AN INVESTIGATION INTO THE INFORMATION SEEKING BEHAVIOURS OF SOCIAL SCIENTISTS OF AHMADU BELLO UNIVERSITY ZARIA

BY

HARUNA HALIDU

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DEPARTMENT OF LIBRARY SCIENCE
FACULTY OF EDUCATION
AHMADU BELLO UNIVERSITY
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DECLARATION

I, Haruna Halidu hereby declare that this thesis submitted for the award of Master of Library Science Degree is written by me. Both published and unpublished material used in writing this work are acknowledged.

NOVEMBER, 1988 HARUNA HALIDU

CERTIFICATION

This Thesis entitled "An Investigation into the Information Seeking Behaviours of Social Scientists in Ahmadu Bello University", Zaria, written by Haruna Halidu meets the regulations governing the award of the degree of Master of Library Science of Ahmadu Bello University and is approved for its contribution to knowledge and literary presentation.

Dr. John Agada
Chairman, Supervisory Committee — Date 15-12-88

Mr. M. I. H. Zia
Member, Supervisory Committee — Date 15-12-88

Dr. D. Bozimo
Member, Supervisory Committee — Date _____

Dr. G. T. Onadiran
Ag. Head of Department. — Date 15/12/88

Prof. D. I. Saror
Dean, Postgraduate School. — Date 7-2-89

DEDICATION

This work is dedicated to my brother Mallam Abu who died in September, 1980 and the unprivileged majority in Nigeria and Africa in general.

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In conducting this study "investigation into the information seeking behaviours of the social scientists of Ahmadu Bello University, Zaria, I am heavily indebted to a good number of people. My greatest gratitude goes to Dr. John Agada, the main supervisor for his intellectual support. I am particularly pleased with the level of commitment which he displayed during the initial stage of this thesis and its full development. Without his intellectual contribution and very many useful suggestions at various levels of this project which resulted in the substantial modification of the work, certainly this research would have been stifled.

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ABSTRACT

The research is premised on the need to find out the sources of information being predominantly used by the social science academics for teaching and research in Ahmadu Bello University, Zaria.

Thus the study sought to answer the following questions:

(1) What are the major sources of formal and informal information for social science academics in A.B.U.?

(2) How does the social science scholar in A.B.U. go about obtaining information through the formal and informal sources?

The specific objectives of the research are:-

(1) To determine the extent to which social science academics depend on the formal and informal sources of information for teaching and research.

(2) To determine the extent to which formal and informal channels of communication aid teaching and research efforts of the social science academic.

The hypothesis of the study states that:-

The social science academic in Ahmadu Bello University depends more on informal channels (i.e. unpublished e.g. oral, meetings, seminar, invisible college, preprints research reports) of information than the formal for obtaining data that is of value to his teaching and research. In testing the above hypothesis in order to provide answers to the research questions raised,

questionnaire and interview techniques were used as data collection instrument. The target population was the academics in the faculties of Arts and Social Sciences, Education, Administration, Law, Centre for Nigerian Cultural Studies(CNCS) and Centre for Social and Economic Research (CSER).

The study revealed that the social science academics in Ahmadu Bello University depend more on the formal sources of information than the informal sources of information for obtaining data that is of value to their teaching and research. For instance, books, closely followed by journals are the most important media to the social science academics in A.B.U. for teaching and research. Within the unpublished channels of communication it was found that meetings/conferences/seminar/workshop are considered by the academics as the most important means through which information is obtained for teaching and research. In addition, the impact of informal academic interaction with colleagues (invisible college) as a source through which information is transferred for teaching and research is appreciably high amongst the social science academics in A.B.U. References cited in books and journals are the most important access for locating materials for teaching and research by the social science academics.

Based on these results, the following recommendations were provided:

1. Seminar and conference papers serve as an important

channel of communication through which information is gained for teaching and research. Thus it is recommended that the department or faculty should compile and deposit copies of their seminar/conference papers in the university library for use.

2. The social science academics need bibliographical guides including the basic library instruction on the use of Library resources to facilitate their use for teaching and research.

3. In order to achieve a genuine academic interaction on the interpersonal basis between the Librarian and the academic, a research register or research profiles of the individual scholars are needed in the library. This will enable the Librarian render information services that is anchored on the research interests of the academics.

4. For the purposes of securing specialised services of the library, Librarians who are specialists in the social sciences or those who have "subject allegiance" should be appointed in the library to serve as a link between the library and the faculty.

5. The predominance of books and journals as a formal source for receiving and giving information for teaching and research needs, presuppose their acquisition on priority basis.

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DEFINITION OF TERMS

The following are the operational definition of the terms as used in this thesis. They are:-

Informal information:

It is the direct interaction of the researcher with the communicator to obtain unpublished information that solves the perceived need. This includes oral information unpublished papers, preprints, correspondence, and personal contacts with major research personnel in one's speciality.

Formal information:

This is a process through which information is received through the unpublished channels of communication (e.g. books, journals and Newspapers).

Information:

A stimulus or message that solves uncertainty. It includes meaning given to data by an individual in a particular situation.

Information seeking behaviour:-

It is the activity undertaken by an individual to locate information to satisfy teaching and research needs.

Information demand:-

It is a situation where an individual recognises the existence of information needs and thus concretely expresses it for solution.

Information needs:-

It occurs when a person perceives that the current state of possessed knowledge is less than that needed to deal with some issue or problem.

Information gathering:-

Those activities in which stimuli are accepted and held in storage to he called on demand. For example, when a person keeps a personal file, collecting data, keeping up and browsing in advance because such information is likely to be useful.

CHAPTER ONE

1.1 INTRODUCTION: INFORMATION SEEKING BEHAVIOUR

The need for information and the means of communicating it in order to enhance the social interaction of man cannot be overemphasised. It is through information that man can effectively interact with his fellow man as well as his environment for economic and political survival. Thus information is a potentially powerful instrument for teaching and research in enhancing the growth of knowledge. Information transfer (formal and informal) within the social science academics is very important for the advancement of knowledge. Information itself will have no value unless it is put to use. That is why social science academics according to Atherton (1977)[1] need effective communication systems to stimulate thought and action by injection of, and interaction with other people's ideas, knowledge, experience and achievement. Information will further promote continuous awareness of what others are doing so that individual scholars may know of new findings in special fields and other related areas. This in itself will provide specific information and data needed for research and also provide introductory and background information for work in unfamiliar fields.

Auster(1982)[2] conceptualizes information seeking behaviour as an "area that concerns itself with who needs what kind of information and for what reason;

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how information is found, evaluated and used and how these needs can be identified and satisfied". Similarly Krikelas(1983)[3] defines information seeking behaviour as "any activity of an individual that is undertaken to identify a message that satisfies a perceived need".

The information seeking behavior of a social science academic, like other academics is foremost determined by the reality of his environment. Paisley(1965a)[4] noted that research findings indicate that information seeking behaviour is a function of situation factors, information inputs and performance of productivity. For example, the academic environment, like other environments in which people live and work seems definitely to affect information behaviour. While personal attributes like the educational background of an individual affects the choice of environment and information seeking, function or task is also a significant factor of influence. Hertz and Rubenstein(1953)[5] pointed out that communication varied with function in the research team. For example, the amount of communication transfer among those with administrative functions is higher than those with technical functions. Meltzer(1956)[6] tried to explain for differences in productivity taken into consideration the factors of available funds for research, "freedom" in the choice of research topic and type of research organization. His finding indicate that type of research organization is not related to productivity by itself,

but the funds and "freedom" factors are positively correlated with productivity and of information processing behaviour.

In a study of medical scientists in a government research organization, Pelz(1956)[7] found that performance assessed by a panel of the scientists peers correlated with two factors. They are frequency of contact with colleagues and similarity of those colleagues and the scientist in terms of "science orientation" and prestige orientation". Further, scientist who interacted daily with dissimilar colleagues were higher in rated performance than scientists who interacted daily with similarity in value orientation among scientist who were isolated. Apart from the issues of task factor and personal attributes of an information seeker, the extent to which a research organization or an institution perceives an information system on a priority scale determines the information seeking behaviour of a scientist. For example, it is the management that has the final say on the amount of money that can be made available for the purchase of publications. This factor basically determines the amount of print sources that can be available to the academics during the course of research. For instance, unrestricted long - distance telephoning according to Paisley and Parker(1980)[8] correlates highly with success in obtaining information but not with productivity. Similarly too, unrestricted travel correlates highly with information success and

with productivity.

Mote(1962)[9] pointed out that the amount of information that can be requested by a scientist is related to the degree of diffuseness of subject area. That is, a diffuse subject area requires a larger volume of information to be demanded by each scientist. In Nigeria and the Third World countries generally, environmental factor conditions the information seeking behavior of a scientist negatively. This in essence, relates to the non-availablity of current journal articles to support teaching and research. For example, nearness to the reporting scientist and (ingroup) determines who receives preprints and oral communication that others do not. It is evident that those who are close to the reporting scientist are more likely to be aware of his (scientist) work.

Atherton(1977)[10] states that "... information embraces all relevant means of communication which include non-documentary and documentary". That is, information can be accessed through interpersonal contact and print source. Social science academics have a communication system through which they interact intellectually. One of the fundamental ways through which they communicate their ideas, perspectives and new findings to their colleagues either at the ... or international levels is via the books and journals.

These media are the sources through which formal information is gained which are ultimately used for research and teaching. When a social science scholar, writes and submits his manuscripts for publication, he does so for the purpose of communicating his findings to his colleagues and the society in general. If he got published, Smalley(1981)[11] says "it means that his work has been evaluated and legitimised by his peers thus making the act of publication a reward system". In Nigeria the scarcity of published materials is on the increase due to high cost of publishing triggered by the fact that Nigeria will have to depend on the advanced countries virtually on everything for publishing. Since this study is broadly focussed, encompassing the totality of information event in terms of print source and interpersonal interactions, the informal information system is thus examined.

1.2 INFORMAL INFORMATION SYSTEM:

Garvey(1979)[12] defines informal information as the "direct interaction of the researcher with the communicator to obtain unpublished information that solves his perceived need". Generally this include oral information, preprints, correspondence, unpublished papers and personal contacts with major research personnel in one's speciality.

Informal communication is very important to the social science academic. Price(1963)[13] first made this subsystem of information popular by calling it "invisible college". Many scholars believe that informal information

tends to serve the needs of a researcher better because it tends to be more readily available, current and flexible. Garvey and Griffith(1979)[14] argue that the "functions of the two elements (formal and informal), seem to counterbalance each other and that the lack of any one of them is an imbalance in the communications system for a scientist".

Morrison(1979)[15] says that "social and behavioural scientists like all of human kind, tend to use whatever sources are nearest, handiest and least forbiding".

In Nigeria, like elsewhere the accessibility factor perhaps has a strong influence on a researcher in the use of informal sources. As a result of the high cost of published materials, social science academics are likely to rely heavily on the use of informal information. Another factor that may lead to further reliance on informal sources is that current ideas and findings published in journals and books take a long time before they become available for research use especially in Nigeria. Probably by the time publications arrive, the information contained in them are stale or probably out of date. This situation in less developed country like Nigeria is far more complex due to the fact that most of the available materials are published in Western Europe and North America.

Most of the arguments raised on the use or non-use of informal information to satisfy research needs

can only be ascertained through investigation. This investigation is necessary in order to understand how a social science academic goes about seeking information for teaching and research. Publishing is one of the most vital vehicles through which information can be achieved. It is in this respect that the state of book publishing in Nigeria ought to be examined.

1.3 FORMAL INFORMATION: PUBLISHING INDUSTRY IN NIGERIA.

Book publishing in Nigeria (like elsewhere) flourishes against a background of the educational philosophy and the political systems in practice. Publishing is defined as the "selection, reproduction and commercial mass distribution of written matters"[16]

The introduction of Western education by the Christian Missions and the particularistic interest generated to produce literate individuals for the propagation of what christianity stands for, essentially marks the beginning of publishing in Nigeria. This role was characterised by the establishment of mission presses (publishing houses) whose main concern was the production of religious tracts and the Bible translated into indigenous languages. As pointed out by Modupe (1973)[17] the available publications were concentrated largely on the aspect of the christian family and upbringing.

In the 1840's when the christian missions saw the need to carry out their activities beyond the narrow

confines of the Bible, schools were opened. The setting up of schools obviously increased the demand for better and more textbooks. Where the materials were produced, the marketing was through some missions. Prominent amongst these churches were the Church Missionary Society (CMS), Sudan United Missions (SUM), bookshops and individual schools. For almost a century, the Missions had no effective competition in book publishing neither from the colonial government nor from the private sector. Just as the colonial government did not give apriori attention to the development of education in Nigeria[18] so also was its attitude to the publishing industry. As a result, publishing, like education, was largely left in the hands of the Missions. This passivity, perhaps in part explains the inability of the colonial administrators to present a definite policy on book publishing in Nigeria. That is why the questions of what material to publish was entirely left in the hands of the publishers to support educational programme. This position gradually led to the dominance of textbooks as against scholarly works and general literature. On the other hand, it could be argued that it could have been uneconomical to produce scholarly works because the low level of education attained by the colonised did not afford viable book marketability. Therefore the government became more engaged in the production of gazettes, civil service lists, blue books, government instructions etc.[19] Some of these materials themselves

do not have direct educational relevance other than mere administrative tools.

Of course, the conception of education by the colonialists was not to produce a highly literate citizens of the colony but at the levels of clerks, messengers and interpreters etc.[20] Essentially the publication of government documents as earlier described were for consumption of the colonial bureaucrats, chiefs and the commercialists for the effective political domination and economic exploitation of the colonised.

A distinguishing feature in Nigerian publishing, is that which is predominated by the British and American transnational book companies. This domination is facilitated by the scanty availability of capital, skilled personnel and low level of technological development which characterise essential features of a developing country like Nigeria. Due to the advantaged position of the advanced countries, transnational book companies like the Longman, University Press, Macmillan, Heinneman, Evans, Thomas Nelson, and the Oxford University Press are certainly at the forefront of book trade in Nigeria. In the late 1950's these multinational corporations (MNCS) had not only effectively captured the Nigerian book trade to their advantage but had dangerously become monopolistic. According to Zell (1984)[21] this monopolization of book market by the MNCS in the host country like Nigeria should be seen beyond mere commercial opportunism and profit maximazation.

It is argued that the books sold to us contain ideas and values of the capitalist world. They are aimed at influencing the Nigerian Government policies i.e. (economic and politics) to the advantage of the West. They determine or dictate which Nigerian manuscripts get published. In the end, the relevance of these materials to Nigerian situation are sometimes doubtful. Songa(1972)[22] submits that: "... the colonially created university like the men who manned colonial outposts, was intended to academically colonise the mind of Africa. Its philosophy and premise were European; it was like the entire educational process, created to kill any remnant of Africanity in the student and the continent".

There is the need to establish and develop Nigeria publishing industry. After three decades of political independence, Nigeria is expected to achieve a high degree of self-reliance in book publishing. That this is not achieved even at the levels of primary and secondary schools textbooks calls for greater concern. This underdevelopment in the publishing industry are caused by three important elements. These all relate to the lack of capital, machinery and technological know-how in Nigeria like any other country in the Thrid World Country. Publishing is a kind of business that needs heavy capital investment and yet it does not yield profit as quickly as other business ventures. The machinery, equipments and raw materials are generally lacking and so the country has to depend on the advanced

countries for the supply. Even where they are imported the country lacks adequate technical experts to effectively utilize the machinery to meet the publishing needs in Nigeria. These indices of underdevelopment tend to scare alot of potential business ventures in the publishing industry. The few indigenous publishers have to compete with the transnational book companies in the host-country to make reading materials available to the people. Due to the few number of the existing publishing houses in Nigeria, and the general lack of printing materials, it is comparatively far cheaper to publish in the advanced economics than in Nigeria. It is for this reason among other things that Nigerians are largely dependent on the advanced countries for publishing and importation of books and journals. This is the situation that the Nigerian social science academic finds himself, a situation that sharpens and directs his information needs and seeking behaviour.

1.4 THE CONCEPT OF SOCIAL SCIENCES.

The term social science applies to any discipline which is concerned with man and society. The concept became popular in Britain in the second half of the nineteen century when a group of professionals of various interests felt that the study of social phenomenon could be best approached through the application of scientific methods. As a result of this thinking, the National Association for the Promotion of Social Science (NAPSS) was inaugurated in Britain in 1857[23]. In the early

twentieth century, the term social science started to acquire a distinctive position in the fields of knowledge. At this level, terminological confusion began to the extent that the terms "social study" or "social studies" and social science became synonymous.

Up to the middle of the twentieth century, there was a strong tendency in Britain to look at disciplines concerned with the study of man and society namely economics, political science, anthropology and sociology as strictly different from each other. The rapid growth of knowledge and the emergence of new disciplines have in the course of history changed the concept of social science. Mitchell(1974)[24] states that:-

> ... It is now recognised that the scientific study of human relationships and that complex organization society must be the concern not of a social science but the social sciences. But just as the scientific revolution gave rise to an array of highly specialised natural and physical science which we conveniently label "sciences" so too we can now speak of a group of disciplines whose interests are in man and society which may be conveniently referred to as social science.

The above is an attempt not only to define what constitutes social sciences but also to trace its history. Handy and Kutz(1964)[25] basically disagree with the term social science but would rather prefer to call it behavioural science to describe all aspects of human behaviour. Within the scope of behavioural sciences or social sciences, they included psychology, anthropology, economics, political science and sociology. They further maintain that there are a lot of overlapping

interdependence and similarities in the disciplines aforementioned.

As stated by Brittain(1979)[26] user studies attempting to cover the social sciences have the problem of defining their area of study. While, a few would contest the inclusion of sociology, economics, political science and anthropology, among the "social sciences" the same cannot be true of psychology, history, education, jurisprudence and management studies". Freides(1973)[27] says: the disciplines customarily designated as "social sciences", are psychology, anthropology, political science, economics, geography and history. He acknowledges the fact that a crisis does exist in trying to delineate boundaries between disciplines, but an attempt to demarcate lines is a rough indication of the range of "social science". According to Line(1969)[28], social sciences as an area of knowledge includes sociology, political science, economics, anthropology, psychology, education, law, management, marketing and social administration. He is of the view that "though boundary disputes tend to be unprofitable, the very difficulty of setting accepted limits to the social sciences constitutes one of the major aspects of the information problem...[29]" In a similar manner, Brittain(1970)[30] cautions that:-

> Some of the boundaries between disciplines are perhaps pragmatic and perpetuated by the existence of professional associations, university departments and labels. These discipline boundaries are not always drawn according to subjects matter and the destination of the results of research. User studies that are directed to goals other than the maintenance of the status quo have to consider very carefully the boundaries that are dictated by information requirements and the provision of information rather than the boundaries that are perpetuated by professional associations, university departments etc.

Having given a perspective view on the social sciences generally, the research tends to give further consideration to the concept of social sciences in Ahmadu Bello University.

1.5 SOCIAL SCIENCES IN A.B.U.

This research considered the following disciplines as "social Sciences" in Ahmadu Bello University. These are political science, economics, sociology, history and geography. In accordance with the A.B.U. practice, the above areas are traditionally referred to as social sciences. In addition to the above, education, law, business administration, public administration, accounting and local government studies are regarded as social sciences for this study. Even though these disciplines are not customarily known as "social sciences" subjects in Ahmadu Bello University, the choice of these branches of knowledge, is thus influenced by Freides, Brittain and Line's definitions. And further, the selection of these disciplines is also based on the definitions of social sciences and the subjects that constitute social sciences. In addition to the faculties, the centres such as Centre for Social and Economic Research(CSER) and the Centre for Nigerian Cultural Studies(CNCS) are also included in the social science subjects for this study.

The faculty and the research Centres in A. B. U. function within the context of Nigeria whose level of literacy is relatively low. Its economy and other social conditions have reduced the majority of her citizens to the level of abject poverty even in terms

of basic needs (i.e. food, housing and health). It is in view of the above that Centres of learning in Nigeria are called upon to carry out research whose results can be used for economic and social planning. Planning that would focus on improving the living standards of all Nigerians. It is in the light of this reality that the role of the Centres and the faculty will be examined in relation to their stated objectives.

The Centres (i.e. CSER and CNCS) are research institutes whose primary functions are the conducting of research into the social, economic, political and cultural aspects of Nigeria and the Nigerian people. The faculty role is basically centred on teaching and research. Even though the Centres are not primarily concerned with teaching, there exists a considerable functional overlap between them (Centres) and the faculty in terms of research activities. In the pursuance of its research activity, the CSER relates to the faculty especially FASS to carry out joint research programme. One of such is called "development studies at A.B.U." The objective as stated, is to bring together academics and professionals working in the various subject areas and make contribution to the theoretical and empirical issues in general with special emphasis on Nigeria and the Third World.[31] This apart, occasional seminars are conducted whose themes are often centred on "issues in development, "economics", "agricultural economic", "rural development" and "physical and social planning".

The findings of such researches are always disseminated through seminars, conferences and research publications.

The academic staff at the CNCS are engaged in the study of four broad areas of Nigerian culture. These are in the fields of music, dance, drama and archaeology. In the area of music, the researchers go out to the field to tape-record the songs and folklore sometimes during the traditional ceremonies and festivals. The recorded tapes are finally brought to the centre for preservation and presentation in what is known as "music information bank". The academics at the centre interact with the faculty by procuring Nigerian artifacts for preservation and making them available to the faculty as teaching aids. This is where the faculty academics rely on the resources of the museum section of the Centre for teaching and research. At the centre, researches are made into the various aspects of Nigerian cultural heritage whose results are disseminated through seminars, conferences and publications.

Since the inception of faculties, the instructional role has been their primary attention in accordance with the objectives of the university. The faculty academic impart new ideas and knowledge from which students are equipped with new skills. In strict adherence to their stipulated functions, the faculties have thus produced a lot of graduates in management cadre. Thus it is probably not an overemphasis to say that the faculties have justified their functions in the production of the

much needed manpower for the economic, social and political transformation of Nigeria. This teaching function is symbiotically related to research to the extent that both operate to complement each other in the faculty as well as the Centres. The research function is very central to a faculty existence, a situation which probably prompted Mabogunje(1973)[32] to say: "no amount of experimentation with the training of students, however would represent a significant contribution were it not firmly underlined by vigorous research activities". It is in this perspective that these faculties have carried out studies in the areas of environmental development and human resources whose results are disseminated through the print sources. These are the research functions performed by the faculties which are also strongly interrelated with research role of the Centres.

1.6 STATEMENT OF THE PROBLEM

Academics and Librarians in Nigeria just like their counterparts in other countries in the "third world", have always expressed concern over the scarcity of locally published materials for teaching and research. The relative rapidity in the growth of universities and research institutions in the last two decades in Nigeria call for scholarly works to satisfy teaching and research needs. The need for currently published channels of communication is obvious in a less developed country like Nigeria in order to adapt and adjust to the changes

dictated by social and technological factors. While the academic in Europe or North America has the ease of access to currently published works, by contrast his colleague in Nigeria stands disadvantaged in getting current publications.

The transfer and smooth flow of information is impeded as a result of the market-oriented approach to information. Ploman(1981)[33] defines the concept of market-oriented approach to information as a situation where information serves as a commodity. This question of the "Market-place of ideas" has its origin in the West where market economy is in practice. The notion of information as a commodity is so much abused in the West that the collection and transfer of information has become a trade, indeed a "gold mine" in its own right. This is why Nigeria as a poor nation as well as its individual citizens with low real income are seriously confronted with the high cost of book importation from the West. The implication of the commercialization of information makes very important or valuable published works out of reach of the Nigerian average citizen. As a consequence, individual social science scholars as well as university libraries lack up-to-date information since they can hardly afford adequate foreign exchange to buy journals and books.

While it is beyond doubt to say Nigeria has been making alot of effort to combat the problems of shortage of books, the existing unsophisticated level of technology and the lack of foreign exchange have

particularly proved a great obstacle. As Osundina (1982)[34] expressed:

> Nigeria depends on book importation at the rate of 94% and only 30% of that is actually imported for its information needs due to scarcity of funds and unnecessary delays. Before books arrive in the country academic session is half-spent thus the books are late and so the students do not get them, booksellers also loose their money.

Given the various and complex nature of problems involved in obtaining published works for teaching and research, social science scholars and others as well, have to adjust to use the informal networks of information exchange. In order to stay current with the latest developments and ideas originating from individuals, meetings, seminars, preprints and "invisible college" are media alternatives that may be exploited to gain useful scientific information. Even in industrialised societies where publications are current and easily accessible, studies have shown that social science academics are less reliant on library holdings for their research needs. A user-study in the social sciences conducted by Line(1971)[35] to get a picture of the information seeking habits of academics, confirms this. The study reveals that "social scientists make relatively little use of bibliographic tools and library services particularly for current awareness purposes..." Similarly, a study carried out in Nigeria by Aboyade (1980)[36] revealed that humanistic scholars use more literature means(formal) for their teaching and research. The social conditions in these two societies under which these two investigations were carried out differ

fundamentally from each other. Even though Aboyade's subject of investigation is on the humanities, the study does confirm that informal sources are as significantly important as the formal sources of information for obtaining information for teaching and research by scholars in humanities.

As the above studies have shown, the less reliance on library services and secondary sources (abstracts and indexes) by the social scientists implies that there is the need to investigate other sources such as the informal information. Moreover in a depressed economy like Nigeria the unprecedented rise in the cost of production, purchase and processing of the published works predicate the use of other sources that are of comparative advantage. Arising from the above, the study seeks to answer the following questions:

1. What are the major sources of formal and informal information for the social science academics in Ahmadu Bello University?
2. How does the social science scholar in A.B.U. go about obtaining information through the formal and informal sources?

1.7 HYPOTHESIS

The hypothesis of this study states that: the social science academic in Ahmadu Bello University depends more on informal channels (i.e. unpublished materials, e.g. oral, meetings, seminars, invisible college, preprints, research reports) etc. of information than

the formal for obtaining data that is of value to his teaching and research.

1.8 OBJECTIVES

The purpose of the investigation is to find out the degree of utility of the various existing channels of communication and to suggest remedial measures that will improve their use.

The specific objective of the study are:-

1. To detrmine the extent to which formal and informal channels of communication aid teaching and research efforts of the social science academics.
2. To determine the extent to which social science academics depend on the formal and informal sources of information for teaching and research.

1.9 SCOPE AND LIMITATION

The study covers the faculties of Arts and Social sciences, education, administration and law. In addition are the Centre of Nigeria Cultural Studies (CNCS) and the Centre for Social and Economic Research (CSER). The coverage in terms of discipline are sociology, economics, political science, history, education, accounting, geography, public administration Local Government and Law. In doing so, the researcher is conscious of the diffused nature of social sciences and the attendant difficulty and implications involved in compartmentalizing social sciences into tightly defined autonomous disciplines.

The research is limited to the investigation into various types of information sources used by the social science academics in Ahmadu Bello University, for teaching and research. Lecturers and research fellows whose ranks range from the Assistant Lecturers to professor or Assistant research Fellow to Research Professor constitute the population understudy in the aforementioned faculties and research centres.

The questionnaire and interview techniques used for data collection in this study in themselves constitute limitations. The interpretation and the ultimate findings of this investigation are based on the resonses given by the respondent depend on his level of perception and the mood in which he is at the material time. In addition, a researcher is not likely to remember if asked "how important" or "how useful" a particular source of information was to him a few years back or even a short while ago. Therefore his responses are sometimes a matter of guess work rather than a concrete description of an information event in his remembered experience. The combined effects of these factors apriori render this work subjective.

1.10 DELIMITATION

Social sciences as a branch of knowledge are established discipline, offered and taught in all the conventional universities in Nigeria. It therefore follows that social science academics are spread all

over in these universities. For the study of this nature to be able to come up with a conclusion capable of generalizeable application in the area of information needs of academic social scientists, it must not be narrowed to only one university. But this research is Ahmadu Bello University based because time and money did not permit the researcher to cover other universities in Nigeria. At any rate, the findings of this research may provide indications of what the information needs of other social science scholars are in other universities in Nigeria since they (social scientists) are all products of the same society.

1.11 SIGNIFICANCE OF THE STUDY

This study is a pioneering one to investigate the information seeking behaviour of the social scientists at the Ahmadu Bello University, Zaria.

The quantitative growth of literature as acknowledged by Garfield(1983)[37] predicates an inevitable demand for information processing and retrieval. The question now arises as to how one could sift out of the millions of the publications of those to match the information needed for teaching and research of the social science researchers. It is in recognition of this problem that this study sees the necessity for determining the information needs of the social science academics upon which information service and management will ultimately be based. This work will perhaps reveal that information needs of an individual scholar may have their origins among others

in the amount of information sources available at a particular time. For example, is the available journal of central or of peripheral relevance to the information needs of social science scholar? This study will provide an indication of the perspectives of the communication structure and the available vehicles through which information is transferred in the social sciences.

If the Librarian or the information scientist is to effectively play his role as a link between the available sources of information and the social science information users, the method and the channel through which information is most frequently obtained has to be known. The research will further effect a series of proposals aimed at effecting interaction between the Librarians and the social science academics. This interaction will hopefully urge Librarian to find out the research needs of the social scientist upon which his (Librarian) service can be rooted. Effective dissemination of information will reduce duplication of research with its negative effect in cost and wastage. The provision of an improved information service in the social sciences will help to make the social scientist contribute meaningfully to the academic programme of the university. It is through such means that the social science scholar will be in a position to grasp and articulate the human problems for their solution for the benefit of the society at large and Nigeria in particular. This thesis will probably reveal the degree of relative importance or usefulness of each channel of

communication that can be best exploited to satisfy the information needs of a social science scholar.

1.12 METHODOLOGY

Investigations into the previous studies on information needs or user - study have revealed a number of survey techniques employed in data collection. For instance, Wood(1969)[38] mentioned five available methods of investigation on user needs. These are questionnaire, interview, the diary, observation and analysis of existing data. Certainly each of these methods have its own advantages and pitfalls. For that reason, none can be said to be perfect as an instrument for data gathering; rather it is argued that the suitability of a particular method is a function of the nature of investigation in use.

In a study by Line(1971)[39] which is related to this thesis, a tripple method of approach (i.e. questionnaire, interview and observation were used to investigage the information uses and needs of social scientists. Similarly questionnaire and interview techniques are considered appropriate as data collection instrument for this study. The questionnaire as a technique becomes an important vehicle for eliciting a good number of responses. Secondly, when such responses are coded, they lend themselves to ease of analysis. However, the questionnaire method is widely known and associated with low response rate. It is also vulnerable to a high probability rate of being misunderstood and mis-

interpreted by the potential respondent. Probably for these reasons, the study has also included the use of interview as another technique to effectively probe the information needs of social science academics in Ahmadu Bello University.

The target population is the academics in the faculties of Arts and Social Sciences, education, Administration, Law, CSER, and CNCS. Further selection within the identified population of academics was made in which graduate Assistant and graduate assistant research fellowsaare excluded. The reason for the exclusion of this category of academics are based on the fact that they have probably not acqured enough experience both in terms of teaching and research. Their responses to the questions asked might therefore not reflect the true situations that constitute the information problems in the social sciences.

For every department identified for this study, a list of all academic staff was obtained from the departmental offices of each faculty. A total number of 235 academics were identified for the study. The spartial distribution of the academic staff in faculties and the centres are as follows:- Accounting 14, Business Administration 16, CNCS 12, CSER 14, Economics 12, Education 49, Geography 9, History 22, Law 17, Local government studies 13, Political science 24, public administration 14 and Sociology 19. The investigation is local and so the research considered it not necessary to sample out of

the parent population because it is easy to access the whole population. Secondly, in order to ensure a fair representation of the subjects involved, the need for sampling out of the parent population was not considered necessary.

Nineteen questions were designed and asked in the questionnaire. Nine out of these were designed to reveal in part, the "importance" as well as "usefulness" academics attach to certain sources of information in gaining critical information for teaching and research. Another aspect also addresses the question of the way information is obtained and their relative importance. These sources of information (both formal and informal) and the methods of locating information are each placed on a five point Likert scale. Each source is assigned weights (five) for "very important" or "very useful" and (one) for "not important" or "not useful".

Having designed these questions, the researcher carried out a pilot survey in which the questionnaires were administered to a sample drawn out of the population. The reason for this investigation is to ascertain whether the questions asked were understood by the respondents. Respondents were also asked to indicate which of the questions they found ambiguous and to further suggest how such questions could be rephrased. Consequent upon this survey a good number of the questions were modified and rephrased. The final copy of the questionnaire were administered personally to every member (235) of the

population. Each questionnaire had a letter attached to it explaining the objects of the research. The locally based nature of the study was well exploited to the extent that the investigator virtually went round from office to office of every respondent for three weeks to remind the latter to respond to the questionnaire. In the end, one hundred and seventy-one (171) out of the two hundred and thirty-five(72.76%) (235) were responded to and returned for analysis(72.76%).

Finally a structured interview was carried out with some academics within the population on a random basis. The raison d'etre for the use of this technique is to further clarify certain conceptions held by the academics on the state of information and information services in Ahmadu Bello University as they relate to social sciences. They were also asked to give suggestions on how to improve the problems associated with information transfer in Ahmadu Bello University and Nigeria in general.

1.13 STATISTICAL ANALYSIS OF DATA

The analysis of data as reported in this work was treated at the Iya Abubakar Computer Centre, Ahmadu Bello University, Zaria. After coding the data, they were fed into the computer useing the statistical package for the social sciences (SPSS) for basic discriptive analysis. The manipulation of the coded responses by the SPSS were a combination of one - way frequency distribution and cross tabulation. The treated data (both one-way frequency distribution and the cross

tabulation) were to be printed and released by the printer in batches. Unfortunately the cross tabulation was not released as the printer was in disorder. Having waited for over one month and yet the restoration of the computer was not immediately forthcoming, the investigator decided to analyse and interpret the available data on one way distribution frequency. Apart from the obvious eargerness to accomplish this work, the data on the cross tabulation aspect which is on the relationships between discipline, age, experience, rank (status) and qualification on the one hand; and the variety of sources of information used by the academics on the other is not the thrust of this investigation.

However, the one way fewquency distribution table were used to show the extent to which informal channels of information are more or less valued than the formal sources of information for obtaining data for teaching and research. In addition, the analysis that followed also indicated the degree to which each source of information e.g. books, journals, seminars/meetings/-conferences and informal academic interaction were useful to a social science academic. Apart from the treatment of the statistics, the thesis recalled some comments made by the academics and responses generated from the interview.

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CHAPTER TWO

2.0 REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

The basis of this review is to examine earlier works or investigations carried out by researchers in the areas of "use studies", "user study" or "information seeking behaviour" and information needs as they relate to this study. The distinction between use studies on one hand and information seeking behaviour and information needs on the other are really difficult to establish. However, Menzel (1967)[1] is of the view that the term use study is a library oriented kind of study. But information needs, information seeking behaviour or user study goes beyond "the demand or concious wants of users". According to Line and Nelson (1972)[2], the study of information needs or information seeking behaviour or user study encompasses the totality of the information event. Further, it is concerned with the study of the factors responsible for differential in information needs of individuals. However, the review that follows is divided into three categories. Firstly, it deals with information needs followed by information seeking behaviour or user study and use study, respectively.

The subject of information seeking behaviour in the social sciences unlike in the pure and applied sciences has comparatively drawn little attention hence the low level of literature generated[3]. Line (1974)[4]

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has adduced some reasons for the paucity of published information which include the contention that policy makers and private sectors hardly sponsor researches in the social sciences. They (social scientists tend to draw heavily on their own hard "thinking" and the interpretation of a given situation retrospectively but this does not mean that social science is static[5]. A scientist addresses himself to the frontiers of knowledge and knows the significant issues at the frontiers too. He stands on the "shoulders" of other scientists and operates in a system where citations to works have become an age long tradition. And so data that have cummulated overtime are of tremendous importance for the advancement of science[6]. Line(1976)[7] commented that the rational for citation is not so much because science is always on the move but the penalities for not keeping up are heavy. This is not because of the risk of duplicating experiments but because of publishing work that betrays ignorance of relevant work and fact. Once an article has been published on a topic it is never revisited. But in social sciences nobody has the last say, and so the same research topic can be revisited.[8,9]

As earlier noted, this has been the factor that has ultimately led to the concentration of studies on information use and needs of the scientist as against that of the social scientists. On the other hand, it is evident that researches in the information requirements

of the social scientists have benefited in no small measure from works in basic and applied sciences. One is perhaps not surprised as such because both scientists (natural and social) are products of the same society and more or less use similar research techniques. Recognizing the symbiotic relationship between the two sciences, the investigator would review some of the existing science literature on information seeking behaviour or user study, information needs, and use study as they relate to that of social sciences.

2. 1 INFORMATION NEEDS

Voigt(1961)[10] presented a three-fold approach of "information needs model". This model in his view determines the information seeking behaviour of a scientist. According to him "needs" for information arises because a scientist wants to know the latest happenings in his area of study. Secondly he (scientist) does so in order to get the most up-to-date anser to specific questions when called for (reference function). And finally to get in touch with retrospective works on a given subject over a specific period of time. The logic in this model of information seeking behaviour is not in doubt. This is because one's needs for information and potential behaviour is dictated by the nature of problem facing the information seeker. What remains unclear however about this model is that the theoretical

base upon which Voigt made this assertion is never stated. For example, the dynamics of information needs, a situation that makes an information seeker during the course of his research looks for "current" or everyday information events needs further consideration.

In a similar manner Menzel(1964)[11] makes use of symbolism to illustrate what determines information needs of a scientist. He says the symbol is conceptually arranged in concentric circles within which are primary and secondary areas of attention. Right at the centre in his view, is the scientist's primary area of research which he feels indebted to for keeping up in full detail. Away from the centre, is the secondary fields of attention of a researcher within which he keeps up but not in the same vigour and detail. The centre-periphery concept in the words of Menzel, does not only premediatate the intensity of information required for keeping abreast but also the choice of channels of communication. For that reason researchers are glued to the existing channels and media and these are overwhelmingly tailored for the user to whom the given field is primary.

Closely related to the Menzel's view is that of Martyn's(1974)[12] which says that information needs of an individual falls into two categories. The first category is what he describes as the "core" which essentially contains the information component without

which an individual cannot perform his professional function. For example, a clinical pathologist must keep abreast with the information in the area of clinical pathology to be able to perform and interact with his professional colleagues effectively. The second area, marginal to the core, contains a large quantity of information which is overtly non-scientific or non-technical. Such information is obtained formally and informally even on more observation of the environment.

Directly related still, is the view of King and Palmour(1974).[13] The investigation posits that the way a researcher conducts his scientific work has a profound impact on his information needs. The main thrust of this research is that user's behavoural pattern in seeking and exchanging information is a function of his information needs. His information needs, it is contended, are bound to vary and alter depending on the accessibility and ease of use. In a research conducted by White(1972)[14], evidence abounds on the information needs both at the intra-individual and inter-individual levels. The focus of his study is an analysis of the communication behaviour of academic economists during three stages of a research project. The first stage, is when the idea was perceived and problem defined followed by the time methodology was determined and data gathered and finally the analysis of results and presentation of findings. Data for the research was

gathered through a self-administered questionnaire sent to a sample of economists on the faculties of ten universities with doctoral level programmes in economics. The finding supports the hypothesis that "a researcher's information-gathering behaviour would vary during a research project as his information needs change. In satisfying these needs, the researcher would follow different patterns of behaviour".

Garvey et al(1979)[15] is in agreement with the above finding. He investigated the problems that might be accountable for the variations in information sources used by a scientist. Secondly, to determine if a particular source is more useful than the other in providing certain kinds of information. He applied a questio naire research technique to survey 2030 productive author scientists. The research reveals that the stage of research in which a scientist is, predetermines his information need. He contended that such needs are satisfied through the use of various sources and also a particular source will be more useful than the other depending on the stage of one's research. According to him non-local colleagues are most useful at the level of "interpretation of results" whereas the use of preprints are better at the stage of "preliminary experimentation". He also compared two major information sources i.e.(journals and local colleagues) to know if one is more frequently used than the other to proceed to the next level of research. The result did not

only reveal that various types of information are provided by the two sources (journal and local colleagues) but they also compliment each other. He says:-

> ... information which journals most provide adequately, colleagues are least helpful and vice versa. Journals are most useful in providing information needed to place a scientist's work in context with similar work already completed and to integrate his findings into current scientific knowledge. On the other hand local collegues are superior providers of information needed to select a design for data collection or to choose data gathering technique[16].

He concluded that books seem to play on ambivalent role in providing needed information. They are effective at supplying general information needed to fashion a scientific solution and adapt a data-analysis technique. Preprints and meetings are most useful in giving information to relate a scientist's work to an on going one in his field.

