University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)　　　　Libraries at University of Nebraska-Lincoln

3-8-2016

Influence of Information Literacy Skills on Information Needs and use among Banking Personnel in Ogun State, Nigeria

Oyintola Isiaka Amusa Mr,
Federal University of Agriculture, Abeokuta, Nigeria, ishaqamusa@hotmail.com

Taoffik OLatunde BELLO
Federal University of Agriculture, Abeokuta, Nigeria, belloto@funaab.edu.ng

Akinkunmi Oluseun OMOTOSO
Federal University of Agriculture, Abeokuta, Nigeria, omotosoao@funaab.edu.ng

Olukunle Akinbola OSUNRINADE
The Oke-Ogun Polytechnic, Saki, Nigeria, kunlexakin@yahoo.com

Follow this and additional works at: http://digitalcommons.unl.edu/libphilprac

Part of the Library and Information Science Commons

Influence of Information Literacy Skills on Information Needs and use among Banking Personnel in Ogun State, Nigeria

By

Taoffik O. **BELLO,** belloto@funaab.edu.ng

Oyintola Isiaka **AMUSA,** amusaoi@funaab.edu.ng

Akinkunmi Oluseun **OMOTOSO,** omotosoao@funaab.edu.ng

Nimbe Adedipe Library,
Federal University of Agriculture,
P.M.B 2240,
Abeokuta, Nigeria,
And
Olukunle Akinbola **OSUNRINADE,** kunlexakin@yahoo.com

The Oke-Ogun Polytechnic,
P.M.B 21
Saki,
Oyo State, Nigeria.

Abstract

This study employed a survey method to investigate the level of information literacy skills of banking personnel, their information needs and use. The study is limited to banks located and operating in Ogun state, Nigeria. Five of such banks were randomly selected and 125 bankers in the banks constituted the respondents for the study. 125 copies of the questionnaire designed for the study were administered on the respondents out of which 75 (60%) were duly completed and returned. The study found out that bankers have high information literacy level and there is a significant relationship between information literacy and information use among them; Job related information, information health matter, and information on financial matters are information needs that are common among the bankers; Current awareness, research and service delivery are major purpose of information use among them. Constraints to information use among the bankers are lack of timely information, lack of access to available information, lack of detailed information, high cost of accessing information, and poor packaging of information. The study concluded that possession of the information literacy skills enable the bankers to identify their information needs, identify information sources to meet the needs, retrieve information from the sources identified and evaluate information retrieved. It recommended the need for adequate provision of information sources that are appropriate to the needs of the bankers by government and information service providers, packaging of information in the format that would be detailed, timely, and easy for the bankers to understand and use.

Key words: Information literacy skills, Information Literacy skills-Bankers, Information needs and use-Bankers, Information Users-Bankers, Bankers-Ogun state Nigeria

Introduction

Information is indispensable for human development and it can be considered as an important resource that contributes towards the development of a nation. It provides the core for the development of knowledge, the basis for innovations, the resources for informed citizenry, and as a result, becomes the key commodity for the progress of a society. Acknowledging the impact of information in human development, Mooko and Aina (2007) opined that every individual, whether literate or illiterate, needs information for a variety of issues essential for survival. Olabisi (2001) observed that the importance of information to individuals and human society cannot be undermined. It is an essential raw material which acquisition and understanding is essential in decision making, policy formulation as well as implementation growth and survival. Reliable information is the cornerstone for building the awareness expertise and practical strategies necessary to improve the world at its hearts, the health, and the physical, technical, mental, social and scientific development of humanity. Without adequate information, not much can be achieved especially when it concerns decision making or requiring knowledge. Information is a perquisite for world decision making at all levels and in all circumstances. Thus, there is often the need for individuals or organizations to obtain timely and relevant information that helps in reducing the degree of uncertainty in the operating environment of such individuals or organizations. Odunewu and Omagbemi (2008) stated that the importance of information extends to personal, interpersonal as well as community decisions and actions. To that extent information is considered a vehicle for development in all areas of human endeavours. It is an essential ingredient in office work, management decision-making and in knowledge work productivity. Information is very vital to development. It is the most singular variable which differentiates and determines whether a country is in the first, second, third or fourth world.

The areas in which people need information are diversified and vary from one group to the other. Some of these information need areas include: job related information, political information, health information, social information (i.e. information on social infrastructure), governmental information, especially as it affects their occupation and businesses, and educational information, among others. The literature on information needs and information seeking acknowledges that work related information seeking is different form everyday information seeking. The different characteristics of work environment make one type of information needs and seeking different from the other. Therefore, it is beneficial to study one group of information seekers at a time and use the results to develop user-oriented

information systems in order to serve such particular group better. It is important to understand that availability and access to information is not sufficient to guarantee that an individual will acquire the skills necessary to comfortably survive in an information world. According to the Association of College and Research libraries (2002), information literacy is a set of ability requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. Information literacy is focused on content, communication analysis, information searching, and evaluation. It is a vital ability for the modern information-intensive world, enabling personal, economic, social and cultural development.

Oyedokun and Lumade (2005) describe information literacy as the ability to locate, evaluate, manage and use information from a range of sources not only for problem solving but also for decision making and research. Information literacy is much broader than the acquisition of traditional information skills. This includes how to use a catalogue, hot to locate a book on the shelves and how to access electronic databases. Warschauer (2004) recognizes information literacy as part of the electronic literacy spectrum, which includes computer literacy – ability to operate a computer. Information literacy is becoming increasingly more important in our world that is rapidly evolving through the growth and proliferation of technological and information resources (American Library Association, 2000). As a result, information users are faced with countless information choices and must decide which resource(s) to use in the acquisition of information. They also determine the authenticity, validity and usability of the information they discover (ALA, 2000). The ability to access, evaluate and use information is a prerequisite for lifelong learning and a basic requirement for the information society.

