

Information Seeking Behaviour of Graduate Students of University of Agriculture, Abeokuta, Nigeria: A Qualitative Approach

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Abstract

The study evaluates how the graduate students behave towards seeking knowledge they need for academic activities in the institution. The study used exploratory qualitative research design. The population of the study was the graduates of University of Agriculture Abeokuta (UNAAB) for 2010/2011 session. An in-depth semi structured interview was explored to examine their information seeking behaviour. The study revealed that inaccessibility and ease of use were the major factors affecting the choice of information resources by the students and that the influences of people like lecturers and lead scholars in the institution shape and reshape the approach of students to information seeking behaviour. It was also observed that e-journals, agricultural CD-ROMs, handbooks and reference materials were the important sources of information to these students. However, lack of time, unawareness, information overload and epileptic power supply were the challenges hindering their information seeking. The study concluded that the information seeking behaviour of these students was more organized than being random and the use of internet do not improve the information use skills of the students. Thus, it was suggested that librarians should trigger their ability to validate sources of information that the students utilized to improve their relevancy, and they should train the lead scholars that the students consulted when they need information.

Keywords Information Seeking Behaviour, Graduate Students, University of Agriculture

1. Introduction

For the academic libraries to adequately face the challenges posed by changing information environment of their users- faculty members, students and other staff, there is need to persistently examine the type of information different users need and utilized. As the amount of information grows, the problem of managing the information to make a decision or be informed becomes more difficult. Hence, the essential components of the library include documents in different channels, formats, languages and sources, needs to be profiled to ensure its maximum relevance to the library users. This is the essence of the information seeking behaviour of users.

Information seeking behaviour of students, according to Anwar^[1], had been defined as active or purposeful seeking of information resulting from the need of students to participate in class discussions, seminars, workshops, conferences or to write final year research paper. The Students may interact with manual information such as newspapers, journals, libraries and/or with computerized systems like web and databases.

Graduates of most universities are active and goal- oriented, having common features but different goals and activities with frameworks that are guided by their intentions and expectations (Thani and Hashim^[2] further examination by Qureshi, Iqbal and Khan^[3] revealed that they have different levels of perception and mental ability. All these have important bearings on their information seeking behaviour.

However, Bhatia and Venkata^[4] in the study of information seeking behaviour of graduate students in digital environment opined that the choice of resources by the students was based on the principles of least effort. They simply want resources that are easy and have simplest methods of use, and not difficult databases with difficult search requirements. They do not feel comfortable with formalized resources. Thus, they experience problems of unawareness and in accessing the information resources.

Also, graduates, according to Thani and Hashim^[5], have received little attention from information scientists, considering their concepts to be similar to that of faculty members or undergraduates, whereas they have different attitudes, expectations, communication skills and information literacy that would somehow be transferred into their search for information. Therefore, this study would make information specialists to react rationally to the emerging behaviours of these students in the most effective ways.

Several literatures have proposed different modules to study the information seeking behaviours. Kahithau^[6] proposed a model that presented information seeking to consist of initiation, selection, exploration, formulation, collection, and presentation. Other conceptual models were proposed by Wilson^[7]; Darwin^[8]; Ellis^[9]

Many studies have evaluated the factors affecting the relationship between students and information seeking behaviour. Qureshi, Iqbal and Khan^[10] when investigating the information seeking behaviour of students in the University of Pakistan, concluded that strong educational and cultural background, conducive environment and effective student participation had positive impacts on the information seeking behaviour of graduates. Also, higher correlation had been found to exist between conducive environment and awareness of resources, if the environment is helpful then the desired knowledge would be easily created and the curiosity towards the awareness of resources would vanish (Bhatia and Venkata^[11]). Other factors enumerated to affect information seeking behaviour include: Timeliness of information; ability to use information access tools; self evaluation; intuition; and the culture of the university and their libraries.

Similarly, Anwar^[12] concluded that students' information seeking behaviour was largely dependent on teachers' attitude. Students wanted good grades and they tend to honour the types of resources their teacher wanted without having any other logical reasons for using them.