In the same study Garvey et al (1979)[17] further compared social and physical scientists; the information sources most useful to the scientists in the two disciplines. The study reveals that local colleagues and books are more useful to social scientists. On the other hand seminar papers, meetings and technical reports are more useful to physical scientists. He also investigated to find out whether or not educational experience as possesed by an individual has a role to play on information seeking behaviour of a researcher.

He made a sample of the available opulation and divided them into three groups based on the time an individuals scientist acquired his highest degree. The research demonstrated that the information need of the less experienced are greater than the experienced scientists. It also reveals that local colleagues are especially more useful to the less experienced. Garvey has used "individual differences", a theory that has its root in psychology to explain that educational background, subject specialization and the nature of research are responsible for the information assimilation of an individual. According to him, these differences within individual and between individuals should be considered seriously in the provision of information services. Thus these differences can manifest themselves in terms of the type of communication media or form needed by individual researcher at a particular time.

Robin and Melton(1969)[18] in their study quoted Rees, Alan and Schutze, Douglas by summarising the above contention in the following words. That "at the present time, we can do little more than hypothesize that information needs and usage vary in relation to the subject fields of users, their educational background, amount of experience and function performed".

Line(1969)[19] in his study, argues that social sciences suffer from the crisis of definition and is at the same time multidisciplinary in nature. It is also

a field that strays into science and humanities in terms of terminology and even the use of methodology. For this reason he further maintains that it would be better to categorise information needs in terms of function (occupation) and environment. This is because according to him "each discipline in the social science tends to be ill-defined. For example, one man's sociology is another main's political science, a situation in which the names of university social science departments reveal little of what their members actually do. A great deal of information is common to more than one discipline and a great deal more is fringe territory". The investigation uncovered that information seeking behaviour of social scientists is determined among other things by function. For example, the information needs of social scientists who are engaged in research tend to be identical whereas that of a non academic social scientist working in an industry would differ. According to him, psychological, sociological and economic criteria have a great role to play and that research s into information need have been less successful because emphasis has been more on scientific or technical problem rather than social consideration. He finally submitted that social science techniques are required to obtain data on the individual need for social science information in the following area: The general broad pattern of need; in more detail, the types of work that

individuals are doing, and the information that would help them and the day-to-day information habits and requirements of individuals". In his view the study can be carried out through the application of questionnaire, interview and observation on a continuous basis.

Crawford(1971)[20] investigated the extent to which information can be transferred through informal communication among scientists in a sleep research". Informal communication according to him, pertains to a person to person relation in which a researcher selects out of the existing population, other scientists to communicate with on aspects of his work. She further maintains that formal communication represents an organized mode of communication which include the scientific literature and its abstracting - indexing services. All the scientist engaged in the current research in the area of "psychological study of sleep" were identified. Included on this list are also those who have written in the field, being a member in the Association and secured research grants in the field of sleep research during the four years preceeding the investigation. Two groups of population were identified. These are the sleep scientists and specialists in other peripheral areas. The respondents were asked to name all the persons contacted at least three times during the past year. One of the assumptions of the study is that:- Informal information can be transmitted via direct and indirect contacts.

A direct contact according to her is one which scientists "i" interacts with scientist "j" as exemplified in the relation i → j. An indirect communication is one that has at least one intermediary such as i → k → j.

In finding out which scientist is either directly or indirectly linked to another in terms of communication relation, algorithm was used to identify a group of inter-connected scientists. 58% of the scientists working in the area of "sleep research" indicated that 3.3 persons were contacted concerning their work. Scientists in other area of study constituting 42% made some contacts. The investigation shows that informal communication network exists embracing 73% of the productive scientists. She also reveals that within the communication network, there is a "core group" of academic giants who significantly differ from other scientists in terms of frequency or contact, productivity, higher citation record and wider readership. She concluded that membership in the informal communication system has a crucial effect on information transfer. She further argues that in the search of knowledge, a scientist who is integrated within a communication network stands at a greater advantage than the non-integrated in receiving new information.

In a related study, Mullins(1966)[21] conducted an investigation aimed at identifying groups of scientist who communicated among themselves. He sampled fifty out

of the "list of men of science in America". The study demonstrated the presence of "invisible college" and remains so invisible of "loosely-knit networks". Mullins like Diana expresses the same contention that a line of demarcation cannot be drawn between the members of the "invisible college". According to Mullins, the college of one scientist differs from another hence the individual scientist has his own choice of personal contact. But Mullin's investigation cannot be said to be representative enough because he used a small sample from a very large population. For this reason the study is unable to identify a network of communicating scientists who are not interconnected.

Storer(1969)[22] maintains a position similar to Mullins, on which he says that the existence of invisible college among the academics is a mere custom-made reference groups. He further says that "any attempt to identify the boundaries of a single invisible college is apparently doomed to failure, because no such entity really exists in a form capable of delineation".

2.2 INFORMATION SEEKING BEHAVIOUR

Orr(1970)[23] and Krikelas(1983)[24] pointed out that two basic sources are responsible for an individual's information seeking behaviour. These two sources according to them are the scientist's own memory and observation of nature or experiment and information generated by others. This model of information needs maintains that information seekers constitute sources

of information in their own right and this tend to direct generally their information behaviour. These internal and external media as they are sometimes called refer to the former as the information seeker's own memory (persona) and the observation of nature. But the latter relates to a situation where a researcher uses the inter-personal and the secondary sources to get information. A researcher tends to resolve this information needs by foremost turning to self-generated information he has gathered overtime. They are known to have used a lot of personal files (personal collections) accumulated experience as a means of dealing with specific problems of investigation. Included in this aspect is perhaps the use of direct observation or experiments by social scientists to gain information. In the case of the latter, he may have to enter the world of the population under-study and stay with them to be able to know their characteristics. According to them, it is only when the individual information seeker has exhausted this internal source and feels inadequate to resolve the problem at hand that he (researcher) resorts to the use of external sources.

In the words of Krikelas(1983)[25] "it is a situation where the information seeker has to go direct to the person whom the researcher thinks has the knowledge or turn to the use of printed words for information". This source preference as noted elsewhere has nothing to do with pertinency of information. Whatever message received,

its impressions and interpretations are indeed subject to the value-orientation of the individual. This two-fold model of information needs presents a significant departure from other approaches. As regards this model the deciding factor in terms of channel to use is dependent upon the accessibility, ease of use and not the quality or accuracy of information that the medium is likely to contain. As argued by Atherton(1977)[26] "unless one is fairly sure of getting information without trouble he is likely to do without. In the end one relies on memory or vague information from a colleague. He however admitted that there are serious information seekers who would spend efforts and material resources to acquire pertinent information".

Odeinde(1974)[27] is of the view that "the needs and use of information ultimately differs because of differences in personal characteristics and disciplinal factors". He argued that in order to meet the information needs of users adequately emphasis must be placed on the study of their characteristics. The research also revealed that discipline differential accounted significantly in the demand and uses in science and technology. According to him, information centres and special libraries are faced with enormous challenge in having to effectively handle information services. This question of using discipline as unit of analysis to explain differences in information needs is yet another area of focus in the study carried out by John and Tobby

(1985)[28]. They observed that information transfer in applied field of study differs from that of the basic in structure. In the basic field of knowledge, information is shared and transferred within the context of subject boundary. For example a Chemist would interact with and engage in information exchange with his colleagues in the same field. Whereas in the applied field,(e.g. political science, sociology and economics) the act of information gathering and transfer occurs across the disciplinal boundary unabated within and between the researchers and practitioners.

A number of their researchers especially in the social sciences do not agree on the extent to which discipline (field of study) can contribute to the differences in information needs and use. Brittain(1970)[29] is of the view that psychological and environmental variables are factors that influence the information seeking behaviour of a social scientist. His notion of environment relates to age, education, background, length of experience of research. But the psychology aspect views the levels of motivation, intellegence and factors that determine information seeking behaviour of a social scientist. He believes that if data are secured through interview, questionnaire or observation of an individual information seeker, using the aforementioned variables as a basic unit of inquiry the result of the research could be of great reliability. He further maintains that for an information scientist to design an effective information

system for the social science community, he must recognise those factors since they influence the information requirements. He finally advocated for the use of "theory of user behaviour" for the proper understanding of the information needs of an individual or group of individuals. Bourne (1962)[30] posits that an individual will differ in his information seeking since search time and the amount of irrelevant materials that can be tolerated vary from one individual to another. According to him, other variables that influence an information seeker can be related to the prefered form of information, work habits, an awareness of information tools, terminology in use and his perception on how "comfortable" the information system is.

There exists a social organization[31,32] among the academics where information is transferred informally for teaching and research. This social organization is what Price(1963)[33] calls "invisible college". The term refers to an "elite of mutually interacting and productive scientist within a research area"[34]. Price(1980)[35] acknowledges the existence of invisible colleges in each active area of science whose chief reason is to adjust to publications crisis by substituting personal contact for formal communication.

Diana(1969)[36] selected a group of scientists in the area of "diffusion of agricultural innovations" for study. The objective of the study is to test the existence of

"invisible college" or "social organization" among the scientists working in the same research area in their quest to obtain information informally from each other. A mail questionnaire was distributed to scientists all of whom have had publications in a particular problem area with shared research interests. As a consequence to the administration of the questionnaire, data were collected on various types of interactions that exist among the scientists. He used Coleman's sociometric connectedness as a method of analysis to show the existence of "social ties" between scientist in the research problem area. The study reveals that the scientists actually interact with one another to get information in a manner that can be described as a "social organization". He noted too that the "social organization" as a system does not only exist exclusively for the scientists working in the same problem area but is also open to "outsiders" whose boundaries are difficult to establish. The presence of "Core Group" within the whole group is helpful to scientists in the research front. Diana expresses an awareness of problem in trying to adequately describe theoretically this group of scientists who communicate informally. She disagrees with the term used by Price "invisible college" but she however suggested that the correct phrase to use is "social circle" when refering to the social organization of scientists in a research area.

Gaston(1969)[37] investigated the informal communication behaviour of high energy physics scientist(HEP). For

his research technique, he adapted Coleman's socio-metric connectedness programme. He found that within the available scientists in the HEP, a subset or "Core scientist" exist who received a great number of direct and indirect communication requests than the rest of the HEP scientists. The study further revealed that members of the "Core Group" communicated more between themselves than the other HEP scientist. He concluded that there is "a strong evidence that an invisible college exists".

Garvey and Griffith(1971)[38] studied 200 research efforts made in pyschology and found that ideas less than one out of seven emanated from media such as journal articles and presentation at national meetings etc. Instead, according to them, the scientists rely to a large extent on informal networks of information to keep abreast of current academic activities and of the current views of the community on the value and relevance of specific research problems. Based on the importance attached to informal communication by earlier research findings, Garvey and Griffith further tried to determine how the informal communication network linking different groups of psychologists could be organised. They found that there is no clear cut networks responsible for transferring scientific information within the groups of active scientists.

Griffith and Mullins(1972)[39] reviewed alot of investigations to reveal how "low and high levels" of organization and communications initiated by small,

coherent activists groups aid the growth of science. They used the findings from surveys, individual interviews and biographical eseays to discuss similarities that exist among colleagues that developed into small activitist groups which had a serious effect on the home disciplines[40]. They maintain that it is no more in doubt whether or not "social organizations" (invisible college) exists among active scientists but how and why and to what extent. As a demonstration to the understanding of what they describe as high level of organization and communication in science, Griffith and Mullins revisited a study carried out by Griffith and miller(1970)[41]. The study was based on the three groups of psychological researchers and focused upon the productive scientists each of whom headed a team of students and junior colleagues. The project revealed that researchers were considerably aware of "Core" researchers and interacted as such with each other to get information based on current research interests. It is on this basis according to them that "loose" communication networks are established amongst the researchers. The emergence of this communication networks are also dictated in part due to a rise in current scentific problem, inadequacy of formal meetings and journals for answering information needs created by the problem.

Another review of a study by Griffith and Mullins (1980)[42] concerns the groups of six. These are the

phase workers in molecular biology, skinnerian psychologists, the quantum physics groups in Copenhagen, the Gottigen mathematicians, the audition researchers in psychology and the ethnomethodologists in sociology. This study maintains that the highest level of organization and communication are achieved through the emergence of groups within disciplines. The emergence of these groups are informed by the coming together of individuals who share the same or similar radical conceptual reorganization and theoretical break within their field. The member of the six grous discussed by Griffith and Mullins are agreed that "social circles" occured within the discipline because of the overthrow of major position and making a crucial revision in methodologies which were previously widely held by the colleagues in the fields. The split groups do not differ only in conceptual framework as opposed to the established order but they also have the same political belief and as such participate in politics in order to secure research grants and appointments. The study further revealed that a break in a theoretical framework is an important social factor in segregating researchers into "in groups" and "outgroups" which ultimately provides personal motivation for the individual scientists. Within the group too are the organizational intellectual leaders who direct areas of research and the dissemination of ideas and findings. Quite often the intellectual leader is a productive scientist who acts as a model to the rest of the members

of the group. Each of these groups, according to the study maintains close and continual interactions on scientific issues. According to Griffith and Mullins (1972)[43] "when an audition researcher was asked whether he and his group exchanged preprints, he said such was unnecessary because they followed each other's work closely that a single newly found constant was enough to inform others of an important advance".

Hoshovsky (1969)[44] draws attention of researchers of information seeking behaviour to the study performed by the American Institutes for Research (AIR) on informal communications study. The objective of the research is to deepen the understanding in relation to the role, importance and problems (if any) associated with the informal communications. According to the investigator, the other objective is to measure the degree of effort being expended on selecting the modes of oral or formal communication and suggest its national effectiveness. The researcher discovered that the informal communication system is very vital in the information transfer process amongst researchers. He maintains, the informal information system eminently posses some basic advantages over and above the formal communication. The study is of the view that these advantages are instigated by the two basic needs namely immediacy of use has to do with situation in which an information seeker benefits from the intereactions with colleagues within or without his

environment to gain information that has direct (or indirect) bearing on his area of study. Flexibility relates to the opportunity afforded the researcher to accept or reject information depending on its (information) intrinsic value to his investigation.

Antecedent to Brittain(1970)[45] and following Merton(1967)[46] Paisely(1968)[47] had advocated the adoption of the theories of the "middle range". The concepts "middle-range" are terms that are neither too close to information use nor too far removed into systems theory and cybernetics. He goes further to say that any field of study, in their various stages started with typology. For example, in the field of information - use study, it is the practice to constrast scientists with the technologists. But he argued that with the aid of "middle range" theory various types (or lable) could be related to each other to arrive at a scientific study. Paisely stated:

> The study of information needs and uses is still in its typological phase, because we lack middle-range concepts that would specify how the typology relate to each other. The progress observed now is a refinement of typologies, with greater specificity of information needs, kinds, channels etc. It has been the experience of other fields that some refined typologies strike almost accidentally upon underlying conceptual dimensions that establish order.

He therefore suggests that concepts such as perceived utility, perceived cost, uncertainty and personality factors could be used to replace ad hoc typologies which now exist.

Paisely(1968)[48] therefore gave a critical analysis

of the earlier researches carried out so far. He states that information needs and uses as a field of study suffers from the pverty of conceptualization. The situation according to him, has beclauded a clear perspective on the: "full array of information sources that are available; the use to which information will be put; the background, motivation, professional orientation and other characteristics of the user; the social, political, economic and other systems that pwerfully affect the user and his work and the consequences of information use e.g."productivity". For that reason Paisely recommends a conceptual framework that situates the user of information within the premise of a set of systems that can be seen as concentric circles moving from the general to the mst specific influence. He describes these systems in which the scientist operates as political system, membership group, a reference group, an invisible college, a workteam, his own head, legal and economic systems. This study is tempted to agree with the stance taken by Paisely on the necessity to evolve a conceptual framework so as to have a proper grasp in the understanding of the study of information needs and uses. Other fields of knowledge like sociology, business Administration and Public Administration draw heavily from the theories of psychology to be able to put forward a coherent theories in their own respective areas of study. According to Lipetz(1970)[49], the essence of such conceptual framework is to explain the observed

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phenomenon of information use or expressed need, the prediction of instances of information use or better still the control of the utilization of information through manipulation of essential conditions.

Unlike Merton, Coover, Paisely, Brittain and Lipetz, Crawford(1978)[50] asserts that advances in conceptualizing the field continues to be made. She refers especially to Caplan et al (1975)[51] in considering environmental variables distinguishing between information use in the physical and social sciences. The research indicates an overwhelming importance of political considerations in determining the ultimate use of research findings. Perhaps one of the most recent thoughts on the variables influencing the information seeking behaviour is that of Mick et al (1980)[52]. Their analysis of factors affecting information behaviour, individual work environment, and task attributes imply that environment and situational constraints, to a large extent determine information behaviour. According to them, "perceptions of management attitudes toward information work have a significant impact on individual information behaviour. They determine how much time individuals spend on information work, the values and attutude individuals bring to work and even individual information behaviour". They are of the view that individual information behaviour are the result of "... complex interactions involving personal attitudes, background, role, function, specific task situation and environment ...". They therefore suggest

that if information officers are to meet the information needs and uses of an information seeker it would require a detailed understanding of the dynamics of an individual information behaviour.

Perhaps one of the earliest recorded studies on users' behaviour was the one presented to the Royal Society Science Information Conference by Bernal(1948)[53] The focus of his study was to diffefentiate information needs if any of basic and applied scientists. In doing so, he used the questionnaire as a survey method to elicit data for the study. In the end, the study failed to show personal characteristics and environmental factors as determinants for information needs. Nevertheless it served as a lead to a mass of research projects that have emerged in the areas of information use and needs and information seeking behaviour both in the pure and social sciences.

Recognising the problems of information accessibility and its improvement, Streatfield and Wilson(1980)[54] undertook a major study of information users in British social services departments. This project is called information needs in local authority social services (INISS). As a part of the techniques for data collection, project INISS employed a structured observation. Project INISS revealed that social services people have a predilection for oral forms of communication. And secondly information requirements vary with the work role. For example Line managers - concern themselves

with staffing matters, implying a potential interest for literature in personnel management. The project finally submitted a proposal for the improvement of information flow. Emphasis was placed on the need to exploit more informal contact network as well as the formal communication system. This study confirms the position taken by Line that the study of information needs is better approached through the function category rather than the discipline of study.

Between 1967 and 1975 a project was started by the University of Bath called "Investigation into information requirements of the social sciences (INFROSS)[55]. The object of the study is to find out the information habits and needs of users of social science information and to see how their particular requirements can be met. One must concede that this is the largest project undertaken in the social sciences information so far. The research technique was based on questionnaire in which a sample of British social scientists mainly academics, government researchers, workers and school teachers was made. INFROSS found out among other things, function, environment and personal characteristics are strong elements in determining information seeking behaviour of the social scientists. And further, secondary services (indexes and abstracts) are relatively little used by the social scientists. According to the finding, the average number of indexing and abstracting services used was 1.7; 22% of respondents used none at all, and 65% used only one. This study has

a good deal of similarity with that of Aiyepeku(1975)[56] in terms of use made of scondary sources by the social scientists in Ibadan, Nigeria. The researcher discovered that most of the published journal articles of the Nigerian social scientist published in Nigeria are not covered by the international alerting services namely indexes, abstracts and current contents. In his own words:

> All of the internationally used indexing, abstracting and current awareness services for the social sciences are foreign based. The pattern of coverage of the leading 26 periodicals in this study suggests that a large proportion of Nigerian social science periodicals publishing Ibadan's research efforts are not covered by these international alerting services because they are not easily accessible while a few general purpose titles may not be considered relevant to the social sciences.

In this case the lack of the awareness of the existing material on the part of an information seeker constitutes a primary factor in the non-use of a given source of information.

Yet in the years 1969 and 1971 the INFROSS carried out another study on the social sciences researchers at the universities of Bath and Bristol[57]. The project carried out an "experimental information services" through the use of some staff known as "information officers" to gain firsthand experience on the problem of secondary information services. And secondly, the research would afford the opportunity of knowing how much informal sources of information are valued by the social science academics. Based on the "experimental information service", the research indicated that collaboration between the

"information officers" and the academics did not only improve secondary information services but germane to informal information transfer. The second aspect of this project is called "action research"[58] whose aim was on improving the secondary services. The scope is in respect of the universities of Sheffield and Bath. The researchers are of the view that even though the available formal sources of information are massive, they are indeed costly to both producers and purchasers(Librarians) to procure. Yet, according to the investigation "it could be improved with much less effort than it would be needed to improve the informal system".