The theory of information literacy presupposes that an individual recognizes the need for information and knows how to find, evaluate, use and subsequently communicate information effectively to solve particular problems or to make decisions (Ojedokun, 2007). He stated further that whether information comes from the Internet or the World Wide Web, online databases, books, journals, government departments, films, conversations, posters, pictures or other images or any number of other possible sources the skill to understand and critically evaluate the information is inherent in the notion of information literacy. Bawden (2001) stressed that information literacy can be conceived as a continuous learning process that encompasses abilities and knowledge, plus the notion of values, with emphasis on several other term and combination of terms. According to him, these terms have also been

used by different authors. The term includes 'infoliteracy,' 'information empowerment,' 'information competence,' 'information competency,' 'information competencies,' 'information literacy competence' and 'information literacy competencies.' Others are 'information competence skills,' 'information handling skills,' 'information problem solving,' 'information problem solving skills,' 'information fluency,' 'skills of information literacy,' 'information literacy and skills,' 'information literacy skills.' Information literacy skills (ILS), according to Parang, Raine and Stevenson (2000), is a fusion of library literacy, computer literacy, media literacy, technological literacy, critical thinking, ethics and communication, which when acquired, would enable users of information to become independent life-long learners. However, for this study, the definition provided by UNESCO in its Information For All Programme (IFAP) as cited by Catts and Lau, (2008) is adopted. This definition states that information literacy is the capacity of people to recognize their information needs; locate and evaluate the quality of information; store and retrieved information; make effective and ethical use of information and simultaneously apply information to create and communicate knowledge. This definition of information literacy is explicit because it entails all the information skills discussed above and most importantly, it highlights the power granted to the individual by being information literate. It should be noted that information literacy is a broader term encompassing information need, information search/seeking behaviour, information retrieval, and information use.

The ILS enables individuals to recognize not only when information is needed, but also when different kinds of information are needed. It provides users of information resources with methods by which they can cope with the huge quantity of information coming from all directions, through all varieties of information resources. It can then be assumed that information literacy skills are needed by bankers for effective use of information resources to enhance their productivity. An information literate person today should possess specific online searching skills such as the ability to select appropriate search terminology, logical search strategy and appropriate information evaluation. However, one barrier to the efficient utilization of information resources especially digital resources in developing countries is the relatively low level of information literacy skill (Tilvawala, Myers and Andrade, 2009). Without the ability to manipulate and use information effectively, investments in both print and electronic based resources may be a waste (Pejova, 2002). In this regard some scholars have suggested that the digital divide between the developed and

developing world has widened due to lack of information literacy skills in developing countries (Dawan, Ganley and Kraemer, 2003).

Information is inevitable to almost all jobs and professions (Zawawi and Majid, 2001). Consequently, the need to become informed and knowledgeable individuals leads to the process of "identifying information needs". However, this process alone cannot work without knowing the ways individuals identify, articulate, seek, evaluate, select and finally use the required information, which is commonly known as "Information literacy". According to Devadason and Lingam (1997), the understanding of information needs of various professional groups is essential as it helps in the planning, implementation and operation of information system and services in the given work settings. Therefore, the working environment and type of task performed by individuals shape their information needs and the ways they acquire, select and use this information. Several studies have shown a relationship between task complexity and information needs. Leckie, Pettigrew and Sylvain (2006) noted that "work roles and tasks largely determine information needs, while a number of factors ultimately affect which sources and types of information are used in a given situation".

The importance of information to bankers is irrefutable. Obviously, financial management is a continuously advancing discipline, involved in the development of various services and break-through in financial management. These advances are due to research activities undertaken by management scientists, which in turn lead to the proliferation of financial information. Access to information is vital in responding quickly and effectively to the challenges and complexities of the banking research environment. Consequently, information has become an integrated element to support financial management research. Creth (2003) commented, that "information professionals must articulate and act upon a vision of making adequate amount of information available to bankers so that their information needs can be met effectively". Therefore, adequate understanding of the information needs and information literacy of bankers is necessary for proper planning and improving collections, services and facilities of libraries. Realizing this need, many studies on this topic have been conducted in developed countries which reflect the information environment there. However, conditions in developing countries are considerably different which make it relatively difficult to befittingly apply data from the developed countries. Appreciating the situation, this study investigates the information needs, use and literacy

skills of bankers in Ogun state, Nigeria. Through the use of information, employees of banks are able to reactively and pro-actively adapt their organizations to environmental changes in order to survive and prosper. Furthermore, some authors suggest a direct link between information and improved performance, (Freirrer, 2001). Freirrer (2001) explained that employees of corporate organizations have a preoccupation with the actions of their competitors and suggested that it was the use of information that could help them maintain their competitive position. Bankers are always on their toes looking for appropriate information to meet their numerous and varying information. Bankers need to keep abreast of local and international security devices to safeguard valuables materials and documents. The bankers have to be abreast of the development in the banking world as well as in the society to be able to meet the needs of the people. They have to be focused to impact positively on the macro-economic scene of the nation. They must be able to affect other economic sector such as Agriculture, manufacturing with utter honest, reliable and punctilious, this arises from the information required to afloat the establishment.

Bankers usually express a great need for information on financial environment, professional development, customers' needs, self care and social infrastructure as well as information about their occupation and business. They may also generally require health information, social information, local area information as well as information on consumer and credit society. The proposition that people are more likely to bias their information search towards information that matches the stereotypical image of a group rather than towards that which does not match their stereotype was tested on professional workers. The conclusion by Johnson and Macrae (2004) was that professional workers seek information that matches their group and useful for their activities and occupation.

A fundamental requirement for information needs literacy, and use satisfaction is that sources should be available and accessible in meeting the information needs. Sources that can be used in meeting information needs may range from oral (i.e interpersonal, friends, colleagues, family numbers etc) printed (i.e books, journals, magazines, newspapers etc) and Digital (internet, e-book, e-journals, e-documents etc). Bankers can also make use of any of these sources in satisfying their information requirement. However, Radeckie and Jaccard (2005) proposed that the more knowledgeable the individual, the easier they would find it to encode information, thereby making further information acquisition easier. Bankers may often seek information from sources that are quite close to their places of work so that they would not have to leave their work environment. This study, thus aims at investigating the information needs, use and literacy of bankers in Ogun state, Nigeria. The effects of

information literacy skills on the use of information in meeting the information needs of bankers will be examined. The study will cover only bankers working in commercial banks within Abeokuta, which is the capital city of Ogun state. This is due to the fact that there is a huge spread of commercial banks in Abeokuta. The choice of commercial banks was also due to their importance and contribution to the economy of individuals and society at large. Most importantly, the study will cover the information needs, information use, and literacy skills of the bankers.

