Sahel Journal of Life Sciences FUDMA (SAJOLS)
September 2024 Vol. 2(3): 147-154
ISSN: 3027-0456 (Print)
ISSN: 1595-5915(Online)
DOI: https://doi.org/10.33003/sajols-2024-0203-19

Research Article

Web Interfaces and Information-Seeking Behaviours of Academic Staff in Promoting Knowledge and Interaction in Tertiary Institutions in Katsina State

***Babangida Hamza[1] and Sirajo Abbas Darma[2]**

[1]Department of Educational Psychology, Isa Kaita College of Education, P.M.B. 5007, Dutsin-Ma, Katsina State
[2]Department of College Library, Isa Kaita College of Education, P.M.B. 5007, Dutsin-Ma, Katsina State
****Corresponding Authors' email*: hamzababangida56@gmail.com; Phone: +2348080383701**

ABSTRACT
The purpose of this paper is to examine the achievements, control of wed interfaces and information-seeking behaviors of academic staff in promoting knowledge and interaction in tertiaries institution in Katsina State, Nigeria. However, the study support teaching, learning, and research in ways consistent with and supportive of the institution's mission and goals. The study used frequency and percentage tables, mean and standard deviation, Pearson Linear Co-efficiency Correlation analysis. The study found that, wed interfaces been practiced in colleges of education, and the effectiveness of ICTs facilities towards supporting web interfaces was Fair-minded (general average mean=3.23, Std=0.945). While, information seeking behaviors interacting was poor among academic staff (average mean=2.31, Std=0.586). Henceforth, there was a positive/strong relationship between the web interfaces and information-seeking behaviors of academic staff in promoting knowledge and interaction in colleges of education in Katsina State (r=.711**) and (sig=.000). The study concluded that, the colleges of education, it is hoped that the results of this study is to determination and help its management to emphasis the web interfaces of colleges education by incorporating it into their curriculum with emphasis on web site interfaces retrieval and use with the availability of ICTs facilities. The study recommended that, the management should consider networked technologies such as the internet and World Wide Web are dramatically changing education and training as it enable academic staff to access information and communicate through others across global borders, cultures and on a global scale.

Keywords: Web Interfaces; Information-Seeking Behavior; Academic Staff; Promoting Knowledge; Library Web-Searching

Citation: Hamza, B. & Darma, S.A. (2024). Web Interfaces and Information-Seeking Behaviours of Academic Staff in Promoting Knowledge and Interaction in Tertiary Institutions in Katsina State. *Sahel Journal of Life Sciences FUDMA,* 2(3): 147-154. DOI: https://doi.org/10.33003/sajols-2024-0203-19

INTRODUCTION

With the advent of technology, academic libraries' services have become crucial access points to bulk of information. A library is no longer a physical building stack with mass of print materials (books and journals). In the modern era, databases have eased the retrieval and access of information. Library websites facilitate discovery and distribution of wider-ranging content materials. University libraries have adopted a culture that fosters excellent learning and research through innovative technology. Universities' websites ought to become universal communication mediums for promoting academic services through technological awareness. Educational institutions have endeavored to assemble an extensive collection of content materials and offer them through websites. With increased technological transformations and Internet use, educational entities have realized the importance of comprehensive web spaces. The universities, polytechnics and colleges of education library websites are commonplace openings of data dissemination and information. Scientific advancement has encouraged an increase in the search designed for exploiting the Internet, especially in place of colleges of education, to

benefit from the opportunity to stimulate efficient knowledge acquisition and teaching practices (Olaleye, 2018). Kumar (2013) assessed the information-seeking behavior of research Scholars to gauge the level of awareness regarding varied library resources and services among them. Besides, highlighting their information proficiency which emerged to be poor in addition to lack of proper awareness regarding library resources (Howlader and Islam, 2019; Ferdows and Ahmed, 2015, Joo and Choi, 2015; Maybee, 2006; Callinan, 2005). Moreover, Partap (2016). Khazer, et al. (2016) studied the Information Learning/Seeking Behavior of researchers and revealed that they mostly believe that it is easier to use electronic resources compared to print owing to various advanced features of electronic resources like ease of searching and browsing, etc. Aina (2004) the information seeking-behavior of users depends on education, access to library and the length of time a user devotes to information-seeking. He went further to say that no matter how comprehensive the resources and services of a library are, it is important that the services are publicized widely so that users could seek information from the libraries.

