# academicresearchJournals

Vol. 7(1), pp. 1-9, January 2019 DOI: 10.14662/IJALIS2018.082 Copy © right 2018 Author(s) retain the copyright of this article ISSN: 2360-7858 http://www.academicresearchjournals.org/IJALIS/Index.htm

International Journal of Academic Library and Information Science

Full Length Research

# Information Seeking Behaviour and Need among Undergraduate Students of the College of Management Sciences, Bells University of Technology. Ota, Nigeria: A Case Study

<sup>1</sup>Towolawi, K. Oluwakemi PhD, CLN and <sup>2</sup>Fawole, O. Oluwatoyin

<sup>1</sup>Head, Resources Development Department, University Library, Bells University of Technology, Ota Email: kemitowolawi2011@gmil.com
<sup>2</sup>Head, Bibliography & Reference, University Library, Bells University of Technology, Ota Email:awoloreyenny@yahoo.com

Accepted 11 December 2018

The study focuses on information seeking behavior and needs of undergraduate students of the College of Management Science (UCMS), Bells University of Technology, Ota. Nigeria (BUTON) as a case study. The study adopted a descriptive survey research design and the population of study consists of four hundred and twenty (420) purposefully selected UCMS. The Undergraduate 1nformation Seeking Behaviour and Needs Questionnaire (UISBNQ) was the research instrument used for data collection. Findings revealed that UCMS need information to pass examinations and test, coursework and assignment, health and football, personal development and general reading, hence majority visit the BUTON University Library (BUTONUL) regularly to use its resources. The search strategies employed are browsing and using internet resources (92.4%), lecture notes and reading list (82.4%), in addition to using databases CD-ROM and the library and its resources (62.3% and 61.4%) respectively. It is however, revealed that, seeking assistance from library staff and librarian recorded 32.4%. While, the challenges faced in seeking information includes non-conducive physical environment of the University library (75%), poor searching skills (80%), limited computer terminals and internet access (70%). Based on the aforementioned findings, it was recommended that undergraduates should be trained on how to search for information and they should continually seek assistant from library staff. Additionally, unlimited computer terminals, internet access and improved physical condition of BUTONUL is to be ensured by its management.

**Keywords:** Information seeking, Needs, undergraduates, Bells University Library, Bells University of Technology, Ota, Management Sciences

**Cite This Article As:** Towolawi, K.O. and Fawole, O.O. (2018). Information Seeking Behaviour and Need among Undergraduate Students of the College of Management Sciences, Bells University of Technology. Ota, Nigeria: A Case Study. Inter. J. Acad. Lib. Info. Sci. 7(1): 1-9

## INTRODUCTION

The Chambers Concise Dictionary and Thesaurus (CCDT, 2003), defined information as knowledge gained or given and the act of given and receiving knowledge. In the same vein, in the academic library environment, the knowledge cum facts gained and or given from varied sources by and or to students with the use of print and non-print resources could be termed information, while the act of given and receiving such information to students with assistance from librarians could also be referred to as information services. The critical nature of information makes it a strong pillar that must be utilized by undergraduates in order to realize a sustainable knowledge and academic development progress; especially as the current civilization could hardly be imagined without information, knowledge and innovation (Ríos-Ortega, 2014). Thus, the provision of accessible and usable information is vital for making informed academic decision by undergraduates. It is also extremely needed to bring about active teaching, learning, research, studying skills cum behavioural changes among information seekers and users.

Accordingly, previous research in this area had focused more on academic and research related information seeking behaviour and use of information by students (undergraduates and postgraduates), faculties (lecturers and Researchers), legal education (lawyers etcetera) as attested to in reviewed literature. (Pun, Hong, Kim, 2017; Ali, 2017, Srivastava and Tiwari, 2016; Nadzir, 2015, Urhiewhu, Eyisi and Eyisi, 2015, Natarajan, 2012, Tahir, Jawad and Mohammad, 2008). Accordingly. Aslam and Seher (2018), opined that undergraduates as users of libraries are the significant components. The identification and fulfillment of library users needs was also discovered to be the objectives of all types of libraries, especially academic libraries. Conclusively, academic libraries and other types of libraries must understand the informationseeking behavior of their users in order to re-engineer their services and provide information efficiently.

