

ON-LINE ELECTRONIC JOURNALS USE AMONG UNIVERSITY ACADEMIC FACULTY MEMBERS OF ISLAMIC AZAD UNIVERSITY, KARAJ BRANCH

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ABSTRACT

This study aimed at identifying the extent to which On-line Electronic Journals is being applied at the Islamic Azad University Karaj Branch as perceived by its faculty. Also, it aimed at identifying the significant statistical differences in using on line electronic journal at the based on faculty members' years of experience and academic qualification. Results showed that faculty uses the OEJ standard extensively and there were no significant difference in the application due to experience or qualification of the academic staffs.

Keywords: e-journals, ICT, journals

INTRODUCTION

Technology has penetrated all areas of life and the use of information and communication technology (ICT) is commonplace in the 21st century. Libraries use ICT for better service and satisfying diverse user needs. Libraries have transformed into digital and virtual libraries where books, journals, and magazines have changed into e-books, e-journals, and e-magazines. This has increased the global dissemination of information. Electronic resources such as e-journals are easily accessible in remote areas. Electronic resources solve storage problems and control the flood of information. Print sources are being digitized.

The rapid growth of new technologies has changed the communication process and reduced the cost of communication for individuals. Electronic information sources can be seen as the most recent development in information technology and are among the most powerful tools ever invented in human history. Electronic information sources are becoming more and more important for the academic community (Kumar and Kumar, 2008).

University academics are a unique population and rely on recent and timely Information and electronic resources are now used more often than print resources by them (Morse and Clintworth, 2000). Since there has been no study conducted so far to measure the use of these e-resources by Islamic Azad University Academic Faculty Members, thus the study aimed to examine the extent to which of using the (OEJ) systems are in place to assure quality higher education production at as perceived by the faculty, through the following three questions:

1. To what extent Islamic Azad University Academic members are using On-line Electronic Journals?
2. Is there any statistical differences (at $\alpha = 0.05$) in the usage of On-line Electronic Journals by Islamic Azad University Academic members regarding years of experience?
3. Is there any statistical differences (at $\alpha = 0.05$) in the usage of On-line Electronic Journals by Islamic Azad University Academic members regarding academic qualification?

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) displays how users accept and use new technology. The model describes the factors that influence users' decisions about how and when they will use new technology, notably. Perceived usefulness (PU) - This was defined by Fred Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance". Perceived ease-of-use (PEOU) - Davis defined this as "the degree to which a person believes that using a particular system would be free from effort" (Davis 1989). The TAM has been continuously studied and expanded. The two major upgrades are the TAM 2 (Venkatesh & Davis 2000 & Venkatesh 2000) and the Unified Theory of Acceptance and Use of Technology (or UTAUT, Venkatesh et al. 2003). Several researchers have replicated Davis's study to provide evidence on the relationships between usefulness, ease of use, and system use (Adams, Nelson & Todd 1992; Davis 1989; Hendrickson, Massey & Cronan 1993; Segars & Grover 1993; Subramanian 1994; Szajna 1994). Attention has focused on testing the questionnaire used by Davis. Adams et al. (1992) replicated the work of Davis to demonstrate the validity and reliability of the instrument and measurement scales. Hendrickson, et al. (1993) found high reliability and good test-retest reliability. Szajna (1994) found the instrument valid.

Diffusion of Innovation Theory

Rogers (1983) and (1995) postulates Diffusion of Innovation theory, which describes the patterns of adoption, explains the mechanism, and helps predict whether a new invention will be successful. The theory has been used as the theoretical basis for a number of information system research projects.

LITERATURE REVIEW

Borrego, et al. (2007) observe that there have been many studies of users of electronic resources in the professional literature in the last few years. In a recent exhaustive review of the literature on the subject, Tenopir (2003) analyzed the results of over 200 studies of the use of electronic resources in libraries published between 1995 and 2003. The main conclusion of this review is that electronic resources have been rapidly adopted in academic spheres, though the behavior varies according to the discipline.

Smith (2003) in his article "*Changes in faculty reading behaviors: The impact of Electronic journals on the University of Georgia*" aimed to explore the role of electronic journals in the weekly scholarly reading habits of faculty. The study showed that electronic access to journals particularly library funded access is integral to research activities, with the vast majority of respondents reported that they read at least one article from an electronic source weekly

Heterick (2002) reports that more than 60% of faculty studied are comfortable using electronic resources. They believe that a variety of electronic resources is important to their research, and they consider electronic databases to be invaluable. In addition, 62% expect that they will become increasingly dependent on electronic resources in the future. The resources they use most often are online catalogs, full-text electronic journal databases, and abstracting and indexing databases. More than 70% of all respondents consider their library's online catalogue to be "very important" to their research. However, the importance of this resource varies significantly by field. Just over 60% of the economists consider their library's online catalogue to be "very important", while nearly 90% of humanists regarded it as such. In fact, the home library catalogue is the most important electronic resource for humanists, by a large margin. Based on their replies, it is as important to their research as personal computers.

Sandra L. De Groote, M.L.I.S. and Josephine L. Dorsch, M.A.L.S.(2001)examined research Online journals: impact on print journal usage.The research tried to determine the impact of online journals on the use of print journals and interlibrary loan (ILL). Results of the statistical analysis showed print journal usage decreased significantly since the introduction of online journals ($F(1,147) = 12.10, P < 0.001$). This decrease occurred regardless of whether a journal was available only in print or both online and in print. Interlibrary loan requests have also significantly decreased since the introduction of online journals ($F(2,30) = 4.46, P < 0.02$).

