

Cumhuriyet University Faculty of Science Science Journal (CSJ), Vol. 36, No: 3 Special Issue (2015) ISSN: 1300-1949

The Effect of Informing Services and Their Assessment in Local and Foreign Sites of Azad Universities Libraries in Guilan Province

Mehrdokht VAZIRPOUR KESHMIRI^{1,*}, Sara MAHLOOJI AFSHAR²

¹Assistant professor of Knowledge and Information sciences Department Tehran North Branch, Islamic Azad University, Tehran, Iran

²*MA* in of Knowledge and Information sciences, Tehran North Branch, Islamic Azad University, Tehran, Iran

Received: 01.02.2015; Accepted: 06.06.2015

Abstract. The main purpose: Purpose of the present research is to study the effect of information services and assessing them in local and foreign sites Azad universities libraries in Guilan province.

Research methodology and statistical population: Method of research has been survey and field and library methods have been used. Statistical population consists of professors, master and doctoral students and librarians of Azad universities in Guilan province that were totally 650 people. Based on the Krejcie Morgan table, sample size of the population is 152 people that 146 of them responded the questionnaires; 109 individuals were students, 28 ones professors and 11 ones were librarians. The data collection tool was a questionnaire that included open and close questions. Three kinds of questionnaire has been designed for the population. In order to determine validity of questionnaire, opinions of experts such as professors, consultants and specialists in the field of library and information were use and ambiguous questions were removed and other questions were replaced. Cronbach's alpha coefficient was used to determine the reliability of questionnaire, that for each of it was computed more than 7 /. and thus the reliability of the questionnaire is acceptable. In order to test hypotheses proposed one sample t- test was used. SPSS22 statistical software Excel were used to analyze data and results are shown in bar, line and pie graphs.

Results: since in the present research questions and hypotheses were the same, hypotheses can be confirmed by considering one sample t-test for each hypothesis ± 5 =a. Therefore, considering one sample t-test 5. /. =a, it is found that the hypothesis of information communications technology's being effective on efficiency of libraries in Azad universities of Guilan is accepted with 95 percent of certainty. Also by considering one sample t-test 5. /. =a it is found that with 95 percent of certainty the hypothesis of effective roles of individuals' being familiar with data bases, online tools of search, official and unofficial information sources in users' use of information is accepted.Of course, significance of teaching information search skills is effective on rate of users' use of information.

Conclusion: In this study, it can be concluded that due to the impact of information services and their assessment on local and foreign sites of libraries in Azad universities of Guilan, by increasing awareness of users about new ways of information and their familiarity with database, mopre information can be obtained in a better way, scientific level of users can be enhanced and finally efficiency of libraries of Azad universities in Guilan can be improved.

Keywords: Information, informing, data retrieval, retrieval system, data storage, storage and retrieval, information technology, libraries of Azad universities in Guilan province

1. INTRODUCTION

Information search is a basic activity of human being that is vital for his survival. As Marchionini states, life requires planning and action, and to do these things reasonable mental models (understanding) from the world is needed. For creation of such mental models information is needed, that is what has the potential to change the state of mind. From Marchionini's point of view "information seeking" is a process which is driven by life itself.

^{*} Corresponding author. Mehrdokht VAZIRPOUR KESHMIRI

Special Issue: The Second National Conference on Applied Research in Science and Technology

Informing science, by definition, is a science that examines issues related to collection, storage, retrieval and distribution and spread of information. Services of information are also about various activities of informing science that was mentioned.

Element that is always present in process of collection, storage, retrieval, distribution and spread of information referred to in the definition of informing science is "information," and as long as information, as capital of this process is not clear, what is performed does not have enough scientific discipline and none of these stages can be assessed in quality and quantity of the task.

Statement of the problem

Scientific communities have always been trying to balance between information and communication technology (ICT) and information retrieval systems (IRS), such as databases, library catalogs, digital libraries, portals, search engines and users of such systems and users and to provide an effective efficient strategy in this field. Therefore, in this research it is tried to know about the effect of information services in storage and retrieval through investigating understanding of students, professors, and librarians of libraries in Azad universities in Guilan province and to enhance individuals' use of information by assessing these services in local and foreign sites, so that they can get the best information in the shortest possible time.

