

# THE AWARENESS AND USE OF SAUDI DIGITAL LIBRARY AMONG THE FACULTY MEMBERS OF VARIOUS COLLEGE LIBRARIES IN KSA

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## ABSTRACT

*Digital Libraries play a major role as centers of learning and institutions of information dissemination. The study aims at investigating the awareness and use of Saudi digital library (SDL) among the faculty members of various college libraries in Saudi Arabia. A questionnaire method was used to identify the awareness of Saudi digital library services, their views on SDL services and their satisfaction levels about e resources and on line database. A simple random sampling method was used. Descriptive statistics like mean, standard deviation, average have been used to analyze the data using the SPSS 22 software. Hypothesis testing was done by using Chi-square test. The data was collected through structured questionnaire. The study was confined to faculty members of various university in Saudi Arabia.*

**Keywords:** Saudi Digital Library; E-resources; E-books; E-journals; Online Data-base; Faculty Members; Students' Awareness; Research Ability Utilization; Integrated Digital Library.

## INTRODUCTION

Digital resources are considered important for the academic community, teaching, research and training due to the technological advancements. Digital libraries play a significant role in scientific information resources. Digital resources usually consist of e-books, online journals, online databases, institutional repository, online public access catalog (OPAC) and Web-OPAC, websites, e-images, e-news, e-thesis and e-dissertation, CD-ROMs, DVDs. The basic idea of digital library is to provide universal access to digitized information throughout the world as they are mostly tuned for the promotion of academic excellence and research. Currently, the internet and CD-ROMs are the most popular electronic resources among universities and colleges. Due to impact of globalization, economic competition and revolutions of ICT, the libraries are undergoing tremendous changes. ICT tools and techniques, knowledge management systems, internet, web resources, digital libraries have made significant changes in the existing library systems and services. Saudi digital library was established by ministry of higher education in 2010 to facilitate online learning. The Saudi Arabian digital library is also known as the SDL. It was created with the goal of providing information services and access to electronic information sources accessible to faculty, staff, researchers, students, and professionals. It contains approximately 310000 e-books and 70000 electronic journals and publications from various university research and conferences in different scientific disciplines; these sources are in multiple forms and are published in Arabic and English.

The goal of the present study is to find out the awareness and satisfaction of Saudi Digital Library among the faculty of various colleges in Saudi Arabia. This research will be useful for administrators of the university libraries in developing a better digital & electronic resources and will provide insight for the people in IT sector.

### **Rationale of the Study**

The faculty members need timely and continuous information services for classroom teaching, guiding research projects and for becoming subject specialist. This study is necessary because of the lack of studies that have been conducted in Saudi universities regarding attitudes of faculty members towards the use of digital libraries in higher education. As it is important to explore the barriers that faculty might encounter when utilizing technologies such as digital libraries in learning. The researcher picked this topic due to the importance of digital libraries in the technology era for the educational field. However, it is possible that Saudi Arabia could upgrade IT systems in universities and colleges with time. It is anticipated that the results outlined in this paper, together with the recommendations, will be useful for those in decision-making roles and provide some insight for the people responsible for IT application. It is further hoped that this paper will assist administrators of the university libraries in developing a more complete understanding of the electronic information needs of faculty and the barriers that may inhibit the optimal use of SDL. This study will be useful to the librarian to understand the factors affecting the usage of SDL.

### **Objectives of the Study**

To examine the awareness and satisfaction of Saudi digital library among the faculty of various colleges in Saudi Arabia.

To study the purpose and utilization of the Saudi digital library resources by the faculty members and to know the ability level of faculty to use the existing electronic resources.

To find out the association between demographic variables & frequency of using the Saudi digital library resources & awareness towards Saudi digital library resources.

To find out the problems faced by the faculty members while accessing and using digital library resources and to suggest some measures to improve the use of e resources based services.

## **LITERATURE REVIEW**

### **Factors Affecting the Utilization of Digital Library Resources in Higher Education across Different Universities**

A careful review of literature discloses that, many investigations have already been carried out to study the use of internet and e-resources in across various university by the faculty members, students and research scholars of different academic institutions from time to time. The aim of the present study is to find out the awareness and satisfaction of Saudi Digital Library Resources among the faculty of various colleges in Saudi Arabia.