In a current survey of the information needs and information seeking behaviour of a Faculty at Bahawalpur by Khan and Shafique^[13], it was found that most of the undergraduates sought for information to pass their examination and to update their knowledge but the graduates needed the information for writing articles and research projects. The graduates' preferred to use textbooks, reference materials and journals, mostly using the method of discussion with their colleagues and their seniors. They later discuss with their teachers. The major problems they encountered were lack of time, non-availability of materials and too much information.

In the digital environment, Bhatia and Venkata^[14] observed that the e-resources mostly used by graduates were e-journals and e-books. They rarely used databases and CD-ROMs. They frequently used Google as their search engine and sometimes Yahoo but rarely used Alta vista and other search engines. The frequently faced problems were lack of time; inadequate bibliographic control and information overload.

Lackshmi, Chinnsamy and Venkatachalam^[15] showed that the average time spent in the library by the students are 1-2 hours at a single visit and 53% of the respondents claimed to always seek for the assistance of library staff while 29% sometimes seek for assistance and 12% do not seek for assistance in the library at all. However, they strongly agreed to be satisfied with the library resources and services.

Also, it was observed that library users including graduates do not fully exhaust most of the library information resources. This was due to technical problems they experienced in accessing the resources and non-awareness of the availability of the resources in the library or in the immediate environment; despite the huge investment in electronic resources. Little analysis have been done to see how today's library users are responding to the changes taking place around them, this is essential in library planning, designing and introduction of new information services.

Majority of reports on user behaviour since 2000 in literatures used surveys and questionnaires to gather descriptive data on the information seeking habits of various groups. However, information obtained from this method is limited by the number of questions that can be reasonably asked, structure of the questions and the choices provided. In contrast, Ellis^[16] in his early work on the methodology for studying information seeking behaviour argued for a micro-approach via observation and unstructured interview techniques. He claimed that qualitative research design would better lend itself to uncovering detailed picture of information usage, by the close observation of a small number of users.

2. Objectives of the Study

The purpose of this study is to characterize the information seeking behaviour of graduates of University of Agriculture, Abeokuta (UNAAB) Nigeria in their scholarly activities. The study will determine whether or not they are searching for information, it will also examine the influences of people, internet, libraries, and other variables on the information seeking behaviour of the graduates. To address these objectives, the following research questions were formulated:

- What kind of information is needed by the graduates in their scholarly activities?
- How do graduates seek information for their scholarly works?
- What sources and channels used, how and why are they used?
- What role do people play in graduates' information seeking habits?
- What other factors influence graduates' information seeking habits?

3. Scope of the Study

The geographical scope of the study is the University of Agriculture, Abeokuta (UNAAB). It is one of the Federal Universities of Technology that were converted to a full-fledged Universities of Agriculture in 1987. It

was suppose to cater for the Humid Forest of Southern Nigerian ecological zone. Generally, it was established to produce highly skilled and/or middle level manpower in agriculture and also to conduct intensive research in all fields and related fields in agriculture. Principally, it has a tripodal mandates. These include:

- (1) To integrate teaching, research and extension for capacity development in agriculture in the zone;
- (2) To accelerate the pace of agricultural production for the attainment of national self-efficacy in food and industrial raw material production; and
- (3) to improve human development and social well-being of Nigerians through a multiple but integrated systems of rural development(UNAAB,2009/10 Yearbook)¹⁵

As at the time of the study, the institution has eight colleges and thirty-two departments; these include:

- *College of Agriculture Management & Rural Development (COLAMRUD) 2 departments,
- *College of Animal Science & Livestock Production (COLANIM)5 departments,
- *College of Engineering (COLENG) 4 departments,
- *College of Environmental Resources Management (COLERM) 4 departments,
- *College of Food Science & Human Ecology (COLFHEC) 3 departments,
- *College of Natural Sciences (COLNAS) 8 departments,
- *College of Plant Science (COLPLANT) 5 departments,
- *College of Veterinary Medicine 1 department.

4. Methodology

The study uses an exploratory qualitative research design with structured interviews. This would furnish deeper understanding of associated issues and give insight into the process under study. Qualitative research provides opportunity to explore, not only the participants' actions but also their perceptions of the research. This is consistent with Dervin's^[17] view of information seeking as a process of sense making where a person finds meaning which fits in with his previous knowledge thus remaining a personal point of view. The population was 302 graduates of University of Agriculture, Abeokuta (UNAAB) who have registered with the library for the 2010/2011 academic season. The population as a whole was used for the study.

