

## **Full Length Research**

# **Information Literacy Skills and Service Delivery by Librarians in National Root Crops Research Institute, Umudike**

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This study examined information literacy skills and service delivery of librarians in NRCRI library. The study was guided by five specific objectives and five research questions. The study employed descriptive survey research design, while the population of the study is eight (8), comprising of librarians in NRCRI Library. The complete census method was used. Only one instrument (questionnaire) was used. The questionnaire was validated by three professionals from the Department of Library and Information Science, MOUAU. Mean was used in analyzing data for the study. The study identified ability to recognize the need for information timely, ability to identify potential sources of information and ability to integrate new information into an existing body of knowledge as the greatest information literacy skills acquired by librarians in NRCRI library. The most source of information literacy skill for librarians in NRCRI library is engaging in the editing of research works. Referral services and indexing/abstracting services are the services on which librarians apply their literacy skills. Promotion of indexing and abstracting services are the greatest effect of information literacy skill on librarian's service delivery in NRCRI library. Inadequate fund to engage in information literacy programme is the greatest challenge librarians in NRCRI library face in the course of acquiring information literacy skills. The study therefore recommended that: NRCRI as the mother institution should ensure that librarians should be well trained on the ability to evaluate information obtained critically.

**Keywords:** Concept of Information, Concept of Literacy, Concept of Information Literacy, Information Literacy Skills, Library Service Delivery

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## INTRODUCTION

### Background of the Study

Information literacy is now the crucial point instead of training students how to make use of the library catalog, physical collections and primary services, students are taught how to critically apply information literacy skills for information search and utilization so as to appear as lasting learners (Mathew, 2007). According to Nilson (2012), information literacy is the skill to identify, locate, evaluate, organize and effectively create, use and communicate information in order to address challenges. The Middle States Commission on Higher Education (2003) defines information literacy as an academic framework for identifying, finding, understanding and using information. Association of College and Research Libraries (ARCL) (2000), defines information literacy as a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate and efficiently use needed information.

Information expansion, explosion as well as human need to unravel his problem alone have brought about much attention on the modes of information creation, organization, dissemination, preservation and conservation. This has led individuals attempting to acquire some methods and competencies in information usage, seeking, location and retrieval. More so, in order to solve their information needs, they seek out different information and sources of information. However, the ability to acquire the right information at the right time and from the right source is equivalent to quality and healthy living which constantly affects the way one operates in his/her chosen profession.

For better understanding of information, it is essential to present the opinions of different experts as covered in the literature. Bruce (2004) posited that information literacy is conceivably the foundation for learning in our contemporary environment of continuous technological change. As information and communication technologies develop rapidly, and the information environment becomes increasingly complex, educators are recognizing the needs for learners to engage with the information environment as part of their formal learning processes. Wilson (2006) further observed that information is used to denote the channel of communication through which messages are transferred or the factual data empirically determined and presented in a document or transmitted orally. Consequently, information is the result of processing, manipulating and organizing data in a way that adds to the knowledge of the receiver. Nonetheless, Heghes, as cited in Thompson (2003), describe information literacy as a new liberal art that extend from knowing how to use computers and access information to critical reflection on the nature of information itself. According to Thompson (2003), information literacy encompasses knowledge of one's information concerns and needs, and the ability to identify, locate, evaluate, organize and effectively create, use and communicate information to address issues or problems at hand. Additionally, information literacy is a prerequisite for participating effectively in the information society, and is part of the basic human right of lifelong learning. Hence, information literacy is a boundless concept which is not only meant for those in the field of library and information science or university students, but is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations. It also enables the individuals who possess it to become more self-directed, and assume greater control over their own learning.