This study is on "Information-seeking behavior advanced knowledge towards library users in tertiaries institution. Though, so many have been studies undertaken to survey the information-seeking behavior or related areas, the need of information differs from person to person depending upon his purpose in relation to his study, education, stage of his work, general interest, and amount of information already available to him and so on. Onuoha and Obiako (2013) in accordant to a preliminary investigation on information-seeking behavior (ISB) have identified inadequate time as one of the challenges to information-seeking by first and final year students of colleges of education. Without the Internet, users might not be able to access these web resources. It is also perceived that not many academics staff is aware of various searching techniques and face many problems while seeking information in electronic environment including slow internet connectivity and electricity disturbance. Furthermore, the number of e-journals and databases subscribed by particular university and colleges was still low. The study examining information-seeking behaviors in promoting knowledge and interacting with academic libraries' web interfaces in tertiaries institution in Katsina State, Nigeria.

The main purpose of this study is to observe the correspondent within a context of wed interfaces and information seeking behaviors of academic staff in promoting knowledge and interaction in colleges of education in Katsina State. To develop a comprehensive research framework to better understand the web interfaces and information-seeking behaviors factors within the Information Technologies (ITs), educational progress and institutional environment for a favorable promoting teaching and learning process with library web site interfaces development in Nigeria as attainable in other developed countries.

Theoretical Framework:

This study was guided by the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003). Venkatesh and his colleges developed the unified model through reviewing eight models which explain ICT usage, namely TRA, TAM, the motivational model, Theory of Planned Behavior (TPB), a model combining TAM and TPB, the model of PC utilization, Diffusion of Innovation (DOI), and the social cognitive theory. The purpose of UTAUT is to explain a user's intentions to use ICT and the subsequent user behavior. The model considers four constructs as direct determinants of user acceptance and usage behavior, namely performance expectancy, effort expectancy, social influence, and facilitating conditions. Venkatesh et al. (2003) stated that UTAUT provides a tool for managers to assess the likelihood of success of technology introductions and to understand the drivers of acceptance in order to design interventions, which include, example training or marketing. UTAUT focuses on users who may be less willing to adopt and use new systems.

Web Interfaces Behavior in Promoting Knowledge among Academic Staff in the Tertiary Institutions

Knowledge Databases: Whereas not necessarily seen as actual training, these databases are the most basic form of information-seeking behavior have probably seen knowledge on software sites offering indexed explanations and guidance for software questions, along with step-by-step instructions for performing specific tasks.

Online Support: Online support is also a form of information-seeking behavior and functions in a similar manner to knowledge databases. Online support comes in the form of forums, chat rooms, online bulletin boards e-mail or live instant messaging support slightly more interactive than knowledge databases, online support offers the opportunity for more specific questions and answers, as well as more immediate answers.

Anachronous Training: This is web interface searching behavior in the more traditional sense of the word. It involves self-paced learning either CD-ROM-based, Network based, Intranet-based as Internet-based. It may include access to instructors through online bulletin board, Online- discussion groups and e-mail or,

it may be totally self-contained with links to reference materials in place of a live instructor.

Coexisting Exercise: Training Synchronous training is done in real time with a line teacher facilitating the training. Every one journals in at a set time and can communicate directly with the teacher and with each other. A student can raise their cyber hand and view the cyber whiteboard. It lasts for a set amount of time-from a single session to several weeks, months or ever years. This type of training usually takes place via internet web sites, audio or video conferencing Internet telephony or even two-way live broadcasts to students in a classroom.