The instrument of the study was a structured interview, which was developed and piloted on one test subject, resulting in minor modifications to the interview proceedings, including operational definitions. Each subject was interviewed by two people from the study team. One is to ask questions and the other to take notes. Each subject was asked the same question but the follow- up questions differs according to the subject's responses to the initial questions. The finding notes were collated and grouped under four themes. The study was instituted on November 2010 and ended in April, 2011.

Table 1. Sample of Graduate Students from the Study Population

College	Post graduate diploma(PGD)	Master	Doctoral	Total
COLVET	0	0	9	9
COLFHEC	22	0	0	22
COLAMRUD	53	5	3	61
COLPLANT	25	0	0	25
COLANIM	9	6	2	17
COLNAS	40	27	6	73
COLENG	35	27	3	65
COLERM	23	3	4	30
TOTAL	207	68	27	302

Source: Post- Graduate school F UNAAB for 2010/2011 session

5. Results of Data Analysis.

The study combines the benefits of quantitative and qualitative analysis.all transcribed interviews were coded into meaningful categories with a view to explore the ideas expressed by the graduates regarding their methods,behaviour and reasoning.

Usually, general questions rather than specific questions were asked to get a better idea of the subjects' feelings that affect their information seeking behaviour

Question 1: What kind of information is needed for scholarly works?

The major scholarly works of the graduates is research/ project works, while most of the postgraduates of the school need information for their course works, general information is needed by some of the graduates because of the tendency to have job interview in the course of their study. However, none of the students need information for entertainment as depicted in table 2

Table 2: information needs of the Graduates

Categories of needs	No of Respondents	Relative Percentage
Course work /Assignment/class notes & time paper	207	69.5
Research / Project	219	72.5
Entertainment	-	-
Discussion	105	34.8
General Knowledge	180	59.6

The results agreed with Thani & Hashim^[18] that graduates needs different types of information based on their interest and work at hand. Also, the kind of information needed for by the graduates is represented in table 3.

Table 3: Kinds of information needed by the graduates.

From the table, the students need mostly scientific /technical information; methodical, patents standards; and Conference proceedings in ascending order, graduates of COLENG, COLFHEC & COLVET need information on technical reports

Question 2: How do graduates seek information they need?

The respondents were questioned on how they go about finding the appropriate materials they need. Their responses are presented in table 4 below.

Kind of information	No of Respondents	Relative Percentage
Scientific/Technical	264	87.4
Reference	5	1.7
Methodological	206	68.2
Patents /Standard	185	61.2
Reports	86	28.4
Conference Proceedings	160	53.0

Table 4: Searching Techniques of Graduates

Techniques	No. of Respondents	Relative Percentage
Citations at the end of book chapters	100	33.1
Retrospective searching of indexes/ / abstracting tools	57	18.8
Citation at end of journal articles	157	52.3
Personal Communication	278	92.0
Internet search	283	93.7
Scanning of journal titles	115	38.1

From the table, majority of the graduates embark on internet searching and personal communication with lead scholars, lecturers and experts in their fields who can offer reasonable clue (s) to their information needs. Thereafter, they claimed to use chain citations at the end of journals articles printed and online.

Question: what sources of information are used by the graduates?

The interviewees were also asked questions on the sources they used for their works. Their responses is presented in table 5 below.

Table 5: Information Sources of the Graduates.

Sources	No of Respondents	Relative Percentage
Books/ Monographs	No of Respondents	Relative Percentage
Scientific / Technical Journals	169	56
Data Sheets	69	56
Library Catalogues	172	57
Internet /Internal Electronic Database	272	90
Patent/Reports /Specifications	114	38

From the table the major formal source raised by the graduates is the internet facilities (90 percent), some of them claimed to use library catalogue (57 percent) and scientific technical journal the library (56 percent). H/V, very few used textbooks in the library/data sheet and patent / reports.

Question 4: what do people play in graduates' information seeking habits?

The people in varying categories play criminal roles in the information seeking behaviours of the graduates. This is represented in table 6 below.

