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INFORMATION SEEKING BEHAVIOURS OF THE FACULTY OF ECONOMICS AND MANAGEMENT SCIENCES, UNIVERSITY OF NAMIBIA

1. Introduction

Background to the study

Studies on academic researchers' information seeking behaviours are warranted in order to establish if they have distinctive information needs and information use situations. Globally, academic researchers are known to contribute towards the attainment of university objectives through teaching, research, consultancy and community service; the University of Namibia (UNAM) is no exception. The responsibilities of academic researchers require them to become involved in information-gathering activities. Like other scientists practising in today's information society, academic researchers at UNAM are today inundated with vasts amounts of information that may not fit the category of evidence-based scientific literature while they try to make intelligent decisions, conduct research or deliver lectures to students.

The number of studies on the information seeking behaviours of academics is vast, showing clearly that the topic is well researched. The volume of literature on this topic reached more than ten thousand publications by the 1990s. (Tahir & Mahmood & Shafique 2008). Studies on the information needs and information seeking behaviour of academics are and will continue to be an interesting area of research for information professionals (Majid & Kassim 2000). Earlier studies on information needs and information seeking behaviours report that faculty members relied heavily on books and journals (Majid & Kassim 2000). A similar study of arts and humanities teachers found that academics consulted colleagues when preparing their teaching (Tahir et al. 2008).

Makri (2006) argues that academic libraries must understand how best to serve, support and meet the needs of academics. Therefore the study on academic scientists at the Faculty of Economics and Management Sciences (FEMS) is of great importance to the University of Namibia (UNAM) Library.

Aim and significance of the study

This study was conducted in order to examine the information seeking behaviours of academic scientists from the Faculty of Economics and Management Sciences (FEMS) at UNAM. The objectives included establishing the type of information sources used by academics, the circumstances that caused respondents to engage in information seeking activities, respondents´ knowledge of library resources, and the barriers they encountered during their information seeking processes.

Studies on the information seeking behaviours of academic researchers are a neglected research area in Namibia. Online searches and local library catalogues yielded no positive results. As far as we know, no study on the information seeking behaviours of academic scientists at UNAM has been conducted to date. This study is therefore a direct

response to this research gap in the literature. The study adds new knowledge to the existing body of literature on information seeking behaviours. Additionally, the study identified gaps in library resources in the fields of accounting, economics, business management, politics and administrative studies. The study makes recommendations on faculty training in library user education and information skills.

Research questions

A review of related studies helped the authors to formulate the research questions used to guide the enquiry:

- What are the information needs of the FEMS academic scientists?
- Which information sources do FEMS academic scientists use to search for information?
- How familiar and satisfied are the FEMS academic scientists with the UNAM Library resources?
- What are the barriers encountered by academic researchers when seeking information?

2. Literature review

Information is currently regarded as one of the essential elements of science that is pivotal to the livelihoods of individuals and communities. Information is a prerequisite for the advancement and generation of new knowledge. Patitungkho and Deshpande (2005) state that "the present era is the era of information and knowledge revolution which has affected information seeking behaviour".

The literature reviewed in this study, looks at various resources deemed relevant to the discourse of information needs and information

seeking behaviours of academic scientists. Patitungkho and Deshpande (2005) report that, "literature on information seeking behaviour of faculty members is greatly broad ranging". The same is underlined by several scholars such as Hiller (2002), Brown (1999), Fidzani (1998), Clougherty, Forys, Lyles, Persson, Walters and Washington-Hoagland (1998) and Pelzer, Wiese and Leysen (1998). Callinan (2005) opined: "Research studies have been carried out which examine the information needs and behaviour of different library user groups such as academics, researchers, graduate students and undergraduates while others distinguished between these groups on the basis of their faculty."

Conceptualizing information needs and information seeking behaviour

The literature abounds in definitions of information seeking behaviour. Leckie, Pettigrew and Sylvain (1996) posit that, information seeking behaviour "involves personal reasons for seeking information". This study uses the term information seeking behaviour (ISB) from Wilson's (1994, 2000) perspective, he discusses "information seeking behaviour from a perceived need for information by the user. In order to address this need, users then visit an information system such as library or database and other sources of information such as textbooks, lecturers and handouts". Callinan (2005) agrees with Wilson.