### CONCEPT OF INFORMATION, INFORMATION NEED AND INFORMATION SEEKING BEHAVIOUR

The term information has been defined by different researchers. To some it is processed data, however, the major difference between data and information lies in the forms, format and process undergone by such data. Hence, data refers to unprocessed raw attributes or symbols that can undergo transformation processes. As pointed out by Towolawi and Adeyemi (2010), organisations rely on data-driven decisions to evaluate and improve. The same is however, applicable to academic libraries. Thus, Towolawi, et al (2010) cited Adebowale (2008) and Ogundipe, Lucas and Sanni (2005), to define data as raw facts, unassembled and frequently unrelated symbols. Thus, information has also been generally referred to as "interpreted data". In the cause of interpreting data however, literature pointed out that the same data might have different interpretations and different individuals might associate different meanings to the same data. Literature also affirmed that, information can be produced from data through manual and automated process (Callaos and Callaos, 2002) Thus, from reviewed literature, information is defined as organised data that is useful and meaningful to the recipients. Therefore, Information to undergraduates can be defined in terms of its value and usage, especially when it add value and meaning to their academic attainment. Hence, information is that, which can tell the students things not known in relation to improving their academic attainment and satisfying their quest for knowledge (Patel and Chaudhari 2017; Tian-guig, 2011)

Nevertheless, information need is a term used in variety of ways by researchers, it connotes purposive needs, demands and wants of library users (in this case undergraduates) to satisfy a set goal. Thus, Chinnasamy (2016), described information need as evolving from a vague awareness of something missing. And this vague awareness culminate in change in behaviour and attitude. Hence, library user strive to locating information to meet their needs in order to contribute to and or have more understanding and meaning of a phenomena and or using such to take care of an identified knowledge cum information gap.

In contrast however, Information Seeking Behaviour (ISB) refers to human behaviour with respect to searching various sources, and channels to source for information (Chinnasamy, 2016). In the context of this study therefore, information seeking behaviour connotes steps taken during the information and knowledge seeking, gaining and searching process. It is also the observed changes and activities engaged in as exhibited by students during the information and knowledge seeking, searching and receiving process. All these, in addition to all strategies used in searching various sources and channels of information within and outside BUTON and BUTONUL culminates into ISB. The information and knowledge however, can be for leisure and or for academic purposes. The terms, information seeking behaviour, information search behaviour/ attitude and information use behaviour/ attitude is used synonymously with ISB. However, some identified factors which affect ISB of students according to literature includes disciplines, academic levels, cultural background and Intuition (Tahir, Jawad and Mohammad, (2008). Subsequently, ISB is a purposive search for information as a consequence of an identified need gap to satisfy some goals by interacting with various information sources (Patel and Chaudhari, 2017). Similarly, as

submitted by Joshi and Nikose (2014), they are the activities a person engages in after identifying the existence of an information need. The duo cited Kakai, et al., (2004) to further explain that information-seeking behavior is an individualized way and manner of gathering and sourcing for information for personal use, knowledge updating, and development. They reiterated that, the Information-seeking behavior of students, researchers, and faculties have been the focus of enquiry for decades as user studies and pointed out that, Information-seeking behavior differs among different user groups (Okonoko, Uche and Ejiro, 2015).

From the aforementioned, it becomes germane that academic libraries understand the information needs of its faculties and students in order to address such needs Thus, Information (Fishers. 2015). behaviour encompasses information seeking as well as the totality of other unintentional or passive behaviors of information users, as well as purposive behaviors that involves searching, browsing and seeking to satisfy an information gap. Natarajan, (2012), citing Case (2002) and Krikelas (1983), opined that ISB are the activities of an individual that is undertaken to satisfy perceived needs, it is continuous and involves searching, locating and using information for an information need. ISB also involve all the activities a person(s) may engage in after identifying a need for information (Sellan, and Sornam, 2018).

