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UTILIZATION OF SCHOLARLY JOURNALS BY UNIVERSITY TEACHING FACULTY MEMBERS

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ABSTRACT:

The main objectives of this study were to investigate the use scholarly journals by the faculty members at GC University Lahore, to investigate the preferred format of journals, and to furnish the recommendations for making effective utilization of journals at Universities. Survey method is selected for this study. The target population of this study was the all-academic faculty members of GC University Lahore. To determine the sample size of the target population, convenience sampling technique was used. The researcher designed a semi-structured questionnaire as data collection instrument on the basis of extensive literature review. The researcher used primary and secondary resources in the development of survey instrument. The response rate was 78.25%. Collected data were tabulated and analyzed through SPSS Version 24.0 to reach at conclusions. Findings of the study reveal that majority of the participants was aware of the basics of internet. Most of the respondents had awareness with the usage and utilization of print and electronic journals. Most of the respondents used internet for exploring journals. Majority of the respondents used electronic journals on daily basis. Most of the faculty members were actively engaged in browsing online journals. Majority of the respondents utilized journals from the university library. Majority of the respondents preferred electronic format for accessing required journals. Most of the respondents couldn't get home access of electronic journals. Findings and recommendations of this study can be a helpful source for library practitioners, educationists, organizational heads, HEC Pakistan, planners, policy makers and decision-making bodies for increasing usage of journals by the faculty members of the universities.

Keywords: Utilization of Journals, Scholarly Journals, Usage of Journals by GCU Lahore faculty

INTRODUCTION & PROBLEM STATEMENT

Scholarly journals have brought a revolution in the educational institutes. In past, researchers and faculty members preferred print journals. They did not prefer e-journals mostly because of IT skills problem. They felt easiness in using journals in print format. They could get relevant pieces of information through print journals without facing any problem.

A number of international studies show that many users prefer online journals due to multiple benefits. They bring more efficiency in their work due to online journals. They don't like delays in their projects due to the busy life. Online journals bring quickness in their work. Morse and Clintworth (2000) did research to make comparison of usage of print and e-journals. The study aimed to find the preferred format of journals by the users. The findings revealed that users utilized e-journals more than print journals. They completed their desired tasks quickly and efficiently. They faced no time limitation, space problem, and finance issues to access their desired e-journals.

With the passage of time, the usage of online journals is being increased. Users are becoming well versed in utilizing e-journals. They browse and search relevant journals in their area of knowledge. People who are skilled in IT show more willingness in using e-journals. Rogers (2001) performed a longitudinal study on the use of e-journals among faculty and students of Ohio State University during 1998-2000. During these two years, around 300 responses were received from each group. In 1998, only 200 journals were available in electronic shape while the number of e-journals enhanced to about 3300 in 2001. The findings revealed that the monthly usage of online journals enhanced from 36.2% in 1998 to 53.9% in 2000, while the printed journals decreased from 74.3% to 65.6% at the same time.

Many faculty members of the different universities prefer both print and electronic journals at the same time. They just want to get the desired information from both sources to complete their tasks. They don't entirely rely on one format only. They use both formats for the purpose of

completing their research work. Cochenour and Moothart (2003) conducted a user survey which aimed to investigate whether the academic faculty, administrative faculty and the graduate students of Colorado State University preferred to use electronic journals and supported to cancel the print subscription. They sent questionnaires to a sample of 6968 respondents and received only 725 (10.4%) filled questionnaires. They concluded that majority of the users (95%) supported both print and e-journals at the same time, however, 26% supported canceling the print subscription and 75% wanted to use only electronic journals. Almost three-quarters of the respondents using e-journals (75%) stated that they used e-journals at least once in a month. They would support the e-journals under this condition if the publisher guaranteed continued access to the volumes of library subscription journals.

Open access journals are also of great value in the present era. These provide free access to relevant research papers without facing problems. These prove valuable in giving access to journals to the researchers. Baladhandayutham (2016) conducted research on the utilization of online journals by teachers of Madurai Kamaraj University, Madurai. A total of 145 respondents made participation in the survey. The result revealed that 86% respondents used the open access sources while three-fourth users (79%) located e-journals on a daily basis. They utilized them for writing research articles and accessed them in the library and in their departments. The study further elaborated that the participants were fully aware of e-journals. However, there was a need to teach them various search strategies to access the e-journals effectively.