In his study, Ellis (1989) developed a model of six information seeking activities that comprise a pattern of information seeking behaviour which is often exhibited by academic researchers: starting, chaining, browsing, differentiating, monitoring and extracting. Nicholas, Rowlands, Clark, Nicholas and Jamali (2009) identified the same patterns. They report that economists and business users exhibited the following distinctive characteristics: heavy use of e-textbooks; off-campus and searches outside office hours; more abbreviated searches and visits;

popularity of Google and Google Scholar among the users, likewise abstract viewing; and a marked preference for current material.

Sources of information

Social scientist respondents from a related study by Shokeen and Kushik (2002) revealed that most scientists visited the library daily and preferred searching using indexing and abstracting periodicals and citations in articles. Respondents in Khan and Shafique's (2011) study acknowledged that they sometimes acquired resources from their colleagues and from their institutional library. The same respondents frequently sought information for lecture preparation, improving personal competencies, improving general knowledge and current awareness. Respondents also conversed with co-workers and experts at other institutions; they read articles and books as part of their information seeking habits.

A survey of 2,084 students and staff at two Australian universities showed that 62% respondents from business said they used e-books (Borchert & Tittel & Hunter & Macdonald 2009). Findings from a study by Patitungkho and Deshpande (2005) indicated that "business and economics students and academic staff used and sought information very much like their virtual colleagues in other subject fields".

Studies by Patitungkho and Deshpande (2005), Khan and Shafique (2011) and Nicholas, Rowland, Clark, Nicholas and Jamali (2009) all produced similar results. Most faculty members were said to seek information for preparing class lectures, 79% for keeping knowledge up to date, and 54% for writing and presenting papers (Patitungkho & Deshpande 2005). The choice of library collections should be based on the needs of the end users. Consequently, librarians must be aware of how their faculty members seek information. (Patitungkho & Deshpande 2005.)

Barriers that hinder access to information by scientists vary. Respondents from Patitungkho and Deshpande's (2005) study faced problems similar to other scientists, i.e., "unavailability of information, lack of time to search for information, incomplete information materials and language problems".

Respondents in Khan and Shafique's (2011) study encountered the following barriers: "Lack of computer hardware and software, information overload and its availability in various sources, lack of time to search for information, non-availability of required materials and lack of good searching skills."

3. Methodology

This research employed a case study design. Data was gathered through a survey method. A pre-designed standard questionnaire was used as the main data collection instrument. The target population comprised 36 full-time academic scientists working at the time at FEMS, some lecturers were away on study leave, while some lecturships were vacant, the Faculty recruited part-time teaching staff to stand in. Part-time teaching staff was excluded from the study because their contact details were not on the faculty mailing list.

Survey

A draft questionnaire was discussed and pre-tested on a few voluntary academic researchers at UNAM. The research instrument was validated and data collection commenced on 25 August 2011 and was scheduled to be completed at the end of October 2011. The questionnaire was

sent to the 36 targeted respondents' e-mails. However, researchers were alerted about possible printing problems among some respondents two weeks into the study. The researchers printed 15 copies of the questionnaire and handed them to the Faculty Secretary for distribution upon request. The introductory paragraphs of the questionnaire contained a statement on ethics assuring respondents that participation was voluntary and that their privacy would be respected and the data kept confidential.

Some respondents complained of busy teaching schedules, hence initial attempts to schedule interviews and focus group discussions failed. Data collection was then restricted to a questionnaire survey. One meeting was held with the Department of Management Sciences to discuss the purpose of the study and clarify the content of the questionnaire.

Descriptive statistics were used to present and analyse empirical data from the completed questionnaires. Statistical data produced frequency distributions which were presented in tables and summary statements.

Respondents

A total of nine respondents out of a possible total of 36 academic scientists took part in the survey. Five respondents were male, and four female. Respondents from the accounting, management sciences and political and administrative studies departments took part in the study. There was no response from the Department of Economics.

The age categories of respondents varied between 20 and 60 years. Five respondents were aged between 41 and 50, while two were from the 31–40 years age group. One respondent was between 20 and 30 years old, while the other was between 51 and 60. The teaching and research experience of the respondents varied according to their age.

Table 1. Academic ranking of respondents

Academic Rank	Frequency
Assistant Lecturer	1
Lecturer	4
Senior Lecturer	1
Associate Professor	3
Professor	0
Total	9

Table 1 shows that most respondents occupied the ranks of lecturer and associate professor, while none occupied the rank of full professor.

