



Usage levels of Serial Publications at the University of Zambia Library

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Abstract

Objective: The study investigated factors that lead to less usage of serials in the University of Zambia Library.

Design/Method: The study combined qualitative and quantitative research designs. Questionnaires and interview guides were used for data collection from a sample size of 170 students.

Data analysis: Data from questionnaires was analysed using Statistical Package for Social Sciences, while data from interviews was done thematically through content analysis

Findings: Levels of serial usage were low due to lack of knowledge of serials collection and its services by users, inadequate search skills, inadequate orientation of students at 1st year level and later on, collection not comprehensive, outdated resources, collection being closed access, etc. To improve serial usage, the library must be run by qualified staff who should adequately guide and train users on how to access, retrieve and use journals. Other aspects included effective marketing strategies and provision of current journals in all subject areas.

Key words: Serials, Journals, Usage, University of Zambia, Students

1. Introduction

Searching for relevant information in whatever format is often not anything easy. It can be labor-intensive, time consuming and frustrating to both casual and experienced information users. Sometimes some information seekers give-up in the process of searching information due to various problems they might experience. Searching for information from journal articles is even much more complex because journal contents somewhat differ from actual book content layout. As such, retrieving information from a journal requires one to know how to retrieve specific articles with the understanding that the title of a journal does not exactly tell specific subject areas covered by each individual article.

A journal is a scholarly research-based publication which is produced on a continuing basis (regularly or irregularly) i.e. weekly, monthly, quarterly, annually etc. In 2008, the University of Victoria Libraries revealed that a journal is a scholarly publication containing articles written by researchers, professors and other experts, usually focusing on a specific field of study. Journals are mainly intended for an academic or technical audience, because of their quality information resulting from peer review and currency. Journals compared to books, are shorter but give a comprehensive coverage, making reading a lot easier and quicker. Usually serials/journals in many libraries are kept in serials collections different from the book collections and the University of Zambia (UNZA) Library is not an exception. All serial materials in the University of Zambia Library are kept in the Serials Department, which is a closed access area.

1.1 Processing serials

When new issues are received, they are firstly accessioned and checked in the system to find out if they already exist in the collection or are totally new title/items. If they already exist in the system, they added in the system and taken to the shelves. But if they are new titles, they are catalogued/classified, put on display shelves for some time before being taken to the shelves. The aim of displaying the new titles is to avail students an opportunity to know what is new in the collection. It also helps the Library ascertain title's continuity. However during the time such materials are on display, they can still be consulted by interested users within the library, except they cannot be borrowed out.

Once the volumes for the new titles accumulate, they are then incorporated into the system. For guidance purposes on item availability and locations, users can use the OPAC or indexes by the issuing desk at serials. The index lists all serial titles in alphabetical order, showing each item's title, ISSN, call number, latest issue, place of location and its status. These indexes are constantly updated (usually annually) in order to reflect current information about the collection at all times. The Serials Collection is as important as any other library service point of the library in supporting the core activities of the University namely learning, teaching, research and consultancy. This is because of the kind of information materials it stocks, mainly journals which offer current research findings.

Due to the nature and process of journal publication, research has proved that usually journals provide research information which is most current, original, subject specific and reliable (UVLs, 2008). This puts journal usage in academic and research circles in the limelight. It is from this notion that it is expected that students, faculties and researchers in academic institutions such as UNZA should find these resources very useful in their learning, teaching and professional endeavour.

Despite the Serials Collection having a good number of good quality materials in terms of currency, coverage and content to all our user categories, a bigger population of the University community/user group does not use the journal collection of the Library. A lot of journals in the section have remained underutilized, most of which have even gathered dust due to their less usage.

It is surprising that there are a lot of studies on 'online resources, in specific electronic journals', and yet very little literature specifically on print journal-use. In agreement, Pullinger (1999) argues that many research studies do not address how the journal and periodical literature was used by academic staff, researchers and students in the different disciplines before the introduction of electronic journals, and some of the differences found.