Therefore, ISB is all activities, outcomes and consequences involved in the search, location and utilisation of information and or knowledge to satisfy identified needs and goals of individuals (Manjunath and Babu, 2018). In the course of seeking for information, here as in the case of the Bells University of Technology, Ota. Nigeria (BUTON) Undergraduates in the College of Management Sciences (UCMS), interact with print and electronic information systems (such as those in the BUTON, University Library (BUTONUL). These resources include books and journals, newspapers etcetera and or with computer based systems, databases and virtual library, namely: ebookCentral academic complete virtual library, web-based and stand alone resources, internet to meet their academic and other needs. Nevertheless, the idea to carry out this study was borne out of the curiosity to understand the information needs and Information Seeking Behavior (ISB) of UCMS, BUTON and also to ascertain their observed seemingly ISB towards the use of information services and resources of the BUTON University Library (BUTONUL) by the researchers. Although, several research had been carried out in multifarious studies on information seeking behaviour and information needs of students, none had focused on Undergraduates of the College of Management Science (UCMS), Bells University of Technology, Ota, Nigeria (BUTON), Ota campus. Thus, this research aims to investigate the ISB and needs of UCMS, BUTON.

## THEORETICAL FRAMEWORK

Marcia Bates Berry-Picking Theory (1989) utilised by Hassan, (2017), provided a strong direction for this study.

The model suggested that individuals pick information. the way berries are picked here and there, then move on to another bush and pick berries and over time, they have a basket of berries, but they came from a variety of places. This connotes that information-seeking behaviour arises as a consequence of a need perceived by an information user, who, in order to satisfy that need, makes demands upon formal or informal information sources or services, which result in success or failure to find relevant information. If successful, the individual then makes use of the information found and may either fully or partially satisfy the perceived need or, indeed, fail to satisfy the need and have to reiterate the search process. The model also shows that part of the information seeking behaviour may involve other people through information exchange and that information perceived as useful may be passed to other people, as well as being used (or instead of being used) by the person himself or herself. Consequently, as earlier authors have argued, the limitation of this model, is that it does little more than provide a map of the area and draw attention to gaps in research: it provides no suggestion of causative factors in information behaviour. Thus, UCMS, BUTON pick information from a variety of sources and gather them together into a unified whole of some kind for their academic attainments. This suggested that, information needs of UCMS, BUTON can be satisfied by the series of information that UCMS, BUTON acquire during the information search process within BUTON, its library and outside the library. (see figure 1)

### **OBJECTIVES OF STUDY**

i. To identify the information needs of UCMS, BUTONii. To determine the information searching strategies employed by UCMS, BUTON

iii. Determine the library visit pattern of UCMS, BUTON iv. Investigate challenges are associated with the ISB and needs of UCMS, BUTON.

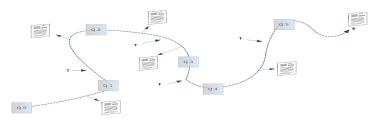
# **RESEARCH QUESTIONS**

Research Question 1: What are the identified information needs of UCMS, BUTON

Research Question 2: What are the information searching strategies employed by UCMS, BUTON

Research Question 3: What is the library visit pattern of UCMS, BUTON

Research Question 4: What challenges are associated with the ISB and needs of UCMS, BUTON



### Figure 1.

Bates' Berry picking Information Retrieval Model. The focus is the sequence of searcher behaviors, which continually shift after gaining new information. Q = Query, T = Thought, E = Exit. Every new piece of evidence, of information here in the form of documents leads to reformulation of the search direction (Q) and to a new conception of the domain of thought (T). Adapted from Bates (1989). (Sources: Hassan, 2017)

#### SCOPE OF STUDY

This study concentrated on investigating the information seeking behaviour and needs of Undergraduate students of the College of Management Sciences (UCMS) in the first private University of Technology in Nigeria. The scope of the study was limited to Bells University of Technology, Ota, Nigeria (BUTON) undergraduate students of the college of management sciences only. The fact that these sets of undergraduates were observed to be regular users of the library and its resources, they are easier to be observed and reached for use as representative sample of all undergraduates of Bells. Ordinarily, it would have been appropriate to include students from other colleges of the University in the study in order to be able to compare their information seeking behaviors and needs. Additionally, the time and cost involved in such endeavor are the limitation of the study.