Four respondents were Post Honors Degree (PHD) holders, while another four respondents possessed a Master`s Degree, and one respondent had a Bachelor`s Degree. Six respondents used the Windhoek Main Library, while one respondent used a UNAM branch library. Two respondents did not answer this question.

4. Findings of the study

Information needs of respondents

The information needs of academic scientists vary. In this study, respondents engaged in information seeking for various purposes.

Table 2. Circumstances that necessitate information seeking (n = 9; multiple answers were allowed**).**

Circumstances that necessitate information seeking	Frequency
Preparing for Lectures	7
Literature Review	5
Conference Presentation	4
Confirm Research Findings	4
Continuing Professional Development	3
Preparing for Meetings	1

Table 2 shows that the most frequently reported information needs were related to preparing for lectures, followed by writing literature reviews. Fewer respondents sought information to confirm research findings to present a paper at a conference. Fewer respondents gathered information for continuing professional development and only one respondent sought information in order to prepare for meetings.

Three respondents spent an average of 1–5 hours per week seeking information, while two respondents spent 6–10 hours per week. Two respondents spent a minimum of 16 hours per week seeking information, while the behaviours of the last two respondents were unknown.

Various tools were used to locate information sources.

Table 3. Tools used to locate information sources (n = 9; multiple responses were allowed).

Access Tools	Frequency
Internet	7
Library Catalogue	5
Indexing Journals	3
Publishers` Websites	3
Local Bookshop	2

Table 3 shows that more respondents preferred to use the Internet and the library catalogue to access information in comparison to indexing journals, publishers websites and the local bookshop.

Two respondents felt overwhelmed by the amount of information available, in comparison to three respondents who did not. Four respondents did not answer the question.

Most respondents were not satisfied with the information that they could find on their own. Only one respondent expressed satisfaction, while five respondents were not satisfied. Three respondents' views were unknown.

Two respondents expressed willingness to pay for required research information, while two other respondents did not. Five respondents did not respond.

Five respondents were aware of contemporary developments in their fields, while one respondent was not. Three respondents' views were unknown.

Four respondents agreed with the statement that academics lacked time to conduct research in comparison to three respondents who disagreed, and two respondents did not answer this question.

Information sources used by respondents

Respondents used a variety of information sources as indicated in Table 4.

Table 4 shows that the most popular information sources among respondents were textbooks, followed by the Internet and then journals. It is surprising that scientific databases were not popular among researchers. It is also interesting that the respondents trusted their own personal notes more than colleagues from the same department.

Four respondents agreed that the library subscribed to print journals in their fields of specialization, while the other four respondents disagreed. One respondent did not answer the question.

Respondents listed the Harvard Business Review, Emerald and EBSCO HOST as their preferred sources. Respondents did not specify the exact preferred titles from Emerald and EBSCO HOST scientific databases as expected from the question.

Table 4. Various information sources used by respondents

Information Sources	Used Very Often	Used Often	Used Sometimes	Used Rarely	No Answer	Total
The UNAM Library	2	3	2	0	2	9
Journals	4	2	1	0	2	9
Textbooks	8	1	0	0	0	9
Conference papers	3	4	1	0	1	9
Research reports	3	2	2	1	1	9
Publications of international organizations	4	2	0	2	1	9
Scientific databases	0	2	2	2	3	9
Colleagues from the department	0	3	3	3	0	9
Scholars from the same field	2	4	1	2	0	9
Personal notes	3	4	1	0	1	9
Internet	7	1	0	1	0	9

Key information sources selected in urgent information seeking

The Internet proved to be the most popular information source in urgent information need situations, with seven respondents ranking it as their first choice, while two respondents selected it as their second choice, and one respondent as a third choice. Eight respondents selected journals when in urgent need of information: first choice (4 respondents), second choice (2 respondents) and third choice (2 respondents). Eight respondents selected textbooks in such situations: first choice (2 respondents), second choice (5 respondents) and third choice (1 respondent).

Use of Internet technologies

All nine respondents had Internet access at their offices. Two respondents additionally accessed the Internet through their own 3Gs, while one respondent additionally accessed the Internet at home, and another respondent accessed the Internet through a friend.

The data below present respondents' ratings of online services that they considered beneficial to the organization (Office Practice and Management, Current Awareness Service, Research Online Tools (E-Books, E-Journals, etc.), E-mail, Web 2.0, uploading lecture notes on e-learning platforms among others).