The third project which later superceded INFROSS is known as design of information systems in the social sciences (DISISS)[59]. The focus of the research is to study the growth, size and structure of social science literature. The study covers the researchers at the University of Bath, Polytechnics of North London, and Open University. Although the result of the research appears inconclusive it indicates how unsatisfactory the present informal information system is. The study noted that since the 2nd World War, literature growth in the social sciences has been quite remarkable. Even then according to the study, the growth rate varies from one country to another and between subjects. For example, there is an increasing concentration of production in a few developed countries. In 1970 ten(10) countries produced 25% of serials published and 70% of monographs.

Access to these publications, the study maintains, is limited by the lack of adequate bibliographic tools. This factor the research further reveals, results among other things in the low use of secondary services. Yet, the study maintains that dependence on personal files and preprints made available to colleagues before publication are conditions that contribute to low use of secondary information services too. This study confirms the results of other investigations by Garvey, Atherton and Meadow as earlier indicated, that access and ease of use do determine the pattern of information use. Still on the relevance of secondary services to the information needs of social scientist, Weinstock (1979)[60] did discuss the importance of user studies. In his view, the design of citation indexes and the analysis of such indexes could help in the improvement of journal selection to satisfy demonstrated rather than hypothetical user needs.

So far the review has attempted an extensive review relevant to this study. But this has been done in a manner that does not address specific issues involved in the area of information seeking behaviour or user studies. These specifics are the theoretical and methodological considerations as they have been applied in the studies of information needs or users. On the theoretical plane, some have doubted the efficacy, the use and value of user studies. For example, Taube(1958)[61] brings to question

the rational behind user studies. He likens information service as a professional service to medicine but unlike a consumer service. He maintains that one cannot derive a measure of effectiveness from user studies neither can it guide one in the design of an information system. Similarly Shaw(1959)[62] is of the view that one cannot rely on one user study and plan for another information system. According to him, this is because there are variations in assumption, Methodology in use and problems associated with interpretation. Another element in this argument is the doubt being cast on the users to express their information needs explicitly. That is why Rees(1963)[63], Menzel(1964)[64], Line(1968)[65], (1968b)[66] have pointed out that users may not be in the position to specify totally their information requirements. They maintain, a user could only give a rough guide and very vague generalizations of the sources of information used. Moreover a user is most likely to encounter difficulty in trying to recall the past information behaviour so that in the end the potential respondent relies on the list of sources of information provided by the investigation for recall. Perhaps this is the reason why some researchers have argued that it would be futile to use interviews and questionnaire methods after the event since an information user may face the problem of recall. Britain(1970)[67] has suggested that it would be more rewarding to explore with the scientist, his day to day work. This presupposes the use of diary and tape recordings or the daily information activity of a scientist.

According to Brittain(1970)[68], enough effort has not been made in the study of information needs beyond merely looking at the demands made upon information services and conscious requirements of users, through the methodology of questionnaire and interview. Menzel(1967)[69] maintains that the study of "information needs include not only the information that users are aware of wanting, not even the information that would be good for them, but also the information that would be good for the progress of scientific research". He is of the view that no reliable and objective methodology has been used and no proposal has even emerged that could be used to assess information needs.

Goover(1969)[70] is of the opinion that one of the factors that has rendered most methodologies in information user studies unreliable, is technique-centredness, thereby putting the method before problem. On this point Brittain(1970)[71] submits that:

> The development of an adequate methodology goes hand in hand with theoretical developments, and until information science has an acceptable theoretical backing it is unlikely that a full fledged methodology will exist. It will be possible, in the absence of good theory, to introduce new methods and to improve existing ones, but the satisfactory evaluation of the results of user studies must wait upon advances in theory.

2.3 USE STUDY:

In another detailed investigation carried out by Robin and Melton(1969)[72] the concept of marketing research was employed for the study of users. Their study views researchers (literature users) as consumers (in the economic sense) of information whose consumption

pattern needs to be measured during a given period of time. But in doing so, they emphasised the necessity to isolate factors which can provide a means to predict the demand for a given product or service (information) so that proper planning can be made for allocation of resources in a changing market. The transfer of technical information is depicted by them as a complex social process in which technology, personal characteristics and organization value interact to influence the patterns of information behaviour. In order to determine the information needs of these researchers, they used the following methodology as a working procedure. That is, a count was made of each document charged out to each researcher investigated taking into consideration, their function, level of education, experience and age. Documents used by the researchers include books, reports, slides, movie films, translations, photocopies and others. And finally a count was made of the number of journal titles (highest number during period of study) received on distribution by researcher studied. The result of the experiment indicated that four dominant factors are considered in determing customer (researcher) behaviour. These are occupation (function) level of education(degree) experience and age.

Wolek and Griffith(1974)[73] made a review of literature on information communication and its relevance to the progress of applied science and technology. They lamented that even though previous investigations in

information needs have demonstrably shown a strong reliance on informal communication, it is the formal channel that has received institutional and policy makers' support[74]. According to them, progress in science and technology depends on the effective transfer of information based on the reduced cost and improving updatedness. They suggested that rather than making policies on informal communications and that of formal as mutually exclusive both must be considered as inter-related elements of the same system. This has probably prompted Menzel(1967)[75] to say:-

> Formal and informal scientific communication are complementary; they must not be thought of as alternatives in the sense that certain messages are obtained exclusively through the printed work the library, and the mechanised search and retrieval system, whereas others are obtained by the exclusive use of the word - of mouth and the telephone. The much more typical event is one in which the receipt of single messages is secured by the successive interplay of these two kinds of communication.

Wolek and Griffith suggested that one of the key ways of improving information transfer is to establish a balance between formal and informal activities so as to avert obstacles to professional progress. While both acknowledge that informal communication in an organization is a well defined network based on the abilities of individuals to monitor different fields, common acquaintances and common membership are factors that affect the probability of contact. The study expresses so far that the "informal communication system as it operates at present exhibits a bias against scientists who are younger or affliated with small, poorly financed or less prestigeous institutions"[76].

Twenty-two members of the staff from the Director to the lowest level social worker in five different departments were observed one week each to assess how they (workers) looked for, obtained and made use of information in their work. The second approach to the study was the interview constructed on the basis of those who had previously been observed, numbering one hundred and fifity-one(151). The conception of information according to the project INISS, is all information related to work knowledge communicated during formal meetings, informal discussion, via memoranda, publications or other means. The following independent variables are considered upon which the analysis of data was based. These are the organizational structure, work-role, personal characteristics that influence communication including but not restricted to officially acknowledged information services.

From the above review it can be noted that there are considerable diversity of approaches to the study of information seeking behaviour. This multidimensional approach to research in terms of conceptualization, methodology and interpretations of data are in themselves responsible for the emergence of a variety of findings, views and conclusions in this field of study. Studies have also shown that differentials in information needs occur among other things, due to institutional variations, function and personal characteristics. This polarization of perspectives by the various researchers have their strength and weakness.

This study unlike those reviewed, is carried out in Nigeria, an environment that is underdeveloped in terms of scientific and technological advancement. One of the implications of this low level of technological achievement is the relatively youthful stage of publishing as an industry in Nigeria. This situation has negatively affected the level of circulation of scholarly works and indeed the entire information behaviour of scholars in the social sciences. Publishing industry is foremost capital-intensive which requires high level scientific and technological manpower for its operation. This aspect of industrialization is relatively backward in Nigeria to the extent that its scholars have to depend largely on foreign publishers for their publications.

In the field of intellectual inquiry Nigerian scholars are disadvantaged in producing academic works that can adequately support their teaching and research needs. As an integral part of the underdevelopment phenonmenon in Nigeria, production cost of manuscripts run comparatively high. This situation in turn renders published materials difficult to acquire. Even though Nigerian scholars are largely dependent on foreign publishers for scholarly works, poverty in real income and technological distance themselves are contributory factors for the poor in-flow of published materials. Social science academics in Nigeria are conditioned by the social contect in which they live. Their information seeking behaviour are inevitably conditioned by the available literature, the degree of interaction between

scholars and the level of development of communication system.

This contradiction in terms of human and material resources between Nigeria and the advanced ecoomies make a research in the area of user study in the social sciences of this nature particularly worthwhile. Moreover, instances of user studies whose foci are on measuring the importance and/or usefulness of sources of informal and formal information are quite scanty in the social sciences in Nigeria. Secondly most of the reviewed literature give less significance to the problem of informal communication as provoked by the lack of published works. As a consequence recommendations on the means of improving the use of informal system of information in the social sciences are patchy. Thus, the thrust of this study is centred on comparing the informal channels against the formal media so as to determine their relative importance and/or usefulness to scholars in obtaining information for teaching and research.

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CHAPTER THREE

3.0 DATA ANALYSIS AND INTERPRETATION

The questions asked in this questionnaire are meant to probe various aspects of information needs and use. For that reason the questions are categorised to reflect these aspects. Questions 1-6 are on the characteristics of the sample in terms of department (discipline) qualification, status or rank, experience, sex and age.

Question 7, (variables A - J) seek to reveal how important certain sources of information are to the scholars in stimulating ideas which turned out to be of value for teaching and research.

Question 8, (variables A- I) deal with the issue of information retrieval and how useful certain tools are perceived to be by the social science academics in locating information.

Questions 9 and 10 (A - I) and (A - F) respectively examine the problem of keeping up with current information. Question 11 tries to determine the degree of interaction that exists between the Librarian and the scholar during the course of a research project. Question 12 considers the issue of research activity as a social organization and has identified variables A - L and their levels of importance in influencing a researcher in the social sciences. Category 13 is centred on the specific factors which the social science scholars may have perceived as a hinderance to academic activity. Questions 14 to 16 are concerned with the role of professional associations

in bringing scholars together to share ideas informally. Question 17(a & b) is intended to determine how important professional journals are to the scholars. Questions 14(b) and 15 are not analysed because of some errors committed during the course of coding which renders this particular aspect invalid. In addition to the treatment of data, comments generated during the interview are also summarised for inclusion in this chapter. And so, the structural arrangement of the analysis is divided into six subheadings. One and two are concerned with "sources of information for teaching and research" and "keeping abreast of fields" respectively. Parts three and four deal with "Factors in undertaking research" and "problems of keeping abreast" while "professional activities" and "interview" constitute the fifth and sixth subheadings.

3.1 Q1. Table 1:

The Distribution of questionnaire in each department

Department (Category Label	No. sent out	No. returned (Absolute Frequency)	%
Accounting	14	12	85.7
Business Admin.	16	12	75.0
CNCS	12	12	100.0
CSSR	14	12	85.7
Economics	12	9	75.0
Education	49	28	57.1
Geography	9	5	55.5
History	22	16	72.7
Law	17	14	82.3
Local Govt Studies	13	8	61.5
Political Science	24	17	70.8
Public Admin.	14	11	78.5
Sociology	19	15	79.9
Total	235	171	

As illustrated in table 1 (above) 235 questionnaires were administered with a response rate of 171(72.765%). Response rate in terms of departments is further shown in the table above. Thus, departments of Accounting and the Centre for Social and Economic Research gave a response rate of 85.7%(12 of 14) each. This is followed by law, sociology and Public Administration with 82.3%, 79.9% and 78.5% respectively. Business Administration and Economics maintain a response rate of 75% each. Departments of political science, Local Government studies, education Geography, History and the Centre for Nigerian Cultural Studies have each 70.8%, 61.5%, 57.1%, 55.5%, 72.7% and 100% respectively. Differences in response rate as seen in the various departments are partly due to the size of sample drawn from each department or discipline.

Q.2(Table 2) Qualification in terms of academic Degrees

Qualification (Category label)	Absolute Frequency	%	Relative Frequency	%	Cum Frequency	%
None response	1		.6		.6	
1st Degree	5		3.0		3.6	
2nd Degree	95		56.0		59.6	
3rd Degree	68		40.0		100.0	
Total	171		100.0			

As revealed by the statistics, the scholars that constitute 56%(95 of 171) are the holders of second degree in their respective disciplines and departments. This is followed by those who have doctorate degrees of 40%(68 of 171) and five academics who hold the qualification of first degree 3% (5 of 171) respectively. Given this level of

qualification, one can conveniently say that the population under study have had enough research experience to appreciate the problems associated with information needs in the social sciences.

Q.3(Table 3). A profile of academic rant or status of respondents.

Rank/Status (Category Label)	Absolute Frequency	Relative Frequency %	Cum Frequency %
Professor	6	3.5	3.5
Reader/Prin. Res. Fellow	17	10.0	13.5
Snr. Lecturer/Senr.R.Fellow	40	23.4	36.9
Lecturer 1/Res.fellow I	38	22.2	59.1
Lecturer II/Res.Fellow II	40	23.4	82.5
Asst.Lecturer/Asst.R.fellow	30	17.5	100.0
Total	171	100.0	

The sample (table 3) analysed reveals that 17.5%(30 of 171) and 23.4%(40 of 171) are Assistant Lecturer/Assistant Research Fellow and Lecturer II and Research Fellow II respectively. While Lecturer I/Research Fellow I constitutes 22.2%(38 of 171) that of senior lecturer and Research Fellow is 23.4%(40 of 171). And finally, there is a sharp fall in the percentages of Reader/Principal Research Fellow and Professor of 10%(17 of 171) and 3.5%(6 of 171) in that order.

3.4 Q.4.(Table 4). Grouped Data of the academics showing the years of experience in teaching and research.

Experience (Category Label)	Absolute Frequency	Relative Frequency %	Cum Frequency %
1 - 5 Years	26	15.2	15.2
6 -10 "	73	42.7	57.9
11 -15 "	43	25.1	83.0
16 -20 "	17	9.9	93.0
21 -25 "	6	3.5	96.5
26 -30 "	2	1.2	97.7
30 and above	2	1.2	98.8
None response	2	1.2	100.0
Total	171	100.0	

The above shows that scholars whose experience in teaching and research ranges from 6 - 10 years constitute the majority 42.7%(73 of 171). But those whose experience in teaching and research is between 11 and 15 years indicate 25.1%(43 of 171). Respondents whose experience is between 1 - 5 years is 15.2%(26 of 171). This large number of the inexperienced academics tallies relatively with the vast majority of the academics who fall within the lower rank of lecturership. The scholars whose experience stretches from 16 - 20 years constitutes 9.9% (17 of 171) while those who fall between 21 and 25 is 3.5% (6 of 171). A negligible percent of 1.2%(2 of 171) belong to 26-30 years of experience. As the number of years of experience increases from 16 and above, there is a corresponding decrease in the number of academics with such experience.

4.5(Table 5). Grouped Data of the sex of the respondents.

SEX (Category label)	Absolute Frequency	%	Relative Frequency	%	Cum. Frequency	%
Male	142		83.0		83.0	
Female	21		12.3		95.3	
None response	8		4.7		100.0	
Total	171		100.0			

As illustrated by table 5(above), 83%(142 of 171) of the academics are male. Female academics constitute 12.3%(21 of 171) and 4.7%(8 of 171) gave no response. This table indicates that teaching as a profession in the faculties of social sciences in A.B.U. is overwhelmingly male dominated. This low level of femal percentage that are currently engaged in teaching social sciences in A.B.U.

reflects the general situation in Nigeria where a few number of women have benefited from university education.

Q.6(Table 6): Age composition of the respondents.

(Age Group) Category label	Absolute Frequency %	Relative Frequency %	Cum. Frequency %
21 - 30 years	29	17.0	17.0
31 - 40 years	95	55.6	72.5
41 - 50 years	42	24.6	97.1
51 - 60 years	4	2.3	99.4
None response	1	.5	100.0
Total	171	100.0	

The statistic above indicates that 55.6%(95 of 171) of the academics age lie between 31 - 40 years. This is an indication that the majority of the scholars are relatively young who are probably ready to embark on more research to gain promotion and recognition in their fields. The category of the age between 41 and 50 years is 24.6% (42 of 171). This is less than half of those whose age ranges from 31-40 years. The number of scholars between 21 - 30 years is 17%(29 of 171). This category of lecturers consists the most junior in rank (i.e. Assistant Lecturer and Lecturer II status.)

3.2 SOURCES OF INFORMATION FOR TEACHING AND RESEARCH.

Q.7.(Variables A - J). Relative importance of information sources in stimulating ideas for teaching and research.

(Variable 7(A) Table A) Mass Mdeia. (Radio and T.V)

Category label	Weight	Respondents (Abso.Freq.%)	Relative Frequency %	Cum. Freq.%
Not important	1	27	15.8	15.8
Moderately imp.	2	67	39.2	55.0
Important	3	43	25.1	80.1
V. important	4	19	11.1	91.2
Most important	5	6	3.5	94.7
None response	9	9	5.3	100.0
		171	100.0	

Variable 7(A) Table 7A reveals that social science scholars 55%(94 of 171) consider radio and television as either "important" or "moderately important" sources respectively through which they gain knowledge for teaching and research. 15.8%(27 of 171) see radio and television as not important sources of information for teaching and research. This is followed by the 11.1%(19 of 171) of the respondents who regard the sources as very important. A very few number of the academics 3.5%(6 of 171) further indicated that these media are most important. 5.3%(9 of 171) of the scholars made no comment on the importance or non-importance of these sources. Based on these statistics, one could say that radio and television are not important sources through which the social sciences academics obtain information for teaching and research.

Variable 7(B) table 7B Mass Media. (Newspapers)

Newspapers: Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not important	1	4	2.3	2.3
Moderately important	2	40	23.4	25.7
Important	3	78	45.5	71.3
V. Important	4	27	15.8	87.1
Most important	5	14	8.2	95.3
None response	-	8	4.7	100.0
Total		171	100.0	

Variable 7(B) table 7B reveals that 45.5%(78 of 171) of the academics found Newspapers important as a formal source of information for their teaching and reseafch. Yet 15.8%(27 of 171) consider newspapers "very important". 23.4%(40 of 171) see the use of them as "most important". 23.4%(40 of 171) of the scholars admitted that the use of

newspapers is "moderately important". The overall usage of newspapers by the social science scholars and the importance they attach to them is relatively higher than the use made of radio and television. This is true especially if one looks at the combined percentages of "important" and "very important" of variables 7(B) and 7(A) which are 61.3% and 36.2% respectively.

Variable 7(c) Table 7(c) Journals/Periodical/Serials in corefield:

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not important	1	3	1.8	1.8
Moderately imp.	2	7	4.0	5.8
Important	3	49	28.7	34.5
Very Important	4	108	63.2	97.7
Most important	5	4	2.3	100.0
None	0	0	00.0	
		171	100.0	

The above table showed that 63.2%(108 of 171) social science academics found journals/periodical/serials "very important channel through which information is obtained for teaching and research. This is followed by 28.7% (49 of 171) of the academics who indicated that the same source of information is "important" for teaching and research. The percentage of those who acknowledged that journals/periodicals/serials are relatively "not important" and "moderately important are 1.8%(3 of 171) and 4.0% (7 of 171) respectively. That 63.2% of the academics have rated journals/periodicals/serials "very important" showed the extent to which the scholars valued the use of such materials.

Variable 7(d) Table 7(d) Books:

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum Freq.%
Not important	1	1	.6	.6
Moderately imp.	2	0	0.0	0.0
Important	3	5	2.9	3.5
V. Important	4	59	34.5	38.0
Most important	5	100	58.5	96.5
None response	-	6	3.5	100.0
		171	100.0	

The respondents who indicated that books are "most important" as a means of getting information for teaching and research are 58.5%(100). This is followed by 34.5% (59 of 171), the academics who agreed that this medium is "very important"for teaching and research. While none of the scholars considered "books" as "moderately important" only very negligible proportion .6%(1) and 2.9%(5) of the academics showed that the channel is "not important" and "important" respectively. A close look at this frequency distribution, showed that this medium of communication is easily the most prominent channel through which social science scholars acquire ideas for teaching and research. This is because there is a large concentration of use as indicated by the scholars around the scales of "very important" and "most important" of 34.5% and 58.5% respectively. As shown by the statistics Books still remain the most prominent channel of communication amongst the social science academics in Ahmadu Bello University, Zaria.