Statement of the Problem

Like other professional groups in Nigeria, bankers make significant contributions to the economy. Thus, they need information for survival and to develop their businesses. There had been studies that focused on professionals generally but very few of them focused on bankers as regards their information needs, seeking behaviour, use, and literacy skill. Also, the researchers are unaware of any study focusing on the bankers in Ogun state. There is dearth of empirical information on the, information needs, use, and literacy skills of bankers, hence, the need for this study. The findings of this study could be useful in improving the intervention of the government and other agencies on meeting the information needs of this group of professionals.

Objectives of the Study

The major objective of this study is to investigate the influence of information literacy skills on information needs and use among Bankers in Ogun state, Nigeria. The specific objectives are to:

1. find out the level of information literacy skills possessed by bankers in Ogun state;
2. find out the information needs of bankers in selected banks in Ogun state;
3. find the purpose of information use by bankers in Ogun State;
4. find out the problems confronting the bankers in the use of information in meeting their information needs and;
5. find out the relationship among information literacy skills, information needs and, information use, among bankers in Ogun state.

Research Questions and Hypothesis

Arising from the above stated objectives, the following research questions were answered in this study:

1. What is the information literacy level of bankers in Ogun state?
2. What are the information needs of bankers in Ogun state?
3. For what purposes do the bankers in Ogun state use information?
4. What are the major problems confronting the bankers in making use of information to meet their information needs?

Research Hypothesis

H_{01}: There is no significant relationship among information need, use, and, literacy skills of bankers in Ogun state.

Literature Review

Information literacy has been defined as the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand. Endrizzi (2006) gave another conception of information literacy by defining it in terms of a set of competencies that an informed citizen of an information society ought to possess to participate intelligently and actively in that society. Information literacy can be considered an essential skill that every individual should acquire in today's knowledge-based global economy. Information has become a significant building block and a critical resource needed by every player in every sector of today's information economy.

Stern (2002), in his own view, described information as the knowledge and skills required to accurately identify information needed to perform a specific task or solve a problem, cost-efficiently search for information, organize or reorganize it, interpret and analyze it once it is found and retrieved, evaluate the accuracy and reliability of the information, including ethically acknowledging the sources from where it was obtained, communicate and present the results of analysis and interpreting it to others if necessary, and then utilize it for achieving actions and results for the development of the society. According to Bundy (2004) an information literate person is the one who know how to find quality information that will help him through his operations and activities. One of the major reasons for the need for information literacy skill has to do with the proliferation of information resources and the various methods of access.

Dunn (2002) reiterated bankers' need for information literacy skills by emphasizing that bankers are faced with diverse information choices in their workplace and other activities. Information is available through community resources, special interest organizations, service providers, libraries, and the Internet. This poses special challenge in evaluating, understanding, and using information in an ethical and legal manner. Moreover, information literacy equips an individual with intellectual and social skills to use information tools wisely and to create new ideas from prior ones that could subsequently improve situations that range from personal to global. It is an approach to building knowledge, solving problems and communicating information and ideas that empowers people to be lifelong learners who are equipped with analytical and critical thinking skills that are beyond the scope of their formal schooling (Stern, 2002). Information literacy skills are becoming increasingly necessary as our society shifts from an industrial economy that is based on production to one based on information and services. It is also important because it is the route to active participation in the information-driven society.

For professional and workers, information literacy skills can equip them with abilities to find the most current and reliable information that would assist them in doing their work more effectively. Professionals and workers are able to constantly adapt to changes due to their capacity to keep up with the increasingly voluminous amounts of information that they encounter. Ultimately, information literate workers and professional are usually dynamic and able to add value to the organization in which they work (Stern, 2002).

Banks strive toward maximization of resources and realization of optimum profits. To ensure success, they continuously engage in planning, restructuring, re-organization, and aggressive marketing. Human resources are usually involved in executing these tasks. Bank personnel are expected to be skillful in business planning and maximization of resources, and to possess appreciable skill in career management in order to promote the image and profit profile of their respective banks. Furthermore, they need the skills to be able to identify and use necessary information that can positively affect the growth of their banks. This type of skills is what is called information literacy skills.

Making use of information is an important part of coping with challenges faced by employees. These include communicative and cognitive activities like seeking, avoiding, providing appraising and interpreting information. Employees' information preferences and use vary over the course of their jobs along with the availability and quality of information. Vickery and Vickery (1987) see preference as a basic concept in information studies, but one that is difficult to define. Information preferences of bank managers may differ from those in

other fields. The source of information, content, medium and language of communication, time and nature of information can influence information preference. The information sources available for use to bankers and other financial sector workers may be slightly different from what are available to other group of people. This may be due to the nature of work and responsibility of the bankers. . Okiy (2003) in his study on bankers in Ethiopia, found that the bankers often seek information from sources that are quite close to their place of work and very easy to access so that they would not have to have this place of work environment. They also rely on sources like their colleagues, friends, family and clients for information.

Underwood (2002) identified television, radio newspaper, and interaction with government agencies, and social networks as sources of information being used by bankers in Japan. Also, bankers often seek for information related to their profession, duties and responsibilities. Thus, they sourced their job related information from their colleagues, media houses, bulletins, radio, television, circulars, and libraries though libraries were not very effective in information provision to this particular group of people.

Information is needed for proper functioning of the individual as well as to aid increase in production level and to assist in community development. All members of a community whether literate or non-literate have identifiable information needs that should be met. The purpose of information and usefulness to the solution of a task at hand may lead to its demand and use. Information need is a psychological state which is not visible and not directly observable. Every individual has information needs. The information could be for recreation, leisure or meeting tasks that are considered critical to survival or information that could meet day-to-day activities or even information that is necessary for the common good of the neighbourhood, community and the nation. The conceptualization of information need is a very difficult task. This is because the needs of individual usually vary from time to time due to some other factors. However, Underwood (2002) described information needs as a piece of information whether recorded or not which an individual or member of a group requires for effective functioning in their daily activities. He further stated that information needs can be seen in the same of data or a set of data specifically required enabling the user to make an appropriate decision on any related problem facing him or her at any particular time In other words, information is needed because it enables individuals to make decision that affects their living activities. He further emphasized the major constraints to accessing information by bankers may include cost of accessing information, lack of access to information, non-relevance of information to the needs of the bankers, knowing where to get the needed information, and unreliability of information. Information problems are also likely

to arise wherever the information source is a person, or where interpersonal interaction in needed to gain access to either kind of information sources. Bankers also reported attitude of information provider/information professional as one major barrier to their successful information seeking behaviour.