It is the act of knowing when and why you need information, where to find it, how to evaluate, use and communicate in an ethical manner (ALA, 2005). Lupton, Glanville, McDonald and Selzer (2004) present a more detailed explanation of information literacy skill to include library research skills and information technology (IT) literacy skill. They explained that the definition goes beyond finding and presenting information, but it is about higher order analysis, synthesis critical thinking and problem-solving. It involves seeking and using information for independent and lifelong learning. However, in this era of information explosion, information literacy skill is that essential skill that empowers individuals (information seeker) to identify, retrieve and effectively use information to sustain and extend learning and profession (Kratochvil, 2013). Information literacy skills are increasingly essential in the present-day environment of speedy technological change and proliferating information resources.

Moreover, because of the increasing complexity of today's environment, individuals are faced with varied and abundant information choices, which surface in their academic studies, in workplaces, and in personal lives. The complexity of this choice is further aggravated as a result of many openings through which information could be acquired, disseminated and stored. Today, information is available through libraries, community resource centres, special interest organizations, media, and the Internet. Increasingly, information comes to individuals in unfiltered formats, raising questions about its authenticity, validity, and reliability (Dadzie, 2008). In addition, information is available through multiple media, including graphical, aural, and textual, and these pose new challenges for individuals in accessing, evaluating and understanding it.

Service delivery may be seen as the various patterns adopted by libraries and librarians in the discharge of library services. Consequently, library service refers to the facilities which are provided by a library for the use of the books and the dissemination of information. It is the service provided by the library staff to the users of the library in order to meet their information needs. The library service is a kind of invisible product in which readers participate (Nnadozie, 2007).

This may be viewed as the activities that libraries and their personnel render to meet the information needs of their users. Such services as core and traditional library services include circulation of library information resources, interlibrary loan, reference and referral services, reprographic services, user education, Selective Dissemination of Information (SDI), Current Awareness Services (CAS), indexing and abstracting, OPAC services, translation, bindery, Internet and e-mail services (Nnadozie, 2007). Owing to the nature of the open service system, the changing demands of readers and the continuing development of document information resources for the academic library service system, the library service cannot attain a status of "zero faults". When readers experience a difference between their own situation and their expectation of the library service, they are dissatisfied (Aina, 2004). Therefore, because reader satisfaction is the target, the academic library should learn how to understand the potential discontent of information as an important premise in achieving the target for the reader satisfaction. As information providers, libraries of all types, and documentation and information centers should be the main recipients of the massive amount of Internet resources that can be used to noticeably enhance the quality of their services and at the same time to save time and money.

Librarians are people who look after the storage and retrieval of information especially in libraries and allied bibliographic centres. In a workplace, the librarian is usually a professional who is trained and educated to deal with information in a wide variety of formats and settings (Aina, 2013). The librarian helps users to navigate the voyage into the Internet and evaluate information efficiently. Consequently, librarians could be viewed as employees charged with the provision and delivery of library and information services to the students, faculty members and the entire user community. They are among the individuals faced with difficulties in information search and service delivery. These difficulties are overcome or surmounted by their professional training and information literacy skills.

According to Zurkowski (as cited in Thompson, 2003), people trained in the application of information resources to their work can be called information literates. They have learned techniques and skills for utilizing the wide range of information tools as well as primary sources in molding information as the solutions to their problems. Furthermore, the development of such competencies should take place throughout an individual's life, especially during the educational years (Lau 2006). Lau (2006) further writes that librarians, as a part of the learning community

and, as experts in information management, should assume the key role of facilitating information literacy through the creation of curriculum-integrated programs with the involvement of faculty. However, not minding that librarians are drivers of information literacy programmes, it is expedient to look into their skills in building an information literate society. This is based on the fact that no one can give what he/she does not have. And, this is the rationale upon which this study is set.

## **Statement of the Problem**

Without doubt, information literacy concept has been included in the Nigerian library and information science curriculum a few decades ago (Mallari, 2014). Based on this latest development, librarians are expected to acquire and apply this skill in the discharge of their duties regularly. It is also important to know whether librarians especially in the research institutes possess and apply information literacy skills in the discharge of their duties.

