

Information-Seeking Behaviour of Extension Workers and Specialists in Nigerian Rural Communities with Special Reference to Job Satisfaction

By

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Abstract

The paper examined the information-seeking behaviour of extension workers and specialist in the context of their use and non-use of job-related information in Nigeria, and also in relation to their job satisfaction. The objectives of the study are to identify the types of information sources, resources and communication channels used by extension workers and specialists in discharging their responsibilities. The paper also identifies the factors that inhibit their behaviour towards information seeking and use with special reference to their job satisfaction. Survey research method was used for the study. A questionnaire was distributed to 38 public extension specialists across Nigeria, and 190 public extension workers. The findings of the study show that the main motivation for seeking job-related information by both public extension works and specialists was interest in developing their own job-related information. The findings also show that the most used information sources by extension workers and specialists were books, magazines and technical reports and both groups used non-Nigerian scientific magazines least frequently. The paper concludes that in both groups, there was a significant positive correlation between individuals' information seeking motivation and the extent to which they used information sources and communication channels. It is hoped that the paper will help in understanding the information seeking behaviour of extension workers and specialist in relation to their job satisfaction, it will also help libraries to be more cost effective by providing services that would satisfy the needs of the extension workers and specialist leading to more job satisfaction. The paper would also enhance the role of rural libraries in providing information services to the rural communities this will lead to the development of rural communities and Nigeria at large. Finally, it will contribute to the existing knowledge, open new doors for further researches and serve as spring board for further researches in information seeking behaviour in Nigeria and world at large.

Introduction

Adequate knowledge about the information seeking behavior of extension workers and specialist especially in the rural areas of Nigeria is imperative to assist libraries in re-orienting their collections, services, and activities to synchronize them with their job satisfaction. In this regards, information needs, and information-seeking patterns of individual are dynamic and changing (Majid, Anwar, & Eisenschitz, 2000). Technological advancements are also expected to alter the ways information was previously identified, acquired, and utilized by the individual community. As a result “models, theories, practices and standards used to organize and provide access to the world’s scholarly information is blurring. Librarians will have to adopt new theories and practices for connecting scholars to information” (Oslen, 1989). This can only be achieved by understanding the information seeking behaviour of different categories of individuals. In view of this, Umar, Mahmood and Mohammad (2012) stated that in Nigeria, perception that information exchange problems still constitute a major constraint to development which remains widespread, and gives rise to negative views of the prospects for improvement. Yet enterprising individuals and institutions have against all odds, taken steps – some modest, some bold – to help revolutionize the management of information for rural development.

Extension workers are administrative leaders or a coordinator for formulating, developing, implementing and evaluating health, agricultural

extension programmes as well as develops rural people and farmers in managing resources in the rural communities. They guide the extension education activities for farmers as groups or individuals towards the purposeful pursuance of given objectives within a particular situation by means of extension communication methods (Khalil, et al 2008). Extension specialist on the other hand is a supervisor and also a coordinator that supervises and trains the extension workers on how to go about carrying their activities. This category of staff usually visits the extension workers to oversee how their extension practices are taken place with view of making suggestions where necessary. In Nigeria, these categories of workers are usually found working with rural farmers or community health workers there by providing information and assistance on the improvement and development of rural activities (Umar et al 2012).

These categories of workers have a key role to play in rural community development and therefore meeting their information needs affect flow of either health or agricultural information. The purpose of this descriptive study was to explore information-seeking behavior of extension workers and specialists with special reference to their job satisfaction in Nigerian rural communities. Understanding their information needs and seeking behaviour will help extensively in designing information products and services that relevant to their needs. It will also be more cost effective by libraries and Nigerian government to operate in that regards.

In this information era, the use information is inevitable to almost all aspects of human development. The need to become informed and knowledgeable individuals leads to the process of "identifying information needs". However, this process alone cannot work without knowing the ways individuals articulate, seek, evaluate, select and finally use the required information, which is commonly known as "information-seeking behaviour". According to Devadason and Lingam (1997), the understanding of information needs and information-seeking behaviour of various professional groups is essential as it helps in the planning, implementation and operation of information system and services in the given work settings.