Meanwhile journal-use studies are very important (whether on print or electronic) because they provide a way of monitoring the use of academic libraries' most costly resources. With the coming of online full-text journals, many academic libraries have embraced both print and electronic journal access services, which make the aspect of measuring journal use in both formats critical to collection development decisions as well as to measure user information satisfaction.

1.2 Aims

The core existence of any library is to satisfy the information needs of its intended user group. In an event where these users do not seem to appreciate and make use of the provided information resources, the library could be practically not meeting its objective. Further, the library could be wasting its resources (Time, money & effort) in acquiring and managing such information resources not being utilized. As such, this study had the objective of exploring factors behind the low usage levels of serials collection Library users through finding answers to the following questions:-

1. How are the usage levels of serial resources in the Library?
2. What factors lead to less usage of serials in the Library?
3. Do the information users possess required search skills?
4. Do search skills have an impact on journal article retrieval?
5. How can use of serials be improved in the Library?

With the answers to the above questions, the study hoped to assist the Serials Department in identifying and responding to key factors that negatively affect users' access to and usage of journals in the collection. This would assist the Department to come up with effective strategies of serving and satisfying the different information needs of all the information users.

It was further anticipated that the findings would help the users improve their information search skills in either print or electronic journals once they agree to be trained. This would help users understand and appreciate the importance of using journals in both their academic and professional world.

2. Literature Review

As information seekers go about looking for information; they each have different ways of retrieving the information they want. Their choice of retrieval methods basically depends on their exposure to the information society and their technical skills. Moukdad (2001) states that people look for information based on, at least in part, their perceptions about that environment of operation. As such, Librarians need to understand users' behavior at the intellectual, emotional and technical levels. A research by CQU in 2011 further found that choosing the right sources for one's research can be challenging due to a variety of options available, which include books, articles and websites. Different sources can provide different types of information. It is therefore best for information users to be able to distinguish one source from the other based on suitability or the information need at a given time. The findings further revealed that information sources found in University Libraries are generally good choices for reliable information because they are selected specifically for academics and research purposes. For example, many scholarly journal articles go through a "peer-review" process, making them quality and reliable. Similarly, Tenopir, King & Bush (2004) revealed that about 70% of readings in a year by Medical Faculty come from the library provided articles because these seem to be more useful and valuable.

The first user study carried out at the London School of Economics by Tilburg University concluded that users want hard copy of articles, just as they made photocopies in the past (Jenkins, 1997). They want to make prints of electronic articles for their own use as they regard paper as an interactive medium where they can highlight and annotate very easily. A second user study carried out at Tilburg and Maastricht University in the period 1996–1998 further examined the use of paper and electronic journals among different disciplines: Law and economics in Tilburg; and medicine, health sciences and psychology in Maastricht. The findings showed that 80% of a high usage level comprised older volumes, up to five and ten years old. However, a closer examination of the use of 83 economics journals available in both electronic and print form indicated a slightly better usage of electronic versions than the print versions.

In their study (Trivedia and Joshib, 2009), the data revealed that there was more use of print journals (55%) as compare to e-journals (29%). Their findings were similar to those of Sandra, Shultz and Marceline (2005), which revealed that print journals were used much more than e-journals respectively. Trivedia and Joshib (2009) went on to argue that the preference of print journals over e-journals or vice-versa vary from institution to institution for a number of reasons. For instance, in circumstances where the introduction of online journals does not give sufficient time for users to readily embrace them, users are more likely to continue using print resources. The usual expectation however, especially in the field of sciences is that once e-journals are introduced, the use of print journals would decrease. This is why nowadays even the publishers are transforming towards this trend of moving from print to e-journals with the understanding that using e-materials has more advantages than print ones because of their currency.

De Groote & Dorsch (2001) in their research sought to determine the impact of online journals on the use of print journals and interlibrary loan at the University of Illinois, Chicago Library. The results of the statistical analysis showed that print journal usage decreased significantly since the introduction of online journals. This decrease occurred regardless of whether a journal was available only in print or both online and in print. Interlibrary loan requests also significantly decreased. The decrease in the use of print collection was a suggestion that many patrons preferred to use online journals to print journals. Another study by Sathe, Grady and Giuse in 2002 investigated the effect of journal formats on the research process; found that medical students preferred online journals, while faculty preferred print journals. Online journals were preferred by the students due to their free access, quick data retrieval and their proximity.