However, it is widely speculated by some authors that librarians may be lacking information literacy skills in the research institutes, while on the other hand; other authors are of the opinion that librarians in the research institutes do not only possess information literacy skills but also apply it in the discharge of their duties.

The impression is that librarians who do not possess information literacy skills cannot render quality services to their employers. Unfortunately, a thorough study of published research works show that a lot of works have been carried out on information literacy skills but none has been carried out on the information literacy skills and service delivery of librarians in the National Root Crops Research Institute, Umudike. This is a problem situation that requires urgent attention. It is based on this, that this study was conducted to examine the information literacy skills and service delivery of librarians in the National Root Crops Research Institute Umudike.

## **Objective of the Study**

The general objective of this study is to examine the information literacy skills of librarians and service delivery in the National Root Crops Research Institute Umudike. The objectives are to:

- identify the various information literacy skills acquired by librarians in NRCRI, Umudike;
- identify the various means through which librarians in NRCRI, Umudike acquire information literacy skills;
- identify the various services on which librarians in NRCRI, Umudike apply their information literacy skills for service delivery; examine the effect of information literacy skills on librarians' service delivery in NRCRI; identify the challenges faced by librarians in their course of acquiring information literacy skills.

## Significance of the Study

The finding of this study shall be directly beneficial to Library Heads and managers, librarians, researchers, students, the research designers and the general public understanding the information literacy skills of librarians vital for the effective and efficient management of libraries. This study serves as a wakeup call on the library managers especially the university librarians in the tertiary institutions who are saddled with the responsibility of assigning duties to library staff as it exposes them to some information literacy skills of librarians which will enable them work effectively as well as challenges facing the acquisition of these skills for improvement and proffering of strategies by the managers of the libraries.

It is also believed that this study will equip librarians on the means of acquiring information literacy skills and how to apply it to their functions and duties in the library. It is hoped that the recommendations made from this study will benefit policy makers, information system developers, and the academicians themselves. It will create awareness among policy makers, about the information literacy requirements and problems that librarians face. This may help them to come up with policies which will develop and promote library in the university. Information systems developers will be able to understand the information literacy skills and capabilities of librarians.

Furthermore, it is hoped that with the research findings available and the recommendations made, the designers will be able to design systems that will be appropriate and user friendly to librarians. The result of this research will serve as a reference source to researchers, students and academic staff who are conducting a research on this topic. Besides, the research results will add to knowledge and already existing literature on information literacy skills. **Scope of the Study**

The present study was conducted at NRCRI Special Library, with a focus on the librarians employed in the library. The respondents, who comprised of librarians only, were fielded with a structured questionnaire. Data collection was confined to information literacy skills possessed by the librarians and how the same skills, if any, were affecting their service delivery to the library's user public.

## LITERATURE REVIEW

### Concept of Information

Information, as a concept, has been defined by many authors in numerous reports. Most of these definitions boil down to its application in different disciplines and profession. However, in this review, more emphasis is given on definitions related to library and information science. To this end, Bawden (2001) identified an initial difficulty with the idea of information, which he described as a nagging concept with no generally acceptable definition. This nagging-definition nature of information made it difficult even in this present information explosion and present Internet age to arrive at an agreed definition of information. This singular situation is what Bawden (2006) further encountered in his quest to define information. Indeed, it may even have worsened, as the term "information" is used ever more widely as a central concept in the physical, social, management, biological, agricultural and library and information sciences (Bawden, 2001). Nnadozie (2014) believes that defining information is fraught with both semantic and conceptual challenges and contradictions. Furthermore, Meadow, Boyce, Kraft and Barry (2007) observe that information is something that is represented by a set of symbols, which are organized or fit into some structure, and whose symbols and organization can be to some extent understood by users of the symbols who read them. In this definition, the authors see information as stand-alone concept where the users of such concept are held on high esteem. However, the definition is not different from Allen (2004) where information is seen as any distinct signal or element forming part of a message of communication.

Cappuro and Hjørland (2003) as well as Herold (2001) attest to the continuing debate on the concept of information where they observed the difficulty in defining information. But it may be that, precisely because of the wider scope for using the information concept, researchers are better at distinguishing the best sense of the meaning of the word for their purpose, as Wilson (2006) urged. However, amidst these struggles in definition of information, Hornby (2010) opines that information simply means a processed data. Hornby (2010) went further to define information as facts or details about somebody or something. The definition not only stops there, it further diverges as a result of the concept being in all disciplines. Additionally, information is that which aids teaching, learning and research not just in theory but in practice. Furthermore, according to Wilson (2006), the word "information" is used, in the context of user-studies research, to denote a physical entity or phenomenon (as in the case of questions relating to the number of books read in a period of time, the number of journals subscribed to, etc.), the channel of communication through which messages are transferred (as when we speak of the incidence of oral versus written information), or the factual data, empirically determined and presented in a document or transmitted orally (Wilson, 2006). Allen (2004) defines information as knowledge acquired or derived, a timely or specific knowledge and the act of informing.

Buckland (2012) states that, when clarity is sought, more careful definitions are needed. One of such definitions of

information by him is restricted to use of "information" in its traditional association with human act of knowing and learning. However, this definition by Buckland is based on its use in the field of information science. Furthermore, in computer science, the concept of information is concerned with the theory and application of algorithms. Another, concerned with entropy, probability, Shannon-Weaver information theory, physical patterns (in-form-ing), and related topics, is sometimes referred to as the "physics of information." Case (2012) defines information as: encapsulated knowledge, packaged human experience, a source that can provide a myriad of data, a resource that takes different formats, packaging, transfer media, and varied methods of delivery which could be carried out through people (family, friends, tutors, fellow students), Institutions (i.e., national health service professionals or help facilities).

Consequently, the word "information" is, of course, used in "information technology" (IT, also ICT, for Information and Communication Technologies) but largely restricted in practice to the use of electronics for communication and computation (Buckland, 2012). Funner (2004) categorized the definition of information into three. They include: *Information-as-knowledge* for knowledge imparted, what was learned as a result of being informed; *Information-as-process* for becoming informed, for learning; and *Information-as-thing* for bits, bytes, books, sounds, images, and anything physical perceived as signifying.

Furthermore, in this 21st Century, information has received a widespread acceptance as the essential feature of production, consumption and exchange (Okiy, 2012). Information is an important ingredient in all human endeavors and for human survival in the society. It is the raw material for decision and the fifth factor of production required by all. This information proliferation has led to the problem of information over load (explosion) where the flow of information associated with librarian tasks is greater than can be managed effectively without some skills and competencies (Wilson, 2006).

However, further attempt has been made to define the concept of information in Library and Information Science (LIS) parlance. Reitz (2004) defines information as all facts, conclusions, ideas, and creative works of the human intellect and imaginations that have been communicated, formally or informally in a format. Information, according to Ochai (2007), is the result of processing, manipulating and organizing data in a way that adds to the knowledge of the receiver. Information is a catalyst for change which has become as important as life itself. It is substantially different from data in that data are raw and unevaluated messages. In another way, Ochai (2007) opines that information is the increase in knowledge obtained by the recipient by matching proper data elements to the variables of a problem. Buckland (2012) in his paper, supporting the definition of information by Ochai (2007) posits that information, being awareness on a given situation or phenomenon, propels one into action and is to be valid and usable (Buckland, 2012). However, Buckland (2012) believes that if the information is valid but not usable, it is outdated or obsolete, and if it is usable but not valid, the information is gossip or grapevine.

Williams and Wavell (2006) boldly highlights the significance of information which include: qualitative, relevance and reliability, as well as the need to deal effectively with the quality of information and sources available in such a way that it could solve the problem to which it was generated to solve. Aguolu and Aguolu (2002) defines information as a message of human experience; what is transmitted, a signal, or a stimulus. Aina (2013) defines information as accumulation of knowledge by human beings in all areas of endeavor that is used to solve problems and reduce uncertainty. Chinaka (2008) defines as the increase in knowledge obtained by the recipient by matching the proper data elements to variables of problems. Nnadozie (2014) defines information as data, which have been processed, and can be used as a basis for argument, decision and action. Uzuegbu (2014) believes that information is formal and tries to build on knowledge. Aina (2004) and Ugah (2014) itemized some of the various definitions of information to include increasing the knowledge of the recipient, resolving uncertainty, value in decision making and physical surrogate of knowledge. Ugah (2014) clearly states that information is the statement of fact that is received by human and that has some form of worth to the recipients. Information is news or facts about something, knowledge received or communicated concerning a particular fact or circumstance.

### Concept of Information Literacy

21st century has been called the information age simply because of the explosion of information output and information sources. It is now clear that individuals and users of information, mainly, those in the academic field, cannot learn everything they need to know in their field of study in a few years or over depending on the help of others. This fact is what brought about the concept of information literacy as observed by Bruce (2003). However, Bruce, as cited in Adeyemi (2017) opines that the concept of information literacy evolved from concepts such as library instruction, bibliographic instruction, and user/reader education. Furthermore, there has been a move away from regarding information literacy as being solely about individuals' skills and competencies and towards an understanding of information literacy as a set of practices (Lloyd, 2011). Lloyd (2011) further asserts that information literacy should be regarded as a practice that is found, driven and inclined by discourses which operated within a setting.

Information literacy is the act of knowing when and why you need information, where to find it, how to evaluate, use and communicate in an ethical manner (ALA 2005). To this end, Eisenberg, Lowe and Spitzer (2004) believe that information literacy equips students, researchers, the librarians with knowledge and skills to identify, retrieve, evaluate, and ethically use and communicate information from various information resources. According to Montgomery (as cited in Adeyemi, 2017), information literacy is an umbrella term which includes electronic searching and information retrieval skills, media skills, research skills, reference skills, learning skills, and study skills. Lupton, *et. al.* (2004) however presents a more detailed explanation of information literacy to include library research skills and IT literacy. Uzuegbu (2014) defines information literacy as the ability to access, evaluate, organize, and use information from a variety of sources. Information literate individuals necessarily develop some technological skills. Information literacy equips them with the critical skills necessary to become independent lifelong learners. Information literacy has come to be an indispensable tool in the world today (Uzuegbu, 2014). Fundamentally and as already observed information literacy is the ability to recognize when information is needed, then locate and evaluate the appropriate information and use it effectively and responsibly. However, Adeyemi (2017) believes that to be information literate an individual must recognize when information is needed and have the ability to locate, evaluate and use effectively the information needed.

Academic librarians in many countries have accentuated and expanded their roles to be advocates and teachers of information literacy (Uzuegbu, 2014). Training on the use of library resources has been an integral part of library services for ages. This was done through orientation programmes and various user education initiatives involving one-on-one and classroom-based instruction. Information literacy education is an extension of these processes, but reflects a much broader dimension of library orientation and more encompassing than the traditional user education (Kolawole & Igwe, 2016).

### **Information Literacy Skills**

In this period of over-abundance of information and information sources, information literacy skills are those essential skills that will empower the librarian to identify, retrieve and effectively use information to sustain and extend their profession and information-handling services (Webb & Powis, as cited in Bury, 2011). According to Bhandary (2004), information literacy skills enable an individual to use different tools available such as libraries, information and media centers, computers, software applications, databases, and other technologies to achieve a wide variety of academic, work-related, and personal goals.

Furthermore, information literacy skills include the following abilities as outlined by ALA (2005): ability to recognize the need for information timely, ability to formulate questions based on information needs, ability to identify potential sources of information, ability to develop successful and effective search strategies, ability to access various sources of information independently and efficiently, ability to evaluate information obtained meaningfully, ability to organize information effectively, ability to integrate new information into an existing body of knowledge, ability to use information critically.

