

# INFORMATION NEEDS AND SEEKING BEHAVIOR OF AGRICULTURAL STUDENTS AT THE UNIVERSITY OF SWAZILAND: A CASE STUDY

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## Abstract

*University students constantly seek information to improve their study. The study sought to understand literature searching experiences and skills of the students of the faculty of Agriculture of the University of Swaziland (UNISWA), Swaziland, of Southern Africa. The purpose of the study was to determine their information requirements and also to determine their awareness of library services available to them. The study collected empirical data on the information requirement of Agricultural students. Data were collected from 165 students from the faculty of Agriculture which has 7 academic departments including Agricultural and BioSystems Engineering, Agricultural Economics and Management, Agricultural Education and Extension, Animal Science, Consumer Sciences, Crop Production and Horticulture. It gives an overview of the findings of the investigation, into the professional factors affecting information needs, information seeking behavior, and library usage of Agricultural students. It also examines the role of new information environments in the information seeking process and makes recommendations based on the findings. Suggestions related to the future research topics and for the teaching professional development of higher education were presented at the end.*

**Keywords:** *Information needs, Information seeking, Agriculture, University of Swaziland, e-resources*

## 0. INTRODUCTION:

Information is regarded as one of the vital resources in agriculture. The existing information environment is ironic, branded by a propagation of information sources and providers, an array of methods for retrieving information, and a redundancy of content from multiple sources. In this “Information Age” many information users tend to experience a sense of information inadequacy and anxiety. The role of information has been acknowledged as an important aspect in the academic and research activities. However, it is believed that a better understanding of the information needs and the information seeking behaviors of students is fundamental for their achievement. The process of seeking and searching for information also has received considerable attention from researchers, resulting in several models, many of which are centered on information seeking and searching in academic or professional settings. Though the models delineate the processes, they have not shed much light upon how users recognize what or how much information is enough to accomplish their objectives. The study of information needs and gathering behavior dates back to 1948 when Bernal and others presented a paper on scientific information at the Royal Society Conference (Bernal, 1960). In the last 30 years a considerable amount of literature has been produced dealing with information needs and information seeking behavior of both individuals and groups in a variety of context (Anwar, Al-Ansari and Abdullah, 2004). It is estimated that the number of publications on information seeking behavior were more than ten thousand in the 1990s alone (Case, 2002). Many studies have been conducted to investigate the information seeking behavior of library users based on their subject interest, occupation, information environment and geographical location. Information needs and Information seeking behavior of academics have also been a popular area of research for the information scientists for decades (Majid and Kassim, 2000). Knowledge of the information needs and information seeking behavior of users is vital for developing library collections, upgrading facilities, and improving services to effectively meet the information needs of users. This paper discusses that the information seeking behavior and information sources could have an impact on the quality of information obtained. Identifying the sources of information and information seeking behavior of library

users will help to understand users' challenges, addressing these challenges, which will in turn improve the overall quality of information obtained from the library. This paper tends to investigate the information needs and information seeking behavior of Agricultural Students in the University of Swaziland.

## **1. INFORMATION NEEDS AND INFORMATION SEEKING BEHAVIOR :**

### **1.1. Information Needs:**

Information ranks next to the basic human needs as air, water, food and shelter. The collection, transfer and use are all pervasive and universal activities. Information needs of individual researcher and educational institution in agricultural sector where information is an essential ingredient for development had not so far been the subject of serious discussion in African countries. Kennedy (1997) wrote that the concept of information needs is similar to the physiological need for food and water. He added, information seeking thus, is dependent upon the problem situation from which the need for information arises. In this view, information need is a situation or task which depends on many factors and changes as the person goes from one stage of task to the next (Kennedy,1997). Information needs is often understood as evolving from a vague awareness of something used and as culminating in locating the information that contribute to understanding and meaning (Kuhlthau, 1993). Thus, it is seen that there is a need to understand the user's requirements because the root of any information seeking is believed to be the concept of information needs, which fall into various categories as need for new information; need to expand or clarify the information obtained; and need to confirm (Allen, 1996). Leug (2002) further added that the goal of user's information seeking activities is to find information that satisfies his or her information needs.

