviour.

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Chapter Five

Conclusion

5.1 Summary of Findings

The findings of this study can be summarised as follows:

1. The study found that the research productivity of university lecturers in Oyo state private universities is above average. However, the research produced by the lecturers have low level of impact and the lecturers rarely have research supports in form of grants.
2. The study also found that the lecturers are able to identify their information needs as well as the sources of electronic information resources that they can use for their research. It was also found that the lecturers are aware of the need to evaluate the information resources they use in their research. However, the often use crude search strategies with majority of them not using Boolean logic, truncation and other advanced search strategies.
3. On the frequency of electronic information resources use, the study found that the lecturers are frequent users of electronic information resources with peer reviewed journal and online databases the most frequently used information resources. However, offline databases and CD-ROM are not frequently used.
4. Examining the purpose of using electronic information resources, the study found that the most prominent purpose for using electronic information resources by the lecturers is to conduct research. They also were using the resources for teaching purposes such as to supervise project students.

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5. The study also found that the level of electronic information resources useamong the lecturerswas moderate. This is shown by aggregating the result of the frequency of using electronic information resources and the purposes for which the resources are being used by the lecturers.
6. The test of hypothesis one shows thatthe use of electronic information resources has a significant effect on the research productivity of the lecturers.
7. The test of hypothesis two shows that the information seeking behaviour of lecturers also has a significant influence on their research productivity.
8. Hypothesis three which examined the influence of use of electronic information resources and information seeking behaviour of lecturers showed that the combination of both variables is significant and they influence research productivity. However, it was also found thatonlyinformation seeking behaviour of lecturers has a significant joint influence of on research productivity of lecturerwhile the use of electronic information resources has no significant joint contribution to research productivity.

5.2 Conclusion

The study has shown that research productivity is a subject of interest to private universities. Lecturers are expected to continuously conduct research which expands the frontier of knowledge and helps to solve societal problems. This researchis expected to be communicated in form of research articles, seminar papers, textbooks and supervised theses and dissertation among others. Lecturers, and by extension, the institutions they work for, are thus judged on the quality and quantity of their research out. However, this study found that the research productivity of lecturers in private universities in Oyo state

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is just above average and most of the research produced have low impact. This outcome is due to various factors which include information seeking behaviour and the use of electronic information resources.

The information seeking behaviour of the lecturer has shown that they tend toward the use of electronic information resources. Their ability to identify information need and information sources as well as evaluate information resources is however tempered by their lack of adoption of advanced search techniques. Effective use of electronic information resources in the information age requires information retrieval skills that surpass the elementary skills. This lack of advanced skills mean that the lecturers are unable to retrieve top quality and relevant information resources necessary to reach level of research productivity and producing impactful research.

5.3 Recommendations

Based on the findings and conclusion reached in this study, the following recommendations are made;

i. It important for private universities in Oyo state toincrease their support forresearchers by sponsoring them to local and international workshops and seminars where they can hone their research skills and learn about the global best practices in research.

ii. It is also important for academic libraries to organise various seminars for lecturers to booststhe use of available sources of electronic information resources and equip them with necessary information retrieval skills to effectively use the databases from where they can obtain quality electronic information resources.

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iii. Academic libraries as providers of authoritative electronic information resources should also create enabling environment to ensure that information users, including lecturers are able to make use of the scholarly databases provided by the institution. They should make effort to ensure that easy access is created and all the necessary supports are provided to aid ease of use of electronic information resources especially by lecturers.

iv. Academic libraries in private universities in Oyo state should introduce robust research support services staffed by qualified librarians who will help librarians in their efforts to use electronic information resources for research purposes.

v. The academic librarians should also work to improve the level of electronic information use among the lecturers. This can be done through selective dissemination of information, current awareness and digital reference services set up to encourage more users to make use of library resources.

vi. The research found that electronic information resources use has significant influence on research productivity. It is therefore imperative that academic ensure that electronic resources are always available to meet the need of all the departments and faculties in tertiary institutions. This can be better achieved by combining open access journals and databases with subscription-based journals and databases to ensure that lecturers have the opportunity to choose from a very wide range of options.

vii. The study also found that information seeking behaviour is a significant determinant of research productivity. It is recommended that libraries periodically conduct survey to understand the information needs and seeking behaviour of

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lecturers. This will help them anticipate lecturers' information needs and then design the appropriate systems and services to effectively meet those needs'

viii. The study has shown the significance of lecturers' information seeking behaviour and the use of electronic information resources. To guide the information seeking behaviour of lecturers and ensure effective use of electronic information resources, it is important to develop an information literacy skill program targeted at lecturers.

5.4 Contribution to Knowledge

The study has filled a research gap by empirically showing the influence of information seeking behaviour and the use of electronic information resources on the research productivity of lecturers in private universities in Oyo state. The study has also contributed to the Nigerian society by offering solutions which can help enhance the research productivity of lecturers in private universities. In addition, the study findings have shown the services and structures needed by academic libraries to effectively meet the need of their clientele.

The study also made theoretical contribution by applying constructs from the Wilson Models of information seeking behaviour to study lecturers in private universities there contributing to the validity of the theory in the African context. Other researchers can base their decision to use the models on its appropriateness to this study.

Empirically, the study has collected data that was previously not in existent. This data is available for future researchers who might find any aspect of useful, either for comparison or adaptation.

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5.5 Suggested Areas for Further Research

The current study focused on private universities in Oyo state.This leaves the door open for further studies. Researchers can include more private universities in Oyo state or across South-west Nigeria. Some of the studies that can be conducted include the following;

1. Information seeking behaviour, information resources use and research productivity of private lecturers in southwest Nigeria.
2. Information seeking behaviour, information resources use and research productivity of university lecturers in southwest Nigeria.
3. Information seeking behaviour, information resources use and research productivity of tertiary institutionlecturers in Oyo state.

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Appendix

Questionnaire

Department of Library and Information Science
Faculty of Communication and Information Science
Lead City University, Ibadan
(QISBERAP)

Dear Respondent,

I am a Master degree student of the above-named Department. The following questionnaire is designed to investigate information-seeking behaviour and research productivity of lecturers. Your answers will be processed anonymously and none of the answers can be considered right or wrong. Kindly fill this questionnaire truthfully.

Thank you.

……

Oladeji, Daniel O.

Section A: Demographic Information:

a. Name of your Institution…….
b. Faculty:……..
c. Position: Prof. { }; Senior Lecturer { }; Lecturer I{ }; Lecturer II{ }; Asst. Lecturers { };Others
d. Qualification:PhD{ }; MPhil/Masters { }; others{ }
e. Age 21-30 { }, 31-40 { }, 41-50 { }, 51-60 { }, 61-70 { }, other { }
f. Gender: Male: { }, Female: { }

7. How long have you been teaching/working in the University? 1 – 5 years{ }; 6 – 10 years { }; 11 – 15 years { }; 11 – 20 years { }; 21 – 25 years { }; 26 – 30 years { }; 31 years { }

Section B

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Level of Research Productivity of Lecturers

What isyour level of research productivity between 2018 and 2021 in these areas listed below?

Strongly Agree (SA); Agree (A); Disagree (D); Strongly Disagree (SDA)

	Research Productivity	**SA**	**A**	**DA**	**SDA**
S/No	**Conference Presentations**				
1.	I do present papers in conference proceedings.				
2.	My institution do sponsor me to attend conferences from time to time.				
3.	I always look forward to attending conference proceedings.				
S/No.	**Research Grant Income**				
4.	I have access to research grant always.				
5.	The numbers of research articles I have at the moment do qualify for accessing of research grants.				
6.	The institution I am working for has accessible grants for her lecturers.				
S/No.	**Research Impact**				
7.	My publication counts have attracted quite a good number of citations on google scholar.				
8.	My publications on googleschorlar are highly rated.				
9.	My research findings have been implemented by many organizations within my country.				
10.	My research findings have been implemented by many organizations within my country.				
11.	The findings of the various researches I have been carried out overtime				

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12.	The findings of all my research works are very distinctive.				
S/No.	**Research Supervision**				
13.	I think I can improve more on my research supervision skills.				
14.	Isee myself as a well rated, competent, research supervisor.				
15.	I have supervised numerous undergraduate and postgraduate students overtime.				

Section C
Information Seeking Behaviour of Lecturers
What do you need information for and which sources do you consult whenever you

search for research activities?

Very true of me; True of me; Somewhat true of me; Not true of me

S/No.	Information Need of Lecturers	Very true of me	True of me	Somewhat true of me	Not true of me
1.	Information need on how to carry out good research work.				
2.	Information need on how to do citations properly.				
3.	Information need on how to write good proposals for accessing grants.				
4.	Information need on how to teach effectively.				
5.	Information need on how to carry out good and effective research supervision.				
S/No.	**Information Sources of Lecturers for Research**				

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6.	Internet.				
7.	Online Databases.				
8.	Books, Journals, periodicals, encyclopedia.				
9.	Libraries.				
10.	Social media platforms.				
S/No	**Information Search Strategies**				
11.	I use Boolean operators to search for information online.				
12.	I use phrase searching technique when looking for information online.				
13.	I use truncation/wildcards when searching for information online.				
14.	I use interpolation search strategy when seeking for information online.				
15.	I use Google scholar all the time when searching for information online.				
S/No	**Evaluating Information**				
16.	I always verify any information I come across when carrying out a research work.				
17.	I trust the information sources I use when gathering information for my research work.				
18.	I can categorically say that whatever information comes my way when carrying out a research work is highly reliable.				
19.	Information gathered for my research work is always accurate.				
20.	Information gathered for my research work is always timely.				

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Section D

Electronic Information Resources Use by Lecturers?

How frequent do you use the under listed electronic information resources and for what purpose? Always; Not always; Rarely; Never

S/No	Frequency of Use of Electronic Information Resources.	Always	Not always	Rarely	Never
1.	Online Databases (Google Scholar, Jstor).				
2.	CD ROMS.				
3.	Websites.				
4.	Off-Line Databases (Encarta, Britannica encyclopedia).				
5.	Social Media platforms.				
7.	Electronic Reference Sources (E-Dictionary, e-encyclopedia etc).				
8.	Magazines/Newspapers/Textbooks.				
9.	Peer Reviewed Journals.				
10.	Online Public Access Catalogue.				
11.	Open Source Software.				
S/No	**Purpose of Use of Electronic Information Resources**	**Always**	**Not always**	**Rarely**	**Never**
13.	I use EIRs mainly for research.				
14.	I use EIRs to learn how to supervise research effectively.				
15.	I use EIRs to understand how to teach effectively.				
16.	I use EIRs to gather materials for research work.				
17.	I use EIRs for data gathering and analysis.				

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Appendix A

Level of Research Productivity of Lecturers in Private Universities in Oyo State.

Statement	SA	A	DA	SDA	Mean
Conference Presentations					
I do present papers in conference proceedings.	44 (29.5%)	59 (39.6%)	36 (24.2%	10 (6.7%)	2.93
My institution do sponsor me to attend conferences from time to time.	4 (2.7%)	22 (14.8%)	58 (38.9%)	65 (43.6%)	1.77
I always look forward to attending conference proceedings.	92 (61.7%)	49 (32.9%)	7 (4.7%)	1 (0.7%)	3.56
Average Mean Score					**2.75**
Research Grant Income					
I have access to research grant always.	4 (2.7%)	9 (6.0%)	47 (31.5%)	89 (59.7%)	1.52
The numbers of research articles I have at the moment do qualify for accessing of research grants.	30 (20.2%)	66 (44.3%)	38 (25.5%)	15 (10.1%)	2.74
The institution I am working for has accessible grants for her lecturers.	22 (14.8%)	36 (24.2%)	43 (28.9%)	48 (32.2%)	2.21
Average Mean Score					**2.16**