Research online services, such as access to e-books and e-journal articles and Current Awareness Services were the most popular and selected as first choice (5 respondents). Five respondents also selected communication with students through the Internet as a benefit to the organization. Other less popular benefits were office practice and management and communication with colleagues (4 respondents). Communication with colleagues via Web 2.0 tools such as blogs and Google groups (3 respondents) and uploading lecture notes online

(1 respondent) were considered insignificant benefits. None of the respondents considered usage of cellular phone technologies as a benefit.

Four respondents preferred to read information retrieved from the Internet in electronic format only, while three respondents preferred print format. Three respondents reported that the preferred format of a document was dependent on circumstances.

It was interesting to note that seven respondents preferred to begin their search process from the Google search page, while two respondents preferred the Library homepage.

Familiarity with the UNAM Library resources

The UNAM Library offers many resources but the FEMS academic scientists were not necessarily familiar with them. The Library's website hosts a number of scientific databases relevant to the fields of accounting, management sciences, economics and political science.

Table 5. Usage of scientific databases hosted on the Library website

Usage Rate	Databases	Frequency
Quite Often	Emerald	4
	EBSCO HOST	3
	Springer Link	2
	JSTOR	2
	OUP	3
	Google Scholar	4
Often	None	0
Sometimes	Emerald	1
	EBSCO HOST	1
Rarely	None	0

Table 5 shows that Google Scholar and Emerald were the most used databases followed by EBSCO HOST. It is interesting to note that Google Scholar proved to be very popular among academic researchers while the majority of scientific databases were rarely used. There was generally low usage of all scientific databases by academic researchers.

Continuing professional development is also important for the scientists, who have to acquire new skills and knowledge in their fields. They should also update their knowledge about library resources. Only one respondent attended Library user training, while the other eight respondents did not. Eight respondents answered that they did not receive training in searching electronic databases; one respondent did not answer the question. Only two respondents had received training on how to search the Internet, while seven respondents had not.

Collection development is one of the primary responsibilities of all course lecturers at UNAM. The study found that three respondents regularly recommended materials to be purchased by the library in support of FEMS curriculum and research activities, while five respondents did not.

Barriers to information access and use

As reported in the literature, barriers to accessing research information vary. Table 6 shows the different barriers encountered by respondents in this study.

Table 6. Barriers in accessing information

Barrier	Very important	Important	Slightly important	Less important	No answer	Total
Research materials that I need on a regular basis are not readily available	6	1	1	0	1	9
Library staff is reluctant to assist users	1	1	1	0	6	9
Some information sources available at the Library are out of date	1	1	1	0	6	9
Information on the same subject is scattered in too many sources	1	1	2	0	5	9
Incomplete information materials	0	3	1	0	5	9
I don`t know how to search the Library catalogue	2	2	3	0	2	9
I do not have time to conduct research	1	3	0	2	3	9
I cannot cope with the available information	0	1	0	1	7	9
Information sources are far apart from each other	0	2	2	0	5	9

Clearly, the most important barrier was that research materials required by respondents on a regular basis were not readily available. Another important barrier was the respondents' inability to search the library catalogue. Instead, the respondents did not consider their own ability to cope with available information, information sources' obsolenscence or the library staff's reluctance to assist users such important barriers in accessing information. The lack of time was mentioned as a barrier by only a few respondents.

When the respondents were asked their major reasons for not using the Internet, only few answers were received. One respondent mentioned lack of time, another limited searching skills and third slow speed of downloading information online.

5. Discussion and analysis of the findings of the study

The study was conducted in order to examine the information seeking behaviours of FEMS academic scientists at UNAM. Additionally, the study elicited respondents' views on the relevance and currency of library resources and researchers' participation in collection development. The results of the study were to be used to align library collections and services with researchers' needs and to benefit students.

Although only one quarter of the target population participated in the study, their views were quite useful. The findings of the study confirmed those of earlier studies (Patitungkho & Deshpande 2005; Nicholas et al. 2009; Khan & Shafique 2011) that most academic scientist seek information when preparing for lectures, keeping up-to-date with knowledge, and when writing and presenting papers. Most previous studies on the information seeking behaviours of scientists, report that academic scientists use journals, textbooks, the Internet, colleagues and scholars from their network as information sources.

The FEMS scientists tended to rely on the library of their parent institution. In considering the barriers to information access, the findings of this study only partly confirm the findings of earlier studies. The most important barrier in accessing information in this study was non-availability of required materials. The same was reported by Patitungkho and Deshpande (2005) and Khan and Shafique (2011). Another important barrier in this study was the respondents' inability to search the library catalogue. The lack of good searching skills was also mentioned by Khan and Shafique (2011). Instead, lack of time was not such an important barrier in this study as it reported in earlier studies.

None of the respondents uses the SA E-Publications database, yet there are accounting, business management and social science journal collections with scientific literature relevant to the FEMS curriculum. The SA E-Publications is a South African database with a regional perspective on Southern Africa; there is also evidence of a number of articles on Namibia. Nor did any of the respondents use the HINARI database, although it has social science literature that could benefit scientists from the departments of management sciences and political science and administrative studies.

The respondents in this study also noted that their lack of time to conduct research was due to a heavy teaching workload, and hence they could only do topical research in order to prepare for lectures but did not have time to carry out field studies. They lagged behind in producing new knowledge in their areas of expertise. This finding could have a big impact on UNAM's publications profile as an academic and research institution. Equally affected was the career advancement of academic scientists whose promotion from lecturer to senior lecturer, and from associate professor to full professor was dependent on their publications output in peer reviewed journals, monographs and textbooks.

The emergence of the information and knowledge society has resulted in rapid developments in information and communication

technologies (ICTs) which have opened avenues for online publishing ventures causing exponential growth and availability of information through the Internet and the World Wide Web. According to the literature, one of the biggest challenges facing all scientists today is their ability to cope with the amount of information available in their respective disciplines, a situation popularly referred to as information overload. This study also sought to ascertain if FEMS academic scientists were experiencing information overload, and if so, investigate their coping strategies.

The views of the respondents who reported that the library materials were out of date corroborates one of the findings reported earlier above that some academics did not participate in material selection for unknown reasons. Many respondents reported that the materials required were not readily available, but it is not known if the Library failed to purchase these to support the researchers information needs.

It is the authors' considered view that most of the respondents who took part in the study were not heavily involved in material selection, and hence were not aware of their obligations to evaluate and develop library resources to support the curriculum and research programmes. The authors conclude that there is a weakness in library-faculty relations with regard to collection development, collection evaluation and weeding of irrelevant and outdated materials. One of the major reasons why the first ISB study was targeted at the FEMS was because it had been observed that the personnel did not participate effectively in collection development between 2009 and 2011. The Faculty Librarian responsible for the FEMS and the Head of Technical Services had both complained of failure by the personnel to exhaust the library collection development budget for three consecutive years. Annual acquisitions statistics generated by the Technical Services Department between 2008 and 2011 supported the above claim.

In view of the above, the authors recommend that:

(a) The Library must organize an Online Public Access Catalogue (OPAC) search training session in order to train the six respondents who could not search the catalogue. There could be more academic scientists from FEMS and other faculties with a similar challenge.
(b) Failure to cope with information overload suggests that there is a training gap in the development of information search strategies, mastery of the Internet and functionalities of digital libraries.
(c) UNAM needs a dialogue on the heavy teaching workload in order to address the concerns of five respondents who selected lack of time to conduct research as a barrier to access to and use of information, and yet research comprised 30% of their core academic responsibilities. Reduction in teaching hours could provide academics with more time to carry out field studies in order to increase the publications output of both researchers and UNAM as an academic and research institution.
(d) Regular customer care training targeted at frontline staff is recommended in order to address library staff`s reluctance to assist users as reported by three respondents.
(e) Some catalogue records may need to be scrutinized in order to verify the claims by some respondents that related information sources were scattered at the library. The authors' interpretation of this response is that some researchers understanding of information organization may be inadequate; this could be addressed through information literacy training targeted at the location and arrangement of materials in the different sections of the Library.

6. Concluding remarks and directions for further research

Overall, this study justifies the need to train academic scientists in information literacy so that they can become self-directed lifelong learners. Library user education and information skills training could

help improve usage of scientific databases whose user statistics have been below 50% since 2008, as well as general library use patterns. The participation of more academic scientists in collection development also needs consolidation. Library-Faculty relations need continuous improvement.

This study pioneered research on academic scientists at UNAM. The study established a research gap and recommends that more information seeking behaviour studies across academic scientists should be carried out. Future studies should use both quantitative and qualitative methods in their investigations in order to gain in-depth perceptions of respondents through interviews and focus group discussions.

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