#### LITERATURE REVIEW

According to Urhiewhu, Eyisi and Eyisi (2015), information is an essential part of all facets of life. The trio argued that information is such an important raw material, that its acquisition and understanding is germane in decision making, policy formulation, as well as implementation for growth and survival. Reliable information according to them, is the cornerstone for building the awareness, expertise and practical strategies necessary to improve the world we live in, in terms of health, physical, technical, mental, social and scientific development of humanity (Urhiewhu, Eyisi and Eyisi 2015 citing Adetoro, 2010).

To undergraduate student, adequate information is a prerequisite to decision making and knowledge acquisition. Thus, Rajesh, Sivasubramaniyan and Kalpana (2018), opined that for every student, there is always a need to obtain relevant information. Thus, to

Rajesh et. al., the information seeking behaviour of students help student in updating their knowledge, refining their attitudes, developing skills and performing better in their academic excellence. As such, it is implied that, information seeking helps in reducing the degree of students uncertainty in academic environment. The term has been widely and increasingly used, but without a clear meaning. Subsequently, Callaos and Callaos (2002), submitted that Information systems cannot exist without information and yet there is no secure agreement over what information actually is, despite fact that, it is one of the most used concept. Hence, the duo concluded, that different disciplines provide diverse meanings for information. Literature attested that information need is lack of appropriate information on which to base choice that could lead to benefits or services to improve people's well being (Natarajan, 2012). Meanwhile, libraries are established in universities to provide needed information in support of teaching, research and community services (Maina, Masese. George and Makwae, 2017). Thus, the general purpose of an academic library is to provide relevant and up- todate resources with a view to satisfying the information needs of its users. Maina, et al (2017), submitted that the availability of all forms and types of information resources in academic libraries are highly imperative to meet with the information needs of different categories of users in the parent institution of libraries. However, the trio argued that high cost of information resources, services and related problems have made libraries to be inadequate in meeting the information needs of its intended users.

Yadav, (2017) investigated the information needs and information seeking behaviour of female aborigines of Mirdha, Bowri, Sawutal and Dumka, who worked in the tea Plantation of Lakhipur. In the study, he discovered, that, lack of information resulted in creating health and education problems for the female tea laborers. In his conclusion, he highlighted factors such as illiteracy, language differences, work overload and lack of library resource as barriers crippling the female population of Lakhipur tea garden. In his conclusion, he recommended a three-fold channelization of information as a necessity to solving the health and educational 1 needs of the laborers.

Similarly, Pun, Hong and Kim (2017), in a case study investigated the information seeking nature of first year students in two universities in Korea and in California State University, Fresno, a university in the United States. The trio provided a general overview of first year students information seeking behavior from different perspectives by applying visual techniques of photo-voice and ethno-mapping. The techniques used created a fuller picture of the first year student experiences in using the library and their information seeking behaviour. Pun et.al (2017) discovered that, first year students often confront new sets of cultural and academic expectations when they enter college. They noted that, the students faced difficulty during transition to the University and reiterated that, they need to learn new values, skills, language and norms to become successful academically. The reasons adduced include being the first in their families to attend college and often searching the library for specific materials but not knowing where to begin. The trio reported, that fresher's find out about the library through their lecturers or friends.