Variable 7(e) Table(e): Journals/Periodicals/Serials in Peripheral fields. (Formal)

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum Freq.%
Not important	1	3	1.8	1.8
Moderately imp.	2	15	8.8	10.5
Important	3	53	31.0	41.5
Very important	4	70	40.9	82.5
Most important	5	24	14.0	96.5
None response		6	3.5	100.0

The distribution showed that 40.9%(70 of 171) of the scholars see this published medium as "very important" a source through which ideas are obtained for teaching and research. 31% of the academics also indicated that this source of information is "important". The academics 14.0% (24 of 171) agreed that this channel of communication is "most important" and 8.8%(15 of 171) and 1.8%(3 of 171) are percentages of those who see the source as moderately important and "important" respectively for their information. Those who did not give any response at all are 6(3.5%).

The use of and the importance the academics attach to journals/periodicals/Serials in peripheral areas comes quite close to those in core fields. This is because while the 63.2% and 28.7% of the academics showed "very important" and "important" respectively for the use of journals in core areas, 40.9% and 31.0% are for journals in peripheral fields respectively. While priority must be given to the acquisition of journals in core fields in the social science, Librarians and information scientists must not underrate the provision of journals in marginal areas.

Variable 7(f). Table 7(f): Informal academic interaction with colleagues.

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not important	1	3	1.8	1.8
Moderately imp.	2	22	12.9	14.6
Important	3	76	44.4	59.1
Very important	4	55	32.2	91.2
Most important	5	13	7.6	90.8
None response		2	1.2	100.0
		171	100.0	

The statistic reveals that 44.4%(76 of 171) of the academics considered informal academic interaction with their colleagues as "important" for obtaining ideas which turned out to be value for teaching and research. This is followed by 32.2%(55 of 171) that found this informal means "very important". While 1.8%(3 of 171) indicated that this source is not important. 12.9%(22 of 171) admitted that it is "moderately important". As 44.4% of the scholars had indicated, this informal means constituted one of the popular sources through which knowledge is acquired for teaching and research. This is particularly true as 32.2% had shown that this medium is "very important". Given the overall distribution of the frequency, the informal channel was seen to be of less importance compared to the formal sources of information. However, the importance attached to this medium is considered relatively high amongst the scholars.

Variable 7(g), Table 7(g): Conferences/Meetings/-Seminars/Workshops.

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not important	1	0	0.0	0.0
Moderately imp.	2	13	7.6	7.6
Important	3	68	39.8	47.4
Very important	4	57	33.3	80.7
Most important	5	28	16.4	97.1
None response		5	2.9	100.0
		171	100.0	

Variable 7(g) showed that 39.8%(68 of 171) of the scholars considered this unpublished medium "important" compared to the 33.3%(57 of 171) who said it was "very important". A percentage of 16.4(28) further agreed that this source was "most important" while 7.6%(13 of 171) indicated "moderately important". Those who did not give any response were 5(.29%) 16.4%(28 of 171) of the academics indicated that this source was most important. This showed that it was indispensable to a few number of scholars as a source of information unlike most of the variables examined so far, no scholar had indicated that this medium was "not important" to him.

Variable 7(h), Table 7(h): Preprints.

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not important	1	87	65.8	15.8
Moderately imp.	2	60	35.1	50.9
Important	3	41	24.0	74.9
Very Important	4	22	12.9	87.7
Most important	5	29	5.3	93.0
None response		12	7.0	100.0
		171	100.0	

As showed by the distribution, 35.1%(60 of 171)

viewed the use of preprints as "moderately important" to their teaching and research. But 24.0%(41 of 171) of them considered it "important" while 12.9%(22 of 171) saw preprints as "very important". While 15.8%(37 of 171) admitted that the source was "not important", 7.0%(12 of 171) gave no response and 5.3%(9 of 171) said it was "most important". Considering the overall assessment of this channel, over 50% of the academics either do not attach any importance to it or considered it of little importance. In view of low importance attached to this medium, preprints is not a popular channel of communication amongst the social science scholars in Ahmau Bello University, Zaria.

Variables 7(I), Table 7(I): Government Documents.

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not important	1	19	5.3	5.3
Moderately imp.	2	17	9.9	15.2
Important	3	52	30.4	45.6
Very important	4	61	35.7	81.3
Most important	5	22	12.9	94.2
None response		10	5.8	100.0
Total		171	100.0	

The statistic indicated that 35.7%(61 of 171) of the social science scholars considered Government Documents as "very important" for teaching and research. This was followed by (52 of 171) 30.4% of them who saw this source as "important". While 12.9%(22 of 171) agreed that government documents are "most important", 9.9%(17 of 171) showed that 5.3%(9 of 171) of the academics indicated that the source is "not important" while there was no response

from 5.8%(10 of 171).

As this frequency distribution had shown, one cannot underrate the importance of government documents as a vital source of communication that aids teaching and research in the social sciences. Thus Librarians and information scientists should not only concern themselves with the provision of text books and journals for the social science academics but also government documents.

Variable 7(J), Table 7(J): Other Communication Channels.

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not important	1	2	1.2	1.2
Moderately imp.	2	2	1.2	2.4
Important	3	5	2.9	5.3
Very important	4	11	6.4	11.7
Most important	5	17	9.9	121.6
None response		134	78.4	100.0
Total		171	100.0	

The scholars were asked to indicate other than those mentioned in the questionnaire which they had used in gaining information for teaching and research.

While 78.4%(134 of 171) of the academics gave no response at all, 9.9%(17 of 171) said other communication channels are "most important". The distribution further indicated that 6.4%(11 of 171) considered other sources as very important. An insignificant percentage of 2.9, 1.2. and 1.2. respectively saw the use of other sources as "important","moderately important" nd "most important".

In addition to the sources mentioned, other channels of communication exploited to obtain critical information by the academics were indicated. For example, historians indicated that they relied to a large extent on the use of oral tradition and ethnography as a means for obtaining information for teaching and research. Similarly too the researchers in the Centre for Nigerian Cultural Studies (CNCS) depend on observation (e.g. participant observation) or field research for gaining critical information, that enables informed research. Geographers also admitted that in addition to the use of published material, travels and field study were occasions where information was obtained for teaching and research.

The implications of these comments are that social science academics depend on the variety of information source for teaching and research. A Librarian may probably be unaware of these communication structures in the discharge of his function and thereby neglecting a very important channel of communication. On this basis the information needs of an academic social scientist may not be adequately met.

Formal and Informal sources of information compared:

A. FORMAL (Table A):

		Absolute Frequency	Relative Frequency %	Cum. Freq.%
I	Books	1062	30.7	30.7
II	Journals/Periodical/-Serials in core field	900	26.0	56.7
III	Govt. Documents	700	20.2	76.9
IV	Journals/Periodical/-Serials in peripheral area.	600	17.3	94.2
V	Mass media(e.g.N/papers)	200	5.8	100.0
	Total	3462	100.0	

B. INFORMAL (Table B)

		Absolute Frequency	Relative Frequency%	Cum. Freq.%
I	Conferences/Seminars/-Meetings/Workshops.	860	39.0	39.0
II	Informal academic interaction with colleagues	700	31.7	70.7
III	Preprints	430	19.4	90.1
IV	Mass Media(e.g. Radio and T.V.)	219	9.9	100.0
	Total	2209	100.0	

Both sources (Tables A & B) are compared. This is done to see whether differences exist in the relative importance attached to each by the academics as a means for getting information for teaching and research. In the five Likert scale (1-5) provided in the questionnaire, all the scores belonging to formal channels of information were added up. Each score was also counted and aggregated for the informal channels of information. The total count of each represents column "Absolute Frequency" from which "relative frequency percentage" and "cumulative frequency percentage" are derived in the subsequent columns.

Based on the distributions as seen in "A" and "B" (preceeding page) the total count of scores (most important) belonging to formal sources of information (3462.00) are greater than that of the scores (most important) derived from the informal sources of information of (2209). Thus the importance attached to formal sources as a means of obtaining information by the social science academics is appreciably more than that of the informal sources of information. The differences between the two channels

of communication are also manifest if one compares their relative frequency percentages.

Apart from this "count" if one looks at the scores of importance attached to the individual channel of communication (both formal and informal) analysed so far, the formal channel predominated in importance. For instance 63.2% of the social sciences scholars scored the use of journals/periodicals/serials in core fields as "very important". Further those who indicated that "books" are "most important" and"very important"were 58.5% and 34.5% respectively. Journals/periodical/Serials in peripherial areas were scored as "most important" and "very important" by 14.4% and 40.9% respectively. Three media within the informal source of information of comparable degree of popularity with those in the formal were considered too. Thus conferences/Meetings/-Seminars/Workshops were rated "most important" and "very important" by 16.4% and 33.3% of the academics each. It further showed that the scholars who considered as "most important" and "very important" of the use of informal academic interaction with colleagues as a source were 7.6% and 32.2% in that order. Finally, 12.9% and 5.3% of the academics saw preprints as "most important" and "very important" respectively.

Given the statistics, the formal sources of information predominate as a means of obtaining information for teaching and research by the scholars in the social sciences. Thus the result of this investigation did not

support the hypothesis that: the social scientist in Ahmadu Bello University depends more on informal channels of information than the formal for obtaining data that is of value to teaching and research.

Q.8.(Variables A - I): Relative importance of information sources in locating materials for teaching and research,(e.g. references in books and journals).

Category Label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not useful	1	0	.0	0
Moderately useful	2	2	1.2	1.2
Useful	3	38	22.2	23.4
Very useful	4	75	43.9	67.3
Most useful	5	52	30.4	97.7
None response		4	2.3	100.0
		171	100.0	

As shown by the frequency distribution, 43.9%(75 of 171) of the academics indicated that references in books and journals are "very useful" in locating materials for teaching and research. This was followed by 30.4%(52 of 171) who found the source "most useful". While 22.2% (38 of 171) rated it "useful", 1.2%(2 of 171) said it was moderately useful and none of the scholars indicated that it was not useful. Those who did not provide any response at all was 4 of 171(2.3%). As the statistic showed, the number of the scholars who agreed that references in books and journals were very useful and most useful (combined) in locating information was 74.3% (127 of 171). This was an indication that the overwhelming majority of the scholars relied on this information

source in retrieving information for teaching and research.

Q.8B.(Table 8B): Library Catalogues

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not useful	1	2	1.2	1.2
Moderately useful	2	63	36.8	38.0
Useful	3	39	22.8	60.8
Very useful	4	34	19.9	80.7
Most useful	5	28	16.4	97.1
None response		5	2.9	100.0
		171	100.0	

Variable 8 indicated that scholars who said library catalogues are "moderately useful" were 63 of 171(36.8%). 39 of 171(22.8%) of them indicated "useful" while 34 of 171(19.9%) agreed that Library catalogues are "very useful". The table further showed that 28 of 171(16.4%) of the academics indicated "most useful",(5 of 171)(2.9%) of them said the variables was not useful in locating information.

From the statistic, it was clear that the scholars who indicated that library catalogues are "moderately useful" and "useful". And conversely, the number of them who indicated that this source was "very useful" and "most useful" decreases progressively. Comparatively, while most of the academics considered reference to books and journals is most useful, the reverse was the case with library catalogues. Based on these data, one could conclude that library catalogues are less useful to the academics in the social sciences in Ahmadu Bello University than references to Books and journals.

4.8.(Variable 8C), Table 8(C): Abstracts and Indexes.

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not useful	1	25	14.5	14.6
Moderately useful	2	51	29.8	44.4
Useful	3	49	28.7	73.1
Very useful	4	27	15.8	88.9
Most useful	5	13	7.6	96.5
None response		6	3.5	
		171	100.0	

Table 8C variable 8(C) showed that 51 of 171(29.8%) of the academics considered abstracts and indexes as moderately useful while 28.7%(49 of 171) saw this source as useful. 15.8%(27 of 171) indicated that this medium is very useful and 7.6%(13 of 171) rated it as most useful. Whereas 14.6% (25 of 171) admitted that the medium is not useful, 3.5% (6 of 171) gave no response.

As the table shows, the majority of the scholars (53.5%) indicate that Abstracts and indexes are either moderately useful or useful. This leaves the distribution of those who said this source is very useful and most useful comparatively small. It is also important to take note of the proportion of those (14.6%) who indicated this source is not useful in locating information. It is an indication therefore that this variable is not well exploited to serve the information needs of the academics. One may deduce that the reason for the poor use of abstracts and indexes by the social science academics was due to the lack of awareness that this source could provide access to the latest research findings.

Q.8D. (Table 8D): Discussion with Colleagues

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	1	.6	.6
Moderately useful	2	34	19.9	20.5
Useful	3	86	50.3	70.8
Very useful	4	31	18.1	88.9
Most useful	5	14	8.2	97.1
None response		5	2.9	
Total		171	100.0	

The statistic indicates that 50.3%(86 of 171) see this channel as useful and 19.9%(34 of 171) say it was moderately useful. The table further showed that 18.1%(31 of 171) of the academics considered it very useful while 8.2%(14 of 171) recorded it as most useful. 2.9%(5 of 171) gave no response, and 6% of (1 of 171) said it is not useful.

This medium, as indicated above, shows that the social science academics rely heavily on their colleagues to get to know the existence of certain works.

Q. 8E. (Table 8E): Consulting experts in the same or similar research areas

Category label	Weight	Respondents (Absol.Freq.)	Relative Freq.%	Cum. Freq.%
Not useful	1	4	2.3	2.3
Moderately useful	2	30	17.5	19.9
Useful	3	57	33.3	53.2
Very Useful	4	58	33.9	87.1
Most useful	5	18	10.5	97.7
None responses		4	2.3	100.0
		171	100.0	

The frequency distribution showed that 33.9%(58 of 171) of the respondents indicated consulting experts in the same or similar research areas is very useful in locating

materials for teaching and research. Similarly 33.3% (57 of 171) of them said it is useful while 17.5%(30 of 171) admitted it as moderately useful. 10.5%(18 of 171) indicated it is most useful, 2.3%(4 of 171) made no comments.

While the scores for this channel were fairly proportionately distributed, the number of the scholars who agreed that this source is either useful or very useful for locating materials for teaching and research is quite high. If one compares these scores with the media such as the library catalogues and the abstracts and indexes, they revealed that consulting experts in the same or similar research areas in locating information cannot be underrated.

..8(F) Table 8F: Books Reviews:

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	43	25.1	25.1
Moderately useful	2	39	22.8	40.0
Useful	3	40	23.4	71.3
Very Useful	4	33	19.3	90.6
Most useful	5	6	3.5	94.2
None response		10	5.8	
		171	100.0	

The statistic revealed that 25.1%(43 of 171) of the academics in the social sciences viewed book reviews as not useful for locating materials for teaching and research. This was followed by 23.4%(33 of 171) who indicated that the medium is useful and 22.8%(39 of 171) considered book reviews as moderately useful. 19.3%(33

of 171) of scholars show that the medium was very useful, 3.5%(6 of 171) admitted it was most useful and 5.8%(10 of 171) made no comment at all.

Given the nature of data presented, book reviews are relatively not as useful to the academics in the social science as other retrieval devices in locating material for teaching and research. For example, 25.1% of the academics had considered book reviews as not useful. Conversely, only an insignificant percentage (3.5%) of the respondents saw book reviews as most useful.

In view of this statistic as shown, book reviews cannot be said to be a signicant medium for locating materials for teaching and research.

3.83. (Table 8G): Requesting Librarians for assistance (e.g. access to material and other information services).

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	14	8.2	8.2
Moderately useful	2	60	35.1	43.3
Useful	3	61	35.7	78.9
Very useful	4	21	12.3	91.2
Most useful	5	12	7.0	98.2
None response		3	1.8	
		171	100.0	

The frequency distribution indicated that 35.7%(61 of 171) of the scholars considered requesting librarians for assistance as useful and followed by 35.1%(60 of 171) who said it was moderately useful. 12.3%(21 of 171) indicated it is very useful in locating materials for teaching and research and 7%(12 of 171) admitted it is

academics found references in seminar/conference papers useful in locating materials for teaching and research. At the same time 26.3%(45 of 171) considered this source as very useful, while 12.3%(21 of 171) saw the medium as moderately useful. 1.8%(3 of 171) made no comment and an insignificant number of .6% said it is not useful.

The relative usefulness of this medium to social science scholars cannot be in doubt because over half of the total respondents indicated that it is useful. Moreover, there was an increasing indication of its usefulness as 26.3% of the academics showed that it is very useful. As a whole all the academics had indicated to a certain extent how useful references in seminar/conference papers are to them except a negligible percent of .6.

Q.8 I:(Table 8.I); References in research projects and theses.

Category label	Weight	Respondents Absol.Freq.	Relative Freq. %	Cum. Freq.%
Not useful	1	1	1.2	1.2
Moderately useful	2	45	26.3	27.5
Useful	3	54	31.5	59.1
Very useful	4	49	28.7	87.7
Most useful	5	12	7.0	94.7
None response		9	5.3	100.0
Total		171	100.0	

The statistic showed that 31.5%(54 of 171) of the respondents considered references in research project as useful and 28.7%(49 of 171) saw this source as very useful. 26.3%(45 of 171) felt that the channel is moderately useful whereas 7.0%(12 of 171) indicated that it is most useful. Just as 1.2%(2 of 171) felt that it

most useful. 8.2%(14 of 171) of the academics are of the view that it was not useful while 1.8%(3 of 171) gave no response.

A few(19.3%) of the academics considered delegating literature search to the Librarian as either very useful or most useful. The majority(70.8%) saw requesting a librarian for assistance as moderately useful or useful. However, the table indicated that librarians are not perceived as a key factor by the social science scholars in providing assistance for locating materials for teaching and research. A deduction based on this statistic can be made. Firstly, the social science scholar might not see the librarian as his intellectual colleague capable of academic assistance. Secondly, the scholar may not like to betray ignorance by asking the librarian for an assistance in an academic enquiry which the former was supposed to have been familiar. However, a sustained collaboration between the two (academics and the librarians) is needed to facilitate research.

G.8H.(Table 8H): References in Seminar/Conference Papers.

Category label	Weight	Respondents Absol. Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	1	.6	.6
Moderately useful	2	21	12.3	12.9
Useful	3	89	52.0	64.9
Very useful	4	45	26.3	91.2
Most useful	5	12	7.0	98.2
None response		3	1.8	100.0
Total		171	100.0	

The table indicated that 52.0%(89 of 171) of the

is not useful, 5.3%(9 of 171) made no comments.

If one compares the relative usefulness of references in research projects and theses to that of references in seminar/conference papers, the social science academics found the former less useful than the latter. For example if one added up the percentages of the category label of "useful" and "very useful" of each variable, that of references in research projects and theses is 60.2%, whereas that of the references in seminar and conference papers is 70.3%. The low use of this source by the social science scholars migh be due to lack of access to this variable. If research results are made available either by the institution or the librarians, this migh enhance its use.

3.2 KEEPING ABREAST OF FIELD.

Question 9 sought to know the degree to which social science academics found (variables A - I) useful in keeping up with current information.

Q.9A:(Table 9A): Preprints.

Category label	Weight	Respondents Absol. Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	21	12.3	12.3
Moderately useful	2	72	42.1	54.4
Useful	3	26	15.2	69.6
Very useful	4	24	14.0	83.6
Most useful	5	16	9.4	93.0
None response		12	7.0	
Total		171	100.0	

42.1%(72 of 171) of the scholars felt that preprints is moderately useful and 15.2%(26 of 171) of them considered it as useful. The table further showed

that 14.0%(24 of 171) of the respondents indicated that it was very useful, 9.4%(16 of 171) of them said it was most useful, 12.3%(21 of 171) confirmed it was not useful, and 7.0%(12 of 171) had no response.

One could infer from the table that preprints are not relied upon by the scholars for keeping up with current information. This is because a total of the percentage of the category label of "useful" and "very useful" simply amounted to 29.2% of the respondents. And secondly, as high as 12.3% of them indicated that it was not useful. The fact that 42.1% of the scholars felt it was moderately useful showed the degree of little use being made of the preprints. The responses as expressed in this table were not unexpected because they tended to collaborate with the statistical evidence given under question 7, when preprints were first examined on its importance in stimulating ideas for teaching and research.

Q.9B:(Table 9B): Conference/Seminars/Meetings/Workshops.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	1	.6	.6
Moderately useful	2	13	7.6	8.2
Useful	3	65	38.0	46.2
Very useful	4	57	33.3	79.5
Most useful	5	33	19.3	98.8
None response		2	1.2	100.0
		171	100.0	

The Data showed that 38.0%(65 of 171) of the scholars felt that conferences/seminars/meetings/workshops are useful for keeping up with current information. This was followed by 33.3%(57 of 171) who indicated very useful

and 19.3%(33 of 171) who rated it most useful. While .6%(1 of 171) felt it was not useful, 1.2%(2 of 171) gave no response.