From the foregoing expert opinions, it can be concluded that information literacy skills empower the people with the critical skills which will help them to become independent information seekers and users and further helps them to apply their knowledge from the familiar environment to the unfamiliar

### **Library Service Delivery**

According to Hornsby (2010), service could be defined as work done by one person or group that benefits another. Similarly, Allen (2004) defines service as assistance or benefit afforded another. Allen (2004) further opines that service is a useful result or product of labour which is not a tangible commodity. *Webster's Universal Dictionary & Thesaurus* (2010) defines service as the act of serving, a system of providing a utility or the act of providing assistance. Delivery according to Allen (2004) is the mode of projecting or discharging. Eisenberg (2008) noted that services and instruction are essential components of every 21st century library and information program. Whether offering direct instruction to users, providing skills-based help functions on websites, delivering one on-one assistance, or even providing meaningful signage in a physical setting, every information and library situation requires helping users to succeed through improving their information skills or understandings. These roles involve not only a formalized training but a one-on-one imparting of skills.

In the general parlance, Aina (2013) believes that service delivery is a component of business that defines the interaction between providers and clients where the provider offers a service, whether that be it information or a task, and the client either finds value or loses value as a result.

Library services are key elements in libraries since the ancient times. Their vital role is increasingly becoming a measure of the library's contribution to the transformation and development of a society and the nation at large (Aina, 2004). It is the most important commodity that any library can offer to its users in order to fulfill its role in the society (Kolawole & Igwe, 2016). According to Kolawole and Igwe (2016), library service is the hallmark of a library's product. The

authors further observe that libraries have the mandate of making information accessible to everyone and providing relevant library services. The essence of these library services is to assist library patrons with the location and use of the library resources (Reitz, 2004). Some of these services include but is not limited to circulation services (discharging and charging of materials, collection of fines and other charges, shelving and shelf-reading of library materials, and maintaining order in shelving areas), reference services (selective dissemination of information (SDI), current awareness services (CAS)), compilation of bibliography, reprographic services, serials management and control, indexing and abstracting, electronic information services, etc. (Nnadozie, 2007). However, these services are the handiwork of the personnel in such libraries. Among the services offered by the university libraries include serials services, current awareness services, selective dissemination of information services, reference services, and information literacy initiatives in higher education which have taken a variety of forms (Nnadozie, 2007).

Consequently, Dadzie (2008) points out that, "librarians have the responsibility to lead the information literacy drive since they have custodial duties of collecting, organizing and providing access to the multiple forms and sources of information in a timely manner so that information is used appropriately". Dadzie (2008) further stated that information literacy, though an issue for librarians is not a library affair and requires partnership with faculty and senior university managers to integrate information literacy into the curriculum.

## RESEARCH METHODOLOGY

### Instrument for Data Collection

The instrument for data collection for this study is the questionnaire. The questionnaire was the major source of generating data for the study. It is titled: "Information Literacy Skills and Service Delivery by Librarians Questionnaire (ILSSDLQ)" and was issued to the librarians in NRCRI library. The questionnaire was made up of two sections "A" and "B". Section A is for the collection of respondents' personal data while section B addresses questions bothering on information literacy skills and service delivery by librarians. Furthermore, the items in the questionnaire consist of close-ended questions using four (4)-point scale of Strongly Agree – A, Agree – A, Disagree – D and Strongly Disagree. Data collected was analyzed using descriptive statistics of frequency counts and mean scores. A four point rating scale method was used to determine the degree of rejection/acceptance. The criterion mean of 2.5 was used to indicate the level of acceptance and rejection. Any mean score less than 2.5 was considered rejected while any mean 2.5 and above was considered accepted.

## DATA ANALYSIS AND RESULTS

This section presents the result of the analysis drawn from this study. The analyses were done with respect to the research questions and hypotheses under study.