The results of a continuous journal-use study at the Library of the Health Sciences–Peoria, University of Illinois, Chicago revealed an increase in print journal usage each year from 1994 to 1997 (De Groote and Dorsch, 2001). Then there was a significant decrease between 1998 and 1999. Meanwhile, a research by Sathe, Grady & Giuse (2002) on the effects of online journals on print journal use showed a significant decrease in journal use each year. But usage for those

journals which were in both print and electronic formats went up compared to those that only existed in print. The results further showed that print journal usage decreased significantly as they became older.

Another study by *Vasishta and Navijyoti (2011)* revealed that lack of training was a major hindrance in using e-resources. The respondents suggested that they needed training with hands on experience on how to access electronic information. They further recommended the need for Librarians to create more awareness programs to market their new resources and services. These could include meeting with leaders, influential persons in other departments and engaging them to spread the awareness about the available resources and services.

3. Methodologies

The overall research design integrated both qualitative and quantitative research methodologies. The main methods of data collection were questionnaires and interviews. The questionnaire had both closed and open ended questions. The essence of combining data collection methodologies was to capture as much information from the respondents as possible. A total sample size of 170 was used to answer a questionnaire. This comprised 40 postgraduates and 110 undergraduates and 20 lecturers). These were sampled by stratified random sampling. For the interviews, 20 respondents were interviewed (15 students and 5 lecturers). Out of the 15 students, 10 were undergraduates and 5 were postgraduate.

Findings from questionnaires were analyzed using the Statistical Package for Social Sciences (SPSS), while data from interviews was analyzed manually through content analysis.

4. Study Findings and Discussion

4.1 Questionnaire responses

A total number of 170 questionnaires were distributed to students and lecturers, out of which 135 were returned and used for the data analysis. This gave a response rate of 79.4%. The 47 (35%) of these respondents were female while 88 (65%) were male; 100 (74%) were pursuing their first degree, 20 (15%) were post graduates, 14 (10%) were lecturers and one did not respond. Twenty (15%) were in the school of Agricultural Sciences, 25 (19%) School of Education, 15 (11%) school of Engineering, 34 (25%) School of Humanities & Social Sciences, 16(12%) Law, 4 (3%) Mines, 11(8%) Natural Sciences, and 10 (7%) were in Veterinary Medicine. The results further showed that 83 (62%) were between the age of 15-20 years, 22(16%) were between 26-35 years, 29 (21%) were above the age of 35 and 1 did not respond, indicating that the majority of the respondents belong to a middle age group.

4.2 Interview responses

For interviews, a total number of 20 respondents were interviewed out of which 10 were Undergraduate students and 5 Postgraduates and 5 Lecturers. Seven were under the age of 30 years, 10 were above 30 years of age and 3 did not indicate their age. Eleven were males, 6 were females while 7 did not respond. Five were in the school of HSS, 2 in Agricultural Sciences, 10 Education, 1 Natural Sciences and 2 did not indicate.

4.3 Serial usage levels in the Library

This factor was evaluated to give an account of the current situation in terms of serials usage at the time the research. This would help in avoiding basing our research on facts that might no longer be true. The study therefore was compelled to verify whether journals/periodicals in the Library were still being underutilized or the situation has changed. Figure 1 is indicating the respondents' responses on the issue of journal use.