The behaviour patterns of the members of a community also act as a barrier to information seeking leading to change (Roger, 1997). The lack of early accessible source of information may inhibit information seeking. In this case higher cost may be imposed on the information seekers. The creditability of an information source is also one major/factor users considers in their search for information. If a seeker of information discovers that an information source is unreliable in the quality and accuracy of the information delivered he or she is likely to regard the source as lacking in credibility. However, Roger (1997) emphasized that bank workers reported interpersonal sources of information (consultations with friends, colleagues, family members etc) as more effective in reducing uncertainty because they provide immediate feedback and social support.

Research Methodology and Design

A survey of expost-facto type was used for the study. It is used to systematically describe the facts, qualities and characteristic of a given population, events or area of interest as factually and accurately as possible. The method was adopted because it is a method used in studying behaviour whereby the researcher attempts to determine the frequency of occurrences, the distribution of and the relationship among a variety of variables. The survey method enabled the researchers to have an understanding of the perceptions and opinions of randomly selected respondents from a larger group in order to ascertain the nature of information needs, use, and literacy skills of Bankers in Ogun State, Nigeria. The study population for this study comprises all the bankers in all the commercial banks in Ogun state. There are a total of seventeen (17) commercial banks in Ogun state with a total population of five hundred and twenty five (525) bankers. Multi stage sampling method was adopted to draw sample for the study. The systematic random sampling technique was adopted to select sample banks the study. The selection is done by selecting every third banks in an alphabetical list of all the banks in Abeokuta, Ogun state, giving a total of five commercial banks selected for the study. The total enumeration method was adopted at the second stage of the sampling process to select the respondents for this study. This implies that all the bankers in all the branches of the selected banks constituted the respondents for the study. Therefore, the sampled population for the study is one hundred and twenty-four (124) bankers. See Table 1.

Table 1: Distribution of bankers across the selected banks

Name of banks	Number of branches	Population of bankers
Ecobank	1	28
Fidelity Bank	1	27
Mainstreet Bank	2	25
Skye Bank	2	29
Union Bank	1	15
Total	**7**	124

The research instruments used for this study were questionnaire and interview. The questionnaire for this study is divided into three sections. Section A of the questionnaire focuses on the demographic information of the respondents. It contains questions aimed at gathering data on the personal information of the bankers such as Age, Sex, Highest educational level, Religion, Work experience etc. The second section (Section B) is designed to gather information on the information needs, sources, and use by the bankers in commercial banks in Abeokuta, Ogun state.

Descriptive statistical methods of analysis such as frequency, percentage, mean, and standard deviation was used in analyzing the data collected for the study. Pearson moment correlation co-efficiency was used to test the hypotheses at 0.05 level of significant.

Data Analysis and Discussion of Findings

A total of one hundred and twenty four (124) copies of questionnaire were administered on the bankers in the selected banks in Abeokuta, Ogun state, out of which only seventy five (75) copies (60.4%) were returned and found useful. Responses were individually analyzed according to banks.

Table 2: Administration and Response rate

Variables		No. of questionnaire administered	No. of questionnaire returned	Response rate from each bank (%)
Banks	Ecobank	28	18	64.3
	Fidelity Bank	27	10	37.3
	Mainstreet Bank	25	17	68.0
	Skye Bank	29	18	62.1
	Union Bank	15	12	80.0
	Total	124	75	

Demographic Characteristics of Respondents

Table 3 presents information on the demographic information of the respondents and it revealed that all the respondents in the banks surveyed are within the age range of 21-40 years while there are more male respondent in all the banks surveyed than female respondents. The Table further revealed that majority of respondents in Skye Bank 16 (88.9%), Ecobank 14 (77.8%), and Fidelity Bank 6 (60%) have worked for between 0-5 years as against what is obtainable in Union Bank where majority of the respondents 8 (47.1%) have worked for between 6 – 10 years. On the other hand, majority of the respondents 9 (53%) in Mainstreet bank have worked for between 6 – 15 years. On the marital status of respondents, Table 2 further revealed that majority of respondents in Skye Bank 11 (61.1%), Ecobank 9 (50%), fidelity Bank 6 (60.0%) and Mainstreet Bank 9 (52.9%) are single as against what is obtainable in Union Bank where majority of the respondents 6 (50.0%) are married. This may mean that majority of the Bankers in Ogun State are unmarried. Information prevented on the qualification of respondents revealed that majority of the respondents in Skye Bank 14 (77.8%), Ecobank 14 (77.8%). Union Bank 7 (58.3%), and Mainstreet Bank 10 (58.8%) are graduate while there are more ND holders 6 (60.0%) in Fidelity Banks. It can therefore be concluded that majority of the Bankers in Ogun State are graduates. Information gathered on the religion of the respondents revealed that there are more Christian respondents in all the Banks surveyed than Muslim respondents

Table 3: Demographic information of respondents

Demographic Variables	SB		EB		FB		UB		MB	
	N	%	N	%	N	%	N	%	N	%
Age range (yrs) 21-30	11	61.1	13	72.2	8	80.0	6	50.0	12	70.6
31-40	7	38.9	5	27.8	2	20.0	6	50.0	5	29.4
41-50	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
50 and above	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	**18**	**100.0**	**18**	**100.0**	**10**	**100.0**	**12**	**100.0**	**17**	**100.0**
Gender Male	14	77.8	10	55.6	7	70.0	7	58.3	8	47.1
Female	4	22.2	8	44.4	3	30.0	5	41.7	9	52.9
Total	**18**	**100.0**	**18**	**100.0**	**10**	**100.0**	**12**	**100.0**	**17**	**100.0**
Years of exp. 0-5	16	88.9	14	77.8	6	60.0	5	41.7	8	47.1
6-10	2	11.1	4	22.2	4	40.0	7	58.3	8	47.1
11-15	0	0.0	0	0.0	0	0.0	0	0.0	1	5.9
16-20	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
21 years and above	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	**18**	**100.0**	**18**	**100.0**	**10**	**100.0**	**12**	**100.0**	**17**	**100.0**
Marital status Single	11	61.1	9	50.0	6	60.0	5	41.7	9	52.9
Married	7	38.9	8	44.4	4	40.0	6	50.0	6	35.3
Widow	0	0.0	1	5.6	0	0.0	1	8.3	0	0.0
Divorcee	0	0.0	0	0.0	0	0.0	0	0.0	2	11.8
Total	**18**	**100.0**	**18**	**100.0**	**10**	**100.0**	**12**	**100.0**	**17**	**100.0**
Educ. Qual ND	4	22.2	4	22.2	6	60.0	5	41.7	7	41.2
HND	5	27.8	6	33.3	2	20.0	1	8.3	5	29.4