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Research Impact					
My publications on google scholar are highly rated.	39 (26.2%)	60 (40.3%)	36 (24.2%)	14 (9.4%)	2.86
My publication counts have attracted quite a good number of citations on google scholar.	27 (18.1%)	69 (46.3%)	38 (25.5%)	13(8.7 %)	2.75
The findings of all my research works are very distinctive.	67 (45.0%)	64 (43.0%)	10 (6.7%)	8 (5.3%)	3.31
My research findings have been implemented by many organizations within my country.	24 (16.1%)	45 (30.2%)	54 (36.2%)	26 (17.4%)	2.43
The findings of my researches have been carried out overtime implemented by international organizations.	17 (11.4%)	55 (36.9%)	47 (31.5%)	30 (20.1%)	2.42
I am satisfied with the present number of publications I have at the moment.	15 (10.1%)	26 (17.4%)	31 (20.8%)	77 (51.7%)	1.88
Average Mean Score					**2.15**
Research Supervision					
I think I can improve more on my research supervision skills.	98 (65.8%)	46 (30.9%)	1 (0.7 %)	4 (2.7%)	3.65
I see myself as a well rated, competent, research supervisor.	51 (34.2%)	81 (54.4%)	11 (7.4%)	6 (4.0%)	3.29
I have supervised numerous undergraduate and postgraduate students overtime.	34 (22.8%)	56 (37.6%)	21 (14.1%)	38 (25.5%)	2.59
Average Mean Score					**3.18**

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Bio- data

Personal Data

Full Name:	Daniel Olufemi OLADEJI
Address:	AjayiCrowther University, Oyo
Email:	oladejido@gmail.com
Date of Birth:	17th May, 1979
Place of Birth:	Oyo, Oyo State
State of Origin:	Oyo State
Nationality:	Nigerian
Religion:	Christianity
Mobile Number:	08032094228/08122572007
Marital Status:	Married
Next of Kin:	Mrs Oladeji Abosede Aina
Address:	Kajola Community, Gold 'n' Rock Area, Obananko Road, Oyo.
Phone Number:	08147263013

Educational Background

St. Mary's R.C.M. Asogo, Oyo :

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First School Leaving Certificate (1986-1991)

A.D.S Grammar School, Ejigbo, Osun State

Senior Secondary School Certificate (2002)

First-Class College, Eyin Fence Ibadan

National Examination Council (2019)

Oyo State College of Education, Oyo

Nigerian Certificate in Education (2005)

Ekiti State University, Ekiti

B.Sc. Political Science (Ed.) (2014)

Lead City Univerisity, Ibadan

Masters of Library and Information Science (2019 still on-going)

Working Experience with Dates

Organisation: AjayiCrowther University, Oyo

Role: Library User Services at Faculty Library (Law Library)

Date: (2015 till date)

Award:

National Association of Political Science Students'

Ekiti State University, Ado-Ekiti Chapter:

Most Active Student **(**2011-2014)

Research Work/ Academic Publications

Published Manuscripts:

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- Social Media Use and Application during Covid-19 by Special Libraries in Nigeria: Case study Justice BabasolaOgunade Law Library. Via Library Philosophy and Practice (e-journal), ISSN1522-0222
- Electronic Information Resources Use and Research Productivity of Lecturers in Private Universities in Oyo State.Via Library Philosophy and Practice (e-journal), ISSN1522-0222

Unpublished Manuscripts:

- Information Seeking Behaviour and Research Productivity of Lecturers in Private Universities in Oyo State.
- Motivational Factors and Digital Literacy as Predictors on Job Performance of Librarians during Covid-19 Pandemic.

Major Conferences, Seminars and Workshops Attended

- Virtual International Conference on Library & Information Science by Sri-Lanka (2021)

Topic for the Conference:

Challenges of Library and Information Profession in New Normal Context

- A1-Day Staff Development Training Seminar (AjayiCrowther University, Oyo) (2018)
- 3-Day training on how to search for Law Databases such as Legalpedia, Hein Online, Law pavilion and other law printed information like England Law Report, Halsbury's Law of England by Law Library, AjayiCrowther University, Oyo (February, 2019)

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- 5-Day Training for Library Staff Members on the Application of KOHA (i.e An Open Source Integrated Library System)January, 2020 at T.Y. Danjuma Library, AjayiCrowther University, Oyo.
- Nigerian Library Association (NLA) 2021at Emeralds Conference Hall, Lead City University, Ibadan

_____ _____

Signature **Date**

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University Compliance Certificate

This is to certified that this thesis by Oladeji, Daniel Olufemi with Matric No. LCU/PG/001228 in the Department of Information Management, Lead City University, Ibadan, is in FULL compliance with the approved university format and style.

_____ _____

Signature **Date**

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