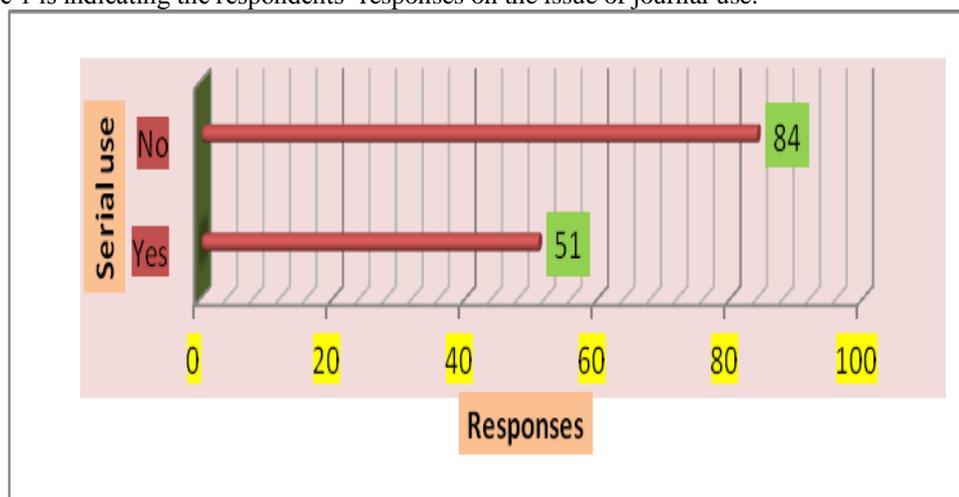


Fig. 1: Usage levels of serials in the library

Results from the Fig. 1 show that 51 (38%) of the respondents indicated that they used the serials for their academic work while the majority 84 (62%) did not. This therefore is proof enough to conclude and base the research problem on the fact that serials in the Library are underutilized by library users.

It was further revealed that among those that indicated that they use serials, they do not visit the library regularly i.e. when respondents were asked how often they use serials materials, 6 revealed that they use serials more than once per week, 5 once in a week, 2 once in two weeks, 8 once in a month, 6 once per semester and 28 said that they rarely use journals. Their responses are recorded in table 1 below.

Table 1: How often one uses serials collection

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	More than once a week	6	4.4	4.6	4.6
	Once a week	5	3.7	3.8	8.5
	Once in two weeks	2	1.5	1.5	10.0
	Once a month	8	5.9	6.2	16.2
	Once per semester	6	4.4	4.6	20.8
	Rarely	28	20.7	21.5	42.3
	N/A	75	55.6	57.7	100.0
	Total	130	96.3	100.0	
Missing	System	5	3.7		
Total		135	100.0		

Respondents mentioned the following materials that they used in the Serials collection: 54 respondents used journals, 19 respondents used Magazines, 15 respondents mentioned newsletters, 14 respondents said reports/reviews and 5 respondents indicated bulletins. This shows that among all the serials, journals are the most used information resources.

4.4 Factors that lead to less usage of serials in the Library

This variable was the core objective of the research. The respondents for both interview guide and questionnaire attributed this problem to the following:-

- Most lecturers do not recommend use of serials or journals to their students and only recommend books. This does not encourage students to use journals but only use what their lecturers have recommended. The argument to this fact could be that since lecturers play a critical role in directing students on what information sources/resources they should use in their academic work, it becomes logical to use lecturers promote the use of serials/journals.
- Respondents further indicated other information resources such as personal textbooks and e-resources. Increased access to Internet and e-resources has been attributed to the fact that Internet provides up-to-date information in an easy and faster manner.
- Ignorance of the existence of the serials collection and its services i.e. its location, information offered and how to use it. This aspect was made clear by interviewees who said that they thought serials was a staff office and not a collection because the collection is hidden behind staff offices. Others still said that they thought the few magazines on display were the only materials the collection offers. These findings therefore suggest that there is need to deliberately conduct sensitization/awareness programs on the existence and the importance of using serials.
- Serials collection being a closed access area hinders students from knowing its resources and services.
- Long distances to the Library from some Schools e.g. School of Agric.
- Lack of skills on how to retrieve specific information from journals make the information retrieval process cumbersome, time-consuming and sometimes unfruitful
- Limited access to desired materials resulting from subject relevance, out-dated resources and missing materials or pages. This has led to some users concluding that periodicals either do not cover much of what they need or are outdated. Others have lost interest and opted to use other information sources
- Busy school schedule , which does not leave them with time to use journals
- Most projects do not encourage research that demands the use of journals
- Lack of knowledge on the importance of using journals i.e. currency and quality of information provided by scholarly journals
- Inadequate orientation on how to use journals at first year level and later on as users interact with the information system
- Limited information on references/guidance and publicity of journals by Librarians i.e. outdated index, poor services and unfriendliness of some members of staff.
- Some users prefer textbooks to journals
- Slow connectivity resulting into failure to open information sites. This discourages most users to search the catalogue