Hewitson (2002) concluded in his findings that awareness about the current status and efficiency of the existing databases for the users is important in order to plan any programs in the library. Al-Saleh (2004) investigated the usefulness amount of the electronic resources existing in three universities of Saudi Arabia. The results demonstrated that there were numerous variables affecting the utilization or non-utilization of the electronic resources. Mostly users preferred to use books and printed documents due to the existing problems such as lack of adequate training for utilization of the electronic resources of the libraries and lack of adequate computers. The fast and continuous development of information technologies has caused the accumulation of electronic resources in the libraries and issues which has demanded training about how to use this technological equipment (Asemi & Riyahinia, 2007). Kaur and Verma (2009) showed that the amount of electronic publication is increasing and the reason is the higher awareness of the library users about the electronic resources and the services offered in the library. AbdulRahman (2013) conducted a study on evaluating the usability of Saudi Digital Library's Interface. He identified a set of sixteen items covering four axis: efficiency, effectiveness, Aesthetic appearance and learnability to evaluate the Saudi Digital Library interface. The main finding of the study indicated that the SDL's interface level of usability practice was not acceptable, in particular regarding aesthetic appearance. Moreover, the problems facing other internet applications in Saudi Arabia will continue to influence the development of digital libraries projects. Anaraki and Babalhavaeji (2013) conducted a study to investigate the awareness and ability of medical students in using electronic resources of the integrated digital library portal of Iran. It was found that the awareness and utilization level of students in the three universities were lower than the average and those who are not aware of the existence of the IDL portal used general search engines to meet their information needs. The respondents admitted that their lack of awareness about the IDL was their most significant problem. Naqvi (2015) conducted a study on awareness, use, and impact of electronic information services on the UG and PG Students at JNMC Library, AMU, Aligarh, India. The purpose of this study was to identify the acceptance of EISs among the undergraduate (UG) and postgraduate (PG) students of Jawaharlal Nehru Medical College (JNMC), Aligarh Muslim University (AMU), Aligarh, India, and determine the usage level, satisfaction, instructions/assistance, and problems faced while searching the EISs. The findings of the study revealed that most of the respondents were well aware of the available EISs, such as internet, e-mail, and online database. A large number of the respondents were using the e-mail, internet, e-reference, web, and online database services to gain knowledge for their research work. Google and Yahoo were the most used search engines for fulfilling the literature queries and there was agreement with the instructions provided in using and accessing the EISs. Most of the respondents were satisfied with the EISs provided by the JNMC Library. Hosam (2017) conducted a study to investigate the current status of Saudi Digital Library, as a new type of modern libraries that appeared lately in the Arab world. The study aimed to shed lights on the pros and cons of SDL to evaluate the current situation and improve the services offered. Research conducted by Taala et al. (2019) on impact of Saudi digital library to Saudi research output: a review focused on need of digital libraries in modern learning environment. The findings presented both positive and negative impact of SDL to improve the digital space. The literature review suggests that though the studies have been carried out to know awareness and use of digital library resources in KSA but such studies were restricted to academic community of a single university, and not explorative, thus the present study attempts to fill-up the gap. Therefore, this study aims at addressing the gap in

knowledge by providing country specific findings that fit the Saudi Arabian higher education sector. The knowledge of these issues will, no doubt, help to plan for further improvements in user services.

## RESEARCH METHODOLOGY AND HYPOTHESIS DEVELOPMENT

A simple random sampling method was used. Descriptive statistics including mean, standard deviation and average have been used to analyze the data using the SPSS 22 software. This study is indented to know the awareness of the faculty members with respect to the awareness, satisfaction and usage of Saudi digital library in various colleges in Saudi Arabia. The sample size comprised of 250 faculty of various colleges in Saudi Arabia including King Saud University, Umm Al-Qura University, King Faisal University, Imam Muhammad Ibn Saud Islamic University, Taibah University. Out of 250 questionnaire distributed, total 226 questionnaire were received from the respondents. Hence response rate was 90.4%. Hypothesis testing was done by using Chi-square test. The data was collected through structured questionnaire.

### Hypothesis Development

*H0: There is no significant association between teaching experience, designation, education, computer training, frequency of using the digital library resources & awareness towards digital library resources.*

*H1: There is a significant association between teaching experience, designation, education, computer training, frequency of using the digital library resources & awareness towards digital library resources.*

## RESULTS AND DISCUSSION

### Demographic Characteristics of the Sample

Out of 226 faculty members 86(38.1%) were male respondents and 140(61.9%) were female respondents. 99(43.8%) respondents were under the age of 0-30 Yrs, 74(32.7%) respondents were between the age of 31-40 Yrs, 37(16.4%) were between the age of 41-50 Yrs and 16 (7.1%) respondents were above 50 Yrs.

Faculty categorization as per the type of college revealed that 84(37.2%) faculty members belonged to Management colleges, 35(15.5%) belonged to Commerce college, 32(14.2%) were of Engineering college, 35(15.5%) were of Arts college and 40(17.7%) belonged to other courses. Designation wise analysis revealed that out of 226 respondents, 113(50%) were lecturers, 52(23%) were readers & 61(27%) were professors.