Web-Penetrating Behavior and Information-Seeking in Promoting Knowledge and Interaction

The web provides more current information than books. Articles published in journals, newspapers, magazines, and eBooks are readily available through the web. Unfortunately, the web lacks bibliographic control. Reports on web-searching behavior became available in the mid-1990 and had ever since multiplied.

MATERIALS AND METHODS

The study used descriptive, correlational and cross sectional. (Creswell, 2003; Amin, 2005). Cross-sectional design was used because the data were collected at once, descriptive because mean and standard deviation were used in web interfaces and the information-seeking behavior: through the use web-searching in promoting knowledge and interacting with academic libraries and correlation to find out the relationship between web interfaces and information seeking behavior for effective utilization to improve the existing facilities and services in the tertiary institutions (Amin, 2005). Quantitative approach was used to describe the statistics of the scores using indices that describe the current situation and investigate the relationships between the study variables using information gained from the questionnaire. In this study a total population of 250 participants from three different tertiary institutions were been reflected as a study to include the following colleges:

- Federal University Dutsin-ma FUDMA
- Isa Kaita College of education, Dutsin-ma, Katsina IKCOE
- Hassan Usman Katsina Polytechnic HUKPOLY

During the analysis of the data, frequencies and percentage distribution was been used to analyze data on the profile of the respondents. Means and Standard Deviations go on used to determine the students' web interfaces and information seeking behavior in promoting knowledge, while Pearson's linear correlation coefficient was used to established significant relationship between web interfaces and information-seeking behavior in promoting knowledge and interaction in colleges of education in Katsina State.

RESULTS AND DISCUSSIONS

The results obtained from the 222 copies of the research questionnaire were analyzed using simple percentages and frequency tables numbered. Note the key to tables: (**HUKPOLY** = Hassan Usman Katsina Polytechnic); (**FUDMA** = Federal University Dutsin-ma); (**IKCOE** = Isa Kaita College of Education, Dutsin-ma).This section covers the demographic features of the respondents in terms of age and categories of respondents. Table 1 and 2 give the summary of the respondent's to answer.

Table I presents the age distribution of the respondents. It shows that 69 percent of the respondents were in the 40 – 49 ages bracket while 31 percent were between the ages of 50 years and above. On the other hand, 25 percent were 31-39. Only 11 percent of the respondents were below 23 years. This shows that more than half of the respondents are young adults (40-49 years) followed by old adults of 50 years and above implies that the staff and students guidance to undergoing a form of education in order to increase knowledge among the tertiary institutions and general population.

Table 2 summarizes categories of the respondents. A Students and academic staff constituted the bulk of academic researchers in tertiary institutions web-site with 48 percent of students and 52 percent of academic staff respectively.

Table 1. Age distribution of Respondents

AGE	HUKPOLY	FUDMA	IKCOE	Total	%
Below 30	10	18	17	45	11%
31 – 39	11	26	14	51	23%
40 – 49	15	30	24	69	31%
50 – up	20	25	12	57	25%
Total	**56**	**99**	**67**	**222**	**100%**

Table 2. Categories of respondents

Respondents	HUKPOLY	FUDMA	IKCOE	Total	%
Students	18	70	27	115	52%
Academic Staff	38	29	40	107	48%
Total	**56**	**99**	**67**	**222**	**100%**

Determination of web search interfaces in colleges of education performance expectancy

Table 3 shown that, item one to three represent knowledge databases for learners'. The mean for item 1 is 3.44, while standard deviation is 1.078, for item 2, the mean is 3.16 and standard deviation is 1.463. And for item 3, the mean is 2.07 while the standard deviation is 1.201, respectively. The total average mean for 1, 2, and 3 is 2.89, and the standard deviation is 1.247. This means the performance of knowledge databases for learners' usage is fair.