B.Sc /B.A./B.Ed	7	38.9	7	38.9	2	20.0	6	50.0	4	23.5
M.Sc./M.A/M.Ed	2	11.1	1	5.6	0	0.0	0	0.0	1	5.9
PhD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total			**18**	**100.0**	**10**	**100.0**	**12**	**100.0**	**17**	**100.0**
Religion Christianity	15	83.3	13	72.2	7	70.0	10	83.3	8	47.1
Islam	3	16.7	5	27.8	3	30.0	2	16.7	9	52.9
Total	**18**	**100.0**	**18**	**100.0**	**10**	**100.0**	**12**	**100.0**	**17**	**100.0**

SB = Skye Bank; EB = Ecobank; FB = Fidelity Bank; UB = Union Bank; MB = Minatreet Bank
N = 75

Research Question 1: What is the information literacy level of bankers in Ogun State use information?

Table 4 revealed that majority of the respondents from Skye Bank affirmed their ability to locate information sources the library 18 (100.0%), their ability to use many resources, at the same time 18 (100.0%), their confident in learning from information solving experience and improve information literacy skills, and their competence to use search indexes ad electronic databases 17 (94.5%) and their competence to select the most appropriate to their information need 17 (94.5%). Respondents from Ecobank affirmed that they are able to identify a variety of potential sources of information 18 (100.0%) feel confident and competent to limit search strategies by subject language, and date, 18 (100.0%) are able to locate resources in the library using the library catalogue 18 (100.0%), and feel confident to learn from their information solving experience and improve your information literacy skills, 18 (100.0%) Furthermore respondents from Fidelity bank, Union Bank and Mainstreet Bank positive statements on information literacy and disagreed with all the negative statements on information literacy.

Table 4: Information literacy level of Bankers in Ogun state Show Information literacy

Information literacy statement	Skye Bank		Eco Bank		Fidelity Bank		Union Bank		Mainstreet Bank		Mean	Mean S.D
	A	D	A	D	A	D	A	D	A	D		
I am able to define the information I need	13 72.8	5 27.2	11 61.1	7 38.9	8 80.0	2 20.0	8 66.7	4 33.3	8 47.0	9 53.0	2.79	0.827
I am able to identify a variety of potential sources of information	16 88.9	2 11.1	18 100.0	0 0.0	9 90.0	1 10.0	10 83.3	2 16.7	16 94.1	1 5.9	3.35	0.707
I feel confident and	15 83.3	3 16.7	18 100.0	0 0.0	10 100.0	0 0.0	10 83.3	2 16.7	17 100.0	0 0.0	3.28	0.583

Statement											Mean	SD
competent to limit search strategies by subject, language, and date												
I am competent in initiating search strategies	14 77.8	4 22.2	16 88.9	2 11.1	9 90.0	1 10.0	10 83.3	2 16.7	16 94.1	1 5.9	3.16	0.638
I feel competent to use different kinds of print sources (Such as books, Periodical Etc)	15 83.3	3 16.7	16 88.9	2 11.1	9 90.0	1 10.0	10 83.3	2 16.7	16 94.1	1 5.9	3.21	0.643
I am able to locate information sources in the library	18 100.0	0 0.0	17 94.5	1 5.5	10 100.0	0 0.0	10 83.3	2 16.7	16 94.1	1 5.9	3.29	0.564
I feel confident to evaluate information critically	16 88.9	2 11.1	16 88.9	2 11.1	10 100.0	0 0.0	12 100.0	0 0.0	17 100.0	0 0.0	3.28	0.559
I am competent to select the most appropriate to the information need	17 94.5	1 5.5	16 88.9	2 11.1	10 100.0	0 0.0	11 91.7	1 8.3	17 100.0	0 0.0	3.33	0.577
I am able to use many resources at the same time to make a research	18 100.0	0 0.0	16 88.9	2 11.1	10 100.0	0 0.0	11 91.7	1 8.3	17 100.0	0 0.0	3.40	0.569
I am able to locate resource in the library using the library catalogue	15 83.3	3 16.7	18 100.0	0 0.0	10 100.0	0 0.0	12 100.0	0 0.0	15 88.2	2 11.8	3.29	0.588
I am competent to use search indexes and electronic databases	17 94.5	1 5.5	16 88.9	2 11.1	10 100.0	0 0.0	12 100.0	0 0.0	17 100.0	0 0.0	3.32	0.549
I am able to recognize interrelationship	17 94.5	1 5.5	15 83.3	3 16.7	9 90.0	1 10.0	10 83.3	2 16.7	14 82.4	3 17.6	3.24	0.675

	SB A	SB D	EB A	EB D	FB A	FB D	UB A	UB D	MB A	MB D	Mean	Std
among concepts												
I feel confident to learn from my information solving experience and improve my information literacy skills	18 100.0	0 0.0	18 100.0	0 0.0	10 100.0	0 0.0	12 100.0	0 0.0	15 88.2	2 11.8	3.25	0.496
Average Weighted Mean											**3.24**	

A = Agree; D = Disagree
SB = Skye Bank; EB = Ecobank; FB = Fidelity Bank; UB = Union Bank; MB = Mainstreet Bank

Research Question 2: What are the information needs of Bankers in Ogun State?

Table 5 revealed that 18 (100.0%) respondents from Skye Bank affirmed that they need information on each of health matters, financial matters and education. Also, all the respondents 18 (100.0%) from Ecobank affirmed job related information need, and information need on loans and credit facilities are their major areas of information need.

All the respondents from Fidelity Bank affirmed job related information, information on financial matter, information on health, information on social amenities, and information on currents affairs as their major areas of information needs while respondents from Union Bank

attested to information on government policies, information on local government, and information on current affairs as topping the list of the areas where they needed information. Also, respondents from Mainstreet affirmed information on financial matters, information on local event 17 (100.0%), information on social amenities 17 (100.0%), information on current affairs 17 (100.0%), and information on loans and credit facilities 17 (100.0%) as their major areas of information needs. The implication to be drawn from this is that information on health matters; job related information and information on financial matters are major information needs area of Bankers in Ogun State.