Blecic(1999) established a correlation between in-house use, circulation, and citation by faculty, which suggests that the gathering of many types of data is impractical and that one method may be used with the confidence that it correlates with other types of uses Electronic information resources are increasingly in use for cores at all levels of higher education (Macdonald 2001).

Millson-Martula (1998) reviewed the purposes and methods of journal-use studies and discussed the importance of weight attached to use as a factor for retention and deselection decisions and the meaning of low use. This review found that the importance of weight for retention or deselection decisions has varied considerably, as has the meaning of low use, ranging from zero to four uses per year.

Reasons for Using On-line Electronic Journals

Academics use On-line Electronic Journals for diverse purposes as demonstrated in the literature. Obaje and Camble (2008) report that On-line Electronic Journals are mostly used for literature searches during project/dissertation and thesis writing as well as personal research by staff.

Academics at Obafemi Awolowo University, Ile-Ife, use On-line Electronic Journals mostly for literature search in research and professional growth (Omotatyo, 2010). Kumar and Kumar (2008), however, highlighted six reasons for using On-line Electronic Journals. Users in the study use On-line Electronic Journals in support of their study (70%) and teaching (59%). One-third of respondents used the sources for project work. Eight-eight percent of medical science users accessed OEJ sources for study, followed by engineering (67%) and management studies (55%).

In Catalan Universities, electronic journals were consulted for both research and teaching by 53.6% of the respondents to a survey. They were consulted only for research by 37.4% and only for teaching by 2.7%. Respondents in Exact and Natural Sciences and Engineering mainly use

journals for research, whereas those in Biomedicine use them for both teaching and research. When the results are disaggregated by age, respondents under the age 30 mainly use them for research, respondents in the 41-50 age group use them for both teaching and research, and respondents over 51 use them for teaching and research or only for teaching. Disaggregated by academic position, only the associate professors showed a high proportion of use for teaching (35.9%) (Borrego et. al. 2007)

RESEARCH METHODOLOGY

This study used descriptive method and survey method for evaluating the usage of OEJ by Karaj Islamic Azad University Academic members. In order to collect relevant data from target group, researcher used a questionnaire with five likert's ranking scale .

Population and the Sample of the Study

Since the population of the study was only consisted of one hundred and eight (108) faculty members , researcher conducted questionnaire on the entire population

Table 1. Academic Qualification and Years of Experience of the Sample

Variables		Number	Percentage %
Academic Qualification	Master	19	14.3
	PhD	99	85.7
	Total	108	100
Experience	Less than 5	33	30.5
	5-10	37	34.3
	More than 10	38	35.1
	Total	108	100

Data Analysis

For statistical analysis of the data in this study, the statistical package of social studies was used included Descriptive statistics , T-test and ANOVA test.

FINDINGS AND DISCUSSIONS

Some of the finding of this study are shown in the following table.

Table 2. Online Electronic Journal use by Islamic Azad University Academic members

Dimensions	Mean	Standard deviation	Level of application
The ability to use (OEJ	3.94	.61	HIGH
The use of (O.E.J) would help to ignore the printing resource	3.67	.69	HIGH
Encourage the students to use (O.E.J).	3.68	.67	HIGH
The importance of using (OEJ) for the academic faculty members	3.25	.77	MEDIUM
- total knowledge of (OEJ) that other school subscribed in.	3.15	.78	MEDIUM
Total	3.71	.65	HIGH

According to table-2 , it is obvious that online electronic journals have been widely and rapidly used in academic spheres and academics in universities have widely indicated that they are able to use and have access to OEJ. E-journals are the most used among the array of available

electronic resources. Electronic journals are used by academics for both teaching and research, among many other uses. Academics have indicated satisfaction with their use of online journals and have committed their interest to the continuous use of e-resources because their use leads to better research and enhances scholarly communication.

From the findings, It was also revealed that there is no significant differences (at $\alpha = 0.05$) in the usage of On-line Electronic Journals by Islamic Azad University Academic members regarding academic qualification and years of experience.

In addition, the findings confirm that the working environment of staff, researchers, and students will provide clues for the reasons why electronic journals will be used or not, and which particular periodical publications will prove popular. The differences in the working environments mean that design of access mechanisms, whether through library Web pages, lecturers' Web sites needs to take into account the different target audience needs and levels of experience. Specialized training by library staff for students also needs to take those differences into consideration.

RECOMMENDATIONS

In the light of the study findings, the researcher recommended the following:

- 1- More studies should be encouraged and trained how to use OEJ in their studies.
- 2- Faculty members should be encouraged and trained on how to be involved and to support using OEJ.
- 3- Comparative Studies on the usage of OEJ can be conducted at different universities and institutes.
- 4- Libraries, information centers and other bodies should swiftly but systematically move to automate their routines and create an enabling environment in order to facilitate ease and wider access to electronic resources in general and online journals in particular.
- 5- Due to heavy use of e-journals, this research further recommends that libraries and information centers should improve upon e-journal ,subscriptions should be open or restricted access.
- 6- Most journal articles are published in pdf format, and a pdf reader is available online for free download and installation. Libraries and information centres should check for the latest version and install it on the system to make journal downloads easier.

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