4.5 Information search skills of library users on journal article retrieval

Lack of information retrieval skills was one of the factors respondents said contributes to less use of journals in the serials department of the Library. It was also one of the variables that the study set out to investigate on its impact on serial use. The results are recorded in figure 2 below.

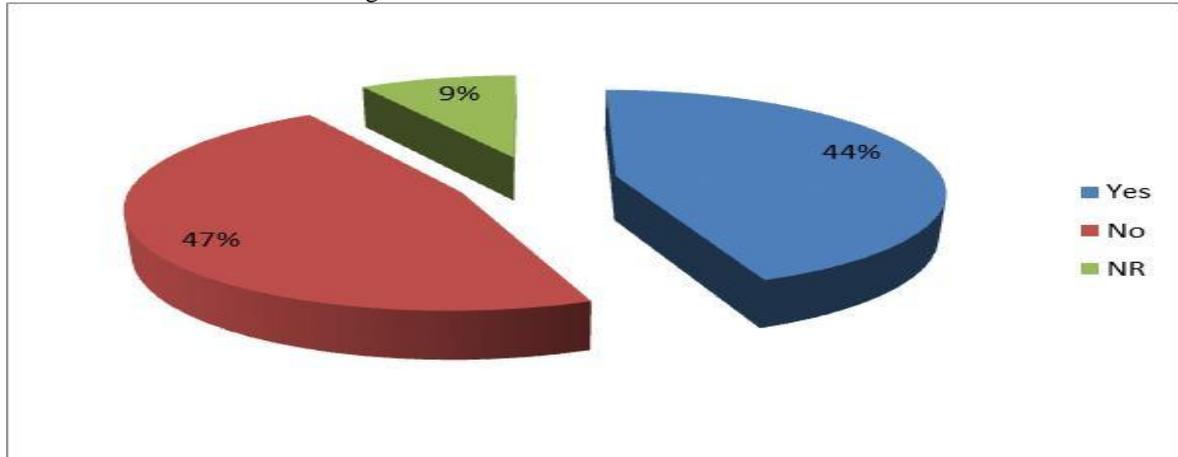


Fig. 2: Students' know-how on journal article retrieval

The findings revealed that 60 (44%) questionnaire respondents knew how to retrieve specific information from journals, 63 (47%) did not know how to, while 12 (9%) gave no response. These results imply that a good number of students do not know how to retrieve specific articles from journals hence need a skill-training program for them.

Further, interview responses revealed that 9 said they were able to retrieve information they wanted while 5 said they do sometimes and 6 did not say. The explanation to why interview results showed a higher no of respondents who are able to retrieve information as compared to questionnaire responses could be due to the fact that most interviewees were post-graduates and Lecturers. These have been in school longer and have by now acquired the required search skills.

In order to establish whether the users would appreciate training to acquire required search skills, the study investigated their willingness to be trained. The responses are shown in table 2 below.

Table 2: Willingness to be trained on how to use and retrieve journal articles

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	65	48.1	51.6	51.6
	No	5	3.7	4.0	55.6
	N/A	56	41.5	44.4	100.0
Total		126	93.3	100.0	
Missing	System	9	6.7		
Total		135	100.0		

The results in table 2 show that 65 (48%) of questionnaire respondents were willing to be trained, 5 (4%) were not willing, 56 (42%) said they know how to retrieve information from journals earlier on while 9 (7%) did not respond. Similarly, out of the 14 interviewees that had earlier indicated that they know how to retrieve information from journals, 12 said that they were willing to be trained while 2 said no.