Likewise, Chinnasamy (2016), in a case study investigated information need and seeking behaviour of engineering college students in Madurai and he discovered undergraduates utilise the library for preparing for examination by using the printed resources more than other types of resources. Conclusively, Udo and Jonathan, (2016), also carried out a study on Library and Information Services for Rural Community Development in Africa: Problems and Prospects. The duo found out that residents of rural communities need information on: health related matters, problems of daily existence. occupational concerns. government operations, education, religious matters and recreational. Thus, Udo et.al (2016), submitted that information play important role in almost every human activity and its value cannot be overemphasized. Thus, UCMS, BUTON visit the University library always to seek for information and utilise its resources, and they are also observed to always use the internet and the university library resources. Are the students really taking advantage of the existence of the internet on campus and the resources of the library, to prepare for examination, assignment, general reading or for social activities? Do students have search strategies they utilise to get needed information?. What are their information seeking behaviour and needs like? These are some of the question this study is set out to answer. Furthermore, the dearth and paucity of literature on user education study of this nature among Undergraduate Students of the College of Management Sciences, Bells University of Technology. Ota, Nigeria necessitated this study. In

addition, it is expected that the outcome of this study will benefits not only the students, but also lecturers in the faculties of management Sciences in Nigeria. The study will also provide information on the information seeking behaviour of students in specialised institutions across the globe and help to make generalization in polytechnics and other institutions of higher learning and perhaps assist in the proposition of a model for a more general framework. Therefore, without an enquiry and a research of this nature, it become difficult to determine the Information Seeking Behaviour and need of Undergraduate Students of the College of Management Sciences in the first private University of Technology in Nigeria, Hence, it is against this backdrop, that, this study was embarked on contributing to the scarce literature undergraduate Information available on Seekina Behaviour and Need in Bells University of Technology, Ota, Nigeria

## METHODOLOGY

A descriptive survey research design was adopted for the study. The study investigated information seeking behaviour and needs among undergraduates of the College of Management Sciences (UCMS), Bells University of Technology, Ota. Nigeria (BUTON). The instrument used for data collection was the Undergraduate Information Seeking Behaviour and Needs Questionnaire (UISBNQ). Data were there after tabulated and analyzed using descriptive statistics such as frequency and simple percentages. The population of study comprises of 420 undergraduate students of the College of Management Science (UCMS), BUTON, who were purposively selected among 200, 300 and 400 level students of the College of Management Sciences. These set of students were observed to have high information needs; they were also observed to visit the library regularly to always utilise and make enguiries at the circulation Unit of the library and to seek information. A structured standard questionnaire was adopted as instrument for data collection. The questionnaires were distributed to the students as they come to the BUTONUL for a period of two semesters, especially during library visit hours; and as they come to utilise the library resources and to make enquiries. The porters and library Assistant are the research assistant used for the distribution and collection of the instrument.

Table 1 shows the distribution of respondents by department and programmes of study. Majority of respondents are undergraduates from the department of accounting. Economics and Human Resources Management, with 35.2%, 28.6% and 20.0% respectively. This is followed by Project Management, Marketing and Finance and Banking Students with 4.3%, 3.8% and 3.3%, while Business computing and

Department/Programme of Study	Frequency	Percentage
Accounting	148	35.2
Economics	120	28.6
Human Resources Management	84	20.0
Project Management	18	4.3
Marketing	16	3.8
Finance & Banking	14	3.3
Business Computing	10	2.4
International Business	10	2.4
Total	420	100

Table 1: Distribution of Respondent by Department and Programme of Study

#### Table 2: Information Needs of .UCMS, BUTON

Variable	Frequency	Percentage
Examination and Test	407	97%
Course work and Assignment	395	94%
Health and Football	368	88%
Presentation	367	87%
Personal/Self Development	336	80%
General Reading	336	80%
Group Discussion	315	75%
Tutorial	294	70%
Social Activities	294	70%
Scholarship	231	55%
Seminars and Workshop	221	53%
Others	120	29%

International Bossiness undergraduates each with 2.4% respectively came last. This table speaks volume in relation to UCMS who frequently visit the Library to seek for information.