Research objective

General objective

The general objective of research is investigating the effect of information services and their assessment in local and foreign sites of libraries in Azad universities of Guilan province.

Secondary objectives

1. Determining the effect of ICT on performance of Azad university libraries of Guilan province

2. Degtermining the effect of individuals' familiarity with databases and online search tools in individuals' using information

3. Determining the effect of individuals' familiarity with official and unofficial information sources in their using information

4. Determining the effect of teaching information search skills on rate of individuals' use of the information.

What is informing science?

Informing science is a discipline that does research on characteristics of information and informational behavior, forces governing the flow of information, and information processing method for information availability and optimal usability. Information is related with a set of knowledge about production, collection development, organization, storage, retrieval, analysis, transfer, conversion and use of information. This discipline includes providing information in natural and mechanical systems, using code in transfer of special messages and investigating tools and techniques of information processing such as computer and programming systems. Informing science is a inter-disciplinary science that is related with fields such as mathematics, logic, linguistics, psychology, computer technology, military operations research, graphic arts, communications, library science, management and other fields. This science consists of both

theoretical science, which does research on the subject of information and informing regardless of its use, and practical sciences, which leads to the development of products and services.

This definition seems a bit complicated because this is a complex and multidimensional issue and the considered definition intends to be fully inclusive. Obviously, informing science is not exclusive domain of any organization.

The aim of informing science as a discipline is providing a collection of information that leads to development of various institutions and practices of gathering and transferring knowledge.

Organizing information

Organizing or classifying a structure increases the user's ability to locate objects.in organizing information carriers, such as books, newspapers, letters, films, computer files and many available media of today are necessary in order to enable users to find the information. Information is a set of integrated data that is organized in a particular way and have meaning and there is a special emphasis on concept of organizing data. Organizing provides structure or framework for a set of data. Nature of its structure is manipulation of data, and thus affects management and retrieval of information.

Models of information organization

Models of information organization are

Linear model (ordinal)

The simplest model of organizing data is linear model. Data join each other one after another in one line. Magnetic tapes, music cassettes, and profile sheets of this structure use the data.

Binary Tree model

model of this type of data structure is like an upside-down tree that each branch has two subbranches. Binary Tree model is useful especially for libraries or other databases that have dual modes. Examples that can be provided for libraries items include: is the desired evidence available or not? In collection development subject, are the desired evidence or evidences ordered or ordered? Is the user provided with desired evidence or not? In the subject of retrieval, is the desired evidence of user retrieved or not? Hierarchical model

Initial hierarchical model in an extension of binary tree model. Each branch may have a number of sub-branches that will have data in itself. This model retains all the attributes of the binary tree model.

The Unix operating system uses this type of file system. The highest level is called root (though the root is always at the end). The sublevel is called, directory.

Relational model

Previous models that have been talked about, organize data in a linear or tree form. The relational model organizes data in a table with rows and columns. Rows are called "record" are columns are called "field". Square tables have same number of rows and columns.

A set of multiple related tables, questions, forms, and reports of a database form a connection since all functions are associated with one table. Tables may have numeric or nonnumeric data. Records and fields and creation of new tables can be added, deleted, or edited.

Hypertext model

Imagine a library study table that reader has put three books on it. The first book is a poetry book; the second one is a glossary of words containing words in the poetry book and the third one is commentary on the poetry book. Reader of the poetry book encounters a term that does not know its meaning; looks up its meaning in glossary and follows interpretation of the poem in the third book. It is clear that there is no physical connection between these three books, but readers think there is a connection between them. Reader has created cognitive relationship between poetry, glossary and commentaries on it in the third book. This is in fact an example that shows the hypertext model. World Wide Web is an example of hypertext in environment of world multimedia networks.

Random access model

Organizing models that are described bring an order in data set and relational model puts data in embedded boxes in the table. In most cases, position of data remains constant.

Random access model makes optimal use of available storage space of the computer possible. Perhaps, in this model, use of the word "random" is misleading. In fact data are not placed in storage space of computers randomly, but they go to quite specific locations determined by the operating system. This allocation seems random, but its action is quite structured. Random access model is the dominant model in most computers for data storage on hard disk space.