In the present age of information and communication technologies, the level of awareness of online journals is higher. Users are becoming familiar to locate relevant research papers easily. They are using latest trends keeping in view the demands of the present age. The most recent study was conducted by Boakye (2017). This research was done to know the level of awareness and use of online journals by the teachers of Garden City University College (GCUC) and Christian Service University College (CSUC) in Kumasi, Ghana. A total of 178 teachers made participation in the survey. Response rate was 95%. The researcher concluded that the level of awareness of e-journals was quite high however level of access was quite poor. Teachers faced some issues like the slow internet, unstable network and power cuts to access the e-journals.

Most of the faculty members in the universities of Pakistan have proper awareness of using online journals. They are properly trained to better utilize online journals for completing multiple tasks. They are well aware of HEC Online Databases which are a great blessing for them. They make an effective utilization of the databases which are available in their universities. Arshad and Ameen (2017) explored the academic use of e-journals at University of the Punjab. The findings showed that a significant number of faculty members had excellent skills in searching e-journals through search engines and full-text databases. The university gave access to full text online journals through HEC National digital library. Overall academic faculty members used electronic journals more frequently than print journals to fulfill their scholarly needs. They preferred to use e-journals to keep themselves up-to-date, to write research articles, research reports and to teach and instruct students.

Peer reviewed journals play a great role in enhancing research culture in the educational institutes. Online journals have brought a revolution in the educational institutes. In past, researchers and faculty members preferred print journals. They did not prefer e-journals mostly. They felt easiness in using journals in print format. They could get relevant pieces of information through print journals without facing any problem. Information technology has brought a great revolution in all fields of life. It has changed the routines of libraries to an amazing extent. It is very crucial to know the utilization of print and online journals by the teachers of universities. In Pakistan, a little research is done to know the behavior of faculty members towards print and electronic journals.

GC University Lahore (GCU) has been the leading educational institution in the Indo-Pak Subcontinent since 1864. In 1872, The GCU Library was established to meet information needs of the community and to lend a hand in teaching, research, consultancy, and learning. In 1937, one reading room, along with an office was set up as Central Library. In 1999, the Postgraduate Library was established to enhance library activities and provide access to a vast archive to students. Recently another larger library was established by bringing together Life Sciences Departments and this is known as Life Sciences Library. There are also eight other independent departmental libraries. These Libraries were created with the goal of storing diverse information in the form of scholarly print and electronic journals, and to provide the users a congenial learning environment.

In the recent years, the library has enriched the collection of print and electronic journals. GCU Libraries have around 450 printed journals in a variety of subject areas such as Business, Education, Environment, History, Computer Science, Physics, Chemistry, Zoology, Mathematics Management Sciences, Political Science, Economics, Psychology, Biotechnology, Botany, Physics, and Literature. These printed journals are purchased and exchanged and gifted by other institutes while the electronic journals are accessed via HEC digital library. The use of electronic journals has been made easy by the establishment due to the high-end technological infrastructure.

The study has investigated the use of scholarly journals by the faculty members at GC University Lahore. Recommendations based on the literature review and findings of the study are guidelines not only to the competent authorities of the institutes but also to the government representatives for an effective utilization of journals in the university libraries.

The study aimed to analyze the usage of e-journals by faculty members. The faculty members are usually expert in using print journals. Although a number of steps are taken for the uplift of research culture in the universities of Pakistan by Higher Education Commission of Pakistan yet desired goals are not being met. There may be some serious reasons behind it. The researcher has tried to explore the usage of print and online journals by the faculty members and aimed to know the barriers which take place in making an effective utilization of journals. There was a dire need to explore the usage of print and online journals by the faculty members of GC University Lahore so that an effective system may be formulated for an effective utilization of journals to produce quality research and increasing the ranking of this university among world's top universities.

OBJECTIVES:

- To find out the utilization of scholarly journals by the faculty members of GC University Lahore
- To offer recommendations to enhance usage of print and e-journals among teaching faculty of the university

LITERATURE REVIEW

Literature is sought from Google Scholar, HEC Online Databases, unpublished dissertations, research reports, conference proceedings, books, handbooks and other useful research-based websites. The literature that has been described in this section reveals major concepts related to the research topic. It also reveals all previous important researches to recognize several theoretical and practical aspects of the study.

Education is a fundamental right of every citizen in Pakistan according to the constitution. However, the situation of education in Pakistan is not good like other under-developing countries. The population of Pakistan is growing at a rapid speed. There are 180 million people in Pakistan. Pakistan has a large population. It has a low literacy rate. Higher education enrollment is only 2.9% according to a study done by Khalid (2006). Pakistan consumes the lowest GDP upon education sector as compared to other nations of South Asian. According to UNESCO, Pakistan has invested averagely 2.32 percent of GDP upon education from 1971 to 2014 whereas other countries like India, Bangladesh and Nepal are investing more budget to raise the standard of education. According to CIA World Fact-book (2014), Pakistan has 54.9 percent literacy rate. The situation of higher education in Pakistan is not satisfactory.

The Pakistani Government is steadily increasing budget for education sector to flourish literacy rate in order to make progress like other leading nations of the world. The increase of budget in the education sector shows that the rulers want to make Pakistan a progressive country because no nation can become prosperous without raising the standard of education. (Pakistan Ministry of Education 2008). Since 2002, worth-mentioning reforms have taken place to flourish quality learning in Pakistan. The Government established federal Higher Education Commission and also devolved it to the provinces for the purpose of providing equal learning opportunities to the people of all provinces of Pakistan. Ample of funds are granted to HEC which are provided to different universities for several development projects. The research rate has also increased through the quality based work of Higher Education Commission of Pakistan. The establishment of Higher Education Commission at federal level and provincial levels shows that the Government

of Pakistan has realized that national progress is not possible without enriching people with quality conscious learning (Pakistan Ministry of Education 2008).

Higher Education Commission has brought revolutionary reforms in higher learning in Pakistan. It has initiated several innovative programmes to improve the condition of education and research in Pakistan. National Digital Library is providing access to more than 25,000 scholarly journals and access to more than 45,000 online books to HEC recognized institutes. These databases of journals and electronic books are a great blessing for the students, researchers, and faculty members. The researchers bring completion of their research-based projects after having utilized these online databases of National Digital Library Programme. They avail costly databases free of cost. They don't need to subscribe expensive journals themselves. The Pakistan Research Repository is an innovative project of the HEC, Pakistan. It is increasing research culture in Pakistan. The theses of M Phil and Ph D levels of all recognized institutes of Pakistan are digitized and made available online in full text format. The users can also download the relevant theses. It is a continuous process as new dissertations are processed and made available online through a specified mechanism. Pakistan Education and Research Network (PERN) is a highly creative project of Higher Education Commission of Pakistan. It provides internet facility to the institutes. It also provides a facility of resource sharing network, video lectures and video conferencing. These projects have brought a revolution in education sector. These have improved the standard of education in Pakistan. These have facilitated researchers to a great extent. These projects have improved the rankings of the universities.

After the establishment of Higher Education Commission, revolutionary changes have taken place also in the libraries. The libraries are granted development funds for increasing resources and shaping up quality services in order to quench the thirst of readers and to facilitate the researchers in bringing completion to their research-based projects. The budget of libraries is increasing with the passage of time. The Government of Pakistan is providing financial resources to the libraries to spread book reading culture and increase research in the country so that the national literacy rate may be made high and the country can become progressive like other developed nations of the world. The librarians are also provided training so that they can satisfy the information needs of the users. They are sent abroad by Higher Education Commission through

funding programmes in order to grab latest technological skills so that they can apply in their own libraries to provide efficient services to the users because in the present age, the library's user lies at the center of every service.

Print journals are easy to access. These can be easily utilized. Due to their lack of technical knowledge, many people feel uneasy while utilizing IT applications. They prefer manual work. They like to read print journals. They don't prefer online journals. They want to have convenience for themselves. As early as 1997, Curtis, Weller, and Hurd conducted a study related to information-seeking behavior of the faculty members of health sciences using emerging information technology. The study aimed to analyze the usage of e-journals by faculty members. The conclusions showed that the faculty members preferred to purchase printed journals. They did not make an excessive use of technology to locate required articles quickly.

Rusch-Feja and Siebeky (1999) conducted an online survey for the Max Planck Society (MPG) which is a leading society in research in Germany. They received 1042 responses. The study found out that computer literate people preferred e-journals rather than using print journals. They found comfort in using e-journals. Only a few respondents (14%) did not use e-journals due to the poor graphic quality and network dependency of e-journals. It shows that most respondents preferred electronic format. They wanted to bring completion of research based works easily and quickly. They didn't want to depend upon printed journals.

Electronic journals are excessively utilized by the faculty members of science. They depend upon online journals a lot. They use e-content to meet their research needs. Speier et al. (1999) explored the perception of faculty regarding online journals. They found that the young faculty members of business science were more interested in using the e-journals than the older faculty. Similarly, the faculty of other disciplines such as finance, accounting, and MIS were more aware and had been more involved in integrating e-journals into their scholarly work. Online journals were given importance and utilized efficiently. Faculty members obtained multiple benefits by using electronic journals. They brought efficiency in their works. They did not wait for the arrival of print journals.

It is commonly observed that e-journals are preferred to meet information and research needs. E-journals are easy to access. There is no problem of exploring back issues of the journals in e-form. Morse and Clintworth (2000) compared the use of print and e-journals. The study aimed to find the preferred format of journals by the users. The findings revealed that users utilized e-journals more than print journals. They completed their desired tasks quickly and efficiently. They faced no time limitation, space problem and finance issues to access their desired e-journals.

Movement of Electronic journals is getting ground. Users depend upon online journals. Faculty members prefer online content. Rogers (2001) performed a longitudinal study on the use of e-journals among faculty and students of Ohio State University during 1998-2000. During these two years, around 300 responses were received from each group. The frequent users of e-journals belonged to the department of biological and medical science. Relatively low use was recorded from the departments of arts, humanities, business, law, agriculture and food. The study of Bauer (2001) also stated that e-journals were being excessively used by the faculty members of health sciences. He said that users were becoming aware of technology. They did not waste time in locating journals. They used quick ways to find out their relevant material.

Older generation is habitual of utilizing print journals while modern generation is fond of using e-journals. Older people are not more skilled in IT based resources. They depend upon traditional resources. Modern days people only rely on online resources. They want to get information around the clock. They want to have a quick and easy access to relevant articles for completing research based works. Sathe et al. (2002) conducted a study related to effective utilization of print and e-journals. This study also investigated the effect of journal format on research process. He found that users utilized both print and e-journals. It was also revealed that some older clinical and research faculty members still preferred print resources and the young faculty members accepted the IT change and used e-journals in their activities. Monopoli et al. (2002) evaluated the Digital Libraries Service at University of Patras, Greece. They found that male teachers were actively engaged in exploring online journals than female teachers.

Scientists of pure and life sciences prefer electronic journals. Scientists of Social Sciences generally prefer print journals. Wang (2010) conducted a study to know information needs in

National Cheng-chi University in Taiwan. Data was gathered from the teachers of different faculties. The findings revealed that the teachers used online journals for different purposes. They used for teaching purpose. They also used for supervising the research work of others. They sometimes faced problem in making an effective utilization of technology.

Younger generation is more active in using technology than older generation. Young faculty members are more active. They are more energetic in utilizing technology. They have proper schooling of IT. They like innovative approaches. On the other hand, the librarians who are not conversant with modern technology, instead of improving their capabilities, develop negative tendencies towards its use. Freudenthal (2001) organized two experiments on people belonging to young and old generation. The study aimed to reveal the role of age and expertise in technology acceptance behavior. The study found that older people made a less use of technology than younger people. The role of younger people was quite active in technology usage and the role of older people was quite passive in technology utilization. The younger people were faster in using technology while the older people were slow in technology usage. It was revealed that age was an important factor in determining technology acceptance attitude among people. Younger generation has better facilities related to technology in the present age. They frequently utilize tools of technology. They complete their assignments and different projects by making an effective utilization of internet. Rogers (2003) described that young generation was more expert and willing to utilize new technology than the old generation. The younger people took keen interest in technology. They used technology for daily routine works. They brought completion to their works quickly by making an effective usage of technology while the older people felt reluctance to avail new technologies.

Academic websites of the libraries provide useful information. These websites may be made user-friendly if librarians are IT-minded. Heinrichs et al (2007) conducted a study related to library websites usage. His study revealed that websites of academic libraries were highly useful. It was found that self-confidence was an importance factor in technology acceptance behavior. The study raised the need of effective training programmes for the faculty members and library professionals for developing technology skills among them to enable to make an efficient utilization of electronic databases.

Male faculty members are more skilled in utilizing technology than female faculty members. Males show more interest in technology-innovations. They make more practice of IT. They show a fearless attitude towards technology-acceptance. Yang (2015) explored users' behavior in the institutes of Taiwan related to technology in the present age of information and communication technologies (ICTs). The study aimed to reveal variables that proved fruitful in technology acceptance behaviors. The study revealed that males were more expert in using technology than females. Women felt hesitation in utilizing new technology. They couldn't benefit from information and communication technologies. They were less skilled as compared to men. The study recommended a need of continuous training programs for developing skills related to technology so that desired objectives could be achieved.

The review of relevant studies has shown crucial facts related to the study. It has broadened insight towards the current research. The review shows that faculty members use print and electronic journals for multiple purposes. Several studies are done in abroad to know the usage of print and electronic journals among the faculty members. The behaviors of faculty members towards electronic journals are of great importance. They can't lead in their disciplines well with negative behaviors. They can become innovate leaders if they have positive behaviors towards information technology. The literature has revealed that environment of the organizations also affects faculty members' behaviors towards technology and working styles. It has become evident that the libraries of Pakistan are far behind from the libraries of progressive countries due to the lack of financial grants and shortage of skilled staff etc. Literature review has strengthened the researcher's concepts and provided a great ease in the understanding of different approaches related to utilization of print and electronic journals. The literature has revealed different factors that play a great role in effective utilization of print and electronic journals among the faculty members.

METHODOLOGY

Research-Method:

Survey method was applied to meet set objectives of the study. According to Babbie (2004) "Survey research is probably the best method available to the social researcher who is interested

in collecting original data for describing a population too large to observe directly". It is an economical method to collect the data as compared to others and especially beneficial to get the responses from scattered population in a wide area. Powell and Connaway (2004) described the associated benefits of questionnaire that "questionnaire can facilitate the collection of large amounts of data in a relatively short period of time". The results of questionnaire are also dependable and consistent (Gay & Airasian, 2003).

This design was chosen because it helps in getting opinions from a huge population. Radovan Vrana and Barbaric (2007) stated that survey research methods permit researchers to collect information regarding opinions, attitudes, beliefs, knowledge and characteristics of larger population without undertaking a complete enumeration. In similar studies, according to Creswell (2011) quantitative research is an appropriate design to understand attitudes, opinions, and behavior of persons towards any specific phenomena. Survey research design was an appropriate tool to approach large number of potential participants. Therefore, quantitative research approach was opted for this study.

Population and Sampling of the Study

"A targeted population is a group of individuals who conform to specific criteria to which generalizations take place" (Cooper & Schindler, 2011). The target population of this study was the all-academic faculty members of GC University Lahore. There are at present 400 faculty members on permanent basis.

Survey Instrument

On the basis of literature available and LIS experts' guidance, a semi-structured questionnaire was formulated to achieve the answer of research questions. It is the most common and simple tool to collect the information into a specific setting. According to Powell and Connaway (2004) "questionnaires are worthwhile tool to get the information from the large amount of data in a short period. It enabled the participants to complete it in available time and it also economical to manage". The questionnaire consisted of open and close ended questions to

explore the users' experience in using print and electronic journals. Questionnaire is an effective instrument to gather descriptive data for measuring attitudes and for answering the required research questions. It helps to attain information related to different trends from a vast population. Different researchers have also highlighted the significance of questionnaire. They have stated that questionnaire is a primary data collection tool. It saves precious time and economy. It is a cost effective tool. It produces accurate data within short time. Surveys are considered very much useful to gather information about behaviors. Questionnaire is a flexible tool. It has many advantages. It is a fruitful method to get desired data. Keeping in view the effectiveness of questionnaire, the researcher used this tool to gather data. The questionnaire was passed through the process of pre-testing and pilot study to check the validity and reliability of the tool.

Instrument Development

There are two major parts in the development of survey instrument. The first part called content development of instrument and second was design development.

Instrument Content

The researchers used primary and secondary resources in the development of survey instrument. In primary resources, the researchers review the available literature on the user studies of print and electronic journals. The research study of Gupta (2011) which was conducted on the use of print and electronic journals at Kurukshetra University, India was the most relevant study related to the current research. This study provides new pathways to the research. In secondary sources, the researcher consults books, reports and other relevant material. These resources provided a guideline into the development of the instrument.

Instrument Design

While designing the survey instrument, three elements are very important. These elements are survey design, question wording and ordering.

Survey Design. In the process of designing the survey instrument, multiple research papers were studied (Gupta, 2011; Thanuskodi, 2012; Baladhandayutham, 2016). The researcher also followed the TAP consideration by (Foddy, 1993). According to Foddy, “TAP paradigm in instrument design are: Topic: the topic of survey clearly defined so that the participants clearly understand it what researcher talked about. Applicability: the applicability of the questions established so that the participant completed the information of survey questions easily. Perspective: the perspective that respondents should adopt, when answering the question, should be specified so that each respondent gives the same kind of answer”. After following these considerations, the survey design was finalized.

Question Wording. The wording is the key part of the instrument. Edwards (1975) stated that “Avoid the use of words that may not be understood by those who are to be given the completed scale”. Edward was the well-known author due to his work on attitude scale. In the current digital world, many people are aware of the term E-journals which is electronic journals but it will be possible some faculty members don’t know about the word “E”. To overcome this situation, a definition of this term has been added in this study.

Question Ordering. Ordering of questions need more consideration. Norman *et al.* (2004) described “questions should be ordered so as to minimize the effect of respondents’ answers on subsequent questions” and that questions should “start with fact-based questions and then go on to opinion-based questions. Begin with interesting and nonthreatening questions that are easy to answer”. In the present study, the instrument ordered the question such as the first part is related to the demographic information, second part deals with awareness and use, next part is about the reasons to use print and electronic journals. And the last three parts are related to preferences, problems and recommendation to market e-journals.

Pilot Testing

Before conducting the main survey, the instrument (questionnaire) which was approved by field experts was pilot tested to make it reliable and valid. The sample of pilot testing was the GCU professors which were not the part of final data collection.

Data Collection

The researchers visited all the departments personally and distributed questionnaires in their offices. Follow up activity was made through visiting their departments and sending them emails after a waiting period of three weeks. Finally, 313 questionnaires were returned with the response rate of 79 percent. Babbie (2004) explains that “a response rate of 50 percent is adequate for analysis and reporting. A response of 60 percent is good; a response rate of 70 percent is very good”.

Data Analysis

After the data collection process, the data was analyzed using SPSS software (Statistical Package for Social Sciences). The researcher created a sheet in SPSS and design the variables to follow the questionnaire. Different and appropriate statistical tests was conducted on data.

DATA ANALYSIS:

This section analyzes and interprets data collected through questionnaires. All the faculty members of GC University Lahore were selected as a population of this study. Data were collected through the questionnaire. Three hundred and thirteen questionnaires have been analyzed below.

Gender of Respondents

A total of 314 respondents participated in this study out of the target population of 400 which represented 78.5% response rate. Out of total respondents, two hundred and fourteen (68.2%) were male and only one hundred (31.8%) of them were the females. Frequency distribution of respondents' gender is presented in table 1.

Table 1
Frequency Distribution of Respondents' Gender (N= 314)

Gender	Frequency	Percent
Male	214	68.2
Female	100	31.8
Total	314	100.0

Experience to Use Internet of Respondents

The respondents were asked to mention their experience to use the internet. They were given different year-ranges to get suitable answers. Results show that only three (0.9%) respondents were using internet for less than one year, fourteen (4.5%) respondents were using internet from 1 to 2 years, twenty-nine (9.2%) have the experience of 3 to 5 years while a significant number of respondents 268 (85.4%) have more than 5 years of experience to use internet technology. A similar study conducted by Arshad and Ameen (2017) in Pakistan which also supports the similar findings that majority faculty members have more than five years of experience to use the internet. Further, Murray and Tschernitz (2005) also revealed that faculty members were greatly benefited due to the arrival of the internet. They were becoming habitual of using the internet. Internet had also increased the efficiency of the faculty members. The reason behind the usage of internet is that it has brought a revolution in all field of life. People are considered illiterate if they don't use internet. Table 2 shows the frequency distribution of respondents' experience to use the internet.

Table 2
Respondents' Experience of Using the Internet

Statement	Frequency	Percent
Less than one Year	3	.9
1-2 Years	14	4.5
3-5 Years	29	9.2
More than 5 years	268	85.4
Total	314	100.0

Reading of Research Journals in a Week

The respondents were asked to mention how many research journals they read in a week. The results indicate that one hundred and twenty-five (39.8%) respondents were reading 1 to 2 research journals in a week while one hundred and eighteen (37.6%) respondents were reading from 3 to 5 articles, forty-eight (15.3%) were reading from 6 to 10 articles and only twenty (6.4%) respondents were reading more than 10 articles. Smith (2003) also support the same findings that three-quarters of faculty members read at least one article from an online source on a weekly basis. Possible reason behind the similarity of the researcher's results and previous study results is that faculty members have same mind set. They spend fixed time for the reading of research journals. Table 3 shows the frequency distribution of respondents' reading of research journals in a week.

Table 3
Reading of Research Journals in a Week

Statement	Frequency	Percent
1-2	125	39.8
3-5	118	37.6
6-10	48	15.3
More Than10	20	6.4
Missing	3	1.0
Total	314	100.0

Personal Subscription to Research Journals

The respondents were asked to mention about personal subscription of research journals. Table 4 shows that seventy-eight (24.8%) respondents had a personal subscription to research journals, while a significant number of respondents two hundred and twenty-five (71.7%) did not have a personal subscription to the research journals. It is also approved from the survey findings of Cochenour and Moothart (2003) that trend of personal subscription of print journals is decline day by day because the 26% survey participants canceled their personal subscription of print journals. The findings of Dillon and Hahn (2002) also support the findings that the users of

electronic journals preferred the subscription of e-journals only by the library. However, it is confirmed by the findings that the academic faculty members preferred to use print and electronic journals which may be freely accessible and subscribed by the university library/department. They have an overall poor attitude towards the personal subscription of research journals. Possible reason behind the similarity of the researchers' study and previous study may be expensive cost of journals which can't be afforded by the faculty members easily.

Table 4
Personal Subscription to Research Journals

Statement	Frequency	Percent
Yes	78	24.8
No	225	71.7
Missing	9	2.9
Total	314	100.0

Experience to use research journals

The respondents were asked to rate their overall experience of using research journals in Print and Electronic Format. Table 5 presents that sixteen (5.1%) respondents had “poor” experience while twenty-four (7.6%) respondents had “fair” experience in using research journals. Fifty-nine (18.8%) respondents had good experience followed by majority respondents one hundred and six (33.8%) had very good while ninety-seven (30.9%) respondents had excellent experience in using research journals. The results indicate that the faculty has overall very good experience to use the print and electronic journals may be due to their interest.

Table 5
Rating of Research Journals Experience

Statement	Frequency	Percent
Poor	16	5.1
Fair	24	7.6
Good	59	18.8
Very Good	106	33.8
Excellent	97	30.9
Missing	12	3.8
Total	314	100.0

Format preferences

This part describes the overview of the format preferences by academic faculty while using the research journals.

Preferred format to use print and electronic journals

The respondents were asked to give their opinion on the format preferences of print and electronic journals. Table 6 reveals that a significant number of respondents i.e. two hundred and seventeen (69.1%) preferred to use electronic journals while only ninety-seven (30.9%) respondents preferred to use printed books. Cochenour and Moothart (2003) support with the same findings that majority of faculty preferred to use e-journals and they also suggested to cancel the print subscription and rely on only electronic journals. Similarly, Bar-Ilan and Fink (2005) also explored that faculty preferred to use the electronic journals over the printed journal regardless of their academic status and age. However, the preferences to use the electronic journals is very common due to its accessibility and other dynamic features that also confirmed the findings of Voorbij and Ongering (2006), Omotayo (2010) and Qasim and Khan (2015). Possible reason behind these similarities may be easiness in using e-journals and its multiple benefits.

Table 6
Preferences of print and electronic journals

Statement	Frequency	Percent
Print journals	97	30.9
Electronic journals	217	69.1
Total	314	100.0

DISCUSSION

The results indicate that two hundred and thirty-six (76%) respondents preferred to use electronic journals to keep update about the field followed by two hundred and nineteen (69.8%) used e-journals to browse current information, two hundred and eleven (67.2%) locate and access specific information, one hundred and seventy-eight (56.7%) used for teaching purpose, one hundred and eighty-eight (59.9%) for research assignments and two hundred and four (65%) faculty members used e-journals to recommend the students. However, it confirmed from the data that academic faculty heavily dependent on electronic journals to keep update, browse and locate information. It is the more convenient format to access the desired information. Almost the same preferences to electronic journals are in line with the findings by Borrego *et al.* (2007), Voorbij & Ongerling (2006) and Dilek-Kayaoglu (2008). The reason of similarity between the researchers' study and past studies is that faculty members don't use journals for only one specific purpose. They make the usage of journals for multiple goals.

The findings reveal that there was a significant difference between the use of print and electronic journals. Out of 314 respondents, 217 respondents preferred to use electronic journals while 97 respondents used print journals. Academic faculty who participated in this study have more than five years of experience to use the internet. They are well aware of print and electronic journals and used them for ten years. Academic faculty used the print and electronic journals on weekly basis. The trend to use on daily basis is not common among GCU faculty. A significant number of faculty used the print and electronic journals by visiting the university central library. They also accessed them through departmental libraries because their departments have also their own libraries and these libraries subscribed/purchased journals. The data further elaborates that

academic faculty read 3-5 research articles in a week but they are dependent on university resources. Because they have no interest to subscribe the research journals. They used these research journals generally to keep update and writing research articles and thesis.

The data revealed that a significant number of the respondents have a good awareness of print and e-journals. Findings also indicated that a great number of respondents (109, 34.7%) has been using the print journals for more than five to ten years while they used the electronic journals (114, 36.3%) from one to five years. The respondents of print and electronic journals equally used them on weekly basis. There is no trend to use the print and electronic journals on daily basis. They almost read three to five articles per week. The data also revealed that they mostly access the research journals from the central library, departmental library, while few of respondents accessed them at homes / off campus. The trend to subscribe/purchase the print and electronic journals is absent among academic faculty. Although they are producing high-quality research in the country and they need more to subscription to journals, they have used the research journals to keep update, teaching, research supervision, writing thesis and articles. They have a very good experience to use both print and electronic journals.

The analysis of data indicated that a large number of respondents 217 (69.1%) preferred to use electronic journals while only 97 (30.9) respondents preferred to use print. A great number of respondents 236 (76%) preferred to use electronic journals to keep updated on the field followed by 219 (69.8%) used e-journals to browse current information, 211 (67.2%) locate and access specific information, 178 (56.7%) used for teaching purpose, 188 (59.9%) for research assignments and the remaining 204 (65%) faculty members used e-journals to recommend the students. However, findings revealed that academic faculty heavily dependent on electronic journals to access the desired information.

RECOMMENDATIONS

Following are recommendations on the basis of the findings of the study:

1. Electronic journals need to be effectively utilized through promotional activities keeping in view multiple benefits.
2. Library guides should be formulated to facilitate the faculty members.
3. Library web pages should be made user-friendly to better serve the faculty members in accessing electronic journals.
4. To improve the services of print and electronic journals, there is need to implement a market strategy for librarians.
5. Higher authorities should allocate sufficient budget to purchase print and electronic journals.

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