#### **RESULTS AND DISCUSSION**

# Research Question 1: What are the information needs of UCMS, BUTON?

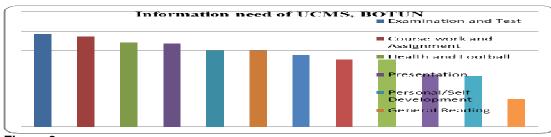
In order to identify the information needs of UCMS, respondents were asked to state the reasons why they seek information. Table 2 revealed the Identified Information Needs of UCMS, BUTON

Table 2 shows the information needs of UCMS, BUTON, From the table, majority of respondents need information on examination and test, course work and assignment, health and football, presentation, personal development, general reading and group discussion as attested by 97%, 94%, 88%, 87%, 80%, 80% and 75% responses respectively. Social activities, scholarship, seminars and workshop also form part of the respondents information need as indicated by 70%, 57% and 29% of undergraduates respectively. Figure 2 is a column chart of the information needs of UCMS, BUTON

# Research Question 2: What are the information searching strategy(ies) employed by UCMS, BUTON?

To determine the information searching strategies employed by UCMS, BUTON, respondent were asked to indicate search strategies used to get needed information.

Analysis of result on Table 3 speak volume on the information search strategies engaged by UCMS, BUTON. Majority of the respondents 388 (92.4%) browse and use the internet and its resources, 346 (82.4%) use lecture notes, 294 970.0%) ask their fellow student question when they need information, 262 (62.3%) use databases and CD-Rom search and 258 (61.4%) use the university library and its resources. Infact all strategies were employed to get needed information by UCMs, BUTON. It is however observed, that, respondents do not seek assistance from library staff and librarians as attested to by 136 (32.4%) of respondents. This result is contrary to the submission of Inglis (2005), that turning to librarians for help as a natural human response and the essence of library services in the 21st century as a spirit of collective and cooperative action.



### Figure 2

Table 3: Information searching strategies of UCMS, BUTON

I search for information by	Frequency	Percentage
Browsing & Using Internet and its Resources	388	92.4%
Using lecturers notes	346	82.4%
Asking my fellow students	294	70.0%
Using Databases & CD ROM Searching	262	62.3%
Use the University Library and its resources	258	61.4%
Using E-books and Journals	242	57.6%
Using shelf guide to locate and consult library materials (Print)	241	57.3%
Using Online Reference Materials	220	52.3%
Seeking Assistance from library staff & librarians	136	32.4%

Table 4: University Library visiting pattern of UCMS, BUTON

Frequency of Use of the BUTONUL	Frequency	Percentage
Always	177	42.1
Most times	126	30.0
Sometimes	84	20.0
Rarely	26	6.1
Not at all	7	1.6
Total	420	100

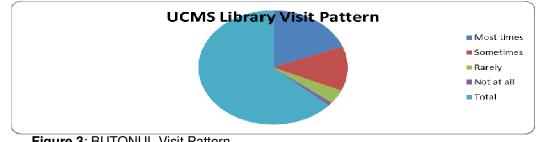


Figure 3: BUTONUL Visit Pattern

## Research Question 3: What is the University library visit Pattern of UCMS, BUTON?

In order to ascertain the visit pattern to the BUTONUL, respondents were requested to indicate their frequency of utilisation of the Library.

Table 4 indicated that majority, 177 (42.1%) always visit the BUTONUL, 126 (30.0%) visit most times, 84

(20.05) sometimes and only 26 (6.1) and 7(1.6) use it rarely and not at all. The analysis of this result reveal that majority 92.1% of respondents (42.1, 30.0 and 20.0) utilise the BUTONUL. Thus, respondents visiting pattern to BUTONUL is as shown in figure 3:

Table 5: The challenges associated with the ISB and needs of UCMS, BUTON	
--	--

Associated Challenges	Frequency	Percentage
Information explosion on the internet	375	85%
Poor Searching skills	336	80%
Non conducive Physical Condition of the library	315	75%
Limited computer terminals and internet access	294	70%
Incomplete lecture notes	252	60%
Lack of time	227	54%
Inadequate knowledge on the use of library shelve and cataloogue	210	50%
Non challant Attitude of library staff	202	48%
Network fluctuation	105	25%

# Research Question 4: What challenges are associated with the ISB and needs of UCMS, BUTON.

Table 5: showed that 375 (85%), 336 (80%), 315 (75%) and 294 (70%) of respondents identified information explosion, poor searching skills, non-conducive physical condition, limited computer terminals and internet access as major challenges associated with information seeking behavior of UCMS, BUTON respectively, while 252 (60%) and 227 (54%) on incomplete lecture notes and lack of time. Inadequate knowledge of use of library shelve and catalogue recorded 210 (50%), 202 (48%) indicated non challant attitude of library staff and 105 (25%) indicated network fluctuation as some of the numerous challenges facing undergraduates in their quest to seek for information to meet their needs in Nigeria libraries.

### CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study, the followings are recommended:

Firstly, BUTONUL to add more health, personal development and general reading information materials and resources to its library collections and create the database of past question papers and lecture notes which is to be made available and accessible or added to the open educational resources of the university for undergraduates access.

In addition, it is recommended that unlimited computer terminals and internet access be made available at the university electronic library and the training of undergraduates in the development of adequate information retrieval and searching skills cum provision of shelf guides is a sine qua non.

Similarly, all undergraduates are enjoined to keep up the habit of regularly visiting the university library and to always seek assistance from library staff and librarians. Finally, improvement on the physical environment of the University library by BUTON management is suggested.

# REFERENCES

- Adetoro, N. 2012. "Social competence and information utilization among Library and Information Science undergraduate in Tai Solarin University of Developing Country Studies Vol.5, No.14, 2012
- Ali Amour El-Maamiry (2017) The Information-Seeking Behaviour of Students: A Case of University of Dubai Information & Technology Global Journal of Computer Science and Technology: Volume 17 Issue 1 Version 1.0 Year 2017
- Aslam, Rabi and Seher Naveed, E (2018) User satisfaction survey of public library: a study of Liaquat memorial library, Karachi, Pakistan International Journal Of Library Science 2018, 7(1):8-14 Doi: 10.5923/j.library.20180701.02
- Callaos Nagib and Callaos Belkis (2002) Toward a Systemic Notion of Information: Practical Consequences *Informing Science* Volume 5 No 1, pp 1-11
- Chambers Concise Dictionary and Thesaurus (2003) Chambers Harrap, Edinburg Mary O'Neill (ed)1410p
- Chinnasamy, K (2016) information need and information seeking behaviour of engineering college students in Madurai:a case study Qualitative and Quantitative Methods in Libraries (QQML) 5: 131-140, 2016
- Fisher et al., (2006). Information and Knowledge Management ISSN 2224-5758 (Paper) ISSN 2224-896X (Online) Vol.5, No.4, 2015 Pp 7-17
- Inglis, Jenifer (2005) The cooperative librarian In Expectations of librarians in the 21st Century Carl Brigdes (ed.) Paegers; Greenwood Press, London pp 30
- Joshi Pradip A and Nikose, S.M. (2014) Information seeking behaviours of users: a case Study of private higher technical Education libraries in Chandrapur district.
- Maina Jane, Masese Jasper, George Mogaka Benard Omallah and Makwae, Evans Nyanyu (2017). Usage And User Satisfaction Of Library Resources In Kisii University Library, Kenya International Journal of

Library and Information Science Studies Vol.3, No.3, pp.20-29, November 2017

Manjunath, N and Babu (2018) Information Needs and Information Seeking Behaviour of Research

Scholars in Bangalore University, : A Survey International Journal of Library and Information Studies Vol.8(1) Jan-Mar Pp 332- 342 http://www.ijlis.org