In general, extension workers and specialist need information that will serve their functional purposes, which will help them to improve the quality of their life by helping solve their immediate problems and engaged in making useful decisions which affect their lives and activities. Information behavior is a broad term encompassing the ways individuals articulate their information needs, seek, evaluate, select, and use information. In other words, information-seeking behavior is purposive in nature and is a consequence of a need to satisfy some goal. In the course of seeking, the individual may interact with people, manual information systems, or with computer-oriented information systems (Wilson, 2000). According to Pettigrew (1996), information-seeking behavior involves personal reasons for seeking information, the kinds of information which are being sought, and the ways and sources with which needed information are being sought. Hurdles that prevent individuals from seeking and getting information are also of great importance in understanding the information-seeking behavior of individuals and organizations.

Understanding the information seeking behaviour and information use of extension workers and specialist has becomes crucial for libraries and information centres to effectively meets their information needs. This understanding may also lead to the discovery of their novel information behaviors and profiles that can be used to enhance the existing information models, systems or even develop new ones. In addition, it will also help the librarians and other information professionals to be effective in providing information to these categories of users; as such to effectively do this task they require a fuller understanding of the information seeking behavior, needs, and uses of the extension workers and specialists.

Today, the main concern in management of human resources is the improvement in performance and

satisfaction of people working in the organisation with a view of increasing their efficiency through motivation. Unless the employees are well informed about their performance and also their strong and weak points, it is very difficult for them to improve their level of performance. One way of enhancing the performance of employees is to provide him/her with necessary information that will serve his needs based on understanding his information seeking pattern. It is against this background the present study was undertaken to study the job satisfaction of extension workers and specialist in rural areas of Nigeria who are important functionaries positioned in the development of rural communities in Nigeria.

This is an area of basic research and, although the resulting knowledge may have practical applications to the libraries, information centres and it will be beneficial to Nigerian rural communities and beyond, there is no necessary that it should. Therefore, what, when, and how information is gathered and used by extension workers and specialists is of critical importance to meet their information needs and the clientele they serve (Radhakrishna and Thomson, 1996). Understanding the information needs and seeking behavior of extension workers and specialist is crucial for effectively meeting their information needs. Understanding about the type of information sources preferred by extension workers and specialist could be useful for libraries in developing their collection development policies. Review of literature showed that no study on information needs and seeking behavior of extension workers and specialist has been undertaken in Nigeria. Available literature is descriptive in nature presenting only personal opinions and perceptions. This study will investigate the information needs and seeking behavior of extension workers and specialist in rural areas of Nigeria with special reference to their job satisfaction. Results of the study may help the rural libraries in Nigeria to re-orient their collections, services, and facilities to synchronize them with the information needs and seeking behavior of their extension workers and specialist.

Objectives of the Study

The major objective of this study was to identify the information seeking behavior of extension workers and specialists with respect to their job satisfaction in rural communities of Nigeria. Specific objectives of this study were to:

1. Identify the job satisfaction of the extension workers' and specialists' in relation to their motivations for seeking and using job related information;
2. Identify the types of information sources and communication channels that extension

workers and specialists used to get job related information;

3. Identify the barriers that hindered the extension workers and specialists from seeking and using job related information.

Literature Review

According to Babu et al. (1997) "information is a critical resource in the operation and management of organizations, timely availability of relevant information is vital for effective performance of managerial functions such as planning, organizing, leading, and controlling". It is commonly agreed that a well-established and well-designed information system to facilitate decision making in various developmental projects is critical to the success of any organization. To be successful, any project requires efficient management of human and material resources. As stated by Waheed (1990) this cannot be done unless accurate, timely, and relevant information is available to decision makers.

In this regards, Saleh and Lasisi (2011) stated that identifying information needs based on the activities of individual helps in attending to their health, agriculture, social, political, trading (petty trading), food processing, textile, pottery and other crafts, entertainment, as well as other public affairs, aesthetic and cultural matters in which extension workers and specialists are the key players in meeting their information needs through the provision of extension services.

According to Chinwe, Andrew and Ngozi (2013) satisfaction of the contextual information needs involves unique information services which could be in the form of telephone, recreational, advisory services, extension/outreach, socio-political, current awareness, children advisory services, selective dissemination of information, book mobile and referral services (Udofia & Posigha 2010). The content and packaging of each service varies from one environment to the other. Provision of information resources and services as well as expressed needs do not guarantee use (Chinwe, Andrew and Ngozi 2013).