Table 6: Information sources of the Graduates.

Sources	No of Respondents	Relative Percentage
E-Mail / Research Group	76	25
Face to Face Discussion/Conversations with Colleagues	211	70
Meetings/Workshop/Conference/Seminar	38	13
Private Correspondence	16	5.0
Discussion with Librarians	27	83
Consulting Lecturers/Supervisors	227	75

From the table majority of the graduates engage people in discussions, 75 percent with their lectures and supervisors, while 70 percent discussed with their colleagues. However, very few of the 27 percent engages the librarians or subject specialists in the librations or subject specialist in the libraries. These results confirm that while librarians had been regarded as second class other people play a document role in the research works of the graduates.

Question 5: What factors influencing the use of information of the graduates?

They were asked on how their information use could be improved. Their responses is shown in table 7 below

Table 7: factors influencing information use of graduates

Factors	No of Respondents	Relative Percentage
Relevancy of information	206	68.2
Language of presentation	115	38.0
Timeliness	114	37.7
Eases of Use of information sources	216	71.5
Background motivation	67	22.1

From the table, relevancy information (68.2 percent) to their information need and ease of use of the information sources (71.5 percent) promote their use of information, timeliness and language of information presentation has little influence on the information seeking behaviour of the graduates.

5. Findings and Discussions

5.1. Information Resources

Accessibility in terms of time, distance, speed, and ease of use were the major factors of choosing electronic information resources among the graduates of the institution. The first stage of search for almost all graduates interviewed was to have a general idea of their project topic, before thorough searching can be done. 272 of them confirmed that internet as the first port of call for the exercise, they reiterated that internet is speedy (fast), current, convenient and offers cutting-edge information than other electronic information resources. The internet's search engine permits users to quickly search a massive amount of information from varying sources ranging from journal articles to notes in different fields. However 247 of the subjects offered mixed reactions about the use of the internet, they declared that the resources is unreliable, non- specific, and mostly lack authority. Students from colleges of engineering, veterinary medicine, natural sciences and food and human ecology declared that most of the papers were of questionable values; most times they might not be relevant to their research. Although, many of these graduates claimed to have no formal skill on the use of internet during their undergraduate studies, they learn the use by trial-and-errors or reading about internet in the library.

161 of the respondents claimed to be versatile in word processing. On the most frequently used search engines, 271, 216 and 60 of the respondents acknowledged Google, Mozilla Firefox and Yahoo respectively. More than three-quarter of the graduates use internet in searching of research papers, they also visited business, personal, professional, academic and organization websites for latest or specific information.

5.2. Influence of People on Information Seeking

Graduate students of the institution utilise people in their information seeking habit based on spirit of trust and cooperation. They affirmed that lead scholars and their lecturers seem to shape their entire approach to

information seeking and learning, more than four-fifth of the respondents affirmed that, although, some of their lecturers may be unapproachable, most of them offered substantive guidance, answer questions, offer recommendations, and resources that form foundations in their research works. One or two key papers, classic books or relevant journal offered to students could lead to a whole host of resources by checking through the references. Some graduates (227) submitted that lead scholars like professors are instrumental in getting resources such as journal articles, books, research papers, data sets and their own personal papers or those of noted authors. Help also come through casual conversations during research seminars, or in formal one-on-one meeting, this however depends on common interest. Also, 211 of the subjects agreed that casual conversations among peers often resulted in sharing of reference books, websites, articles, journals, term papers, names of key peoples in the field.

Furthermore, some of the interviewees yielded that casual conversation made them to be focused, and to locate sources. 76 of the graduates rendered the importance of research group in casual discussion as opportunity to talk about their research, share ideas and get feedback all this would define and shape their research.