### **1.2. Information Seeking:**

Information-seeking behavior differs among user groups. Academic libraries must understand the information needs of faculty and students in order to address those needs. The concept of information seeking is basically the consequences of a felt information need by a

user who may then make demands upon formal and informal information sources or services in order to satisfy the needs (Boadi & Letsolo, 2004). Information seeking means different things in different context that involves the search, retrieval, recognition and application of meaningful content (Kingrey, 2002). Boyd (2004) added that information seeking is a personal and situation dependent activity that is underpinned by access to information and the strength of the information sources. According to Backlund (2003) information seeking is a process in which participants can act as both receivers and senders. It is defined as a purposive process, in which the individual attempts to find information through information sources in order to satisfy his or her information needs (Brystrom, 1999). Uhegbu (2007) describes information-seeking behavior as the way in which information users conduct themselves when searching for information. Ajiboye and Tella (2007) agree when they describe information-seeking behavior as the way and manner people gather and sought for information for their personal use, knowledge updating and development. Uhegbu (2007) describes the factors affecting choice of information, particularly among students, which includes course of studies, level, age, and religion.

## **2. UNIVERSITY OF SWAZILAND LIBRARY : AN OVERVIEW.**

The University of Swaziland (UNISWA) the only institution of higher learning in the country, comprises of three campuses at Kwaluseni, Luyengo and Mbabane. It was established in 1982 by an Act of Parliament of the Kingdom of Swaziland with a mandate to teach, conduct research and carry out community service. The University has 7 faculties which include Agriculture, Education, Humanities, Social Sciences, Commerce, Health Sciences, Science & Engineering and an Institute of Distance Education (IDE) which offers both undergraduate and postgraduate programmes. There are altogether 36 Academic departments which offer Certificate programmes, Diplomas, Bachelor's degrees, Master's degrees and a Ph. D. degree. The UNISWA Library was started along with its parent body the University of Swaziland in the year 1982. Since its inception the Library supports the educational research and learning functions of the University and a number of services are directed to these efforts. It also caters for the needs of the students and teachers of the

university at large. The mission of the Library is to “effectively provide services and access to quality academic information resources, irrespective of format and location to the University staff, students and associates in support of the instructional, learning, research and administrative functions of the University”. The University has the most comprehensive collection in the country, housed on the three campus libraries Kwaluseni, Luyengo and Mbabane. The UNISWA library has a collection of 1,966,500 monographs and current subscriptions to more than 325 print journals with back issues for more than 600 journals.

The library has a total membership of 5767 out of which 5251 are undergraduates 165 students are postgraduates, 1695 students are from IDE (Institute of Distance Education) and 351 members are from Academic and Administrative staff. The library holdings have been available in machine readable catalogue since 2000 and the computerized bibliographic information of the library holdings have also been made available for users’ searching throughout the campus network (Intranet) using web OPAC. Digitization of theses and dissertation for inclusion into the university’s Institutional Repository is in progress. The Repository collections provide free online access to all types of institutional research outputs within the university network (Intranet). Apart from the print resources the University library had procured quite a number of e-resources over the period of time. The University is also a member of EIFL (Electronic Information for Libraries) through which the students and the faculty can access the core and peer reviewed journals and bibliographic databases from different publishers and aggregators in different disciplines.

### **3. PROBLEM STATEMENT:**

The University of Swaziland Library carry out a user education programmes which involves the teaching of Library skills, a library tour, and associate with formation retrieval tools at the beginning of every academic year. This is followed by hands-on-tutorials on the use of the available e-resources of the library so that they will not face any problem while using the library. As students come from different backgrounds some of which possess better skills to utilize library materials, while others do not have adequate skills for utilizing library

materials such as using a computer, use of internet and library catalogues. So there are some students who face difficulties in accessing and using library materials. They take time to understand and use the library so the authors embark on this study, with the hope of finding their problems and find out the solution so that the materials in the library can be put into maximum utilization.

#### **4. OBJECTIVES OF THE STUDY:**

The objectives of the present study are:

- To find out the awareness and use of library resources by the students;
- To find out whether they are satisfied with the services of the library;
- To determine the frequency of library visit by the Agricultural students;
- To know the purpose of visiting the library;
- To examine the methods and sources used by the students of Agriculture to acquire required information;
- To know the purpose of seeking information;
- To evaluate the services provided for the restructuring of information and/or the establishment of new services if necessary.
- To know what format they prefer whether electronic or print;
- To find out what problems are encountered in seeking information;
- To recommend possible ways of improving the library services towards meeting these needs.

#### **5. SCOPE, LIMITATION AND METHODOLOGY:**

The scope of the paper limits to the faculty of agricultural students of the University of Swaziland only. The population of the study comprised of 7 departments in the Faculty of Agricultural Science in the University of Swaziland The authors adopted random sampling method for collecting the primary data. For this purpose, questionnaire method was used for collecting the data. A total number of 200 questionnaires were distributed to the students

including both undergraduate and postgraduates students. A total of 165 filled-in questionnaires were received of which 84 were from male and 81 from female students with an overall response rate of 83%.

## 6. DATA ANALYSIS AND FINDINGS:

**Table 1. Gender:**

Sl. No.	Male	Female	Total
1.	84	81	165
2.	42%	41%	83%

Table 1 shows the number of respondent gender wise.

**Table 2. Awareness of e-resources:**

Sl. No.	Yes		Total	No		No response	
	Male	Female		Male	Female	Male	Female
1.	80	71	151	1	3	3	7
2.	95%	88%	92%	1%	4%	4%	9%

Table 2 shows the awareness of the e-resources of the library by the user. 92% of the users were aware of the e-resources but some of them nearly 32% find it difficult to use the e-resources which are clearly shown in table 8.

**Table 3. Satisfaction:**

User satisfaction is one of the most important aspects for a good library so it is important to know the adequacy of the available information resources and to find out to what extent the users feel about the collections.

Sl. No.	Yes		Total	No		Total	No response	
	Male	Female		Male	Female		Male	Female
1.	48	44	92	31	28	59	7	9
2.	57%	54%	56%	37%	35%	36%	8%	11%

Table 3 shows the satisfaction of the users with the services provided in the library. More than half 56% of the users are satisfied with the services. But still 36% of the users are not satisfied. So there is a need to improve the services. One of the issues is that some of the books are obsolete and there were not enough number of books for them to borrow.

**Table 4. Frequencies of visit to the library:**

The study attempted to know the frequency of the student visiting the library so that the library staff can assist the students while searching for information. Their frequency is tabulated in Table 4. There are 3 male and 1 female who did not respond on the visit to the library.

Sl. No.	Frequency	No. of respondents			Percentage		
		Male	Female	Total	Male	Female	Total
1.	Everyday	21	25	46	25%	31%	28%
2.	2-3 times	50	45	95	60%	56%	58%
3.	Weekly	9	8	17	11%	10%	10%
4.	Monthly	1	2	3	1%	3%	2%
5.	No response	3	1	4	4%	1%	2%

The frequency of students visiting the library has been classified into four time gaps as shown in table 4. Majority of users 58% were visiting the library 2-3 times a week followed by 28% users visiting everyday.

**Table 5. Purpose of visit:**

Sl. No.	Purpose	No. of respondents			Percentage		
		Male	Female	Total	Male	Female	Total
1.	To study	72	68	140	86%	84%	85%
2.	To borrow books	47	34	81	56%	42%	49%
3.	Browsing the shelves	11	18	29	13%	22%	18%
4.	Used of reference materials	44	45	89	52%	56%	54%



5.	Read the journals	27	21	48	32%	26%	29%
6.	To collect course materials	24	20	44	29%	25%	27%
7.	Know the latest arrival	7	4	11	8%	5%	7%
8.	Read newspaper & magazines	39	22	61	46%	27%	37%
9.	Browse e-resources	0	1	1	0	1%	1%

Table 5 shows the purpose of visit to the library. It allowed the users to respond to all that applies to them. Most of the students 85% come to the library to study. 54% come to use reference material and 49% that means almost half of them come to borrow the books. Students are less interested on latest arrival of materials. It is noteworthy that out of the 165 students only one has come to the library for browsing the e-resources. One female has not responded.

#### Table 6. Use of library resource and services:

The users were asked to respond on the use of the library resources and the service that are provided by the library and they were allowed to answer as many as that applies to them. The following table highlights the rate of respond from the students.

Sl. No.	Services	No. of respondents			Percentage of respondent		
		Male	Female	Total	Male	Female	Total
1.	Issue / Return	16	23	39	19%	28%	24%
2.	Reference service	31	33	64	37%	41%	39%
3.	Books and journals	59	47	106	70%	58%	64%
4.	Seminar/ conference	9	2	11	11%	3%	7%
5.	Indexing/Abstracting	10	4	14	12%	5%	9%
6.	Bibliography	10	8	18	12%	10%	11%
7.	Newspaper	37	25	62	40%	31%	38%
8.	Interlibrary loan	10	10	20	12%	12%	12%

Out of the 165 students there are only 1 male and 2 female that did not respond to the use of the library resources and services. 64% of the users use the books and journals followed by 39% reference service, 38% of them for reading newspaper and then 24% use issue and return service. Abstracting and indexing are hardly used.

**Table 7. Purpose of seeking information:**

Users visit the library to fulfil their needs by consulting the documents available in the library. Here in this table the users are allowed to indicate their purpose of visit that all relate to them.

Sl. No.	Purpose	No. of respondent			Percentage		
		Male	Female	Total	Male	Female	Total
1.	For career development	31	25	56	37%	31%	34%
2.	To solve immediate practical problem	50	50	100	60%	62%	61%
3.	To keep up to date	31	18	49	37%	22%	30%
4.	To write an article /research paper	59	62	121	70%	77%	73%

From the above table 7 it is seen that most of the students 73% seek information to write an article or a research paper which is usually an assignment for their courses. 61% of them come to solve the immediate practical problems. 34% of the users do come for their career development and 30% of them come to keep up-to-date about the library.

**Table 8. Preference of format:**

Sl. No.	E-journals		Total	Print		Total	No response		Both	
	Male	Female		Male	Female		Male	Female	Male	Female
1.	69	54	123	13	19	32	2	3	0	5
3.	82%	67%	75%	16%	24%	19%	2%	4%	0	6%

The users were asked on their preference of the journals in print or electronic format. The above table highlights the preference. 82% male and 67% female i.e. 75% of the users prefer the e-journals while 16% male and 24% female i.e. 19% prefer the print format. 2 male and 3 female did not respond to the query while 5 females want both formats to be available.

**Table 9. Problem on use of e-resources:**

Sl. No.	Yes		Total	No		Total	No response		Total
	Male	Female		Male	Female		M	F	
1.	25	28	53	52	48	100	7	5	12
3.	30%	35%	32%	62%	59%	61%	8%	6%	7%

Users do face problem while using the electronic resources. So they were asked whether they face any problem while using the e-resources. The response is tabulated in table 9. From the table it is seen that the problem of accessing the e-resources by the students is lesser about 32% only. 62% male and 59% female i.e. 61% of the total users do not have any problem. The problem they experience is as a result of inadequate computer skills.

## 7. RECOMMENDATION:

Based on the findings the following recommendations are drawn:

- Information search tools should be set for the users before embarking on research activities to enable them to maximize the use of library resources during their research;
- Students must take part in the library orientation program and the library skill classes that are taught by the library staff at the beginning of the new session;
- Information marketing strategy should be developed to create awareness among the students on the available resources and services both from the library and the departments;
- The library professional and supportive staff must always be willing and ready to provide assistance to students who have little or no knowledge of using the library;

- Proper infrastructure for accessing the e-resources should be provided to accommodate students and staff of the faculty of agriculture and those of others;
- There should be efficient internet facilities that will allow students access to the information.

## 8. CONCLUSION:

Information needs and seeking behavior is influenced by a number of factors so the first step is to understanding the actual needs of information users. The study has set to determine the information needs and seeking behavior of the Agricultural students of the University of Swaziland. The result shows that most of the students come to the library to study, borrow books. They were aware of the e-resources available in the library but they hardly use the e-resources. They use only the books and the printed journals mostly. Though the role of the library profession remains the same but the methods and tools for information storage and retrieval continue to grow and change dramatically so librarians must understand information-seeking behavior of users to re-engineer their services and provide information efficiently. The result of the study also discloses that some of the users are not satisfied with the library collections and services. Although orientation/ awareness programmes are conducted in the beginning of each session they want to give more training in the use of the e-resources. From the study we conclude that most students lack basic skills on how to use the library services and resources. It also discovered that students do not have adequate knowledge in the use of the library and that some of the students are not aware of the services the library offer. Marketing of library services could make more students aware of the available resources and services. The study did establish the main sources of literature consulted by the students and their ability to use them but it failed to establish whether there was any relationship between students' ability to use library services and resources and students' performance in their studies.

The following studies could be carried out to build onto this study for further improvement of services to meet information needs of the Agricultural student.

- The impact of instruction on the use of library resources and services on Agricultural student's performance in their studies.
- Understanding the student's formal and informal means of learning about the services the library provides, and the use of its services and resources.

These suggested studies could provide more valuable data which could help in the improvement of awareness programmes which is carried out by the library professionals in the use of the library resources and services.

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In this case study, students assume the role of a public relations specialist contracted to communicate. **Are We Too Clean?** This case study focuses on the relationship between the microbiome (the suite of species that live in or on the human body) and autoimmune and allergic diseases. At the center of the case is Amelia, a young woman living with Crohn's disease. **Banana Split: To Eat or Not to Eat** This case focuses on the banana, the most popular fruit in the world. Initially students are given rudimentary information and encouraged to generate wide-ranging questions. **Do Corridors Have Value in Conservation?** This case study discusses conservation corridors as a means to reduce the problems of population size and isolation in a fragmented habitat.