Like any other organization, information has its own importance to help the individuals working in managerial or other positions to make the right decisions. Communicating information and knowledge from information resources or developers to extension patrons is an integral part of the extension process. Blackburn and Flaherty (1994) asserted that the flow of information in extension organizations is of more importance than in organizations that are not responsible for providing their clients with useful information. As Buford (1990) pointed out, agricultural extension

depends to a large extent on information exchange between and among farmers on the one hand, and a broad range of other actors on the other. Extension, along with education and research, is typically seen as a service, public or private, that responds to the needs of farmers and rural people for knowledge they can use to improve their productivity, incomes and welfare and to manage the natural resources on which they depend in a sustainable way. It brings information and new technologies to farming communities, allowing them to improve their production, incomes and standards of living.

Shin and Evans (1991) identified that the main reason for seeking information by Illinois agricultural and horticultural extension advisors was to answer client inquiries. In their study, they categorized information sources into three types: oral, written and electronic. Written-only sources accounted for the largest single share (45.9 percent), followed closely by written and oral combination (43.0 percent). Less than 3.0 percent used electronic information sources. Radhakrishna and Thomson (1996) found that extension workers regularly seek information to carry out their day-to-day work. Extension workers frequently communicate with a variety of information sources. Prominent among these were: clients, another worker in the office, another worker in another organization or institutions, extension specialists, their immediate supervisor, local news agencies, local business organizations, state, and federal agencies, and local school teachers and administrators. According to Malek-Mohammadi (2000), Provincial Extension Specialists who were working for the Ministry of Jihad-e Sazandegi in Iran reported radio, TV, computer, seminars and training courses as their five most used information sources and channels. They indicated the lack of knowledgeable and skilled information personnel as the main problem of the information system of the Ministry.

In exploring communication sources used by extension personnel Singh, et al (2003) found that the most important source of acquisition of farm technology in India was the state department of agriculture and the most important communication mode was staff specialists, while the least used mode was personal correspondence with researchers. Mohammadi (2002) investigated the factors influencing information-seeking behaviour of extension workers in Zanjan Province, Iran. His research showed that there was a significant relationship between age, level of education, years of experience, and the worker's level of job-related information with information-seeking behaviour. The main reason for seeking information by extension workers was holding training courses,

followed by solving daily problems of farmers and up-dating their information, respectively.

In Nigeria, studies on information behavior are generally fewer than the developed world despite the high level of interest generated by the field in the last decade. The available few have concentrated on professional groups mostly within institutions and in urban settlements. In a review of studies on the information needs and seeking behavior of indigenous people of several developing Countries, Dutta (2009) reported that “there is relatively small number of studies done on the information behavior of the citizens of developing countries” and particularly Nigeria, and that, “the few concentrated on the educated individuals and the urban population located in the large cities than on citizens who live in the rural areas.” This study is therefore not only an attempt to bridge this gap but to also answer such questions as what are the information needs and seeking behaviour of extension workers and specialist in Nigerian rural communities?

Methodology

The study used a questionnaire based survey design for data collection. This technique was referred as it was less time consuming and affordable for a scattered population. Another reason for using a questionnaire was the convenience of contacting the extension workers and specialists, some of whom often go out-station for extension activities.

Study Population

The population of the study comprises of public extension workers who work for the Ministry of Agriculture and the Agency for Nomadic Education in Northern Nigeria and public extension specialists across the Northern Nigeria. These institutions are considered the most reputable and well-established among institutions carrying out extension services in Nigeria. Extension workers and specialists numbering 200 and 40 respectively comprised the study population. Proportionate, stratified, random sampling technique was used to generate a random sample. Each state participating in the study constituted a stratum. Using a random selection to select the respondents

The Instrument

Several studies on the related topics were consulted and their instruments were critically examined. Materials from these instruments and the personal knowledge of author were used to develop a questionnaire for the study. Section one of the questionnaire dealt with personal information about respondents such as job title, age group, gender, and the highest academic qualification. Section two elicited data on the job satisfaction of the respondents’ motivation for seeking job related

information, methods used by the respondents for getting information, level of information sources and communication use, and barrier to information use. The questionnaire was pre-tested in two states not included in the population for the final study. A pilot test was conducted to determine the questionnaire's reliability and validity to answer the research questions of the study. A total of 240 questionnaires were distributed and 195 completed questionnaires were returned. The overall response rate for the survey was (81.3%) which is considered satisfactory for this type of survey. Data collected were analyzed using the Statistical Package for the Social Sciences (SPSS). Appropriate statistical procedures for description (frequencies, percent, means, and standard deviations) were used.

Findings of the Study

Demographic characteristics of respondents

The findings of the study showed that majority 184 (94.2%) of the respondents were male, while only 11(5.6%) were female. The study also found that majority of workers and specialists attained certain level of educational background as follows, majority 136 (85%) of the extension workers had diploma and other certificates in the area of extension work. On the other hand, more than half 24 (69.7%) of the specialist had Bachelor of sciences degrees, 10 (27.1%) had Masters Degree and only 1 (3.2%) had a Ph. D degree. The results also found that both the workers and specialist had experienced in the extension work with at least 1 to 20 years working experience in the extension work, but workers had experiences much higher than the extension specialists with 22 (13.6%) and 3 (8.6%) respectively.

Job satisfaction and Motivation for Seeking Job related Information

Respondents’ Level of Job Satisfaction

In this research, workers and specialists' job satisfaction was measured using a Likert-scale, including ten factors that affect job satisfaction. These factors were derived from several previous studies and were applied in this study with some amendments. Lower means were indicative of more satisfaction with the job. Table 1 shows the perception of the respondents' level of job satisfaction. The findings revealed that specialists were very satisfied with the social position of the job with mean score of (1.17) and extension workers were very satisfied with the job security with mean score of (1.07). Both groups were rather dissatisfied with the salary paid for the work they did.

Motivations for Seeking Job-related Information

The respondents were asked to indicate the extent of importance that each motivation had to them for seeking job-related information. Lower means were

indicative of important motivation for seeking job related information. Table 2 provides ranking of different information seeking motivations based on their relative importance as perceived by the respondents. 'Interest in developing job-related information' is regarded as an important motivation for seeking information by specialists with mean

scores of (1.69), while the extension workers were to do the job task with mean score of (1.74). 'To update specialized information to improve organizational tasks' was the second most important motivation for seeking information by specialist (mean=2.34); for extension worker's it was 'interest in developing job related information (mean=2.24).

Table 1: Level of Job Satisfaction

Factor	Job position							
	Specialist				Workers			
	N	*Mean	SD.	Rank	N	Mean	SD.	Rank
Social position of job	35	1.17	0.70	1	160	1.68	0.79	2
Level of job security	35	1.44	0.85	2	160	1.07	1.13	1
Opportunity for applying personal abilities	35	2.38	0.81	9	160	2.16	1.20	8
Friendly relationship with extension workers	35	2.32	1.12	8	160	2.21	1.09	9
Time flexibility for doing tasks	35	2.31	0.64	7	160	2.12	1.16	7
Level of authority for doing tasks	35	2.26	0.79	6	160	1.65	1.18	5
Managerial method in organization	35	2.17	0.79	5	160	1.64	1.02	4
Rate of promotion	35	1.88	1.06	4	160	1.34	1.02	3
Basis for promotion	35	1.47	0.99	3	160	1.26	1.04	2
Salary in terms of work done by personnel	35	2.90	0.92	10	161	2.80	0.96	10
Note: Scale: 1) None; 2) Little; 3) Somewhat; 4) Much; 5) Very much *Lower means are indicative of more satisfaction with the job.								

Table 2: Motivations for Seeking Job related Information

Motivation	Job position							
	Specialists				Workers			
	N	*Mean	SD	Rank	N	Mean	SD	Rank
Interest in developing job-related information	35	1.69	0.50	1	108	2.24	0.62	2
To update specialized information for doing tasks better	35	2.34	0.73	3	108	2.75	0.87	3
To do job tasks	35	2.10	1.05	2	106	1.74	0.94	1
To publish written materials for increasing job security	35	2.44	0.90	4	105	2.98	1.10	6
To publish written materials for showing off abilities and knowledge	35	2.87	1.02	5	106	2.96	1.00	5
Competition against co-workers	35	3.47	1.03	6	105	2.85	1.15	4
Note: Scale: 1) Not important; 2) Little important; 3) Somewhat important; 4) Very important; 5) Extremely important. *Lower means are indicative of important motivation for seeking job related information								

The use of Information Sources and Communication Channels

Respondents were asked to indicate the level of use of selected information sources and communication channels. The Table 3 below revealed that the top three information sources for specialists were books, newspapers and research reports with mean scores of 1.17, 1.33 and 1.38, respectively, while that of extension workers were books, agricultural magazines and newspapers with mean score of 1.18, 1.22 and 1.28 respectively. Both groups used non-Nigerian scientific magazines least frequently. Concerning the use of communication channels, interpersonal communication with colleagues, radio,

telephone and internet were rank to be the first three communication channels by extension specialist with mean score of 1.77, 1.83 and 2.05 respectively. While that of extension workers were interpersonal communication with colleagues, radio and office library were ranked respectively as the first, second, and third communication channels most used by both extension workers with mean score of 1.17, 1.39 and 1.78 respectively. Among eleven selected communication channels, the Internet, as a modern communication channel, was ranked as the third most important channel used by specialists and the seventh most important used by extension workers.

Table 3: Information Sources and Communication Channel

Variable								
	Specialist				Workers			
	N	*Mean	SD	Rank	N	*Mean	SD	Rank
Information sources								
Books	35	1.17	0.65	1	158	1.18	0.95	1
Agricultural magazines	34	1.94	0.73	4	158	1.22	0.89	2
Technical reports	35	2.97	0.65	12	157	2.48	0.82	10
Research reports	35	1.38	0.62	3	157	2.13	0.97	5
Reports on agricultural statistics	34	2.50	0.77	10	160	2.01	1.09	4
Video tapes	35	2.44	0.87	9	160	2.78	1.12	11
News papers	35	1.33	1.20	2	160	1.28	1.08	3
Inter-organizational newsletters	35	2.41	0.87	8	160	2.29	1.05	7
Reports on organization performance	35	2.33	0.86	7	157	2.34	0.98	8
Academic theses	35	2.30	0.95	6	158	2.20	1.15	6
Compact discs (CDs)	35	2.11	0.97	5	158	2.45	1.01	9
Floppy discs	35	3.30	0.79	14	160	3.01	1.04	13
Non-traditional books	34	2.69	0.65	11	160	2.34	1.10	8
Slides	35	3.33	0.67	15	160	2.78	0.93	11
Non-traditional scientific magazines	35	3.27	0.85	13	157	2.79	0.98	12
Communication channels								
Personal communication with co-workers	35	1.77	0.86	1	160	1.17	0.88	1
In-service training courses	35	2.75	0.55	9	157	2.40	0.87	11
Scientific-technical conventions	35	2.72	0.56	8	158	2.31	0.92	9
TV	35	2.69	1.30	7	160	2.08	1.20	5
Personal library	35	2.47	0.99	6	160	2.18	1.13	8
Office library	35	2.25	0.73	5	157	1.78	1.04	3
Scientific associations	34	2.17	0.71	4	157	2.39	1.09	10
Internet	35	2.05	0.79	3	154	2.10	1.26	7
Radio	35	1.83	1.10	2	160	1.39	1.05	2
Telephone	35	1.83	1.15	2	160	2.09	1.13	6
Other public libraries	35	2.86	0.63	10	160	1.98	1.10	4
Note: Scale: 1) Never; 2) occasionally; 3) At times; 4) Frequently; 5) Most frequently *Lower means are indicative of extent of utilisation of information sources and communication channels								

Barriers to seeking Job-related Information

Table 4: Organizational barriers to seeking job-related information

Organizational factor	Job position			
	Specialist		Workers	
	N	Percent	N	Percent
Lack of time flexibility for doing job tasks	8	22.2	18	16.7
Job complexity and ambiguity in tasks	5	13.9	16	14.8
Some needed information is classified	2	5.6	7	6.5
No access to internet at office	1	2.8	11	10.2
Lack of in-service training courses	-	-	4	3.7
No access to direct telephone line at office	-	-	1	0.9

To obtain additional insight into organizational factors that influence information-seeking behaviour, study participants were asked to indicate the most important in a multiple choice question including six organizational barriers that hinders their information seeking. It is clear from Table 4 that 8 (22.2%) of the specialist and 18 (16.7%) of the extension workers indicated lack of time flexibility for doing job tasks as the main barrier that prevented them from seeking and getting information and. Followed by 5(13.9%) of specialist and 16(14.8%) of the extension workers who indicted job complexity and ambiguity in tasks as the second major barrier. While the least barrier indicated by the respondents was no access to the internet by 1(2.8%) of specialist and no access to direct telephone line at the office by 1(0.9%) of the extension workers.

Relationship between Demographic Variables and Information Seeking Pattern

The Pearson coefficient of correlation was used to explore the relationships between the variables. This was done in order to establish whether demographic variables of the respondents are influencing their information seeking behaviour. This signifies that

the positive correlation coefficient ($r < .005$ or $r < .001$) is indicating positive influence, while negative correlation coefficient is indicating negative influence among the variables. The correlation between respondents' demographic variables with factors encompassing their information-seeking behaviour was tested using Likert Scale scores of every person as shown in Table 5. For both workers and specialists, there was a statistically significant correlation between the extent of use of information sources and motivation to seek information. There was also a significant relationship between the extent of use of communication channels and motivation to seek information. For specialists, years of education, level of job satisfaction, motivation to seek information and the extent to which communication channels were used were correlated with the information sources use. In both groups, a significant correlation was found between the extents of information seeking motivation and the extent to which communication channels were used. For specialists, there was a significant correlation between the level of job satisfaction and the extent of using information sources with the extent to which communication channels were used.

Table 5: Pearson Correlation between Demographic Variables and Information- Seeking Pattern

Variable	The extent of information seeking motivation (r)		The extent to which information sources are used(r)		The extent to which communication channels are used(r)	
	Specialists	Workers	Specialists	Workers	Specialists	Workers
Age	-0.053	0.015	-0.116	0.065	-0.199	0.065
Years of extension work	-0.224	-0.075	-0.316	0.082	-0.440*	0.067
Years of education	-0.257	0.187	0.28	0.241*	0.354	0.252*
Level of job satisfaction	-0.189	-0.128	-0.146	0.396**	0.065	0.365**
The extent of information seeking motivation	-	-	0.561**	0.340**	0.423**	0.345**
The extent to which information sources are used	0.456**	0.460**	-	-	0.254	0.793**
The extent to which communication channels are used	0.343**	0.468**	0.290	0.693**	-	-

Note. *: $r < 0.05$; **: $r < 0.01$

Relationship between Demographic Variables of the Respondents with Information-Seeking Pattern

Likert scale scores for three factors which make information seeking behaviour, including (1) the extent to which individuals use information sources, (2) the extent to which individuals use communication channels, and (3) the extent of individuals' information-seeking motivation, were used to seek correlation between some selected demographic factors and information-seeking pattern of respondents. As shown in Table 6, the Pearson coefficient of correlation was used to explore the correlations between these variables. According to the correlation analysis, there was a

negative correlation between workers' years of extension work and their information-seeking behaviour; in other words, when workers' years of extension work increases, their information-seeking behaviour decreases. This may be the result of pride or of too great self-confidence that they have after they have spent some time doing extension activities and feel that they are fully aware of everything concerning their job and do not need to seek additional information. For specialists, there was a significant positive correlation between both years of education and level of job satisfaction with their information-seeking behaviour.

Table 6: Pearson correlation between some selected variables with information seeking behaviour

Variable	Information seeking behaviour (r)	
	Specialist	Worker
Age	-0.168	0.67
Years of extension work	-0.423	0.46
Years of education	0.024	0.262*
Level of job satisfaction	-0.109	0.339**
Note. *: $r < 0.05$; **: $r < 0.01$		

Discussion of Findings

The findings of study indicated the information-seeking behaviour of extension workers and specialist in the context of their use and non-use of job-related information. The results showed that the main motivation for seeking information by specialists were interest in developing job-related information', while the extension workers were to do the job task. These findings were in line with study of Pezeshki-Raad et al. (2004) who found their respondents main motivation were interested their own job-related information and to do the job task. In addition, the findings of this study were in disharmony with the study of Shi and Evans (1991), who found that the main reason for seeking information by Illinois agriculture and horticulture Extension advisors was to answer client inquiries. With regards to the information sources used, the findings indicated that extension workers top three mostly used information sources by were books, agricultural magazines, and newspapers, while that of specialists were books, newspapers and research reports. This is contrary to what was obtained in the study of Malek-Mohammadi (2000) that provincial extension specialists who were working for the Ministry of Jihad-e Sazandegi reported radio, TV, computer, seminars and training courses as their five most used information sources and channels. However, the study is in line with the findings of Pezeshki-Raad et al. (2004) who found similar findings but indifferent format that the top three mostly used information sources by extension managers and specialists were "Persian books", "Persian scientific magazines", and "scientific-technical reports", respectively.

With the respect to communication channels, the study found that extension workers top three communication channels were interpersonal communication with colleagues, radio and office library. While the specialists on the other hand, were interpersonal communication with colleagues, radio, telephone and internet were ranked respectively as the top communication channels which were used

by respondents for seeking and getting information. This finding was to some extent not in support with the findings of Pezeshki-Raad et al. (2004) and Singh, et al. (2003), though, both respondents from the former and later used interpersonal communications but differ in the sue of other communication channels. The results this study of also showed that the majority of workers and specialists who believed their organization did not support them in seeking and getting information, reported lack of time flexibility for doing job tasks as the main barrier that prevented them from information seeking. The study of Pezeshki-Raad et al. (2004) was in support of the findings from this study, who found that lack of time flexibility is hindering the extension workers and specialist from seeking using information to do the job tasks.

The study also found that there was a significant negative correlation between specialists' years of extension work with their information-seeking behaviour, meaning that specialist experience with the extension services is not influencing their information seeking behaviour, this findings is similar to what was obtain from the study of Pezeshki-Raad et al. (2004) and Singh, et al. (2003) though their respondents were dissimilar. On the other hand, the study found a significant positive correlation between extension workers' years of education, level of job satisfaction with their information seeking behaviour, meaning that extension workers educational level and job satisfaction is influencing their information seeking behaviour. According to the findings, there was a positive correlation between workers' level of job satisfaction with the salary they received; it seems that increasing workers' salaries may increase their job satisfaction and consequently improve their information-seeking behaviour. This finding is inline with the previous findings of other studies such as Pezeshki-Raad et al. (2004) and Singh, et al. (2003), Malek-Mohammadi (2000). In the overall context the findings of the study revealed that demographic variables of the respondents were

found to have significant relationship with their information seeking pattern. In this regard, it could be said that the information seeking behaviour of extension workers and specialists were found to be similar with other respondents elsewhere.

Conclusion

This study has provided insight into the information-seeking behaviour of public extension workers throughout Nigeria and extension specialists who work for the Extension and Ministry of Agriculture in Northern Nigeria, a group that has not received much attention in information-seeking studies. Since knowledge about the information seeking behaviour of extension workers and specialists plays a vital role in meeting their information needs effectively. The results of this study can be used to provide valuable information sources for extension personnel and remove information seeking barriers to facilitate the flow of agricultural information around the country and consequently meet the information needs of extension personnel and their clients.

In the light of the above findings and analysis from the present study it is hoped that understanding the information seeking behaviour of extension workers and specialist will help the policy makers to better structure the information resources by expanding and enhancing different formats and type of materials and the methods of delivery of library and information services in rural areas of Nigeria. The findings of this study would help libraries to be more cost effective by providing services that would satisfy the relevant needs and information seeking pattern of respondents under study. This would also enhance the role of libraries in the rural areas by supporting the agricultural and economic activities. In addition to this, the insight from this study would have some implications for policy making concerning library and information services in Nigeria and developing countries at large. It is hoped that the findings of this research would open doors and serve as a spring board or stepping stone for further researches in the area of information seeking behaviour, needs, use and would serve as a contribution to the knowledge environment. The findings of this study should be shared with the officials and other individuals who are interested in any research that involves extension services.

Recommendations

Following the findings and discussion obtained from the study, it is recommended that:

1. Extension organizations and Nigerian government should increase the level of job satisfaction by increasing their salary and other incentives; this may consequently

improve the information-seeking behaviour of extension personnel.

2. There is also need to provide information literacy training programmes to extension workers and specialist this will taught them about the importance of the flow of information in the organization, and the necessity of having up-to-date and relevant information to make the right decisions.
3. In-service training courses should be provided this could be useful to teach workers in this regard.
4. In regards to the use of information sources and communication channels, it seems, therefore, that motivating the extension workers and specialists by the government and extension organisation to seek and get information will increase their use of information sources and communication channels and may consequently improve their information-seeking behaviour.
5. Information infrastructure such as the computers, internet and other electronic information resources should be provided to enhance the extension activities in the rural communities of Nigeria.

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