The results presented in table 3 shows that item 1 to 13 represent Online Support Assistances for the learners'. The mean for item 1 is 4.25, standard deviation is 0.552 the interpretation is Very Good. Item 2 mean is 4.22, standard deviation is 0.505, and the interpretation is Very Good. The mean of item 3 is 4.22, standard deviation is 0.815, and the interpretation is Very Good. In item 4 the mean is 4.15, standard deviation is 0.642, and the interpretation is good. For item 5 the mean is 4.14, and standard deviation is 0.747 the interpretation is Good. Item 6 mean is 3.98 and standard deviation is 0.969 the interpretation is Good. Item 7 mean is 3.92 and standard deviation is 0.872 the interpretation is Good. Item 8 mean is 3.04 and standard deviation is 1.089 the interpretation is fair. Item 9 shown the mean is 2.88 and standard deviation is 0.843 the interpretation is fair. However, Item 10 the mean is 2.72 while standard deviation is 1.027 the interpretation is Fair. In respect of item 11 mean is 2.63 standard deviation is 1.519 that it is the understanding is Poor. To this, item 12 mean is 2.24 and standard deviation is 1.286 the interpretation is Poor. The presentation of online support assistances level 1 shown the total average of the mean is 3.43, while standard deviation is 0.920 the interpretation was determined the online support assistances level 1 is good.

Coexisting Exercise

Table 4. Shows that searching and point of accessing the web by staff for academic activities effort expectancy on asynchronous training has four items. Item 1 is (mean=2.97, Std=1.251) the interpretation is Fair. Item 2 is (mean=2.79, Std=1.500) the interpretation is Fair. Item 3 is (mean=2.72, Std=0.948) the interpretation is Fair. Item 4 is (mean=2.70, Std=1.054) the interpretation is Fair. As indicated on the table above shown that, the interpretation is Fair of asynchronous training by the (average mean=3.20, Std=0.934).

Coexisting Exercise

The results presented in Table 5 web-penetrating behavior and information seeking in promoting knowledge and interaction in tertiary institutions social influence shows that learner's knowledge on coexisting exercise this has seven items. Item 1 is (mean=3.97, Std=0.173) the interpretation is Good. Item 2 is (mean=3.93, Std=0.264) the interpretation is Good. Item 3 is (mean=3.81, Std=0.540) the interpretation is Good. Item 4 is (mean=3.64, Std=0.952) the interpretation is Good. Item 5 is (mean=2.09, Std=0.476) the interpretation is Poor. Item 6 is (mean=2.08, Std=0.655) the interpretation is Poor. Item 7 is (mean=2.07, Std=.637) the interpretation is Poor. The above table results imply that learners on coexisting exercise practice. The interpretation is Fair by indication of (average mean=3.08, Std=0.528).

Email and Internet Use Services

The above results imply that learners' assistances in using emails is good and therefore can help them in sending assignments, and course works to their lecturers online. They can also be able to receive lecturer notes, assignments, course works from their lecturers.

Table 3. Web Interfaces Behavior in Promoting Knowledge among Academic Staff in the Institutions. Performance Expectancy

Knowledge of Web Searching and Databases	Mean	Std. Deviation	Interpretation
I can fosters, interaction and stimulates understanding and the recall of information seeking behavior.	3.44	1.078	Good
I accommodates different learning styles and fosters learning through a variety of activities for the use of web-search facilities	3.16	1.463	Fair
I do Fosters self-paced learning and gain more knowledge.	2.07	1.201	Poor