Based on this data, the source was relatively more useful to scholars in the social sciences in A.B.U. in keeping up with current information than the preprints. For instance, the percentage of (38.0%) who declared the source useful is fairly high compared to that of preprints. The extent of reliance on this medium is appreciably high if one looks at the category labels of "very useful" and "most useful" of 33.3%(and 19.3% respectively). Its value is also glaring because the proportion of respondents who felt the source is not useful and moderately useful had reduced significantly to .6% in that order.

Q. 9C: (Table 9C): Research reports, including dissertation, thesis and project.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	0	0	0
Moderately useful	2	27	15.8	15.8
Useful	3	53	31.0	46.8
Very useful	4	56	32.7	79.5
Most useful	5	31	18.1	97.7
None response		4	2.3	100.0
		171	100.0	

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The frequency distribution showed that 32.7%(56 of 171) of the respondents indicated that research reports are very useful for keeping up with current information. This was followed by 31.0%(53 of 171) of the scholars who said the source is useful and 18.1%(31 of 171) who felt it is most useful. 15.8%(27 of 171) of the academics indicated

moderately useful, none amongst them felt it is not useful while 2.3%(4 of 171) gave no response.

The distribution showed that 50.8% of the respondents considered this medium most useful and very useful. This is an indication that the value that could be derived from the use of this source for keeping up with current information is beyond average. In addition, none of the respondents indicated that this source is not useful.

Q.9D:(Table 9D & E): Academic Interaction with Colleagues and printed bibliographies examined.

Table 9D.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	1	.6	.6
Moderately useful	2	23	13.5	14.0
Useful	3	62	36.3	50.3
Very useful	4	60	35.1	85.4
Most useful	5	19	11.1	96.5
None response		6	3.5	100.0
		171	100.0	

Q.9E (Table 9E): Printed Bibliographies.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	19	11.1	11.1
Moderately useful	2	63	36.8	48.0
Useful	3	42	24.6	72.5
Very useful	4	35	20.5	93.0
Most useful	5	7	4.1	100.0
Total		171	100.0	

Q.9D & E (Tables D & E) were campared to see the degree to which these sources were found useful by the social science academics in keeping up with current information. Table D indicated that 36.3%(62 of 171) of

the respondents found the source useful and 35.1%(60 of 171) very useful. Table E on the other hand, showed that 24.6%(42 of 171) of the respondents found it useful while 20.5%(35 of 171) of them felt it is very useful. While table(D) showed that 13.5%(23 of 171) saw the medium as moderately useful table(E) had 36.8%(63 of 171) of the academics who said printed bibliographies are moderately useful for keeping up with current information. Response in table (D) showed that 11.1%(19 of 171) of the respondents indicated most useful and that of table(E) expressed that 4.1% found the source most useful. As .6%(1 of 171) of the academics in table(D) felt that the source is not useful, 11.1%(19 of 171) (table E)said that it is not useful. 3.5%(6 of 171) of the respondents in (table D) made no comment as against 2.9%(5 of 171) in (table E) who gave no response.

A look at the two tables, one finds that academic interaction is more useful to the scholars than the printed bibliographies. For example, while 36.8% of the respondents in (table E) found this source moderately useful, 13.5% in (table D) indicated moderately useful. As high as 11.1% in table E showed that the academics felt that the printed bibliographies is not useful but the statistic in table D expressed .6%. The scholars relied on the academic interaction with colleagues more than the printed bibliographies. This is because the category label under useful and very useful in table D indicated a higher proportion (36.3%, 35.1%) respectively whereas that of table E is 24.6% and 20.5% respectively.

Q.9:(Tables 9F & G): Book reviews and Browsing in Bookshops compared.

Table 9F: Book Reviews.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	48	28.1	28.1
Moderately useful	2	35	22.2	50.3
Useful	3	41	24.0	74.3
Very useful	4	31	18.1	92.4
Most useful	5	6	3.5	95.9
None response		7	4.1	100.0
Total		171	100.0	

Q.9G: (Table 9G): Browsing in Bookshop

Category label	Weight	Respondents Absol. Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	49	28.7	28.7
Moderately useful	2	53	31.0	59.6
Very useful	3	34	19.9	79.5
Most useful	4	18	10.5	90.1
None response	6	6	3.5	93.6
		11	6.4	
Total		171	100.0	

As earlier stated, Tables 9F and G were compared to see the degree to which these two sources are useful in keeping up with current information. 28.1%(48 of 171) of the respondents in table F felt that book reviews are not useful while 28.7%(49 of 171) expressed same in table G. Table F further showed that 22.2%(38 of 171) of the scholars expressed that book reviews are moderately useful as against 31.0%(53 of 171) in table G. Statistics in table F indicated that 24.0%(41 of 171) of the academics showed that the source is useful, 18.1% very useful and 3.5% indicated most useful but 4.1%(7 of 171) made no response.

As it was found in Table G, 19.9%(34 of 171) of the

respondents expressed the source as useful, 10.5% (18 of 171) felt that it is very useful and 3.5%(6 of 171) indicated it to be most useful whereas 6.5%(11 of 171) gave no response.

As the two tables had shown, social science academics found these sources of relatively little use in keeping up with current information. For instance, over 50% of the respondents felt that book reviews or browsing in bookshops are either not useful or moderately useful. This result was quite expected because in Nigeria the newly locally published materials are scarce coupled with the problem of book importation. If the number of locally published materials are few one would naturally expect the reviewed materials to be low too. Further, if bookshops located on the university campuses are hardly replenished with new books the academics would certainly feel discouraged to go there for new additions.

Q.8: (Table 9H & I): Library accession list and abstracts and indexes compared.

Q.9.(Table 9H): Library accession List.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	53	31.0	31.0
Moderately useful	2	55	32.2	63.2
Useful	3	34	19.9	83.2
Very useful	4	16	9.4	92.4
Most useful	5	5	2.9	95.3
None response		8	4.7	100.0
Total		171	100.0	

Q.9.(Table 9I): Abstracts and Indexes.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not useful	1	43	25.1	25.1
Moderately useful	2	53	31.0	56.1
Useful	3	32	18.7	74.9
Very Useful	4	25	14.6	89.5
Most useful	5	5	2.9	92.4
None response		13	7.6	100.0
Total		171	100.0	

As table H showed, 31.0%(53 of 171) of the respondents considered library accession list as not useful, 32.2% (55 of 171) moderately useful and 19.9%(34 of 171) saw it as useful. While 9.4%(16 of 171) of the academics felt the source is very useful, 2.9%(5 of 171) indicated most useful and 4.7%(8 of 171) expressed no responses. On the other hand, table I revealed that 25.1%(43 of 171) of the academics felt that abstracts and indexes are not useful and 31.0%(53 of 171) said it is moderately useful. The statistics further showed that 18.7%(32 of 171) of the scholars found the channel useful 14.6%(25 of 171) very useful, 2.9%(5 of the 171) most useful and 7.6%(13 of 171) did not respond.

From the statistics, library accession list and abstracts and indexes are not well exploited by the social science scholars as a means for keeping up with current information. For instance, 31.0% of the respondents in table H found the source not useful while those in table 9 I, of 25.1% considered abstracts and indexes not useful. Table 9H revealed further that 32.5% of the

academics merely considered the library accession list as moderately useful while table I expressed that 31.0% of them saw abstracts and indexes moderately useful. This means that 63.2% of the respondents in table H and 56.1% in table I respectively considered the use of these sources as a means for keeping up with current information of little use.

Question(ten)10, was asked to determine the level of importance social science academics in A.B.U. attach to (variables A-F) in keeping tract of current research in progress.

Q. 10A:(Table 10A); Colleagues in A.B.U.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	6	3.5	3.5
Moderately imp.	2	23	13.5	17.5
Important	3	48	28.1	45.0
Very important	4	60	35.1	80.1
Most important	5	19	11.1	91.2
None response		15	8.8	100.0
Total		171	100.0	

Q. 10B (Table 10B): Colleagues in other institutions.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	11	6.4	6.4
Moderately imp.	2	48	28.1	34.5
Important	3	48	28.1	62.6
Very important	4	42	24.6	87.1
Most important	5	10	5.8	93.0
None response		12	7.0	
		171	100.0	

(Table 10A) showed the responses made by the academics in which 35.1%(60 of 171) of them indicated this source

as very important, 28.1%(48 of 171) important, 13.5% (23 of 171) as moderately important, 11.1%(19 of 171) felt it was most important and 3.5%(6 of 171) said it is not important. Finally, 8.8%(15 of 171) gave no response.

The statistics of variable B(table 10B) also indicated that 6.4%(11 of 171) of the respondents considered colleagues in other instiutions not important. 28.1% (4 of 171) and 28.1%(48 of 171) expressed that the channel is moderately important and important respectively. This was followed by 24.6%(42 of 171) and 5.8%(10 of 171) of them who indicated very important and most important. 7.0% of the scholars did not respond to the question.

Based on the responses given in both tables (i.e. A & B), the social science academics in A.B.U. got to know of the current research within themselves in the same institution more than the academic interaction made outside the institution. For example, 35.1% and 28.1% of them under table A considered it very important and important respectively in gaining information through colleages in A.B.U. The proportion of such academics in table B was comparatively low at 24.6% and 28.1% of them indicated very important and important in that order. The disparity in the level of importance attached to the source could be discerned as 11.1% of the respondents indicated most important in table A while in table B, it was 5.8%. As a matter of fact it would be natural for the academics in the same institution to interact more with one

another than it would be the case with other institutions, due to reasons of nearness and acquaintances.

Q. 10C.(Table 10C): Conferences/Seminars/Meetings/-Workshops.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	4	2.3	2.3
Moderately imp.	2	11	6.4	8.8
Important	3	68	39.8	48.5
Very important	4	47	27.5	76.0
Most important	5	30	17.5	93.6
None response		11	6.4	100.0
Total		171	100.0	

Q. 10D. (Table 10D): Research register (e.g. files kept in the Department of the university.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	56	32.7	32.7
Moderately imp.	2	42	24.5	57.3
Important	3	21	12.3	69.6
Very important	4	27	15.8	85.4
Most important	5	13	7.5	93.0
None response		12	7.0	100.0
		171	100.0	

Variable C(table 10C) indicated that 39.8%(68 of 171) of the respondents expressed that this communication channel is important, 27.5%(47 of 171) very important and 17.5%(30 of 171) is most important. While 6.4%(11 of 171) of them had no response, 6.4% indicated moderately important and 2.3%(4 of 171) felt it is not important.

(Variable D) table 10D expressed that 32.7%(56 of 171) felt that research register is not important and 24.5%

(42 of 171) expressed it is moderately important. This was followed by 15.8%(27 of 171) who said it is very important and 12.3%(21 of 171) indicated important. 7.5% of the academics felt it is most important and 7.0% gave no response.

As the statistics indicated, the social science academics in A.B.U. considered Conferences/Seminars/Meetings/-Workshop more important than the research register in keeping abreast with the current research in progress. Consider the case in table D where as large a percentage as 52.7% of the respondents did not see this medium as important in aiding to keep up with current research. The frequencies that followed in table 10C further explained how this medium is of great importance to the academics. For instance, 30.8%, 27.5% were indications of the level of importance attached to this medium. They are proportions that represent the number of respondents who indicated "important" and "very important" in the use of this variable.

.. 10E (Table 10E): Requesting librarians for assistance.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	19	11.1	11.1
Moderately imp.	2	69	40.4	51.5
Important	3	45	26.3	77.8
Very Important	4	21	12.3	90.1
Most important	5	5	2.9	93.0
None response		12	7.0	100.0
Total		171	100.0	

The frequency distribution is such that the respondents

who indicated that requesting for assistance is not important is 11.1%(1 of 171). Those who showed moderately important amounted to 40.4%(69 of 171) and 26.3%(45 of 171) indicated important. As 12.3%(21 of 171) felt requesting librarians is very important, 2.9%(5 of 171) was for most important and 7.0%(12 of 171) had no response.

As the frequency distribution showed, requesting Librarians for assistance by the scholars in the social sciences is not considered vital for keeping track of current research in progress. For instance, those who did not consider it as important constituted 11.1% and those that just saw it a little important is 40.4%. When these percentages are totalled, over half(51.5%) of the respondents do not attach any appreciable importance to requesting librarians for assistance. However, the 38.6% of them who indicated either important or very important was an indication that librarians play a relatively important role in assisting the social science academics in their search for literature.

Q. 10. (Table 10F): Citation index.

Category label	Weight	Respondents Absol. Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	49	28.7	28.7
Moderately imp.	2	44	25.7	54.4
Important	3	28	16.4	70.8
Very important	4	21	12.3	83.0
Most important	5	5	2.9	86.0
None response		24	14.0	100.0
Total		171	100.0	

The statistics indicated that 28.7%(49 of 171) of the

respondents felt that citation index is not important, 27.7%(44 of 171) expressed moderately important and 16.4% (28 of 171) said it is important. The importance attached to this medium by the respondents as showed above progressively decreased as 12.3% and 2.9% respectively felt that it is very important and most important. 14.0%(24 of 171) made no comment on the importance of citation in keeping track of current research in progress.

Obviously this channel of communication cannot be said to be popular amongst the social science academics in A.B.U. because 54.4% of them considered its importance minimal. All other responses totalled, (31.6%) gave the impression that respondents hardly considerod this medium as important. This finding tended to strengthen the earlier result over the low use of abstracts and indexes by the social science academics.

Q. 11A. (Table 11A): The frequency of use of specialised services of a librarian in obtaining information crucial to main or marginal areas of research.

Category label	Weight	Respondents Absol.Freq.	Relative Freq. %	Cum. Freq.%
Never	1	8	4.7	4.7
Rarely	2	35	20.5	25.1
Sometimes	3	68	39.8	54.9
Frequency	4	37	21.5	86.5
Most frequent	5	11	6.4	93.0
None response		12	7.0	100.0
Total		171	100.0	

As the frequency distribution indicated, 39.8%(68 of 171) of the respondents sometimes used the specialised services of the librarian in obtaining information. This was followed by 21.5%(37 of 171) of them who showed

frequently, 20.5% (35 of 171) rarely and 6.4%(11 of 171) who indicated most frequent. Those who never used this specialised services constituted 4.7% and 7.0% had no response.

As the table indicated, 25.2% of the scholars never or hardly ever used the specialsied services of a Librarian crucial to main or marginal areas of research. This had left one with 51.3% of them who felt that such services were sometimes or frequently used. The overall assessment of this, still gave the impression that the social science scholars to do not exploit the specialised services of Librarians for research as one would have expected. If the academics had recognised that Librarians could be of great assistance in reaching sources of information as an intermediary, then the problems sometimes associated with access to information would have been reduced.

3.4. FACTORS IN UNDERTAKING RESEARCH.

Q. 12.(Variables A-L): Factors considered to be the important influence upon the selection of the research topic or proble.

Q.12A (Table 12A): Research/thesis supervisor.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	21	12.3	12.3
Moderately important	2	32	18.7	31.0
Important	3	56	32.7	63.7
Very important	4	29	17.0	80.7
Most important	5	19	11.1	91.8
None response		14	8.2	100.0
		171	100.0	

Q.12C. (Table 12C): A Lecturer not directly involved in the Research Supervision

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	27	15.8	15.8
Moderately important	2	43	25.1	40.9
Important	3	74	43.3	84.2
Very important	4	7	4.1	88.3
Most important	5	4	2.3	90.6
None response		16	9.4	100.0
		171	100.0	

In table A, 12.3%(21 of 171) of the respondents considered research/thesis supervision not important and 18.7%(32 of 171) moderately important. Table C, 15.8% (27 of 171) of them felt that a lecturer not directly involved in the research supervision is not important while 25.1%(43 of 171) of them expressed moderately important. 43.3%(74 of 171) in table C indicated important and 4.1% (7 of 171) said very important. On the other hand, table A showed that 32.7%(56 of 171) of the scholars indicated important and 17.0%(29 of 171) very important. Finally, 11.1% of (19 of 171) and 8.2%(14 of 171) of responses under table A gave most important and none response respectively. Table C's frequency was 2.3%(4 of 171) and 9.4%(16 of 171) each representing most important and none response in that order.

Considering the two tables(A & C), table A(research/-thesis supervisor) constituted the most important influence upon the selection of the research topic or problem undertaken by an academic social science scholar. For example, while 15.8% of the respondents in table C

did not see this informal network as important only 12.3% of them in table A did so. And secondly, the influence of research/thesis supervisor is more predominant especially as 11.1% of the scholars in table A felt this medium is most important whereas in table C it is 4.1%.

Q.12B (Table 12B): Books.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	5	2.9	2.9
Moderately important	2	15	8.8	11.7
Important	3	44	25.7	37.4
Very important	4	66	38.6	76.0
Most important	5	25	14.5	90.6
None response		16	9.4	100.0
		171	100.0	

Q.12D (Table 12D): Journals/Periodical/Serials in core fields.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	8	4.7	4.7
Moderately important	2	9	5.3	9.9
Important	3	33	19.3	29.2
Very important	4	68	39.8	69.0
Most important	5	47	27.5	96.5
None response		6	3.5	100.0
Total		171	100.0	

Table 12B statistics showed that 2.9%(5 of 171) of the scholars considered books not important in the influence of selection of research topic or problem and 8.8%(15 of 171) of them expressed moderately important. But table 12D indicated that 4.7%(8 of 171) of the academics did see journal/periodical/serials in core field as important. This was followed by 5.3% of them

who felt that this medium is moderately important. 25.7% and 38.6% of the respondents in table B felt this medium is important and very important respectively. Table D on the other hand had its respondents(19.3% and 39.8%) expressing important and very important in that order in the use of journals/Periodicals/Serials in core fields. While 27.5%(47 of 171) of the respondents in table D further felt this medium is most important, 3.5% of them made no response. If this were matched against table B, 14.5%(25 of 171) said, books is the most important while 9.4%(16 of 171) did not make a response.

Looking at the two tables it would be difficult to say which one is more important than the other in influencing the choice of research topic. However, the scholars tended to rely more on the use of journals/periodical/-serials in core fields (table D) more than the books, because 27.5% of them felt this medium is most important as against 14.5% in table B. Differences also existed between the two in terms of those respondents who expressed very important (39.8%) in table D and 38.6% in table B.

.12K: (Table 12K): Chance contact with a scholar in own discipline.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	28	16.4	16.4
Moderately important	2	64	37.4	53.8
Important	3	45	26.3	80.1
Very important	4	19	11.1	91.2
Most important	5	5	2.9	94.2
None Response		10	5.8	100.0
Total		171	100.0	

Q.12L (Table 12L): Share the same belief in conceptual framework and interpretations of research problems in the discipline with the scholar.

Category label	Weight	Respondents Absol. Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	26	15.2	15.2
Moderately important	2	38	22.2	37.4
Important	3	49	28.7	66.1
Very important	4	29	17.0	83.0
Most important	5	16	9.4	92.4
None response		13	7.6	100.0
		171	100.0	

Following the statistics in table 12k, 16.4%(28 of 171) of the scholars expressed that chance contact with a scholar in own discipline is not important. Just as 37.4%(64 of 171) of them felt that it is moderately important. 26.3%(45 of 171) expressed important. Take 12L indicated that 15.2%(26 of 171) of the respondents felt that sharing the same belief in conceptual framework and interpretations of research problems in the discipline with the scholar is not important. And while 28.7%(49 of 171) of the scholars indicated important, 22.2%(38 of 171) of such said this informal system was considered moderately important. 17.0%(29 of 171) of these respondent further indicated that it is very important, 9.4%(16 of 171) most important and 7.6%(13 of 171) had no response. And finally, while table K, showed that 11.1%(19 of 171) of the respondents indicated very important, 2.9% of them gave most important and 5.8%(10 of 171) did not give any response.