Since a good number of respondents indicated that they need training, the idea of introducing retrieval skill training program in the Library would be ideal and accepted by many library users. This program would also be a successful project.

4.6 Effects of search skills on journal article retrieval

Asked whether respondents felt that lack of search skills would negatively affect information retrieval, 111(82%) said yes, 13 (13%) indicated no impact and 11 (8%) gave no response. See figure 3 for details.

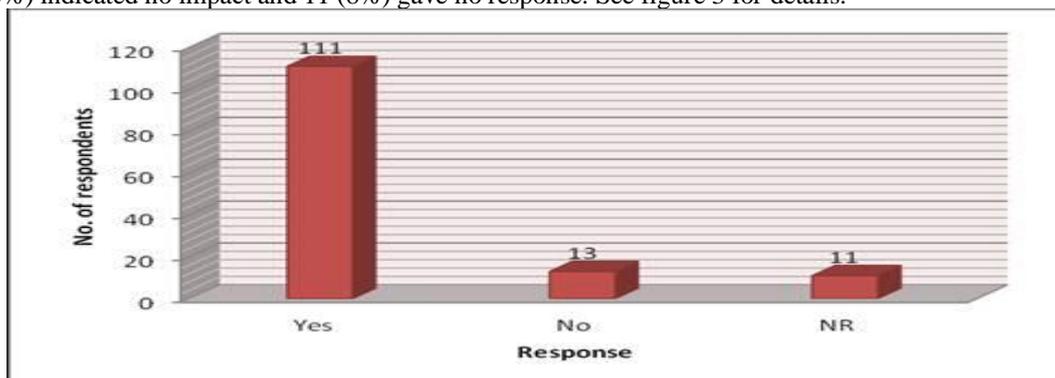


Fig. 3: The effect of lack of search skills on information retrieval from journals

Meanwhile the 13 interviewees also revealed that lack of search skills have a negative impact on information retrieval. They explained that when people do not have search skills, they will not know how to retrieve the specific

information they want. Their search results will be irrelevant to their information need and consequently get discouraged to keep trying. However, one interviewee did not agree that search skill would have a negative effect on information retrieval.

The interpretation of these results is that lack of search skills is one of the factors that negatively impact on user information retrieval. Therefore, most students do not use journals because they fail to and hence need training. In the same vein, respondents explained that lack of search skills puts one at a disadvantage and renders them inability to know where to find information even when it is available. Such people may get discouraged and stick to using old books. Lack of search skills makes the information searching process tedious, unnecessarily long hence time wastage. Some users get lost while looking for specific articles from journals and in the end fail to get needed information. They further revealed that skills empower users with knowledge on how to easily get information from many sources including journals.

4.7 How usage of serials can be improved

To establish ways through which the usage of serials in the library can be improved, the respondents were asked to suggest ways they felt would lead to the desired situation. The following were the recommendations from both interviews and questionnaires:-

- Members of staff in the library must be qualified, proactive and willing to adequately assist, guide and teach users on how to access, retrieve and use journals and other periodicals in the collection. Librarians by nature should be friendly, courteous and exercise good working culture, i.e. wear a smile, offer a greeting or just say “thank you” after a service
- Library users should be regularly sensitized on the importance of journal use and be communicated to on new items in the collection via various media e.g. notice boards, posters, UNZA website, email, UNZA radio and Lecturers. Talking about using lecturers in advertising journals, one respondent said that “Lecturers should help students i.e. sometimes call librarians to give talks on how to find information in the library”
- Make Serials Collection an open-access area so that users can easily locate information materials they want on their own. This would also help them to easily notice new and current materials. One user responded as follows “Members of staff give us an impression that Serials is a sacred area”.
- Provide current journals in all the subject areas offered at the University. To this effect one respondent recommended the inclusion of these six journals namely ‘Soil Science of American Journal, Agronomy journal (Merge 2 records), Journal of environmental quality, Crop science journal, European journal of soil science and Soil use and management’ to the e-resources the library subscribes to.
- Increase the number of OPAC computers and borrowing period and privileges for each student/user
- Digitize serial materials and have them accessible through UNZA website so that users can easily access them online
- Respondents further noted that apart from the orientation/training done at first year level, a more detailed skill training program needed to be arranged for all library users
- Information should be readily available, improve internet connectivity and subscribe to e-journals