Average mean	**2.89**	**1.247**	**Fair**
Online Support Assistances			
I know how to inspire browsing information through hyperlinks to sites on the World Wide Web.	4.25	.552	Very good
I know how to display online sustenance originates in the form of forums, chat rooms.	4.22	.505	Very good
I know how to use online bulletin boards.	4.22	.815	Very good
I know how e-mail or animate prompt messaging support somewhat more interactive than knowledge databases.	4.15	.642	Good
I know how to organize, copy and paste files in directories format.	4.14	.747	Good
I know how to create itemized lists (ex. bulleted format).	3.98	.969	Good
I know how to edit, copy, cut and paste a block of text or selected objects.	3.92	.872	Good
I can analyses and draw conclusions from a data set by searching, sorting and editing records.	3.04	1.089	Fair
I can use online support offers the opportunity for more specific questions and answers, as well as more immediate answers.	2.88	.843	Fair
I can work with self-pacing for slow or quick learners reduces stress and increases satisfaction.	2.72	1.027	Fair
I know how to provide context sensitive help and interactivity engages users, pushing them rather than pulling them through training and retrieve information appropriate.	2.63	1.519	Fair
I am able to work with very large documents that require to develop knowledge of the Internet; and encourages learners to take responsibility.	2.24	1.286	Poor
I know how to use file on-demand availability enables learners to complete training conveniently at off-hour or from home.	2.14	1.100	Poor
Average mean	**3.43**	**0.920**	**Good**

Table 4. Searching and Point of Accessing the Web by Staff for Academic Activities. Effort Expectancy

Asynchronous Training	**Mean**	**Std. Deviation**	**Interpretation**
I can go in repossess, and filter, data from the Microsoft access and involves self-paced learning any CD-ROM-based.	2.97	1.251	Fair
I can make a simple database in Microsoft access.	2.79	1.500	Fair
I understand the applicability of network based, Intranet-based as Internet-based.	2.72	.948	Fair
I understand how to create different access to instructors through online bulletin board, online discussion groups and e-mail or, it may be totally self-contained with links to reference materials in place of a live instructor.	2.70	1.054	Fair
Average mean	**3.20**	**0.934**	**Fair**

Table 5. Web-Penetrating Behavior and Information Seeking in Promoting Knowledge and Interaction. Social Influence

Coexisting Exercise	**Mean**	**Std. Deviation**	**Interpretation**
I am able to use the real time with a line teacher facilitating the training.	3.97	.173	Good
I am able to download journals in at a set time and can communicate directly with the teacher and with each other.	3.93	.264	Good
I am able to raise the cyber hand and view the cyber whiteboard search engines to locate desired information.	3.81	.540	Good
I am able to set amount of time-from a single session to several weeks, months or ever years	3.64	.952	Good

I am able to use basic steps to ensure online privacy and computer security.	2.09	.476	Poor
I am able to recognize that copyright restrictions apply to computer software and Internet documents.	2.08	.655	Poor
I am able to comprehend the training usually takes place via internet web sites, Internet telephony or even two-way live broadcasts audio or video conferencing in a classroom.	2.07	.637	Poor
Average mean	**3.08**	**0.528**	**Fair**
Email and Internet Usage			
I am able to compose, send, receive, reply to and forward email messages.	4.04	1.373	Very good
I am able to send electronic messages with attachments.	3.42	.908	Good
I can use mailing list to exchange information.	3.41	1.188	Good
I am able to access my college email account	3.35	.937	Good
Average mean	**3.56**	**1.102**	**Good**

The study found that, the utilization of web interfaces to information-seeking behaviors and performance in academic libraries trendy stimulating knowledge and interacting was poor (average mean=2.31, Std=0.586). The poor utilization of web site could be attributed to lack of awareness, lack of information needs services, lack of comprehensiveness of the web interfaces with library resources, lack of trained library staff in ICT skill services and lack of management support to provide man power for the information resources.

This study is in agreement with that of Umesha and Chandrashekara (2013) found that the role of libraries in health science or medical science is totally different than the traditional libraries. They have different task to correlate the needs such as curriculum based learning, research and point of care. In this study, they surveyed on 193 PG students and 430 faculty members from 12 dental colleges of Karnataka. The study also found that the reason for using printed periodicals was that academics staff promoting knowledge in teaching and learning preparing for their lessons and improving their teaching skills; they have little time to do scientific research; and networks were not available at home because they could not afford them.