Table5: Information Needs of Bankers

Information Needs	Skye Bank		Eco Bank		Fidelity Bank		Union Bank		Mainstreet Bank		Mean	Std Dev
	A	D	A	D	A	D	A	D	A	D		
Job related information	17 94.5	1 5.5	18 100.0	0 0.0	10 100.0	0 0.0	10 83.3	2 16.7	16 94.1	1 5.9	3.51	0.601
Information on financial matter	18 100.0	0 0.0	17 94.5	1 5.5	10 100.0	0 0.0	12 100.0	0 0.0	17 100.0	0 0.0	3.59	0.522

	SB A	SB D	EB A	EB D	FB A	FB D	UB A	UB D	MB A	MB D	Mean	SD
Information on health	18 100.0	0 0.0	16 88.9	2 11.1	10 100.0	0 0.0	11 91.7	1 8.3	14 82.4	3 17.6	3.23	0.583
Information on education	18 100.0	0 0.0	16 88.9	2 11.1	10 100.0	0 0.0	11 91.7	1 8.3	14 82.4	3 17.6	3.24	0.589
Information on government activities and policies	14 77.8	4 22.2	17 94.5	1 5.5	9 90.0	1 10.0	12 100.0	0 0.0	13 76.5	4 23.5	3.04	0.556
Information on local events e.g festivals meeting etc	12 66.7	6 33.4	14 77.8	4 22.2	9 90.0	1 10.0	12 100.0	0 0.0	17 100.0	0 0.0	3.04	0.625
Information on social amenities e.g electricity, water etc	15 83.3	3 16.7	17 94.5	1 5.5	10 100.0	0 0.0	9 75.0	3 25.0	17 100.0	0 0.0	3.15	0.730
Information on current affairs	17 94.5	1 5.5	17 94.5	1 5.5	10 100.0	0 0.0	12 100.0	0 0.0	17 100.0	0 0.0	3.35	0.533
Information on loans/credits facilities	16 88.9	2 11.1	18 100.0	0 0.0	9 90.0	1 10.0	8 66.7	4 33.3	17 100.0	0 0.0	3.27	0.622
Information on scholarship	13 72.8	5 27.8	15 83.3	3 16.7	6 60.0	4 40.0	9 75.0	3 25.0	14 82.4	3 17.6	3.00	0.838
Average Weighted Mean											**3.24**	

A = Agree; D = Disagree
SB = Skye Bank; EB = Ecobank; FB = Fidelity Bank; UB = Union Bank; MB = Minatreet Bank N = 75
Research Question 3: For what purposes do the bankers in Ogun State make use of information?

Table 6 revealed that 18 (100%) of the respondents from Skye Bank agreed that service delivery, professional enhancement 17 (94.5%), leisure 17 (94.5%), and skill acquisition 17 (94.5%) are their purposes of information use while respondents from Ecobank affirmed professional enhancement 18 (100.0%), research 18 (100.0%), resolving problems in daily practice 18 (100.0%), service delivery improvement 18 (100.0%) professional

relevance 18 (100.0%), current awareness 18 (100.0%), preparation of reports 18 (100.0%), and skill acquisition 17 (94.4%) as major purposes for which they use information.

Moreover, respondents from Fidelity Bank affirmed research 10 (100.0%), study enhancement 10 (100.0%) leisure 10 (100.0%), resolving problems in daily practice 10 (100.0%), service delivery improvement 10 (100.0%), current awareness 10 o(100.0%), preparation of report 10 (100.0%), skill acquisition 9 (90.0%), and professional enhancement 9 (90.0%) as their major purposes of information use. Also, respondents from Union Bank affirmed professional enhancement 12 (100.0%), service delivery improvement 12 (100.0%), current awareness 12 (100.0%), research 11 (91.7%), resolving problems in daily practice 11 (91.7%), professional relevance 11 (91.7%), and preparation of report 11 (91.7%) as the major purpose for which they use information. Respondents from Mainstreet Bank affirmed service delivery improvement 17 (100.0%), current awareness 17 (100.0%), research 16 (94.1%), resolving problems in daily practice 16 (94.1%), professional relevance 16 (94.1%) preparation of report 16 (94.1%), and skill acquisition 16 (94.1%). Therefore, current awareness, research, and service delivery were found to be the major purposes of information use that are common among bankers in Ogun State.

Table6: Purposes of information use by Bankers

Purpose of information use	Skye Bank		Eco Bank		Fidelity Bank		Union Bank		Mainstreet Bank		Mean	Std Dev
	A	D	A	D	A	D	A	D	A	D		
Professional enhancement	17 94.5	1 5.5	18 100.0	0 0.0	9 90.0	1 10.0	12 100.0	0 0.0	15 88.2	2 11.8	3.63	0.673
Research	17	1 5.5	18 100.0	0 0.0	10 100.0	0 0.0	11 91.7	1 8.3	16 94.1	1 5.9	3.63	0.564
Study	94.5	1 5.5	18 100.0	0 0.0	10 100.0	0 0.0	10 83.3	2 16.7	14 82.4	3 17.6	3.44	0.642

	SB A	SB D	EB A	EB D	FB A	FB D	UB A	UB D	MB A	MB D	Weighted mean	SD
enhancement												
Leisure	17 94.5	1 5.5	14 77.8	4 22.2	10 100.0	0 0.0	6 50.0	6 50.0	12 70.6	5 29.4	3.08	0.749
Resolving problems in my daily practice	15 83.3	3 16.7	18 100.0	0 0.0	10 100.0	0 0.0	11 91.7	1 8.3	16 94.1	1 5.9	3.49	0.554
Service delivery improvement	18 100.0	0 0.0	18 100.0	0 0.0	10 100.0	0 0.0	12 100.0	0 0.0	17 100.0	0 0.0	3.65	0.479
Professional relevance	18 100.0	0 0.0	18 100.0	0 0.0	10 100.0	0 0.0	11 91.7	1 8.3	16 94.1	1 5.9	3.64	0.536
Current awareness	18 100.0	0 0.0	18 100.0	0 0.0	10 100.0	0 0.0	12 100.0	0 0.0	17 100.0	0 0.0	3.69	0.464
Preparation of report	18 100.0	0 0.0	18 100.0	0 0.0	10 100.0	0 0.0	11 91.7	1 8.3	16 94.1	1 5.9	3.59	0.548
Skill acquisition	17 94.4	1 5.5	17 94.4	1 5.6	9 90.0	1 10.0	10 83.3	2 16.7	16 94.1	1 5.9	3.57	0.640
Average weighted mean											3.54	

A = Agree; D = Disagree
SB = Skye Bank; EB = Ecobank; FB = Fidelity Bank; UB = Union Bank; MB = Mainstreet Bank
N = 75

Research Question 4: What are the major problems confronting the bankers in making use of information to meet their information needs?

Table 7: Problems confronting Bankers in their use of information

Problems	SB		EB		FB		UB		MB		Mean	S.D
	A	D	A	D	A	D	A	D	A	D		
Lack of access to available information	10 55.6	8 44.4	12 66.7	6 33.3	7 70.0	3 30.0	10 83.3	2 16.7	15 88.2	2 11.8	2.93	0.741
High cost of accessing information	12 66.7	6 33.3	13 72.8	5 27.2	4 40.0	6 60.0	9 75.0	3 25.0	9 53.0	8 47.0	2.83	0.935
Information is sometimes not timely	13 72.8	5 27.2	13 72.8	5 27.2	7 70.0	3 30.0	8 66.7	4 33.3	3 17.6	3 17.6	2.92	0.818
Information is often not detailed enough	15 83.3	3 16.7	10 55.6	8 44.4	5 50.0	5 50.0	8 66.7	4 33.3	13 76.5	4 23.5	2.87	0.935
Poor packaging of information	15 83.3	3 16.7	8 44.4	10 55.6	4 40.0	6 60.0	5 41.7	13 58.3	13 76.5	4 23.5	2.83	0.991
Information is not presented in the language I understand	9 50.0	9 50.0	7 38.9	11 61.1	3 30.0	7 70.0	3 25.0	9 75.0	9 53.0	8 47.0	2.39	0.820
Information is not related to my business	9 50.0	9 50.0	4 22.2	14 77.8	4 40.0	6 60.0	5 41.7	7 58.3	8 47.0	9 53.0	2.53	0.859
Information is not in useable form	10 55.6	8 44.4	7 38.9	11 61.1	4 40.0	6 60.0	4 33.3	8 66.7	8 47.0	9 53.0	2.41	0.917
Information is not available	5 27.2	13 72.8	4 22.2	14 77.8	3 30.0	7 70.0	5 41.7	7 58.3	3 17.6	14 82.4	2.21	0.934
Information cannot be easily accessed	5 27.2	13 72.8	7 38.9	11 61.1	5 50.0	5 50.0	7 58.3	5 41.7	6 35.3	11 64.7	2.63	0.897
Information is not appropriate to my need	10 55.6	8 44.4	7 38.9	11 61.1	7 70.0	3 30.0	8 66.7	4 33.3	8 47.0	9 53.0	2.60	0.870

											Mean	SD
Information is not useful	9 50.0	9 50.0	6 33.3	12 66.7	5 50.0	5 50.0	8 66.7	4 33.3	11 66.7	6 35.3	2.59	0.902
Lack of skills in using available information	6 33.6	12 66.7	5 27.2	13 72.8	3 30.0	7 70.0	4 33.3	8 66.7	6 35.3	11 64.7	2.28	0.781
Information is difficult to use	9 50.0	9 50.0	11 61.1	7 38.9	4 40.0	6 60.0	6 50.0	6 50.0	5 29.4	12 70.6	2.51	0.876
Information is scatted in too many sources	10 55.6	8 44.4	6 33.3	12 66.7	5 50.0	5 50.0	6 50.0	6 50.0	5 29.4	12 70.6	2.37	0.851
Average Weighted Mean											**2.59**	

Table 7 presents information on the problems confronting the respondents in making use of information to meet their information needs. It showed lack of detailed information 15 (83.3%), poor packaging of information 15 (83.3%), lack of timeliness of information 13 (72.8%), and high cost of accessing information 12 (66.7%), as topping the list of problems confronting respondents from Skye Bank in their use of information. Respondents from Ecobank affirmed high cost of accessing information 13 (72.8%), lack of timely of information 13 (72.8%) and, lack of access to available information as major problems hindering their use of information.

The respondents from Fidelity Bank affirmed lack of access to available information 7 (70.0%), untimely of information 7 (70.0%), and inappropriate information 7 (70.0%) as major problems they encounter in their use of information while respondents from Union Bank attested to lack of access to available information 10 (83.3%) high cost of access to information 9 (95.0%), lack of timely information 8 (66.7%), lack of detail information 8 (66.7%), lack of usefulness of information 8 (66.7%), and difficulty in accessing information 7 (58.3%) as major problems confronting them in their use of information. Respondents from Mainstreet bank on the other hand affirmed problems of lack of access to available information 15 (98.20), lack of timely information 14 (82.4%), lack of detailed information 13 (76.5%), poor packaging of information 13 (76.5%), and lack of usefulness information 11 (64.7%), as major problems confronting them in their use of information. It can therefore be inferred from the information above that lack of access to available information, high cost of

accessing information and lack of adversely information as major problems hindering information use among bankers in Ogun State.

Research Hypothesis

H_{01}: There is no significant relationship among information need, use, and, literacy skills of bankers in Ogun state

Table 8: Regression analysis of relationship between information need, information use, and information literacy level of bankers in Ogun state

Model	Sum of Squares	df	Mean square	R^2	F	Sig
Regression	340.731	1	340.731	.089	7.439	.008
Residual	3481.218	74	45.805			
Total	3821.749	75				

Table 4.9 presents information on the analysis to determine the existence of Table 14 presents information on the analysis to determine the existence of a joint relationship between information need, information use, and information literacy level of bankers in Ogun state and it revealed F value = 6.460; P =0.003<0.05 indicating the existence of a significant joint relationship among the variables. Thus, the null hypothesis is not accepted. Therefore, it can be concluded that there is a significant joint relationship between information need, information use, and information literacy level of bankers.

Discussion of Findings

On the information needs of bankers in Ogun state, finding from the study revealed that financial information, job related information, and health information major areas of information needs among bankers in Abeokuta, Ogun state. This corroborates Underwood (2002) findings that revealed job related information, information on financial matters, information on health, and information on scholarship and education as major information needs of bankers. On the other hand, the major purposes of information use by the bankers, as revealed by the study were identified as including, current awareness, research, and service delivery improvement.