Conclusion

The research brought out a number of important issues that would lead to improvement of Library operations and service delivery not only to Serials Collection but to other service points of the Library as well. The study revealed that the levels of serials usage are low. This is due to lack of knowledge of serials collection and its services by users, inadequate information search skills to retrieve required information from journals, insufficient orientation at both 1st year level and later on, outdated materials, serials collection being a closed access area, etc. To change this situation, the research brought out the following propositions:-

Have, qualified members of staff, who are proactive and willing to adequately assist, guide and teach users on how to access, retrieve and use journals sensitize Library users on the importance of journal use and communicate to them on what is new in the collection, open-up the serials collection for users to easily locate information materials on their own, and provide current journals in all the subject areas offered at the University.

References

- CQ University, (2013). *Evaluating books, journals, journals articles and Websites*, Retrieved on 10.08.14 from <http://libguides.library.cqu.edu.au/evaluating-resources>
- De Groote, Sandra L. & Dorsch, Josephine L. (2001). Online journals: impact on print journal usage. *Bull Med Libr Assoc*, 89(4), 372–378. Last retrieved on 10.04.2015 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC57966/>
- Hallmark, Julie. (2004). Access and Retrieval of Recent Journal Articles: A Comparative Study of Chemists and Geoscientists. *Issues in Science & Technology Librarianship*. Last retrieved on 03.04.15 at <https://pacer.ischool.utexas.edu/handle/2081/691>
- Maxfield, M.W., DiCarlo, R. & DiCarlo, M.A. (1995). Decreasing use of monthly serials after publication date. *Serials Libr*, 27(4), 71–6.
- Millson-Martula, C. (1988). Use studies and serials rationalization: a review. *Serials Libr*, 15(1–2), 121–36.
- Milne, D. & Tiffany, B. (1991). A cost-per-use method for evaluating the cost-effectiveness of serials: A detailed discussion of methodology. *Serials Rev*, 17(2), 7–19.
- Moukdad, H. (2001). Users’ perceptions of the Web as revealed by transaction log analysis Online Information Review. *National Library of Australia*, 25(6), 349-358. Last retrieved on 28.03.13 from <http://www.librarysupportstaff.com/infoseek.html#info>
- Pullinger, D. (1999). Academics and the new information environment: the impact of local factors on use of electronic journals. *Journal of Information Science*, 25(2), 164-172.

Sandra, L., Shultz, M, & Marceline, D. (2005). Online journals' impact on the citation patterns of medical faculty. *J Med Libr Assoc*, 93(2), 223-228.

Sathe, N. A, Grady, J. L. & Giuse, N. B. (2002). Print versus electronic journals : a preliminary investigation into the effect of journal format on research processes, *J Med Libr Assoc.*, 90(2), 235-43.

Tenopir, Carol, Et'al. (2004). Medical faculty's use of print and electronic journals: Changes over time and comparison with other scientists. *Journal of the Medical Library Association*, 92(2), 233–241. Last retrieved on 10.04.15 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC385305/>.

Trivedia, Mayank & Joshib, Anuradha. (2009). Usage of electronic journals (e-journals) versus print journals by healthcare professionals in H M Patel Centre for Medical Care and Education (HMPCME). *Journal of Health Informatics in Developing Countries*, 3 (1), 16

University of Victoria Libraries (UVL). (2008). *Books vs. journals, newspapers & magazines*. Last retrieved on 18.06.13 from <http://library.uvic.ca/site/lib/instruction/research/bookvjour.html>

Vasishta, Seema and Navijyoti. (2011). Trends in the Use of E-journals: A Case Study of PEC University of Technology, Chandigarh. *Library Philosophy and Practice*. Last retrieved on 28.03.2015 from <http://www.webpages.uidaho.edu/~mbolin/vasishta-navjyoti.htm>