The fact that staffs are not making use of library web interfaces and interacting to supplement their class work well effectiveness, or enrich themselves with new knowledge from updated materials could only mean that academic staff lack the necessary library web-site interfaces skills which would help them take advantage of such services which are readily at their disposal, or it could be because the library web-site services which the schools have do not serve their purpose; they are just there for the sake but not having what the staffs need to enhance their academic behavior activities.

In contrast Kannada (Lohar, 2013) library was lacking good library web-site interfaces resources, had poor collection of audio, visual and audio visual aids, and Computer-database and other library abilities of the resources. Users strongly agreed the importance of web resources and demanded proper preservation and digitization of old documents. Prakash (Prakash, 2013) in his study surveyed (out of 110 respondents) lecturers 48(43.63), 35(31.81) Asst professors and 27(24.54) professors. Finding of this study indicates that information-seeking behavior was motivated by a wide variety of needs, including personal, professional, entertainment, etc.

This study agrees with that of Egberongbe (2013) at the University of Lagos who found that e-library resources such as bibliographic databases, e-newspapers and e-magazines were not used very much. Furthermore, the study showed that lecturers and research scholars were aware of e-library resources. Awareness of library web-searching and interaction resources indicated users knowledge of the availability of the library web interfaces assets, and that they made use of them.

The results presented in Table 7 shows a positive/strong relationship between Web Interfaces for use of academic staff and Information-Seeking Behaviors in Promoting Knowledge ($r=.711^{**}$). This implies that an improvement in the utilization of library web site interfaces resources will cause an increase in the abilities of academic staff in information seeking behaviors in promotion knowledge. In other words, if academic staff improve on their grade book times, presentation skills, word processing skills, database skills, graphing skills, email utilize and web design skills, there will be a high likelihood that they will have the confidence to exploit the available library web interfaces resources that are readily at their disposal hence increase information seeking behavior in promoting knowledge in good utilization.

Table 6. Determine the Information Seeking Performance in Academic Libraries and Web Interfaces Put on Use in the Colleges of Education

Use of Web Interfaces Resources	Mean	Std. Deviation	Interpretation
I use the electronic journals provided by the library for my project writing.	3.99	1.278	Good
I use the e-library resources to retrieve current literature for studies	2.37	.636	Poor
I use the web catalogue (OPAC) for sourcing information in the library.	2.36	.917	Poor
I participate in professional discussion group/list serve via the library's Internet access.	2.29	.823	Poor
I use the electronic books provided by the library to complement my class notes.	2.22	.712	Poor
I use the information resources to update my knowledge in subject areas of interest.	2.16	.608	Poor
I use e-library resources to do class assignments.	2.13	.380	Poor
I use the online database in the library for my assignments.	2.12	.420	Poor
I use the libraries and information seeking behavior to source materials for research/writing project.	2.10	.428	Poor
I follow blog discussions on subject area of interest via the library's internet access	2.09	.377	Poor
I use e-library resources to search for scholarship opportunities.	2.08	.425	Poor
I use the e-library resources to amplify my course works.	2.07	.367	Poor
I use the Internet access in the information seeking resources to send e-mail.	2.05	.241	Poor
General average mean	**2.31**	**0.586**	**Poor**

Table 7. The Relationship between the Web interfaces and information seeking behaviors of academic staff in promoting knowledge and interaction in colleges of education

		Web Interfaces for use of academic staff	Information-Seeking Behaviors in Promoting Knowledge
Web Interfaces for use of academic staff	Pearson Correlation	1	.711**
	Sig. (2-tailed)		.003
Information-Seeking Behaviors in Promoting Knowledge	Pearson Correlation	.711**	1
	Sig. (2-tailed)	.003	

****. Correlation is significant at the 0.05 level (2-tailed)**

CONCLUSION

This study examined the result of web interfaces equal on information-seeking behaviors and utilization among the academic staffs in the tertiary institutions in Katsina State. Web-site interfaces is among the most important explosion propelled by the internet transformation to promoting positive knowledge. The search engines mostly used for academic activities by the staffs in tertiary institutions included Google and Yahoo, while Google Chrome and Opera were the most frequently used web-search browsers. Information-seeking behavioral domain strategies were the most utilized search strategies followed by practical field while metacognitive domain strategies were the least used. As such, academic staff are advised to inculcate the habit of patronizing search engines in all their academic activities which will make them academically well equipped, professionally well groomed and psychologically well balanced.