**Research Question 1:** What are the various information literacy skills acquired by librarians in NRCRI library

**Table 1:** Mean Responses of Librarians on the Various Information Literacy Skills Acquired by Librarians in NRCRI Library. N = 8

	SA	A	D	SD	Mean	Remark
Item Statements						
Ability to recognise the need for information timely	4	2	1	1	3.25	Rejected
Ability to formulate questions based on information needs	2	3	2	1	2.75	Accepted
Ability to identify potential sources of information	5	1	1	1	3.25	Accepted
Ability to develop successful and effective search strategies	3	2	2	1	2.88	Accepted
Ability to access various sources of information independently and efficiently	4	2	1	1	3.13	Accepted

Ability to evaluate information obtained critically	1	2	3	2	2.25	Accepted
Ability to organize information effectively	2	3	2	1	2.75	Accepted
Ability to integrate new information into an existing body of knowledge	5	1	1	1	3.25	Accepted
Cluster Mean					2.94	

The data presented in Table 1 above shows that the cluster mean of the responses of librarians on skills acquired by librarians in the NRCRI of all the 8 items is 2.94 (cluster mean), which is greater than the criterion mean of 2.50 on 4-point rating scale. This indicated that librarians accepted that the information literacy skills listed in table one above are the information literacy skills acquired by librarians in NRCRI.

**Research Question 2:** What are the sources of information literacy skills of librarians in NRCRI library?

**Table 2:** Mean Responses of Librarians on sources of information literacy skills in NRCRI library. N = 8

Item Statements	SA	A	D	SD	Mean	Remark
Reading of books	6	2	-	-	3.75	Accepted
Discussion with colleagues	4	4	-	-	3.5	Accepted
Attending conferences and seminars	5	2	1	-	3.5	Accepted
Frequent surfing of the Internet	2	3	1	2	2.63	Accepted
Engaging in research works	2	2	3	1	2.63	Accepted
Visiting libraries and information centers	4	2	1	1	3.13	Accepted
Engaging in indexing and abstracting services	6	1	1	-	3.63	Accepted
Engaging in literature search services	4	3	1	-	3.38	Accepted
Cluster Mean					3.74	

The data presented in Table 1 above shows that the cluster mean of the responses of librarians on the sources of information literacy skills of librarians in NRCRI of all the 8 items is 3.74 (cluster mean), which is greater than the criterion mean of 2.50 on 4-point rating scale. This indicated that librarians accepted that the sources of information literacy skills listed in table 2 above are the sources of information literacy skills of librarians in NRCRI.

**Research Question 3:** In what services do librarians in NRCRI apply their information literacy skills for service delivery?

**Table 3:** Mean Responses of Librarians on Services Librarians in NRCRI Apply their Information Literacy Skills. N =8

Item Statements	SA	A	D	S	Mean	Remark
Reference services	5	2	1	-	3.5	Accepted
Referral services	3	3	2	-	3.13	Accepted
Internet services	1	-	4	3	1.88	Rejected
Indexing and abstracting services	4	2	1	1	3.13	Accepted
Selective dissemination of information services	2	3	2	1	2.75	Accepted
Current awareness services	3	2	2	1	2.88	Accepted
Bibliographic search services	2	3	1	2	2.63	Accepted
Selection of library materials	3	2	1	2	2.75	Accepted
ICT/digital services	1	1	3	3	2.00	Rejected
Library websites maintenance	-	-	3	5	1.38	Rejected
Cluster Mean					2.60	

The data presented in Table 3 above shows that the cluster mean of the responses of librarians on the services librarians apply their information literacy skills of librarians in NRCRI of all the 10 items is 2.60 (cluster mean), which is greater than the criterion mean of 2.50 on 4-point rating scale. This indicated that librarians accepted that the services listed in table 3 above are the services librarians in NRCRI apply their information literacy skills.

**Research Question 4:** What are the effects of information literacy skills on librarians' service delivery in NRCRI?

**Table 4:** Mean Responses of Librarians on the Effects of Information Literacy Skills on Librarians' Service Delivery in NRCRI

Item Statements	SA	A	D	SD	Mean	Remark
It leads to effective reference service delivery by librarians	6	1	1	-	3.63	Accepted
It brings about the acquisition of right information resources	5	2	1	-	3.5	Accepted
It provides an avenue for utilization of meaningful information resources	5	3	-	-	3.63	Accepted
It makes the librarian an independent entity	3	1	2	1	2.5	Accepted
It creates a positive image on library services	4	1	2	1	3.00	Accepted
It help to differentiate the librarian from ordinary Internet users	2	1	2	3	2.25	Rejected
It promotes indexing and abstracting services	6	2	-	-	3.75	Accepted
It enhances quality selective dissemination of information	4	2	1	1	3.13	Accepted
Cluster Mean					3.17	

The data presented in Table 4 above shows that the cluster mean of the responses of librarians on the effects of information literacy skills on librarians' service delivery in NRCRI Library of all the 8 items is 3.17 (cluster mean), which is greater than the criterion mean of 2.50 on 4-point rating scale. This indicated that librarians accepted that the services listed in table 4 above are the effects of information literacy skills on librarians' service delivery in NRCRI Library.

**Research Question 5:** What are the challenges faced by librarians in their course of acquiring information literacy skills?

**Table 5:** Mean Responses of Librarians on Challenges in their Course of Acquiring Information Literacy Skills

Item Statements	SA	A	D	SD	Mean	RMK
Inadequate information resources on information literacy skills	5	2	1	-	3.5	Accepted
Absence of information literacy programmes	4	1	2	1	3.00	Accepted
Negative attitude of most librarians towards information literacy	3	2	2	1	2.88	Accepted

Lack of management support for information literacy programmes	5	1	1	1	3.25	Accepted
Inadequate fund to engage in information literacy programmes	6	1	1	-	3.63	Accepted
Unawareness of the effects of information literacy on service delivery	4	2	1	1	3.13	Accepted
Librarian's level of education	3	2	2	1	2.88	Accepted
Absence of sponsorship for information literacy conferences	5	2	-	1	3.38	Accepted
Librarian's fear of ICT	4	2	1	1	3.13	Accepted
Cluster Mean					3.2	

The data presented in Table 5 above shows that the cluster mean of the responses of librarians on the challenges of librarians in the course of acquiring information literacy skills in NRCRI library of all the 9 items is 3.2 (cluster mean), which is greater than the criterion mean of 2.50 on 4-point rating scale. This indicated that librarians accepted that the services listed in table 4 above are the challenges of librarians in the course of acquiring information literacy skills in NRCRI library.

## CONCLUSIONS AND RECOMMENDATION

From the results and findings obtained in this study, the following major conclusions were drawn:

Ability to recognize the need for information timely, ability to identify potential sources of information and ability to integrate new information into an existing body of knowledge are the greatest information literacy skills acquired by librarians in NRCRI.

Engaging in indexing and abstracting services is the most source of information literacy skill of librarians in NRCRI library.

Referral services and indexing and abstracting services are the services librarians apply their literacy skills.

Promotion of indexing and abstracting services are the greatest effect of information literacy skill on librarian's services delivery in NRCRI.

## RECOMMENDATIONS

The following recommendations have been made based on the findings, discussions and implication of the study:

National Root Crops Research Institute as the mother institution should ensure that librarians in the NRCRI library should be well trained on the ability to evaluate information obtained critically

The institute should also ensure that there is training on Internet services ICT digital services and library website maintenance.

Information literacy programmes should be organized on the ability to recognize the need for information timely and ability to formulate questions based on information needs.

## LIMITATIONS OF THE STUDY

The findings of the study were limited by the following factors: The researcher had planned to extend this study to other universities in the South-south since they have libraries and librarians that require information literacy skills, but could not due to economic and social issues.

## SUGGESTIONS FOR FURTHER STUDIES

In view of the limitations of the study, the following suggestions are made for further research:

a study on the information literacy skills of librarians in the state and federal Polytechnics in South-south Nigeria, and a comparative study of information literacy skills of librarians and non-librarians in Abia State University.

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