Data retrieval

Data retrieval is an important issue in information systems, information retrieval process by which a set of data is searched for retrieving items requested by an information request. Data retrieval is a complicated process because there is no infallible way to provide direct access between user query and evidence / evidences containing information. Information retrieval is based on the agreement between key words and words to express the same concepts used in the evidence. This fact this shows that the retrieval on the basis of agreement, may lead to retrieval of related evidence / evidences from perspective of system because the requested keywords by user were in it simply and that is while it may be simply rejected by user because the items retrieved are not in agreement with his needs.

Data retrieval steps

Pao (1989) has identified four steps before the user interacts with information systems for retrieving required data. In the first two steps "information problem " the user understands that there a lack of information. This lack of information can be for solving a specific problem, or may be need to background information or it can be need for updating in a specific subject or context. When the problem is identified, user formulates information problem if it is required, in other words determines what solutions should be proposed to solve the information problem. In the next step the user raises his information need as question that can be the context for search in information system. This question then is converted to an information request which is understandable for information system. The final step would be in the form of one or more key words, a question or a statement that is understandable for system. Based on what the user obtained in interaction with the information system, it is may be needed to step back previous steps and review information need and do the search again.

Research background

Various theses and papers have been provided on investigating information services in various centers and organizations so far and majority of this research has been on foreign sources and unfortunately in Iranian domestic resources less has been studied on the impact information services and its assessment in local and foreign sites. Therefore, the researcher have not found any new records in Persian background and most of literature were related to foreign sources.

Research background in Iran

Shamsollahi (2002) has provided his thesis under entitled " development plan of information and reference service at the National Library of the Islamic Republic of Iran". His purpose was to study current status of information and reference services at the National Library of Iran and to provide a propose plan to develop the quality and quantity of these services in the national library. questionnaires and field surveys were used as data collection tools. The research findings show that organization of the national library has changed several times since its establishment. But none of them have been able to meet national needs for long time. Among the problems existing in this organization are lack of computer equipments, lack of Internet communication lines, lack of communication network other than the Internet, lack of OPAC of nonbook material, weaknesses in training clients for efficient use of resources and etc. these are factors that solving them can help development of information and reference services at the National Library.

Ahmadi (2002) provided a thesis entitled "Study of information services of libraries in international organizations centers of in Tehran". These services include: type of activity, organizational structure, communications and technology of facilities and equipments, and so on. Research method is comparative survey and descriptive. Required data is collected through questionnaires, observations, and interviews with library officials. The study population in the present study is libraries of international organizations in Tehran, that among 9 international centers in Tehran, 4 center (United Nations information centers, UNESCO, UNICEF, FAO) have a library. After collecting data and using the SPSS statistical software for data analysis, it can be concluded the library of Information Centre of the United Nations is in the first rank regarding information is in the fourth rank.

Fatemi Neisiany (2005) wrote a thesis entitled " A comparative study of information services in the public and Azad university libraries in Isfahan city". for this purpose all of the university libraries were investigated from various aspects such as specialist human resources, a variety of information services provided, methods of storage and retrieval of information, funding and hardware and software facilities. The research community included 39 central and school libraries belonging to public and Azad universities of Isfahan and data collection was through questionnaire. The results of study suggests that in central libraries of these universities only 41 percent and in school libraries 32 percent of total information services are provided. This suggests that some of the mentioned libraries are not in desired status in terms of providing information services.

Research Background abroad

Noorman Masrek (2010) provided a paper entitled "assessment the impact of portal of Malaysia University library". His aim in this study was to evaluate the effects of the portal of the library in the Faculty of Technology based on views of students in the unit faculty remembers information management. The data collection tool included 400 questionnaires that had been from the unit faculty remembers information management to students of technology school. The results of this study show that respondents have stated that the library portal satisfies their needs to some extent in terms of quality of information. All characteristics of data quality are: completeness, comprehensiveness, accuracy, timeliness, reliability and suitability of the data

format for users. Of course it should be mentioned that the importance of information systems and services is equal to the importance of quality of information.

Savant (2011) wrote a paper entitled "The information retrieval system and its features in India" provides. His aim in this paper was to study various aspects of information retrieval systems and related software in developing fundamental treasures in India. In this study, data collection was done through questionnaires that were in guide part of the web site surveymonkey.com. The findings show that 79 percent of Indian organizations use a data retrieval software package called DSpace. Regarding the responses obtained from the questionnaires it can be concluded that this software has the highest degree in information retrieval and supports all text formats including HTML, PostScript, PDF, spreadsheet, etc.

Ina (2013), has conducted a study entitled "creating interaction between information and communication technology, information retrieval systems, users, and making a difference". The aim of this study was to track down items to create a balance between information and communication technology, information retrieval systems such as databases, library catalogs, repositories, digital libraries, portals, search engines and users of this type of systems. The findings show that development and advance in information and communication technology brings opportunities fro studying extensive needs of information users information retrieval system mostly meets these needs that include search of analytical information based on the search strategy plan, review towards visual part and creating changes through news services, encouraging and supporting writers to produce and publish their works.

Shafique (2013) presented a paper entitled "remaining ways of Pakistan libraries through the integration of the technologies: choosing the Library 0/2 and 3D library". In aim of this study was to explain the concept of Library 0.2 and the 3D library, as well as about the new opportunities for selecting concepts of Library 0.2 and 3D library. Particular and special objectives of this research include reviewing of the position of research in Pakistan in every aspect of Web 0.2, Library 0.2 and 3D library, explaining development of a user-centric library in programs of 0.2 library and 3D library for receiving ideas of information specialist, and providing a plan for the selection of tools of library 0.2. Library and 3D library. In the current study, by keeping the findings of previous research and using modern methods, a combination of new technologies for the survival of Pakistan's libraries can be achieved. findings of this study show that Pakistan's libraries use technology of library services of 0.2 Library and 3D library now.

Kattimani Shivaputrappa (2013) presented a research paper entitled "Evaluation of Library and ICT skills of library and information professionals in the engineering school libraries in Karnataka, India". The purpose of this study was to evaluate library and ICT skills among different choices of library professionals (ie, librarian, substitute librarian, assistant librarian, library assistants and others), who work in libraries of Engineering Faculty that are associated with Wyss and Swaraya Faculty of Technology. The data gathering tools included questionnaire, observation and interviews with the library and information professionals. The findings of this study show that the majority of library specialists who work in the Engineering School of Karnataka have accidentally chosen this specialty and there is significant difference between different choices in line with capabilities of computer function, creating files, software models of library automation software, different operating systems, Internet skills, web design / web editing, search engines, and digitization of information retrieval system. Comparing all the options, it can be concluded that librarians are more skilled in web design, and most of them face financial problem and overtime work in acquiring information and communication technology skills.

Research Methodology

In any research, considering subject and extension of research domain, different methods are used. Current research is survey, field and the library research.

Statistical population

Statistical population in the present study consists of master and doctoral students, professors and librarians of Azad universities in Guilan province that in total are 650 persons. To select sample 152 were considered using Morgan table that 146 questionnaires were returned.

Research Data collection tools

In the current study, a questionnaire was used to collect data and three questionnaires were distributed among master and doctoral students, professors and librarians in Azad universities of Guilan province. The questionnaire of students included 17 close questions and 1 open question. In the of professors there were 26 close questions and 3 open questions and librarians questionnaire consisted of 28 close questions and 3 open question. From 146 questionnaires, 109 questionnaires related to students, 28 ones were for professors and 11 ones for librarians.

Analysis of research findings

The results of findings of this study are presented in two parts: first part is descriptive statistics, in which the sample under study is described in terms of percent, frequency and descriptive statistics tending to center and dispersion (mean and standard deviation) and bar, linear and pie graphs. And in the second part the hypotheses were tested by descriptive analytical method and using SPSS 22 and Excel software and testing hypotheses will be through one sample t-test, thus research questions will be answered.

Determining the validity of questionnaire

Validity means that to what extent the measurement tool gauges the considered feature. To measure validity of questionnaire various tools are used. In the present research for determining validity of the questionnaire, opinions of experts such as professors, consultants and specialists in the field of library and information were use and ambiguous questions were removed and other questions were replaced.

Determining the reliability of questionnaire

Reliability, which is known as credibility, accuracy and stability of questionnaire means that that if the measurement toll that is made for measuring the variable is used in similar circumstances at other time or place, similar results are achieved. In other words, a reliable tool is the one that have features of repeatability and measurement with the same results.

In the current study of measuring reliability of each parts of data collection tool Cronbach's alpha coefficient is used, that the result is presented in Table 3-1. As can be seen in the table, Cronbach's alpha coefficients for each of the questionnaires of the research is calculated more than 7.0. Therefore, it is concluded that the questionnaire has acceptable reliability.

Table 1. Reliability of data collection tool.

	Number of observations	Number of questions	Cronbach's alpha coefficients of reliability
Questionnaire of professors	28	51	0/746
Questionnaire of students	109	29	0/703
Questionnaire of librarians	11	52	0/825

2. CONCLUSION Summary Of Research Findings

The results of this study are described in two parts of descriptive statistics in which the study sample is described in terms of percent, frequency and descriptive statistics tending to center and dispersion (mean and standard deviation) and pie, bar and line graphs. Samples studied, include description of the samples in terms of demographic data of respondents (Masters and PhD students, professors, librarians), such as gender, age, education and job. Also research samples are described based on research indices for students, professors, and librarians. The research sample of students, professors, and librarians have been described.

The inferential statistics also the reliability of data collection toll is discussed that in accordance with Cronbach's alpha coefficient analysis, data collection tool in this research has acceptable reliability. Also in this part of the statistical hypotheses are tested and basic research questions are answered.

3. TESTING RESEARCH HYPOTHESES

First hypothesis – ICT is effective on the performance of Libraries of Azad Universities Guilan.

	Number Mean Standard		Test statistic	Significance	Confidence interv	al 95%	
			deviation		level	Lower bound	Upper bound
Professors	28	3/27	0/582	2/533	0/017	0/504	0/052
Students	109	3/46	0/515	9/435	0/000	0/564	0/368
Librarians	11	3/61	0/384	5/336	0/000	0/876	0/360
total	148	3/44	0/524	10/242	0/000	0/527	0/356

Table 2. Testing the impact of ICT on performance of Libraries of Azad Universities Guilan.

As can be seen in Table 2, significance level of testing the impact of information and communications technology on performance of Libraries of Azad Universities Guilan for professors, students, librarians and in total for three groups was calculated less than 05/0 = a, therefore with 95 percent of certainty, the hypothesis of effectiveness of information and communication technologies on the performance of libraries of Azad universities in Guilan for professors, students, librarians, and in total for three groups is accepted.

Second hypothesis - familiarity of people with databases and online search tools has been effective in use of the information.

	Number	Mean	Standard	Test	Significance	ificance Confidence interval 95%	
			deviation	statistic	level	Lower bound	Upper bound
Professors	28	3/94	0/688	7/275	0/000	1/213	0/679
Students	109	3/97	0/702	14/559	0/000	1/112	0/846
Librarians	11	4/25	0/680	6/096	0/000	1/706	0/793
total	148	3/99	0/697	17/327	0/000	1/106	0/880

Table 3. Testing Impact of people's familiarity with databases and online search tools in use of information

As seen in Table 3, significant level of testing the impact of people's familiarity with databases and online search tools on use of information for professors, students, librarians and three groups was calculated less than 05/0 = a, therefore hypothesis of effectiveness of people's familiarity with databases and online search tools on use of information for professors, students, librarians, and total of three information and online search tools is accepted with 95 percent of certainty.

Third hypothesis - Degree of people's familiarity with the official and unofficial information sources has been effective on the use of information.

Table 4. Testing the impact people's familiarity with the official and unofficial sources of information on the use of information.

	Number	Mean	Standard	Test	Significance	Confidence interval 95%	
			deviation	statistic	level	Lower bound	Upper bound
Professors	28	3/43	0/760	3/014	0/006	0/138	0/727
Students	109	3/59	0/653	9/544	0/000	0/473	0/721
Librarians	11	3/76	0/579	4/358	0/001	0/372	1/150
total	148	3/57	0/670	10/496	0/000	0/469	0/687

As can be seen in Table 4, significant level of testing the impact of familiarity with the official and unofficial sources of information on use of information for professors, students, librarians and three groups was calculated less than 05/0 = a, so the hypothesis of effectiveness of familiarity degree with the official and unofficial sources of information on use of information for professors, students, librarians, and all groups is accepted with 95 percent of certainty.

Fourth hypothesis – teaching information search skills has been effective on the use of the information.

Table 5. Testing the effect of teaching information search skills on people's use of information.

	Number	Mean	Standard	Test	Significance	Confidence interval 95%	
			deviation	statistic	level	Lower bound	Upper bound
Professors	28	3/55	0/783	3/773	0/001	0/254	0/862
Students	109	3/74	0/675	11/488	0/000	0/615	0/871
Librarians	11	3/93	0/584	5/316	0/000	0/544	1/329
total	148	3/72	0/693	12/689	0/000	0/610	0/835

As can be seen in Table 5, significant level of testing the impact of teaching information search skills on use of information for professors, students, librarians and total three groups was calculated less than 05/0 = a, therefore the hypothesis of effectiveness of teaching information search skills on use of information for professors, students, librarians, and all three groups will be accepted with 95 percent of certainty.

Discussion and interpretation of fundamental research questions

The first question – has information and communication technologies been effective on the performance of Libraries of Azad Universities in Guilan ?

This question is related to questions in the questionnaire about degree of peoples familiarity with Internet, meeting information needs via the Internet and their use of official and unofficial sources of information for access to information that considering confirm of the first hypothesis, given one sample t-test less than 05 / 0 = a, it can be said that the answer to the first question is positive. In other words, information and communication technologies has been effective on the performance of Guilan universities libraries

The second question – has familiarity of people with databases and online search tools been effective in use of information?

This question is related to the questions of the questionnaire about the degree of people familiarity with databases and specialized journals,, online search tools like search engines that by considering acceptance of the second hypothesis given that one sample t-test was less than $0 \ 05 = a$ it can be said that people' familiarity with databases and online search tools has been

effective in use of information

The third question – has people's familiarity with official and unofficial sources of information been effective on the use of the information ?

This question is related to the questions of the questionnaire about the official information sources such as books, specialized journals, electronic specialized publications, online databases and unofficial sources of information, such as work and personal experiences, participation in conferences and seminars, participation in short term and long term courses of informing that by considering acceptance of the third hypothesis given that one sample t-test was less than 05 = a it can be said that people' familiarity with official and unofficial sources of information has been effective on the use of the information.

The fourth question – Has teaching information search skills been effective on the use of the information ?

This question is related to the questions of the questionnaire about type of search system, features of database, type of request from data base, degree of familiarity with operators for search that by considering acceptance of the fourth hypothesis given that one sample t-test was less than 05 = a it can be said that teaching information search skills has been effective on the use of the information

Comparison of the results with research backgrounds

In the present study, after investigating and statistical analyses and obtaining results, the researchers found that like studies conducted in Iran by people like Shamsolahi, Ahmadi, Fatemi Neisiany presented in the second chapter, problems such as shortage of funding, lack of library equipment new technologies and facilities, lack of motivation in people for learning new skills of searching for information, shortage of specialized and up to date resources, no subscription of professional journals, weakness of Internet connection lines, lack of communication network of connecting Azad universities libraries

in Gillan to each other affects how the informing services are provided and cause quality and quantity of informing services to decrease and thus production of science and research in the country will be reduced.

However, about research carried out abroad it can be said that in the research paper by Masrk the effects of portal Library of Malaysia university is investigated that meets the needs of users to regarding quality and quantity to some extent, but unfortunately libraries of Azad universities Guilan it is still in its infancy and is far from global standards and can not meet the user's information needs.

In research conducted by Savant, software package of data retrieval known as Dspace talked about that in libraries of Azad universities in Guilan old method are stil being used and they are not familiar with new methods of information retrieving methods.

In research paper by Ina, creating an interaction between information and communication technology, information retrieval system and users have been talked about, that in libraries of Azad universities in Guilan it is tried to increase scientific level of Azad universities in Guilan province by creating interaction between information services and needs of users.

In the research by Shafiqe libraries 0/2 and 3D library are brought, that unfortunately there is no such case in Azad universities libraries in Guilan and it is hoped that by creating the necessary infrastructure, including funding, hardware and software requirements and familiarizing users with new methods and new concepts of library and information services, performance of libraries in Azad universities of Guilan can be increased.

In the study by Shiva Putra ICT skills,library communications and librarianship evaluation in Engineering faculty of Karnataka in India has been talked about and the results of this study show that learning ICT skills can be effective in providing library services ; that this case is true in Azad universities libraries in Guilan and by increasing online search skills and ICT skills performance of Azad universities libraries in Guilan can be enhanced.

Recommendations based on the results of research

Considering the results obtained from descriptive and inferential statistics some recommendations are proposed as following:

- Generating interest and motivation in users to learn new ways of informing

- Funding to equip libraries with new facilities and technologies of information retrieval and informing

- Holding short-term and long-term informing courses for professors, students, and librarians
- Creating communication network to connect the libraries of Guilan Azad Universities
- Increasing Internet bandwidth in the universities libraries of Guilan
- Subscriptions of libraries in Azad universities of Guilan to specialized electronic journals

- Teaching new skills of information retrieval and informing to professors, students and librarians.

4. SUGGESTIONS FOR FUTURE RESEARCH

Researches that can be conducted in line with the present include:

- A comparative study on how to provide information services in libraries of public and Azad universities in Guilan province

- A comparative study on informing services in local and foreign sites

- study of how informing services in local and foreign sites in libraries of Azad universities in Guilan affect increasing production of science and improve of scientific level of country

-Use of modern methods of informing and use of advanced equipment, information and communication technology in the libraries of Azad universities in Guilan.

REFERENCES

- [1] Ahmadi, Nafiseh, (2002). Investigating informing services of libraries in centers of international organizations in Tehran, MA thesis, Islamic Azad University, North Tehran Branch, Tehran.
- [2] Hafez Nia, M., (1998). Introduction to research methodology in the Humanities, Tehran Sadr.
- [3] Khaki, Gh., (2003). Research methodology with an emphasis on thesis writing, Tehran: Baztab.
- [4] Shamsollahi, Gh., (2002). Development plan of informing services and reference at the National Library of the Islamic Republic of Iran. MA thesis, Islamic Azad University, North Tehran Branch, Tehran.
- [5] Alijani, R. (2008). Information systems and related concepts, Tehran: Chapar.
- [6] Fatemi Neisiany, T., (2005). Comparative study on information services in libraries of public and Azad universities of Isfahan. MA thesis, Islamic Azad University, North Tehran Branch, Tehran.
- [7] Norton, M. J. (2005). Principles of Informing Science (Javad. Bashiri, Mohsen. Azizi, Translator). Tehran: Ketabdar.
- [8] Pao, M, (1989). Concepts of Information Retrieval.Engleubod, Co, Libraries Unlimited.
- [9] Ina, Fourie (2013). All about information- balancing ICT, IRS, users and making a difference retrieved 15 March 2013 from: www.Emerald.com
- [10] KattimaniShivaputrappa, Fakkirappa; Ramesh, R.Naik (2013).Evaluation of Librarianship and ICT Skills of Library and Information professionals working in the engineering college libraries in Karnataka, India: a survey retrieved 23 December from: www.Emerald.com.
- [11] NoormanMasrek, Mohamad; Jamaludin, Adnan; AwangMukhtar, Sobariah (2010).Evaluating
- [12] Academic library portal effectiveness: A malaysian case study retrieved 10 July 2010 from: www.Emerald.com.
- [13] Sawant, Sarkia (2011). IR system and features: study of Indian Scenario retrieved 30 May 2011 from: www.Emerald.com
- [14] Shafique, Farzana (2013). Survival avenues for Pakistani libraries in the era of emerging
- [15] Technologies:Adoption of Library 2.0 and Library 3-D retrieved 25 April 2013 from: www.Emerald.com.