It was observed that out of 226 respondents only 31.9% of the respondents were Ph.D. and 68.1% of the respondents were non Ph.D. Therefore, maximum number of respondent had an education less than doctorate degree.

Out of 226 respondents 50.4% of faculty members had less than 5 years of experience, 36.7% had 6 to 15 years of experience, 11.56% had 15 to 25 years of experience and only 1.3% of faculty members had above 25 years of experience.

## Awareness and Usage of SDL among Faculty Members

It was found that 60(26.5%) faculty members used Saudi digital daily, followed by 58(25.7%) members used once in a week, 44(19.5%) faculty members used once in a month, 16(7.1%) faculty members used occasionally, 24(10.6%) faculty members used digital resources rarely and remaining 24(10.6) % of the faculty members never used digital library resources.

It was found that out of 226 respondents most of the faculty members browse digital E-resources from Home 78(34.5%), 65 respondents (28.8%) from the computer lab, 44 respondents (19.5%) from the department and 39 respondents (17.3%) from the library. It was evident from the data collection that out of 226 respondents, majority i.e., 117(51.8%) of the institute library had no adequate digital resources, only 109(48.2%) had sufficient digital resources.

It was found that out of 226 respondents, 189(83.6%) faculty members think that e-resources are convenient than print resources and 37(16.4%) faculty members were still not comfortable with e-resources.

Out of 226 respondents, 147(65%) faculty members went through formal computer training and 79(35%) faculty members did not undergo such training. Based on Mean computation about awareness of digital resources it was revealed that the majority of the faculty members were aware about internet, followed by E-journals, online database, E-newspapers, e-thesis & projects, e-books, e-zines, OPAC and very few faculties were aware about CD-ROM. Hence, it can be concluded that most of the respondent were aware about internet and were least aware about CD-ROM.

Based on the mean computation, the awareness and use of digital resources provided by institute's library among the respondents, It was found that majority of the respondents preferred open access journals, followed by IEEE, DELNET, Springer link, INDEST-AICTE, Emerald, NPTEL, ASME/ASCE, Elsevier, ProQuest, J-Gate, DOAJ and least preferred digital resources & online database was found to be Capitaline. Hence it can be concluded that most of the respondents were aware about open access journals and were least aware about Capitaline.

## Purpose of Using SDL

Based on the mean computation, the purpose of using SDL by faculty members was for the latest developments and to update knowledge, followed by for research, for teaching, to collect subject information, for career development, for communication, for guiding research students, for writing research articles, for other purpose and very rare faculties use digital library for writing books.

Based on the mean computation, the library services provided by the institute included borrowing facility, followed by photocopying service, reference service, current awareness service, student advisory service, books display programs, bibliographic service, textbook loan facility, OPAC facility, CD-ROM facility, selective dissemination of information service and very few institutes provided inter- library loan services.

Majority of the faculty members preferred using e-resources over the print resources because of the following reasons that e-resources were time saving, easy to use, more informative, easy to update, less expensive, global sources can be accessed at one place with help of e-resources and very least respondents believed that it was helpful in effective presentation.

Based on the mean computation, above table shows the method of learning to browse the e-resources & digital library. Most of the respondents learned, how to browse digital library by self-study, followed by guidance from the faculty, guidance from friends and very rare faculties follows the method of taking guidance from the library staff.

### **Satisfaction on Services of SDL**

Out of 226 respondents, 92(40.7%) respondents were satisfied up to some extent, 59(26.1%) respondents were satisfied up to large extent, 34(15%) respondents were very less satisfied, 28(12.4%) respondents were satisfied to very large extent and 13(5.8%) respondents were satisfied to a less extent. Most of the faculty members were satisfied with books and e-books sources, followed by print and online database, journals and e-journals, indexing and abstracting journals, reference collection, thesis/dissertations and very few faculties were satisfied with CD-ROMs/DVDs source of information. Most of the faculty members were satisfied with the internet facility followed by reference facility, borrowing facility, photocopying service, UGC-INFONET, bibliographic service, inter library loan and very few faculties were satisfied with OPAC facility.

### **Problems Faced by Faculty Members in Using SDL**

Based on the mean computation, the reasons due to which respondents face problem in using digital library resources was found that majority of the respondents faced lack of sufficient e-resources followed by limited computers, lack of time, lack of assistance by library staff, lack of training in e-resources /database, lack of knowledge to use, difficulty to organize digital resources, lack of relevant information sources, slow internet bandwidth, lack of accessibility, difficulty in location of all on line material, technical problems server down, others issues, lack of infrastructure facilities in library, frequent powercuts.