Government should provide web-searching interfaces for use to information-seekers to increase modern creativity in tertiary education system that will boost behavioral activities and elevate academic staff development.

Provision of networked technologies such as the internet and World Wide Web are dramatically changing education and training as it enable academic staff to access information and communicate through others

across global borders, cultures and on a global scale. Therefore, Government and all other Stakeholders should do everything possible to actualize that.

The Curriculum Planners should include web-search behaviors in the curriculum of the learner to guide them in the use of search engines that are designed for more knowledge and educational purposes.

Tertiary institutions should provide dual forecast of web-searching behavior among academic staff and digitization of library information resources for their professional development.

Academic staff should be encouraged to develop an information seeking behavior to pave way for them in the use of search engines that are designed for more knowledge and educational purposes.

REFERENCES

Aina, L.O. (2004). Library and Information Science Text for Africa. Ibadan: Third World Information Services. P. 60

Amin, Y. and Shima, Y. (2007). Information need and information seeking behavior of professionals at an Iranian company. Library Students Journal, 2 Available at:http://www.librarystudentjournal.org/index.php/lsj/article/view/65/124

Ellis, D. (1989). A behavioral model for information retrieval system design. Journal of Information Science, 15 (4): 237-247.

Kadli, J. and Hanchinal, V. (2015). Information seeking behaviour of law students in the changing digital environment. DJLIT, 35(1), 61-68. http://dx.doi.org/10.14429/djlit.35.1.8099

Kadli, J. and Kumbar, B. D. (2011). Faculty Information-Seeking Behavior in the Changing ICT Environment: A Study of Commerce Colleges in Mumbai. 14.

Khazer, M., Jan, S. and Ganaie, S. A. (2016). Impact of ICT on information learning/seeking behavior of researchers: A case study of science scholars in University of Kashmir. In Emerging trends and issues in Scientometrics Informatics and Web metrics, 491-500.

Kumar, A. (2013). Assessing the Information need and Information Seeking Behavior of research Scholars of MBPG College: A Case Study. International Journal of Digital Library Services, 3 (3), 1-12. Retrievedfrom http://www.ijodls.in/uploads/3/6/0/3/3603729/ashish_1-12.pdf

Olaleye, S. A., Sanusi, I. T., Ukpabi, D. and Okunoye, A. (2018) "Evaluation of Nigeria universities websites quality: A comparative analysis," Library Philosophy and Practice, vol. 1717, pp. 1-14.

Onuoha, U.D. and Obiako, A.N. (2013). Comparative analysis of information seeking behaviour among students of Babcock University, Nigeria. IOSR Journal of Research & Method in Education (IOSR-JRME), 2(2) (Jul–Aug. 2013), 01-06. Available at www.iosrjournals.org

Ukachi, N. B. and Ayiah, E. M. (2017). Exploration of Appropriate Media for Satisfying the Information Needs of Future Community of African Farmers. Library Philosophy and Practice (e-journal), 1513. Available at http://digitalcommons.unl.edu/libphilprac/1513.

Umesha, U. and Chandrashekara, M. (2013). Information Seeking and Searching Behavior of Dental Science Professionals in Karnataka. DESIDOC Journal of Library & Information Technology, 33(2).

Venkatesh, V. and Bala, H. (2018). Technology Acceptance Model 3 and a research agenda on interventions. Decision Sciences, 39(2), 273-315.