5.3. Searching Techniques

Most graduate students who seem to know very little about their research works at the onset start with general to specific searching, but those of them assignments given by lecturers embark on specific, known searching techniques. By this, specific journal to use, website name and necessary citation were known. This is easier, quicker, and gives more relevant feedbacks. 212 of the graduates adopted citation chaining. They start by looking at the references of the known journal and iterate through the references. 75 of the subjects, majorly engineering, veterinary and food science students, who are on research submitted that citation of references in several journal articles is much quicker and easier than the e-copies on net. You can click on one paper and others will unravel to you; thus they prefer electronic articles to easily build a related and relevant body of literature. Most of the graduate students from extension, environmental sciences and crop production check citations from key materials collected from lead scholars and colleagues and rarely locate them by themselves in the library. They check who the author has cited, then track the references. 10 of the respondents confirmed using citation indexes to look for full-text articles with their citation chaining.

Nearly all the graduate students appear to prefer the use of open-ended keyword rather than using exact keywords in their information searching. In their searching techniques, 126 gave preferences to full electronic document; 70 prefer summary of the original document like abstract or indexed document and 30 preferred the evaluative review of the original from the net.

5.4. Libraries and Librarians

When the graduates are searching information for their project they often search through variety of electronics resources in the Nimbe Adedipe library, prominently mentioned e-resources are: E-journals- AGORA; HINARI; JSTOR; Emerald; EBSCOHOST; National Virtual Library in Nigeria; AJOR; and CD_ROM including TEEAL (The Essential Electronic Agriculture Library); CAB Abstract; CABI Abstract (Food and nutrition); E-Granary and E-books depending on their disciplines and levels. Other library resources they use regularly are handbook and other reference materials in library catalogue; library staff and previous student projects. 211 of the subjects answered that the use materials in the library for their project works, the reasons submitted are that library happens to validate the information obtain on the internet; library had a proven authority as regard to what was stocked in the library and library is able to track developments in those resources in library. 90 of respondents that use the materials in the library agreed that it is very convenient for them to consult the materials and 90 specified that it is just convenient, while 40 said that it is less convenient, the reasons provided for non-use and inconvenient in the consultation of the library materials include: inexperience of the students to use the resources; non awareness of the existing resources; epileptic power supply; and frequent down time of the server that leads to time wastage in accessing electronic resources. More than half of the respondents (176) emphasised that library is not their first port of call, they only use it half-way through their information seeking process for their project works, 25 of them are indifferent while the remaining 76 gave different levels of importance of library in their project works. However, they want the library to improve on alerting services, by creating subject based alert; reference assistance/consultation in the library; library communication about new resources, services and events through their e-mail, and flyers.

6. Conclusions and Recommendations

The study is based on assumption that the ability to x-ray the information seeking habits of users by librarians or information providers will play an active role in serving their clientele. Behaviour tends to change relative to the influence of some factors; thus this study is aware of the possibilities of changes in the information seeking behaviour of the graduates as they progress in the cause of their projects and studies.

Information seeking behaviour is a function of information need, individual, and resources available. As regard to this study, the information need of these graduate students was initiated by their project works that is a prerequisite for the degree in view. The influences of individual characteristics, such as: background of the students, levels of IT knowledge of the students, students' discipline, and level of the students' programme were evident in the study. Although, awareness, accessibility and ease of use were the determinants of resource use and information seeking habits, reliance on a particular information sources/channel was not vivid in this study.

Despite the prominent and regular use of internet as one of the major electronic resources by the students in this study, it does not improve their information use skill i.e. the ability of information obtained from a given source to meet the needs of the users, due to massive jumble and lack of authority that were associated with the source. The other prominent information resource confidently adopted by the graduate students in this study is the influence of people in their information seeking behaviour. They use lead scholars, lecturers, peer group, and colleagues in face-to-face discussion, seminars and workshops, casual discussions among peers and research groups. This source had opposite features as internet, it is organised and reliable.

It could not be clearly established from this study the influences of the librarians on the information seeking behaviour of the graduates, because they only use library when the document was not readily available online and too costly for the students that they resort to using library. This was perhaps due to little technical knowledge and low level of awareness of the students. Therefore, the following recommendation could be useful:

- the ability to validate sources of information is probably more important today with the volume of information available on the internet; therefore, librarians could utilize this challenge to demonstrate its value in their environment;
- it is necessary to train the lead scholars that the students consulted when they need information, so that the information sources disposed to the students would be effective;
- aggressive information marketing strategy should be developed at both subject librarians and departmental levels through awareness;
- library communication of new resources on net could be send to the e-mail of the interested students

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