Many of the respondents are unaware and have not used On-line thesis/dissertations, abstracts/ indexes, On-line databases, which are very relevant for their study and research. The present study revealed the awareness and use of digital resources provided by institute library. It showed that majority of the faculty members i.e., 184(81.4%) were aware about Internet and only 53(23.5%) were aware about CDROM.

It was concluded that 92(40.7%) respondents were satisfied up to some extent and 13(5.8%) respondents were less satisfied with available library resources, whereas 84(37.2%) faculty members were satisfied to some extent 23(10.2%) faculty members were satisfied to less extent with the digital information sources and services provided by institute's library.

Most of the faculty members i.e., 129(57.1%) access Open Access Journals and only 50(22.1%) access EBESCO digital resources and online database, 50(22.1%) access Capitaline. It was concluded that, 60(26.5%) faculty members are using digital resources daily & 24(10.6%) of the faculty members never use digital library resources.

Among the 226 respondents, majority i.e., 174(77.0%) of the faculty members highly preferred digital library resources for the latest developments and to update knowledge and 79(35%) for writing books. Majority of the respondents 161(71.2%) have faced lack of sufficient e-resources and 114(50.4%) respondents faced the problem of using digital library resources.

## Findings of Hypothesis Testing

The chi-square value for gender at 9 degree of freedom was found to be 19.125. Value of  $p=0.024$  which is less than standard value of alpha, 0.05. ( $P<0.05$ ) therefore the null hypothesis was rejected. Hence, it was found that there is a significant association between Gender & Awareness and use of digital resources.

The chi-square value for age at 27 degree of freedom was found to be 281.962.  $p=0.000$ . Since  $P<0.05$  therefore the null hypothesis was rejected. Hence, it was found that there is a significant association between Age & Awareness and usage of digital resources.

The chi-square value for teaching experience was found to be 121.925 at 27 degree of freedom.  $p=0.000$ . Since  $P<0.05$  therefore the null hypothesis was rejected. Hence, there was a significant association between Teaching Experience & Awareness and usage of digital resources among faculty members.

The Pearson chi-square value for designation was found to be 93.710 at 18 degree of freedom.  $p=0.000$ . Since  $P<0.05$  therefore the null hypothesis was rejected. Hence, there was a significant association between Designation & Awareness and usage of digital resources among faculty members.

The Pearson chi-square value for education was found to be 97.722 at 9 degree of freedom.  $p=0.000$ . Since  $P<0.05$  therefore the null hypothesis was rejected. Hence, there was a significant association between Education & Awareness and usage of digital resources among faculty members.

The Pearson chi-square value for computer training among faculty members was found to be 98.388 at 9 degree of freedom.  $p=0.000$ . Since  $P<0.05$  therefore the null hypothesis was rejected. Hence, there was a significant association between Computer Training & Awareness and usage of digital resources among faculty members.

## CONCLUSIONS

It can be concluded that there is a significant association between demographic variables of faculty members such as gender, age, teaching experience, designation, education, computer training and their awareness level and usage of digital resources. It is clear from the study that the speed of availability and the ease of accessibility of information make the faculty members to use digital resources more frequently. So the libraries can take initiatives to organize awareness programs in this area.

## RECOMMENDATIONS

Based on the findings of the study, the following suggestions are made to improve the awareness and use of Saudi digital library among the faculty members. College libraries should create awareness among the faculty members by conducting awareness programmes, such as orientation program, demonstrations, conference, seminars, through emails and notices for the optimum use of available digital resources. The universities should support the libraries in every possible way and faculty members should cooperate in this regards. University libraries should convert the non-users into actual users by educating them about the potentiality of the digital library resources for their academic activities. Each of the faculty members should be given

computer system with internet connectivity as well as LAN connection at his/her department chamber to use the digital library resources frequently. University libraries should increase the number of internet nodes exclusively for faculty member. Internet bandwidth should be increased. UPS systems with sufficient capacity should be established in the university campuses. Management should provide sufficient funds for strengthening digital resources in libraries. The library should conduct regular evaluations and assessments to determine the effectiveness of the digital resources in meeting information needs of the users. Institute Library must provide Article Alert Service and Proactive e-mail based on content pages of select e-journals for the faculty members & students and the same may be made available in the library web site for future reference. The libraries web pages should provide an online guide to e-resources and various search-options to e-resources. Libraries should introduce feedback systems (both online and offline) for observing the proper use of e-resources.

### SCOPE FOR FUTURE RESEARCH

The scope of the future research could be to find out the most effective method and tool which can increase awareness about digital library resources not only among faculty members but also among students and research scholars. Also impact of usage of digital library resources can be identified on the academic performance and enhancement of skills, knowledge among students and faculty members not only in Saudi Arabia but in other countries as well.

### LIMITATIONS OF RESEARCH:

The study was confined to faculty members of various colleges of Saudi Arabia.

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