Moreover, findings on the information literacy level of bankers showed that the bankers possessed high information literacy level. The major problems confronting the bankers, as revealed by the study, include; lack of timely information, lack of access to available information, lack of detailed information, high cost of accessing information, poor packaging of information, inappropriateness of information, and difficulty in accessing

information. This corroborates Afolabi (2003) findings that revealed cost of accessing information, lack of access to information, non-relevance of information to bankers' needs, and unreliability of information as major problems confronting the bankers in their use of information.

The study further revealed a significant relationship between information literacy level and information use by bankers in disagreement with Afolabi (2003) that reported a non-significant relationship between information literacy level and information use. This implies that information literacy level influences the use of information among bankers in Ogun state. Also, a non-significant relationship between information literacy level and information need was also established by findings from the study in agreement with Oyediran-Tidings (2004) study that also reported a significant relationship between information needs and information use. Also, the findings from the study established a joint significant relationship among information need, information use, and information literacy level of bankers in Abeokuta, Ogun state.

Conclusions and Recommendations

From the findings from the study it can be inferred that bankers in Ogun State are able to identify their information needs and also able to identify and make use of information sources in meeting their information needs. This supports the high information literacy level of bankers in Ogun State established by the study. Job related information, health matter information, and financial information were found to be the major areas of information needs that are common among bankers in Ogun State. The possession of the information literacy skills enable the bankers to be able to identify their information needs, and be able to identify information sources to meet the needs, be able to retrieve information from the sources identifies, and also be able to evaluate information retrieved for the sources to identify the relevance to the needs of the bankers. The following recommendations are hereby proffered:

1. There is need for the training and re-training of the bankers by organizations concerned on information literacy to enable them have the required skills in identifying their information need areas, identifying the sources that can meet the need, and retrieving information from the sources.
2. Adequate access to information sources relevant to the needs of the bankers should be granted by the information service providers such as libraries, television and radio houses, information centres and other stakeholder in information service provision
3. Information provision for the bankers should also be made timely and detailed
4. The cost of accessing information should be made affordable for the bankers by the information service providers

5. Relevant information sources should be made available for bankers use by information agencies such as Libraries and Information centres.

References

Afolabi, A.K. (2003). Information needs, information sources and information seeking behaviour of commercial vehicle drivers in Ondo State, *Gateway library journal* 6.2: 89-97.

Association of College & Research Libraries (ACRL). (2000). *Information Literacy Competency Standards for Higher Education*. Chicago, ALA, 2000. 16 p.

Bawden, D. (2007). Information and Digital Literacies: a review of concepts. Journal of Documentation, Vol. 55 (2), pp. 218-259.

Bundy, A. (2004). Australian and New Zealand information literacy framework: principles, standards and practice, 2nd ed. Australian and New Zealan Institute for Information Literacy.

Catts, R. and Lau, J. (2008) *Towards Information Literacy Indicators*. Paris: UNESCO.

Devadason, F.J. and Lingam, P.P. (1997). A methodology for the identification of information needs of users. *IFLA Journal*.

Dewan, S., Ganley, D. and Kraemer, K. L. (2005). Across the Digital Divide: A Cross-Country Multi-Technology Analysis of the Determinants of IT Penetration. *Journal of the Association for Information Systems*.

Dunn, K. (2002). Assessing information literacy skills in the California State University: A progress report. Journal of Academic Librarianship, vol, 28 (1-2), pp. 26-35.
.
Endrizzi, L. (2006). Information Literacy. *Lettre d'information* – April 2006.

Frerrier, WJ. (2001). Navigating the competitive landscape, the drivers and consequences of competitive aggressiveness. *Academy of Management Journal*.

Leckie, G.L., Pettigrew, K.E. and Sylvain, C. (2006). Modeling the information-seeking of professionals: a general model derived from research on engineers, health care professionals, and lawyers. *Library Quarterly*.

Mooko, N., & Aina, L.O. (2007). Information environment of artisans in Botswana, *Libri*

Odunewu, A. O. & Omagbemi, C. O. (2008). The university library information provision and use by policy makers in Olabisi Onabanjo University (OOU), Nigeria. Library Philosophy and Practice. (E-journal).

Ojedokun, A. A. (2007). Information literacy for tertiary education students in Africa. Ibadan: Third world information Services, 193p.

Okiy, A.J. (2003). You can't ask if you don't know what to ask: a survey of the information needs and resources of hospital outpatients, *New Zealand Medical Journal*.

Olabisi, A. (2001). Information sources in science and technology: A new approach. Ibadan: Moba Printing Press, pp.34-49.

Parang, E, Raine, M. & Stevenson, T. (2000). Redesigning freshmen seminar library instruction competencies. Research Strategies, vol. 17 (4), pp. 269-280.

Oyediran-Tidings, S. (2004). Information needs and seeking behaviour of Library users. Result form Yaba College of Technology, Lagos, Nigeria. *Lagos Journal of Library and Information Science*.

Pejova, Z. (2002) *Information Literacy: An Issue which Requests Urgent Action in Developing Countries and Countries in Transition*. Paper presented at the UNESCO, the U.S. National Commission on Libraries and Information Science, and the National Forum on Information Literacy, for use at the Information Literacy Meeting of Experts.

Radecki, C.M and Jaccard J. (1995). Perception of Knowledge and actual knowledge and information search behaviour.

Roger, E.M. (1997). Assessing consumer health information needs in a community hospital. *Bulletin of the Medical Library Association*.

Stern, C. (2002). Information Literacy Unplugged: Teaching Information Literacy without Technology.

Tilvawala, K, Myers, D. M, & Andrade, A. D. (2009). Information literacy in Kenya. The Electronic Journal of Information Systems in Developing Countries, vol. 39 (1), pp. 1-11.

Underwood, C. (2002). Information needs of rural women in Zambia-form the information needs surveys in Zambia, Baltimore, John Hopkins University Centre for communication programmes.

Vickery, B. C. and Vickery, A. (1987). Information science in theory and practice, London: Bowker-Saur

Warschauer, M. (2004). Technology and Social Inclusion: Rethinking the Digital Divide. London: The MIT Press.

Zawawi, S. and Majid, S. (2001). The information needs, and seeking behavior of the IMR Biomedcal Scientists. Malaysian Journal of Library and Information Science, 5 (1), 25-41