Based on the statistics of the two tables, sharing

the same belief in conceptual framework and interpretations of research problems in the discipline with the scholar exerted more influence than the chance contact with a scholar in own discipline. For instance, while 9.4% and 17.0% of the scholars in table L indicated most important and very important respectively those of table K constituted 2.9% and 11.1% on the same category label. In fact while 16.4% of the respondents in table K did not see the medium as important, 15.2% of those in table L said it was not important. However, the relative importance of each variable cannot be ignored since their level of influence did not differ widely.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	60	35.1	35.1
Moderately imp.	2	50	29.2	54.3
Important	3	22	12.9	77.2
Very important	4	21	12.3	89.5
Most important	5	1	.6	90.1
None response		17	9.9	100.0
Total		171	100.0	

Q.12J. (Table 12J): Personal acquaintances originating from conferences/meetings/seminars.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	13	7.6	7.6
Moderately imp.	2	28	16.4	24.0
Important	3	71	41.5	65.5
Very important	4	35	20.5	86.0
Most important	5	15	8.8	94.7
None response		9	5.3	100.0
		171	100.0	

Based on the available responses of the two tables

(I & J), personal acquaintances originating from meeting/conferences/seminars has more important influence on the social science scholar than the abstracts. For example, 7.6%(13 of 171) of the respondents in table J did not see the importance of personal acquaintances from meetings/conferences/seminars. But as high a proportion as 35.1%(60 of 171) in I considered abstracts as not important. While 16.4%(28 of 171) of those in table 12J felt this medium is moderately important, 29.2% (50 of 171) of the respondents in table 12I considered it moderately important. Further, responses in table I indicated 12.3%(21 of 171) and .6%(1 of 171) for very important and most important respectively, but response percentages in table J were higher to the range of 20.5% (35 of 171) and 8.8(15 of 171). The scholars in table J who felt that this channel of communication was important constituted 41.5%(71 of 171) as against 12.9%(22 of 171) of those in table I who considered abstracts as important. The importance attached to the use of personal acquaintances originating from meetings/conferences/seminars by the scholars are more than that of the abstracts.

4.12E (Table 12E): Citation index.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	47	27.5	27.5
Moderately imp.	2	58	33.9	61.4
Important	3	31	18.1	79.5
Very important	4	13	7.6	87.1
Most important	5	5	2.9	90.1
None response		17	9.9	100.0
		171	100.0	

Q.12F (Table 12F): Journals/Periodical/Serials in peripheral fields.

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	16	9.4	9.4
Moderately imp.	2	25	14.6	24.0
Important	3	52	30.4	54.4
Very important	4	59	34.5	88.9
Most important	5	8	4.7	93.6
None response		11	6.4	100.0
		171	100.0	

As stated earlier, these two variables were compared to determine the level of importance each has in influencing the social science scholar in selecting research topic or problem undertaken. As the statistics have shown in these two tables (E & F), Journals/Periodicals/Serials in peripheral fields has more influence on the respondents than the citation index. This means that citation index (table E) is less important than journals/periodical/-Serials in peripheral area. Responses in table 12E indicated that the academics who expressed not important amounted to 27.5% (47 of 171) and 33.9%(58 of 171) for moderately important. In terms of table 12F, 9.4%(16 of 171) expressed not important and 14.6%(25 of 171) of them indicated moderately important. While 18.1%(31 of 171) and 7.6%(13 of 171) of the respondents in table E felt that citation index is important and very important respectively, table F indicated that 30.4%(52 of 171) and 34.5%(59 of 171) are for important and very important in that order. Table E further showed that 2.9%(5 of 171) and 9.9%(17 of 171) of the respondents expressed most important and none

response in that order. 4.7%(8 of 171) and 6.4% (11 of 171) are for most important and none response respectively. One reason that may have contributed to the low use of citation index may be due to lack of awareness on the part of the scholars that this medium aids research. The social science academics probably need more interaction with the librarians to be more aware of the sources available in the Library.

Q. 12G (Variable 12G.): Academic collaboration (e.g. Co-authorship)

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	51	29.8	29.8
Moderately imp.	2	37	21.6	51.4
Important	3	43	25.2	76.6
Very important	4	22	12.9	89.5
Most important	5	6	3.5	93.0
None response		12	7.0	100.0
		171	100.0	

Q.12H(Table 12H): Membership in professional association

Category label	Weight	Respondents Absol.Freq.	Relative Freq.%	Cum. Freq.%
Not important	1	61	35.7	35.7
Moderately imp.	2	48	28.1	63.8
Important	3	27	15.8	79.6
Very important	4	18	10.5	90.1
Most important	5	4	2.3	92.4
None response		13	7.6	100.0
Total		171	100.0	

Looking at the frequency distribution of these two tables (G & H), the respondents considered academic collaboration (e.g. co-authorship) more important in

influencing the selection research topic or problem than the factor of membership in professional association. For example, the percentage of the scholars who did not see membership in professional association is important in table H is higher by 35.7%(61 of 171) than those in table G whose percentage is 29.8%(51 of 171). While 25.2%(43 of 171) of the respondents in table G felt that academic collaboration (e.g. co-authorship) is important to them, in table H 15.8%(27 of 171) saw membership in professional association as important. The domineering importance of academic collaboration (e.g. co-authorship) over the use of the membership in professional association is further explicit as 12.9%(22 of 171) of scholars in table G indicated very important as against 10.5%(18 of 171) in table H. As less number of the respondents(2.3%) in table H expressed most important, (3.5%) in table G felt it is most important. 21.6%(37 of 171) of the academic in table G is for moderately important. While 28.1% in table H indicated moderately important. However, both variables have an appreciable influence on the scholars in the social science in Ahmadu Bello University in the choice of topics for research and problems.

3.2. <u>PROBLEMS OF KEEPING ABREAST</u>.

Q. 13A (Table 13A): The problems associated with a researcher's attempt to keep up with current studies.

Rank order 5 - 1, 5 being the highest value.

Table 13(A):

	Variables	Absolute Frequency.	Relative Frequency%	Cum. Frequency.%
1.	None availability of preprints	500	27.5	27.5
2.	Presence of gaps in the available indexing and abstracting journal in the subject area.	379	20.8	48.3
3.	Not enough time is devoted to track down research reports by the researcher	305	16.8	65.1
4.	Lack of current awareness services (e.g. current content, accession list etc.)	377	20.7	85.8
5.	The available literature too massive to go through	259	14.2	100.0
	Total	1820	100.0	

As earlier stated, the social science academics were asked to indicate within the five variables given and rank order 5-1. The variables that represents the most difficult problem facing the researcher in keeping up with current studies is assigned (five)5 and the least being(one) 1.

As the frequency distribution in table 13A indicated, non-availability of preprints was considered as one which presented the most difficult problem that hindered the social science researcher from keeping up with current studies. This is true because the response percentage expressed by the scholars constituted 27.5%(500 of 1820) this being the highest value of all. This was followed by 20.8%(379 of 1820) in which the respondents felt that

presence of gaps in the available indexing and abstracting journal in the subject area constituted the second most difficult obstacle to research. The lack of current awareness services (e.g. current content, accession list etc) was rated 20.7%(377 of 1820) in which this particular variable was seen as a problem to current studies. The impact of the presence of gaps in the available indexing and abstracting journal in the subject area on the scholars is virtually the same as that created by the lack of current awareness service. This is confirmed by the numerical value of the former(20.8%) and the latter(20.7%) respectively as shown by the table. The fact that these variables gave almost the same degree of problems to the social science scholars did not come as a surprise since the two are functionally related. The table further showed, 16.8%(305 of 1820) indicated the level of response percentage in which the academics felt that not enough time is devoted to track down research reports by themselves (social science academics). The fact that this variable was scored relatively high by the academics was a serious indication that factors that constitute information problem in the social sciences in A.B.U. are in part, self-perpetuated by the scholars themselves. In other words, even if current research materials were available, incidence of information apathy or sheer laziness and under-investment of time in the literature search redner access to valuable information impossible. Finally the social science scholars considerd the issue the available literature being too massive to go through

as the least problem that constituted access to current studies. This conception was given practical expression as it was rated 14.2%(259 of 1820) being the lowest numerical value hence of the least information problem to scholars.

Beyond the statistical treatment of the responses given by the respondents, some scholars perceived the problems associated with a researcher's (social science academics) attempt to keep up with current studies differently. Their comments are reproduced here since they have relevance on the problem of information transfer in Nigeria and the Third World in General. The comments are summarised as follow:-

(1) "you have not addressed the main problem. The lack of current journals is the main issue".

(2) "Non-availability of current journals constitute the main obstacle to the researcher in trying to keep up with current studies".

(3) "It takes too long to get published research findings in Nigeria. However, when they are finally out, they must have been overtaken by events (out of date)".

(4) "the research has failed to ask specific questions on the usefulness of oral interview, personal observation and archival material which are infact the sources of information for most researches in the social sciences".

Commenting on the possibility of benefiting from specialised services of a Librarian in obtaining information crucial to one's main or marginal research area, a scholar

said:- "only to trace missing journals which are never really found. Some journals stay in the bindery for years on end". This implies that the missing journals create alot of gaps in the existing materials. And secondly, Librarians try to explain away some of these lapses by saying that such journals are in the bindery.

3.6. PROFESSIONAL ACTIVITIES:

Q. 14. (Table 14): Membership of professional Association.

Category label	Respondents Absolute freq.	Relative Frequency %	Cum. Frequency%
Yes	128	74.9	74.9
No	40	23.3	98.2
None response	3	1.8	100.0
	171	100.0	

As shown by the table, a very large number of the scholars belong to one or another professional association. Based on the responses given, 74.9%(128 of 171) of the academics belong to a professional association. But 23.3%(40 of 171) of them indicated that they did not belong while 1.8%(3 of 171) gave no response. The fact that a significant majority of the scholars belong to a professional association, is an indication that its role probably bears some relevance to their academic pursuit. But this is merely speculative since (question 16) that follows may throug more light on this.

Q. 16 (Table 16): Relative importance of meetings of associations in gaining useful information to a recently concluded research or research in progress.

Category label	Weight	Respondents Absol. Freq.	Relative Freq.%	Cum. Freq.%
Not applicable	0	40	23.4	23.4
Not important	1	6	3.5	26.9
Moderately imp.	2	13	7.6	34.5
Important	3	45	26.3	60.8
Very important	4	43	25.1	85.9
Most important	5	22	12.9	98.8
None response		2	1.2	100.0
		171	100.0	

The frequency distribution shows that 26.3%(45 of 171) and 25.1%(43 of 171) of the respondents considered the meetings of professional associations important and very important respectively. This meant that 51.4% of the social science scholars in A.B.U. expressed that this informal system were either important or very important in gaining useful information to their recently concluded or research in progress. They also felt that this channel 12.9%(22 of 171) is most important through which knowledge was gained in the development of research project. The importance of this source of information, cannot be underestimated since it is the only 11.1%(19 of 171) of the scholars who felt that it is either not important or moderately important. This finding actually confirmed that the meetings of professional associations of the social science academics helps in satisfying their information needs. Librarians should endeavour to promote the futility of this channel by monitoring such meetings to acquire papers that are usually presented in such

gatherings. Such papers if acquired, could be an important information source for the scholars.

Q. 17(a) Table 17(A): Subscription to a professional Journal.

Category label	Respondents (Absolute Freq.)	Relative Frequency %	Cum. Frequency%
Not applicable	2	1.2	1.2
Yes	125	73.1	74.3
No	36	21.0	95.3
None response	8	4.7	100.0
Total	171	100.0	

The question was asked to see whether professional background has influence on the information behaviour of a social science academic.

As the responses showed, 73.1%(125 of 171) of the scholars were agreed that they subscribed to a professional journal. Since the overwhelming majority of the respondents admitted subscribing to a professional journal, this would imply that the profession to which one belongs has an influence on the individual in acquiring materials on personal basis. This tendency for the building of personal collections was exemplified by the very large proportion of the (73.1%) of scholars that subscribe to a professional journal. This statistical evidence does not in any way suggest that one must subscribe to a professional journal before one could use it in order to satisfy one's information needs. Rather it reveals the level of commitment of an individual scholar to his profession and his information seeking behaviour.

Comments made by the respondents perhaps justified the reason why some of them do not subscribe to a professional journal. They commented:-

the problem created by foreign-exchange in Nigeria has made it difficult if not impossible to subscribe to journals. This implies that some scholars saw the need to subscribe to a professional journal but for the lack of foreign exchange or delays usually associated with payments.

4.17(3): Relative usefulness of professional Journal(s) in obtaining information for a recently concluded research or research in progress.

Category label	Respondents (Absolute Freq.)	Relative Frequency%	Cum. Freq.%
Not applicable	36	21.1	21.1
Not useful	0	0	21.1
Moderately useful	3	1.8	22.9
Useful	33	19.3	42.2
Very useful	56	32.7	74.9
Most useful	33	19.3	94.2
None response	10	5.8	100.0
Total	171	100.0	

As stated before, this question sought to know the academics, perception on how useful a professional journal is to them in aiding research. The responses that followed indicated that 32.7%(56 of 171), and 19.3%(33 of 171) of the scholars saw professional journals as "very useful" and "useful" respectively. Further, while 19.3%(33 of 171) of the academics felt this medium is "most useful", 5.8%(10 of the 171) considered professional journals as "moderately useful". Since 52% of the academics considered

this channel of communication very useful and most useful, the Library system must encourage its acquisition and making it available for use. This finding also confirms the assertion that professional journals play a very useful role in satisfying the information needs of a social science scholar. It further provides an indication that in times of scarcity of foreign-exchange as it is being experienced in Nigeria, locally published professional journals became veritable alternative to foreign journals in the information transfer process.

3. 7. INTERVIEW:

As a supplement to the questionnaire, the investigator conducted some interviews with the academics to obtain some ideas on the issues which they (academics) considered problematic in keeping up with current studies. The following questions were asked:-

Question I. Based on your experiences, state the problem associated with a researcher's attempt to keep up with current studies.

Question 2. Give some suggestions for improving the information services in A.B.U. and Nigeria in general.

While it is not necessary to reproduce in detail all the comments generated, the thesis however attempts here to summarise the essentials of the interview. At the forefront of what they (scholars) considered to be a hinderance to gaining current information on the latest research findings, is the lack of current journals.

According to them the individual scholar could hardly procure current journals due to high cost and the problem of foreign-exchange. They said libraries are looked upon as the last resort but unfortunately, the A.B.U. library complex itself had proved grossly inadequate in acquiring and making available current journals. They lamented that a good deal of their time was always wasted during the course of their literature search and yet in the end one would go away without getting the material(s) one was looking for. They further pointed out that since the library services could not meet their information demand, there was the tendency on their part not to rely on the library for their research.

A scholar in history indicated that librarians do not live up to the expectation of the researchers. He explained further that the library was not only lacking in current materials but also retrospective documents. He mentioned specifically documents originating from "commissions of enquiry" and "tribunals" set up by the governments of this country since the colonial and Independent periods in Nigeria are seldom available in the library. A research fellow reacted sharply saying: Libraries in A.B.U. do not seem to be involved with some specialised needs of their users. For instance, the study on "women" is neglected in terms of the supply of books on the subject even though there is a huge body of books published on the subject. Some also felt that librarians have not been particularly useful to them (academics) in the

entire problem of access to information and literature search. They urged the Librarians for more co-operation and assistance. Some have even lost confidence in the librarians themselves hence they (academics) tended to bypass the former during a literature search.

Some scholars made suggestions on how to improve the existing system of information transfer amongst scholars in A.B.U. and Nigeria in general. They said it was high time the social sciences scholars in Nigeria deemphasised on the use of foreign journals in order to defray the high cost of materials being imported. They further pointed out, the librarians and the academics in A.B.U. should act in concert to track down locally organised seminar, conference and workshop papers and make them available for research. They went on, the existing high cost of published materials would continue to make acquisitions of current materials very costly for our system.

CHAPTER FOUR

4.0 SUMMARY OF STUDY: FINDINGS, CONCLUSION AND RECOMMENDATIONS.

4.1 INTRODUCTION

This capter summarises the findings of the study, draws up the conclusions and further provides recommendations.

Antecedent to this century, the sources through which information could be received and transmitted was comparatively limited in number. The channels that predominated in use were oral, radio and a very few variety of published channels of communication. In this century, there has been tremendous advancement in media technology due to scientific and technological progress. This ranges from the very many variety of published channels of communication to the computer. The access to and the choice of channel to use in order to satisfy one's information needs is indeed very difficult. This question of accesibility to published works is further compounded by the problem of choice. In Nigeria, the relative scarcity of locally published materials has probably indered the smooth flow of information (ideas) in an academic environment. Yet the demands being made upon the universities and research centres to carry out research into various aspects of our national life inevitably presses for unimpeded transfer of information.

Unfortunately, a dependent nation like Nigeria has had to rely on the industrialised nations of the West

for published works. The implication for this is the unprecedented rise in cost of publications in Nigeria. The phenomenal rise in the cost of production and purchases of published materials in Nigeria makes acquisitions of scholarly works very expensive for Nigerian academics. In addition to the high rate at which published channels of communication are being sold coupled with the problem of available foreign-exchange, one would strongly argue for the use of informal sources of information as a complement. As a reaction to the situation described above Bozimo(1983)[1] quoted the committee of university librarian thus:
"Our university libraries are gradually becoming out of date mainly on account of our inability to purchase recent publications. Overseas booksellers, unlike publishers are by the nature of their trade unable to operate in their transactions with us under the presshipment importation decree 1978".

The stated reasons above among other things are the issues that led to this investigation. The research is therefore premised on the need to find out the sources of information being predominantly used by the social science scholars in A.B.U. and how they obtain their information for teaching and research in the prevailing circumstances. If the preferred sources of information in use by the academics are known, efforts can be made to concentrate on their acquisition in order to facilitate teaching and research.

Arising from the stated views above, the study as earlier indicated, sought to answer the following questions:-

1. What are the major sources of formal and informal information for the social science academics in A.B.U.?
2. How does the social science academic in A.B.U. go about obtaining information through the formal and informal sources:

In order to find answers to these questions, a research hypothesis that is to be tested is stated thus: The social science academic in Ahmadu Bello University depends more on informal channels (i.e. unpublished, e.g. oral, meetings, seminars, invisible college, preprints, research reports) of information than the formal for obtaining data that is of value to his teaching and research. The primary aim of the study is:

1. To determine the extent to which formal and informal channels of communication aid teaching and research efforts of the social science scholar.
2. To determine the extent to which social science academics depend on the formal and informal sources of information for teaching and research.

In order to test the hypothesis of this investigation and provide answers to the research questions raised, questionnaires and interview techniques were used. The questionnaires were administered to a total number of 235 academics in the faculties of Arts and Social sciences (FASS) Education, Administration, Law, Centres for Social

and Economic Research (CBSER) and the Centre for Nigerian and Cultural Studies (CNCS). In the end, one hundred and seventy one(171) out of the two hundred and thirty-five (235) questionnaires were responded to and returned for analysis(72.76%). Finally a structured interview was conducted with some academics randomly to further deepen the understanding on the state of information in A.B.U. as it relates to social sciences.

4.2 FINDINGS:

Based on the data analysed in chapter three of this study, the following are the findings:

1. As revealed by this study, the formal sources of information are more important channels of communication to the social science academics in Ahmadu Bello University than the informal sources of information. The total aggregate frequency counts as rated by the academics in terms of importance attached to the formal sources of information (i.e. books, journals, Government documents and Newspapers) is 3462. But the scores attracted by the informal sources (i.e. conferences/seminars/meetings/workshop, informal academic interaction with colleagues, preprints, radio and television) from the academics totalled 2209. This means that the social science academics in A. B. U. depend more on the formal sources of information than informal sources of information for obtaining data that is of value to their teaching and research. This result does not differ from that of

Aboyade (1980)[2] and Meadows(1974)[3]. They revealed in their investigations that literature means or archival (i.e. formal sources of information) are more important to the academics as a means of obtaining information for teaching and research than the personal means or informal sources of information. As a result of this empirical evidence, the hypothesis which states that: Academic social scientist in A.B.U. depends more on the informal sources of information than the formal sources of information for obtaining data of value to his teaching and research is thus rejected. On the aggregate, one would have expected the scholars to have largely adjusted to the publications crisis in Nigeria by substituting informal sources of information for formal communication.

But difference in usage arises probably due to the relative level of development in Nigeria. And secondly social science academics are more amenable to cite information obtained through literature means which they have used for teaching and research than information acquired through the informal sources. For example, the pressure of "publish or perish" phenomenon in a university system which serves as a basis for promotion or non-promotion of an academic dangerously introduces an element of materialistic conception of scholarship. Cherns(1970)[4] commented that: "many of the prestigious social scientists operate in a system whose reward structure is oblivious to "uses" but that which favours listing of publications and citations by other scholars". Since the academic

worth of a teacher is determined by the number of publications and citations produced, formal sources of information are bound to be more popular in use than the informal sources of information. However, it must be noted that the relative significance of informal sources of information to the social science academics in A.B.U. is appreciably high. The relative advantage published channels of communications have over the informal channels is lamented upon by Wolek and Griffith(1974)[5] when they said:

> Even though previous investigations in information needs have demonstrably shown a strong reliance on informal communication, it is the formal channel that has received policy makers' support. They suggested that rather than making policies on informal communications and of formal as mutually exclusive both must be considered as integrated elements of the same system.

2. Within the group of the published channels of communication (i.e. formal sources of information), books are the most important medium of information to the social science scholars in A.B.U. in obtaining data or value for teaching and research. This result is in line with that of Garvey(1979)[6] which maintains that books are more important to the social science academics than journals (see table 7(d). Journals constitute the second most important source to the social science scholar in Ahmadu Bello University. (see table 7(c).

3. Another interesting aspect of this study is the degree of importance attached to journals in peripheral fields to the scholars' main area of research. The result

showed that such journals are very important. A comparison in terms of importance between journals in core areas and that of marginal areas in satisfying the information needs of the academic shows a little differences. While journals in core fields was scored by 65.5% of the scholars as either very important or most important that of journals in peripheral fields was 54.9% (see table 7(e). This finding confirms the position that relevant literature in the social sciences are scattered over a wide range of areas due to its multidisciplinary characteristics[7]. This means that if one maintains a strong collection of journals in core areas in the social sciences to the neglect of journals in marginal areas, the social scientist would miss a great deal of information relevant to his research needs. The implication of this finding must be of importance to the Librarians as well as the information scientists. That is, in providing information services to the social science academics, efforts must be made to acquire journals in peripheral fields for them (social science academics). For example, the journals to which an economist subscribes are inevitably those dealing with his own speciality. But in addition to this he has to read journals in adjacent fields of study or other specialities such as History, Geography, political science etc.

4. Within the informal channels, it was found that meetings/conferences/seminars/workshop are considered by the academics as the most important means through which information is obtained for teaching and research. If one

compares this with other informal media, like informal academic interaction with colleagues, preprints, radio and television (see table 7(g), f, h, and A), conference/-seminars/meetings/workshop is scored by the highest number of the academics as the most important. As the data demonstrated, information services in A.B.U. can be improved if seminar or conference papers are collected and made available to the library for the use of the scholars. The joint efforts of the social science academics and the librarians in making these papers available to researchers will at least reduce the degree of problem to scholarship created by the scarcity of locally published academic works. As it would be expected, radio, television and preprints do not yield important information for the academics. The fact that preprints is not a popular medium amongst the social science academics in A.B.U. is an evidence of accessibility problem.

However Meadows(1974)[8], says, "the great appeal of preprints is that it makes information available quickly encouraging communication amongst scholars which would have been made difficult by lags between submission and appearance of papers in journals". In view of the fact that 39.7% (see table (A) of the academics considered academics interaction with their colleagues as most important confirms the study of Diana(1969)[9] which reveals that the scientists actually interact with one another in a manner that can be described as a "social organization" or invisible college". Further, Crawford(1971)[10] agrees that informal network exists amongst productive scholars.

He argues that in the search for knowledge, a scientist who is integrated within a communication network stands at a greater advantage than the non-integrated in receiving new information".

5. On the aspect of access or tool for locating information, it was found that the academics considered references cited in books and journals as the most important for locating materials for teaching and research (see table 8A). This result does not differ from that of Meadow's (1974)[11] when he revealed that references cited in the journals are considered as the most important sources through which scientists learn of the existence of relevant information. In a descending order of importance, media such as consulting experts in the same or similar research areas, the use of library catalogues, references in research projects and theses and references in seminar/conference papers followed. In this study, the use of abstracts and indexes, discussion with colleagues, book reviews and requesting librarians for ... ce by the social science scholars are seen as less important in that order as compared to above. (see tables 8c, d, f, and g).

The question of relatively low use of abstracts and indexes in locating information by the social science academics as reported in this work was also identified by Line(1971)[12] in his study. He says: secondary services (e.g. indexes abstracts) are little used by the social scientist. Similarly Aiyepeku(1975)[13] discovered that most of the published in Nigeria are not covered by the

international alerting services namely indexes, abstracts and current contents. Meadows(1974)[14] rightly summarised the problem of secondary materials to have arisen due to ignorance on the part of users(academics), lack of coverage and delay time publication of abstracts. This he argued are themselves disincentive to communication amongst scholars in the social sciences. As the data have demonstrated, going through the librarians for locating materials for teaching and research is the least usefu, just as the use of library catalogues has featured less prominently. The understanding of the use of the library catalogues as access point to mongraphs is bound to be blurred due to the fact that those who used the catalogues may have also benefited from the interactions of other colleagues. Thus it is argued that if secondary information services are to be improved as well as informal transfer of information, collaboration between the librarians and the academics must be encouraged. However, Krikelas(1983)[15] posited that "there is some evidence that when a decision has been taken to seek information in printed source located in a library, the human (in this case Librarian) is not perceived as a viable provider".

6. The academics were asked to rank order five variables which they considered the most problematic in their attempt to keep abreast of their discipline. In the end the absolute frequency obtained from the rank ordering was used as a measure of relative difficulty. The finding indicated that the following variables as listed below are in decreasing order of problem to the scholars

in their attempt to keep up with current studies.

(a) Non-availability of preprints 500 (27.5%)

(b) Presence of gaps in the available indexing and abstracting journals in the subject are 379(20.8%)

(c) Lack of current awareness services (e.g. current contents, accession list etc) 377 (20.7%).

(d) Not enough time is devoted to tract down research reports by the researcher ... 305 (16.8%).

(e) The available literature too massive to go through 259 (14.2%).

There seems to be a contradiction in the fact that non-availability of preprints was seen as one which constitued the most serious obstacle to the academics in keeping abreast of their discipline. Earlier on, the academics felt that this informal element is one of least important in obtaining information for teaching and research.

7. The data revealed that the informal media of conferences/seminars/meetings and workshops are the most useful to the academics in keeping up with current information. It was also found that research reports including dissertation, thesis and project came quite close to the above (see tables 9, b & c). The following media such as academic interaction with colleagues, book reviews, and preprints are found to be useful to a certain extent. Those channels that generated very low percentage are the abstracts and indexes, browsing in bookshops and library accession list respectively (refer to table 9, I, G & H). That book reviews was rated by 42.1% of the academics as

a useful tool for keeping up with current information does not seem to have reflected the fact that published works especially books come quite late to this part of the world. It is therefore questionable how it could have served as means for staying current. But on the other hand, it is possible that some of the academics are on the mailing list of foreign publishers who promptly inform the former of the current information event.

8. Colleagues in A.B.U. serve as the most important means through which the academics in the social sciences get informed of the current research in their areas of speciality. Other sources of information that followed in terms of their relative importance are:- Conference/Seminars/Meetings/Workshops, academic colleagues in other universities, requesting librarians for assistance, citation index, and research register (e.g. files kept in department or the university). The low position given to librarians as means through which an academic can be informed of current research, is an evidence that social science scholars hardly delegate literature search to information specialists. As earlier stated, it is also true that citation index are less popular with the scholars in the social sciences. This may be due to the fact that citation indexes themselves are not current in this part of the world coupled with the situation that the academics have little or no interaction with librarians whose help would have been of crucial importance.

9. It was found that only 21.5% (37 of 171) of the

respondents frequently made use of the specialised services of a librarian in obtaining information for teaching and research. Those scholars who never and rarely sought for this specialised services constituted 25.2% and 39.8% respectively. This left the significant minority of 6.4% who most frequently made use of the librarians. This finding, unfortunately points to the fact that a significant proportion of the academics do not avail themselves or the specialised services of the librarians to aid their research.

10. Journals in core fields have the most important influence on the social science academics in selecting a research topic or problem either in their remembered past or that which is currently in progress. This is followed by books, journals in peripheral areas, personal acquaintances originating from conferences/meetings/ seminars and thesis/research supervisor. Trailling quite behind in terms of the degree of influence, is the factor of sharing the same belief in conceptual framework and interpretations of research problems in the discipline with the scholar. In addition to this are other factors such as academic collaboration (e.g. co-authorship), chance contact with a scholar in own discipline, abstracts, membership in professional association, citation index and a lecturer not directly involved in the research supervision (see table 12(A-L). This finding further indicated that journals in core and marginal areas and books are indispensable to the social science academics in A.B.U. Equally

important too, is the role of a research or thesis supervisor and personal acquaintances developed from conferences/meetings/seminars. While it seems obvious that information services will improve if efforts are concentrated in the provision of books and journals in core fields, interpersonal relationships with scholars is advisable in furthering research efforts.

11. The thesis found that academic interaction is being encouraged on the basis of discipline by 74.9%(128 of 171) of the scholars in A.B.U. who belong to various professional associations related to their fields of speciality.

12. The importance of the meetings to the social science academics in A.B.U. was significant. For instance 38% of them found the meetings very important for gaining useful information to a recently concluded or to an on going research. For instance, Aboyade(1980)[16] expressed that the meetings of professional associations do not only prompt research in the subject area but they do provide veritable opportunities for exchange of ideas.

13. The percentage of the scholars who subscribe to a professional journal was 73.1%(125 of 171) of the scholars. Here again, the overwhelming majority of the scholars subscribe to professional journals. It was found that professional journals are quite central in aiding the scholars to get information for recently concluded research or research in progress. For instance, over half (52%) of the academics have indicated that this medium is very important.

4.3 CONCLUSION

The focus of this study has been to determine the extent of use of the various media (both formal and informal) by the social science academics in Ahmadu Bello University, Zaria. The research is narrowly concentrated on the social science academics in A.B.U. probably because it is hopeful that its finding(s) would serve the immediate needs of the librarians whose services are needed by the social science community in that environment.

Information services as indeed other market oriented services are based on the actual and perceived needs of the customers (information users). In a generation in which the growth of literature or (publication explosion) is on the ascendancy, one is definitely faced with the problem of source selection. This question of source selection is a complex task for an academic who is probably lacking in sufficient time, and the technical skill needed for retrieval.

On the other hand, the lack of currently published works has been articulated as a major impediment to gaining information to current research findings. Reasons for the scarcity of published academic works are issues that hinge on a number of variables. For instance, the amount of funds meant for the purchase of books and journal have increasingly dwindled in recent times to be able to secure enough materials for research. Another element that dangerously operates against the acquisition of published works are delays caused by technicalities associated with

importation procedure. While the combined effects of under-funding and importation procedures make the procurement of books and journals a herculean task, the need for research materials by the academics is on the increase.

It is in recognition of this problem that this research was broadly undertaken beyond the narrow confines of use made of formal channels by the social science academics. Information pervades social science in a number of ways. The informal element has featured prominently as necessary adjunct to published works through which information is transferred within the social science community. Thus the realization of an improved information service for the social science scholars among others is largely dependent upon the effective exploitation of the informal media to gain current information for the advance of knowledge.

At the onset of this thesis, research questions and specific objectives were drawn and raised to guide it.

Research questions

1. What are the major sources of formal and informal information of the social science academic in A.B.U.?
2. How does the social science scholar in A.B.U. go about obtaining information through the formal and informal sources?

The study provides answers to the research questions raised as follows:

1. Books and journals/periodicals/serials in core fields

of the social sciences constitute the major sources of formal information (see table 7c & d). In spite of this finding, it serves a useful information to add that journals/periodicals/serials in peripheral area and Government documents follow very closely as important channels of communication through which social science academics obtain information.

2. The social science scholar in A.B.U. obtains information through informal sources in a number of ways. These are the personal interaction with academic colleagues, conferences/meetings/seminars and workshops, oral evidence and observations (see table 7f, g, & h).

It might be argued that the findings that have emerged from this investigation do not vary significantly from other studies on information needs. But one distinguishing characteristics of this study is that it was focussed on the information needs of the broad spectrum of the social science academics (i.e. Assistant Lecturer to professor). But that of Aboyade(1980)[17] was narrowly restricted to the minority group of the scholars (i.e. Senior lecturer - professors in the humanities. Thus this research has articulated and stressed further perculiarities of informational problems in the social sciences within the framework of society like Nigeria. Further, while this study was premised on the information needs in the social sciences in contrast, another similar study was carried out in humanities in Nigeria.

4.4 RECOMMENDATION

The need for improved information service for the social science academics calls for collaboration between the librarians and the academics. This symbiotic relationship requires that the librarian has to study and know the behaviour of users in their quest for information. The academic is also likely to miss a great deal of relevant information for teaching and research if he does not perceive the librarian as a necessary partner in the pursuit of knowledge.

Based on the findings of this study, the following specific recommendations are made.

1. The low use made of some secondary sources (e.g. abstracts and indexes) is either an indication that the social science academics are to a large extent ignorant of the available research materials or due to non-availability of them in the library. It is therefore recommended that librarians should prepare bibliographical guides that will make the scholars aware of the existence of such tools so as to facilitate their use by the academics.

2. The social science scholars should acquaint the librarians with what they are doing in terms of academic activities. This will put the librarian in a better position to effectively monitor the information needs of the academic and the issues at the research front in the social sciences upon which his services will be based.

3. In view of the importance attached to the use of seminar and conference papers as an informal medium for gaining information for teaching and research, the department or faculty must compile and deposit copies of their seminar/conference papers in the library for use.

4. Each department in the faculty should compile research registers or research profiles of the individual scholars and send them to the library to enable the librarian know the research interests of the academics as to be able to tailor his services. If this approach is followed, then the basis for a genuine academic interaction on interpersonal basis between the librarian and the academic will have been established.

5. Information scientists who are specialists in the social sciences or those who have "subject allegiance" should be appointed in the library to serve as a link between the library and the faculty. It is hoped that this will generate some confidence in the minds of the social science scholars to academically interact and communicate with the people who share their own perspectives for the purpose of securing specialised services of the librarian. This type of academic integration between the academics on one hand and the librarians on the other will equip the latter to appreciate the current research needs of the former.

6. As books and journals continue to predominate as a

formal channel for obtaining and giving information for teaching and research needs, efforts must be made to procure them on priority basis.

7. The university presses in Nigeria must be activated through increased funding to publish local research reports for documentation and dissemination in order to avoid duplication of research efforts by individuals.

8. Given the strigent economic measures in practice, no library can confortably acquire books and journals needed for scholarship. It is therefore recommended that library consortium within a geographically defined area or region be pursued as a matter of policy. In order to ensure an effective distribution network of such materials, courrier services must be mounted by each member of the university library consortium to facilitate inter-library loan.

4.5 SUGGESTIONS FOR FURTHER RESEARCH AREA.

1. The scope of this study is so narrow that is difficult to make valid generalization for wider population. Therefore further research must be carried out to encompass other university social science academics in Nigeria.

2. A comparative investigation on the user needs in the humanities and social sciences versus physical sciences can be pursued to see the degree of variation in the use made of the various information media.

3. Further study should be carried out to see whether or not information needs can be effected as the researcher

progresses through different levels of research. The result of such study can help the information scientist to know the type or form of information to provide at a particular level of research.

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Questionnaire for academic staff in some selected departments in Ahmadu Bello University, Zaria

(Appendix A)

1. Tick the appropriate department as indicated below

- ☐ Accounting
- ☐ Business Administration
- ☐ Centre for Nigerian Cultural Studies (CNCS).
- ☐ Centre for Social and Economic Research (CSER).
- ☐ Economics
- ☐ Education
- ☐ Geography
- ☐ History
- ☐ Law
- ☐ Local Government Studies
- ☐ Political Science
- ☐ Public Administration
- ☐ Sociology

2. Tick your highest academic qualification(s)

1st Degree:- B.A./B.Sc./B.Ed/LL.B.

2nd Degree:- M.A./M.Sc./M.Ed./LL.M/M.P.A./M.B.A.

3rd Degree:- Ph.D.

.../2.

[redacted] are to you in stimulating ideas which turned out to be of value for teaching and research. (Score each as appropriate)

	Most important 5	very important 4	important 3	Moderately important 2	Not important 1
Mass Media(e.g. Radio, Television)					
Mass Media(e.g. Newspapers.)					
Journals/Periodical/Serials in core field					
Books ------ ------ ---- ---- --					
Journals/Periodical/Serials in peripheral fields to yours.					
Informal academic interaction with colleagues					
Conferences/Meetings/Seminars/Workshops					
Preprints(e.g. "a part of a work printed and issued before the publication of the complete work or printed abstracts of papers to be delivered at a conference, circulated in advance to enable informed discussion to take place")					
Government Documents					
Other (please specify)					

.../4.

5. Indicate the degree to which you have found these sources useful in keeping up with current information. (Please score each as appropriate).

	Most Useful 5	very Useful 4	Useful 3	Moderately Useful 2	Not Useful 1
Preprints(e.g. "a part of a work printed and issued before the publication of the complete work or printed abstracts of papers to be delivered at a conference, circulated in advance to enable informed discussion to take place").					
Conferences/Seminars/Meetings/Workshops					
Research Reports, including dissertation, thesis, project.					
Academic interaction with colleagues					
Printed bibliographies ----------					
Book Reviews: ----- ---- ---- -------					
Browsing in bookshops ----- ----- -------					
Library accession list:					
Abstracts and indexes ----- ---- ----- -					
Other (Please specify)					

.../6.

12. What factors do you consider to be the most important influence upon the selection of the research topic or problem you have either undertaken or currently in progress. (Score each as appropriate).

	Most Important 5	very important 4	Important 3	Moderately Important 2	Not important 1
Research/thesis Supervisor					
Books ---- ----- ---- ---- ---- --					
A Lecturer not directly involved in the research supervision:					
Journals/Periodical/Serials in core fields:					
Citation index ---- ---- ---- ------					
Journals/Periodical/Serials in peripheral fields to yours.					
Academic collaboration(e.g. Co-authorship.) ----- ---- ---- --- ----					
Membership in professional association					
Abstracts --- ---- ---- ---- ---- ---					
Personal acquaintances originating from conferences/Meetings/Seminars.					
Chance contact with a scholar in own discipline.					
Share the same belief in radical conceptual framework and interpretations of research problems in the discipline with the scholar.					

16. How important are the meetings of these professional associations to you in gaining useful information to a recently concluded ~~research~~ research in progress. (Please tick as appropriate).

Most Important	very Important	Important	Moderately important	Not important.
5	4	3	2	1
☐	☐	☐	☐	☐

17. (a) Do you subscribe to a professional journal?

Yes	No.
☐	☐

(b) If yes, how useful is/are the journal(s) to you in obtaining information for a recently concluded research or research in progress?. (Please score).

Most Useful	Very Useful	Useful	Moderately Useful	Not Useful
5	4	3	2	1
☐	☐	☐	☐	☐

APPENDIX B

Dear Sir/Madam,

As partial requirement for the award of a Master's Degree in Library Science (MLS), I am conducting an investigation in to the "Information seeking Behaviour of Social Scientists" in the Faculties of Arts and Social Sciences (FASS), Education, Administration, and Law; Centre for Economic and Social research (CSER) and Centre for Nigerian Cultural Studies (CNCS) at Ahmadu Bello University, Zaria.

Information is a vital commodity for teaching and research. Knowing the behaviour of users in their quest for information is crucial for the effective management and dissemination of information for use.

Enclosed is the questionnaire which seeks to probe some aspects of the information seeking behaviour of the academics of the aforementioned faculties and the centres.

Your co-operation in filling the questionnaire will contribute not only to the overall success of the project but also to the provision and management of the information resources for faculty members. All responses will be kept in the strictest confidence.

Thanks for your co-operation.

Haruna Halidu
Kennedy Library
Institute of Administration,
Ahmadu Bello University
Zaria.

Appendix C.

President Kennedy Library,
Institute of Administration,
Ahmadu Bello University,
Zaria.

19th August, 1987.

TO:

_____

_____

_____

Dear Sir/Madam/Dr.

Request for Personal Interview

As part of my M.L.S. studies, I am investigating the information seeking behaviour of social scientists of Ahmadu Bello University, Zaria. I would be most grateful if you could grant me an interview to enable me have a deeper understanding on the problem confronting an academic social scientist as he seeks information to facilitate teaching and research functions.

The interview is specifically based on the following questions.

(1). Based on your experiences, state the problems associated with a researcher's attempt to keep abreast of discipline.

(2). Give some suggestions that would improve informations transfer process in the social sciences in A.B.U. and Nigeria in General.

Thanks for co-operation.

Yours faithfully,

Sgd.
Haruna Halidu.

KASHIM
AHMADU
ZARIA