- Nadzir, Maslinsda Mohd (2015) Identifying the information-seeking behaviors among school of computing undergraduate Students Journal of Theoretical and Applied Information Technology 74 (2) 1 Pp 149-154
- Natarajan, M (2012) Information seeking behaviour of students of Management Institutions in NCR of Delhi Trends in Information Management (TRIM) 8(2), pp. 100-110
- Okonoko Vera Ngozi, Uche Emeka-Ukwu Ayomanor and Ejiro Kenneth (2015) Information Seeking Behaviour of Faculty Members In A Nigerian University International Journal of Academic Research and Reflection Vol. 3, No. 4, 2015 Pp 95-105 www.idpublications.org

Patel Urjita and Chaudhari, B.K (2017) Information Seeking Behavior of the Engineering College Students, Gandhinagar International Journal of Research in all Subjects in Multi Languages Vol. 5, Issue: 10, October: 2017 pp 58-62

- Pun, Raymond, Hong Yujin and Kim Minsun (2017) Telling the First Year Experience: Visual Techniques to Assess First Year Students and Their Information Seeking Behaviours IFLA WLIC 2017 WROCLAW http://creativecommons.org/licenses/by/4.0 pp 1-6
- Rajesh R, Sivasubramaniyan G and Kalpana L (2018) information seeking behaviour among B. ed. College students in Puducherry: a case study International Journal of Information movement Vol.2 Issue pp 110-112
- Ríos-Ortega, Jaime (2014)the concept of information in library science, sociology and cognitive science Bibliotecológica, Vol. 28, no. 62, January/April, 2014, México, Pp. 143-179
- Sellan, Yesan and S. Ally Sornam.(2018) information search strategies among theological faculty members in Tamil Nadu, the Christian Librarian: Vol. 61 : Iss. 1 pp 51-68

Srivastava Vishnu and Tiwari, Vijay Raghav (2016) Information seeking behaviour of the stude1nts of National Law University, Uttar Pradesh International Journal of Academic Research and Development Volume 1; Issue 11; November 2016; Page No. 38-43 www.academicsiournal.com

Tahir Masood Qureshi, Jawad Iqbal and Mohammad Bashir Khan (2008) Information needs & information seeking behaviour of students in Universties of Pakistan Journal of Applied Sciences Research, 4(1): 40-47, 2008

Tahir Masood Qureshi, Jawad Iqbal, and Khan,

Mohammad Bashir Khan (2008)Information Needs & Information Seeking Behaviour of Students in of Pakistan Journal of Applied Sciences Research, 4(1): 40-47, 2008

- Tian-qing Qiao (2011) Definition and Essence of Information Triple C: Journal of Cognition, Communication, co-operation 9(2): 342-346, 2011 http://www.triple-cative
- Towolawi, K.O and Adeyemi, J.A (2010) Acquisition and Use of Library resources in a University of Technology: A statistical Analysis Library Philosophy and Practice availble http://digitalcommons.unl.edu/libphilprac/
- Udo Nwokocha and Jonathan N. Chimah (2016) Library and Information Services for Rural Community Development in Africa: Problems and Prospects Paper submitted for IFLA WLIC Satellite Meeting – Africa Section titled Building Cross Cultural Capacities for Universal access to Information and Knowledge in Africa held in Ohio University, Athens, Ohio, USA between: 11-12 August 2016
- Urhiewhu Lucky Oghenetega, Eyisi Ifeka . E. Okeke and Eyisi, Godsgift Ukoma (2015) I1nformation Seeking Behaviour and Need among Undergraduate Students in Faculty of Management Science in Madonna University Nigeria Okija Campus: A Case Study Developing Country Studies Vol.5, No.14, 2015 Pp 87-92
- Yadav, Sangita (2017) information needs and information seeking behaviour of female workers in Lakhipur tea garden IOSR Journal of humanities and social science (IOSR-JHSS) volume 22, issue 12, ver. 2 (December. 2017) pp 37-42 online: ww.iosrjournals.org doi: