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The study of the relationship between perceived richness of information resources at Academic library and attitude towards using them

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The study of the relationship between perceived richness of information resources at Academic library and attitude towards using them

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Abstract

This study aimed to investigate the relationship between perceived richness of information resources at academic library and the attitude to use them by students' of Islamic Azad University of Ahvaz; and conducted by an analytical survey method. Using stratified random sampling 380 students were selected and data were collected using researcher made questionnaire. Results showed that the students have no tendency (mean=3.2281) to use the information resources of library. Meanwhile, the library information resources in terms of update (mean=3.2281), accessibility (mean=3.1702), quality (mean=3.1342), transparency (mean=3.1325) and quick feedback ability (mean=3.1325) are above average and in a relatively favorable level; but, in terms of interactivity (mean=2.9746) they are at a relatively unfavorable. Results also demonstrated that there exist a significant positive relationship (Sig=0.000) between the perceived richness of information resources and the attitude to use them (r=0.689) .Due to the richness of various information resources, electronic resources (mean=2.35) has been specified richer than others. The update feature for periodicals (mean=3.69) and electronic resources (mean=3.76), and the

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feature of quality (mean=3.76) were the most important ones compared to the other dimensions of information richness. The study findings indicated that paying attention to the features of information resource richness could be effective in increasingthe students'attitude to use the information resources.

Keywords: *Information Richness, Academic Libraries, Information Use, Perceived Richness of Information, Information Sources, And Academic Library Users.*

Introduction and Problem Statement

The main purpose of academic libraries is to meet the educational and research needs of users in order to aid the process of education and research as two main functions of the university. Academic libraries do this by providing access to information and presenting diverse of information services such as loan, reference and electronic information service. To put it simply, libraries collect the information in an integrated process, and give it a benefit by organizing and creating a mechanism for storing and retrieving. Therefore, it is clear that the provision, organization/classification, access and dissemination of information are under the influence of the challenges posed by the quantity of information and a variety of information carriers. On the one hand, the diversity and expectations of users also have been affected in some way by the influence and learning of information and communications technology. Today, the volume of generated data is so large that in order to disseminate them wide spectrums of information carriers will be used. For example,printed books, e-books, journal articles, conferences, Web resources, etc. are among

these resources.The existence of information in various resources does not guarantee the utilization of them.Therefore, library and information agencies are offered to link user needs and existing information on various resources.It is important to note that providing every type of services by information agency and library, though the authorities may consider it having an appropriate quality, is not solely sufficient.In other words, information services users' and users ofinformationresources are looking for certain featuresthat understanding them can justify their usagebehavior. Previous studies have shown that users' usage behavior of information resourcesis influenced by their perception of accessibility, quality (Babalhavaeji and Hosseini, 2011; Babalhavaejiand Farhadpoor, 2011) as well as the perceived richness of information resources (Sepahvand and Arefnejad, 2013;Bahmani, 2014; Meysaminejad,2015and Hosseini, 2015).The features of information and communication technology revolution affect the above-mentioned conditions and challenges regarding the use of information.The pervasive influence of information and communication technologies, on the one hand, led to a volumetric increase of information and consequently avarietyof information carriers were followed;and on the other hand, in the field of librariesit was synced with acceptance resistance and insistence on traditional structuresthat one of its concrete results can be observed in lesser referral of people to libraries which needs study.Regarding the small amount of information resourcesusage and information services as well as the cost of the resources and services, it is required to investigate the usage behavior and factors affecting the attitude of people to use the specific services or resources.In the field of communication sciences and media,which has inherent affinity with information field, the media

*richness theory is used to justify the usage of users of various information channels and the richness of information is as a part of media richness theory that has been presented by Daft and Lengel at 1986.The information richness theory suggests that media with special features are more effective in sending complex messages (Daft and Lengel, 1986; Daft, Lengel&Treino, 1987; Trevino, Lengel& Daft, 1987).Communication channels that **a**) allow quick feedback; **b**) make the use of multiple information cues available (for example, verbal and non-verbal); **c**) make the use of natural language available; and **d**) are able to display the focus of personal importance (Trevino et al.,1987), are particularly of greater richness.Theories related to information richness imply that channels of communication mightbe arranged based on a combination of four features on a continuum "of the richer to poorer spectrum"(Daft and Lengel, 1986) in which face to face communication is considered as the richest channel and non-personal correspondence such as memos or installed bulletin boards isthe weakest one.Steuer (1995) suggested that audio-visual media such as television must have a stronger impact on the presence of mind than print media (text) because they have more transparency (the ability of a technology to create a richer interactive environment).In his view, a richer channel shall keep aspects of the resource and message environment closer to reality using the recipient ofthe executive instruction.Skalski and Tamborini (2005) also suggest that understanding the presence of mind ofa message resourcemakes the resource cuesmore highlighted in mind and leads to an increase in judgments derived from the resource that affectsdesires.Tamborini (2000) believes the media that are of high*

transparency should induce more envelopment as they have the ability to involve more senses in user.

With regard to evidences from studies related to information richness and media richness, it seems that richness of information resources can be one of the effective factors inusers'attitudetouseresources and information services.Hence,borrowing from media richness theory and studies related to the information richness, features such as quick feedback ability, being up to dated, interactivity, transparency, accessibility, and having high quality as the dimensions of information richness of information resources investigated in this study. Therefore, the main problem of the present study is whether there exists a relationship between the perceived richness of information resources and attitude towards their use among graduate students of Ahvazuniversity students. Then, the following questions and hypotheses developed for this purpose:

• How is the attitude of students towardsthe use of information resources of university libraries?

• How is the attitude of students towards the use of print and electronic information resources with regard to the dimensions of information richness?

• Is there a relationship between perceived information richness of resources and users'attitudes toward using them?

• Is there a significant difference between the features of the perceived richness of information resources?

Literature review

Media richness theory and consequently the richness of the information are considerable from two dimensions. First, theymonitor the value of use of an information channel regarding itscontent features;and second, they concern the active role of the user in using an informationchannel, that the selection of information source by the user can be influenced by his perception of the special features of the source of information. By looking at the previous research, it becomes clear that the richness of information as a broader issuehas not been studied in connection with the operation of library users and some of the features have been considered in similar studies. However, the structural features of media can affect users' ability to use its information (Mithas, Ramasubbu, Krishnan &Fornell, 2006); And probably due to this reason in literature of communication, media richness theoryhas been used generally in connection with the fact that what sources of information people choose and use (Dennis and Kinney, 1998; Kahai& Cooper, 2003).Major studies in the field of libraries have been focused on the features of information resources (particularly in terms of accessibility) or user behavior in the use of specific resources.

In the field of librarystudies, the major emphasis has been on the study of user'ssatisfaction of the services and informationresources at libraries, user motivation in going to libraries and using their sources and services, and the relationship between the quality of library services and users' trust. In these studieslibrarian interaction with users, training to use library resources, access to resources, updating of information, librariansability and desire to answer users questions,libraries rules and regulations (MalekiNojehdehi, 1994), the possibility of personalized search in the

database, free services and the possibility of simultaneous searching of multiple compact discs (Shahsavari, 2001);collection, human resources, management, public services, physical environment, and peripheral applications (Iroun, 2005); obtaining needed information and related to academic courses, identifying special resources, specialized and professional information updates (Arablu, Norouzi&Maghsoudi , 2012)were as the sources of satisfaction to the library's patrons.While the amenities (MalekiNojehdehi, 1994); lack of awareness of the existence of such services in thelibrary and the lack of awareness of resources types (Shahsavari, 2001); lack of rich library collection and a mismatch between resources and needs of the users (Gilasi, 2007); lack of updated reference-books, the low number of Persian books copies and also the insufficient number of computers in the library (Ghorbani, Kamali&Momeni, 2009);and lack of resources, lack of updated resources, lack of knowledgeabout the existence of resources, and limitation of working hours in the library (Kashmiripour, 2010), were also identified as the welcoming barriers to library services.Other studies have looked beyond description to discover the causes. For example, the findings of Moradmand (2006) have shown that there exists a significant relationship between the behavior and characteristics of librarian and library users' satisfactionas well as between library services to patrons and their satisfaction with the library.According to the study ofGilasi (2007), the most important channels used for library users if new information is neededhave been internet and electronic sources (CD-disc).The results of the study of Fahimnia and Mantegh (2013) also represent that the quality of services, satisfaction, evaluation of the effectiveness of services and expectations of the services have a significant relationship with ultimate confidence.

Also, Lin (2012), by reviewing the study of media richness theory in terms of impact on people's perceptions and behaviors,found that media richness theory plays an important role in the introduction of mechanical mutual interaction ofindividuals (especially the richness and accuracy of the content).

Motiang, Wallis and Karodia (2014), by defining user satisfaction as an evaluation of the production and facilities of libraries, evaluated the satisfaction of users of libraries services at the University of Limpopo and MedunsaCollege(Medical University of South Africa) and found that this satisfaction is generated when users make optimal use of library services and information resources.According toMagesa, Kisangiri&Ko (2014), creating market information system with the approach ofaccess to information and transparency of information is among the needs and basic requirements and a factor promotingmarket efficiency.As a result, it is obvious thatthe internet access in the library is one of the most important reasons of users for using the library.

By reviewing the past researches, it can be said that today one of the main challenges for libraries is the low turnout ofpatrons whichhas become complicatedand is a serious threat to the life of these great cultural collections. In several studies which have been conducted from various angles, disparate aspects such as the accessibility, usability, reliability, up datedness, users'interest, motivation, quality of information, lack of knowledge about the existence of source/information, lack of information skills and so on,have been investigated as effectivefactors. Theusability of library resources is rooted in the spirit of Ranganathan's five laws of library science which their themes, on the one hand, refer to the use of information resources and attention to the needs and

requirements of users; and on the other hand, dynamism and development of the library.In other words, weakness and inability of the library collection leads tothe low turnout of users and consequently jeopardizes the dynamism and development of the library.Based onAguoluand Aguolu(2002) perhaps resources are available in the library and are diagnosed bibliographically with the thematic need of the related user, but the user is not able to receive it;because they want to use those information resources that access to them requires minimal effort. Books usabilityis a useful indicator of a library collection (Abdulsalami, 2013) and requires libraries to employa proactive approach to motivate users to use their resources and services. This entailspaying attention to the richness of resources, providing access to the Internet and providing services such as information literacy program (Parvathamma& Reddy, 2009).Inability to useinformation resourcesof the academic libraries hascaused teachers and students not to use library services (Dike, 1992)and thishas undermined, to some extent,the role of the library as one of the most important information position. People's referral to the library and using its resources is located along their informationbehavior. Therefore, information-seeking behavior can be considered as the voluntary activity of user to find and use informationand a response to his information needwhich depends on the nature of need, the accessibility of resources, and information-seeking behaviors. In Kuhlthau'sopinion, (1991) user, in information seeking, is confrontedwith five types of inaccessibility including conceptual, linguistic, critical, bibliographic and physical inaccessibility.These requirements will be followed by the minimal use of library services. Consequently, it can be saidthat accessibility to information is another considerable issue.

Accessibilityis a prerequisite to use information (Neelamegham, 1981); and natural and artificial obstacles related to free access to information is an issue thatmakesuse of library difficult and damages the reputation of the library. Thus, library, to play its appropriate role, requires that its resources are used effectively and that accessibility to relevant sources of information is necessary (Okiy, 2000)and it is emphasized that increased use and importance of information resources are influenced by its accessibility (Qamar, 2002 cited in: Nwachukwu, Abdulsalami, & Paulina, 2014).From the perspective of Garba (2009 cited in:Nwachukwu, et al., 2014), the accessibility of information resources is based on the ability to absorb informationfrom a source that can dramatically make it useable, and information technology has helped the accessibility of information resources by reducing the barriers of time and costs.This issue has also been confirmed in the study ofSahin, Balta and Ercan (2010), where students' use of online resources in developing class project is influenced by their perceptions of reliability, accessibility, update and their interest in these resources.

Moreover, Iyoro (2004), with the study of accessibility to information contribution in the learning process, insists that users use library when they feel the information is readily and easily accessible.Zmud, Lind and Young (1990) believe the access/quality theory is based on the premise that information should contain features such as "relevance, accuracy, reliability and appropriateness" which are classified as qualitative characteristics of an information system. In addition, Culnan (1984) defined comfort, reliability, ease of use, validity, use technique (programminglanguage), and the experience of using the system as indicators of accessibility.For

this reason, accessibility to information in most previous studies has been prominently raised.De Alwis and Higgins (2001) believe thatmanagers' failure to use all resources of information is due to ignorance, lack of information skills, and lack of access to new informationchannels.In another study,Dadzie (2007),with stating features such as accessibility to resources that might be geographically or financially limited, access to more recent information, and the possibility of linking with more related resources as an advantage of electronic information resources, introduces them as being more valuable in comparison with common information resources in libraries; Also, this has been clearly expressed in the study of Peterson, Rowat, Kriciter& Mandel (2004).According to them, the speed of findingresponses to clinical questions was the reason of medical students to use electronic information resources.Furthermore, findings have shown that the accessibility of information source compared to quality of information during making decision on the recovery and use of it is more important (Kwasitsu, 2004;Yitzhaki and Hammershlag, 2004).

Along with usability and accessibility as major challenges, other features have also been investigated. According to Fritch and Cromwell (2001); Knight and Burn (2005) and Maglaughlinand Sonnenwald(2002) information-seekers consider the validity and reliability of information before accepting or rejecting the source.Besides, Palmer and Sandler (2003) consider theaccessibility to articles at any time via desktop computer, the user experience of the ease of searching, the ability to load and print all or part of the document, novelty of information, the speed of access and the ability to send it to others as the most important feature of electronic publications.

Methodology

The research is a practical study. Regarding the fact that the main aim of this study is the investigation of the relationship between perceived richness of information resourcesand attitude toward using them among students, a survey-analyticalmethod was used to assess the phenomena and provide scientific basis in order to identify and solve the problems.The study population includes 27500 students at various educational levels (Associate, Bachelor, Masters and PhD.) of Islamic Azad University of Ahvaz.A sample size of 380 students was selected as the sample (stratified random sampling)using the Cochran formula and the error coefficient 0.05, and data were collected using aquestionnaire.With respect to the components of the study and following 6 features of richness ofinformation resources (updating, transparency, interactivity, quick feedback, quality and accessibility) the researcher made-questionnaire was compiled; then the validity of the questionnaire was assessed and approved formally using the views of 10 specialists of communications, knowledge and information science.To assess the reliability, the questionnaire was initially distributed among a small group of the study population (n=40) and was approved using the accurate calculation of Cronbach's alpha coefficient of 0.83.

Results

Table 1: Results of t-tests, attitudes to use information resources

Variable	No.	Mean	SD	df	t-	P- value

					value	
Usage of information resources	*380*	*2.8803*	*0.775*	*379*	*-3.011*	*0.003*

According to the results ofTable 1 the probability value obtained in t-test (0.003) is lower than the level of significance (0.05) and t- value (-3.011) is greater than the critical value.It can be claimed that there exists a significant difference between the actual mean of attitude to use information resources (2.8803) and the theoreticalmean (3).But the negative value of t shows that students do not have a great attitude to use information resources of the libraries.In other words, the attitude to use information resources is located on the slope of low and very low levels.

Table 2: Results of the t-test, students' attitudes to use information resources with regard to the dimensions of richness of information resources

Variable	*No.*	*Mean*	*SD*	*df*	*t-value*	*P-value*
richness of information resources	*380*	*3.1287*	*0.6310*	*379*	*96.651*	*0.000*
attitudes to use information resources due to their up datedness	*380*	*3.2281*	*0.8557*	*379*	*5.195*	*0.000*
attitudes to use information	*380*	*3.1325*	*0.8216*	*379*	*3.142*	*0.002*

resources due to their transparency						
attitudes to use information resources due to their interactivity	380	2.9746	0.8630	379	-0.575	0.566
attitudes to use information resources due to their quick feedback ability	380	3.1325	0.7582	379	3.405	0.001
attitudes to use information resources due to their quality	380	3.1342	0.9126	379	2.867	0.004
attitudes to use information resources due to their accessibility	380	3.1702	0.8223	379	4.034	0.000

Results of Table 2 indicate thatamong the dimensions of information resourcesrichness, except the interactive featureof the information sources, other features are in good condition.In terms of the up datedness feature of resources, the probability value obtained in the t-test (0.000) is lower than the significance level (0.05) and the value of t (5.195) is greater than the critical value. Therefore, it can be claimed thatthere is a significant difference between the actual mean of attitude to use information resources with regard to the up datedness mean (3.2281) and the theoreticalmean

(3).As a result, we can conclude that the attitude of students to use information resources with regard to updatednessisin good condition (high or very high) and updating the resourcescan impact on their use.

With respect to transparency feature of resources, the probability value obtained in the t-test (0.002) is lower than the level of significance (0.05) and t-value (3.142) is greater than the critical value.It can be argued that there exists a significant difference between the actual mean of attitude to use information resources with regard to the transparency mean (3.1325) and the theoreticalmean (3).Therefore,attitude of students to use information resources of librarieswith regard to transparency feature is in good condition (high or very high).

In connection with the interactive feature of the resources regarding the fact that theprobability value obtained in the t-test (0.566) is higher than the level of significance (0.05) and the t-value (-0.575) is less than the critical value, It can be said that there is a significant difference between the actual mean of the attitude to use information resources regarding the interactivitymean (2.9746) and the theoreticalmean (3).In other words, the attitude of students to use information resources of libraries concerning the interactive mode is close to average.

In terms of quick feedback feature, since the probability value obtained in the t-test (0.001) is less than the level of significance (0.05) and the value of t (3.405) is greater than the critical value,it can be claimed that there exists a significant difference between the actual mean of the attitude towards using information resources with regard to the quick feedback mean (3.1325) and the

theoretical mean (3). Therefore, we can say that the attitude of students to use libraries resources concerning the quick feedback feature is in good condition (high or very high).

Regarding the quality of resources, the probability value obtained in the t-test (0.004) is lower than the level of significance (0.05) and the value of t (2.867) is greater than the critical value.It can be argued thatthere is a significant difference between the actual mean of the attitude towards using information resources with regard to the quality feature (3.1342) and thetheoreticalmean (3).So it can be concluded that the attitude of students to use libraries information resources of Islamic Azad University of Ahvaz with regard to information quality indicator isclose to average.

With respect to the accessibility of resources the probability value obtained in the t-test (0.000) is lower than the level of significance (0.05) and the value of t (4.034) is greater than the critical value.It can be argued that there is a significant difference between the actual mean of attitude to use information resources with regard to the accessibility mean (3.1702) and the theoreticalmean (3).So it can be concluded that the attitude of students to use libraries with regard to the accessibility feature is in good condition (high or very high).

Table 3: Results of Pearson correlation test for assessing the relationship between the dimensions of richness of information resourcesand students' attitudes to use them

independent variable *(the dimensions of richness of information*	*The dependent variable* *(Attitude to use information sources)*

resources)	R	Sig.
Richness of information resources	0.689	0.000
Up datedness of informationresources	0.608	0.000
Transparency of information resources	0.448	0.000
Interactivity of information resources	0.573	0.000
Quick feedback ability of information resources	0.611	0.000
Quality of information resources	0.501	0.000
Accessibility of information resources	0.372	0.000

The results set forth in Table 3 demonstrate that there is a positive and significant correlation (r=0.689) between the perceived richness of information resources and the attitude to use resources.In addition, comparison of the correlation relationship at the level of subscalesof information resourcesrichnessshows that the relationship between all the features and attitude to use resources is positive and significant.This relationship between the featuresof "quick feedback of information resources"and the attitude to use resources has the highest intensity with the correlation coefficient of (r=0.611) and regarding the accessibility of informationresourceshas the lowest intensity with the correlation coefficients of (r=0.372).The correlation coefficient between the up datedness of information sources and attitude to use is strong with the correlation coefficient of (r=0.608) that shows updated sources of information is positive and consistent with users' attitudestowards informationresources of the library. Interactivity, quality and transparencyof the

information resources are also in line with users' attitude to use information resources and are influential in it.

Table 4: Friedman test related to the richness of various information resources

Variable Variety of resources	Rank of Mean	Rank	No.	Chi square	df	P- value
Circulatingand reference books	1.61	3	380			
Printed periodicals, journals and newspapers	2.04	2	380	113.230	2	0.000
Electronic information resources	2.35	1	380			

According to the results set forth in Table 4, since the obtained probability value (0.000) is less than significance level 0.5. It can be said that the features of information richness among a variety of resources are different based on students' view; and electronic information resources (mean=2.35) have higher richness compared to any other resources.Printed periodicals, journals and newspapers are the next priorities. Circulating and reference books have less richness than other resources.The dimensions of information richness for each of the information resources group werecalculated that are shown on tables (5), (6) and (7).

Table 5: Friedman test of circulating and reference books in terms of information resources'

richness

Variable Circulating and reference books	Rank of Mean	Rank	No.	Chi square	df	P- value
Up datedness of information resources	3.61	3				
Transparency of information resources	3.64	2				
Interactivity of information resources	2.90	5	380	72.998	5	0.000
Quick feedback ability of information resources	3.64	2				
Quality of information resources	3.76	1				
Accessibility of information resources	3.45	4				

The results set forth in Table 5 show that,based on the students' perspectives, circulating and reference books do not equally have thefeatures of information resources richness. Circulating and reference books have a fairly good level in terms of features of quality (mean=3.76), transparency (mean=3.64), and quick feedback (Mean=3.64) and with respect to other featureslike up datedness,accessibility, and interactivity are at lower level.

Table 6: Friedman test of printed periodicals, journals and newspapers in terms of information resources' richness

Variables Printed periodicals, journals and newspapers	Rank of Mean	Rank	No.	Chi square	df	P-value
Up datedness of informationresources	3.69	1				
Transparency of information resources	3.50	4				
Interactivity of information resources	3.27	6				
Quick feedback ability of information resources	3.36	5	380	20.302	5	0.001
Quality of information resources	3.62	2				
Accessibility of information resources	3.57	3				

Results in Table 6 show that based on students' perspective printed periodicals, journals and newspapers do not equally have the features of information resources richness.Periodicals contain more features ofup datedness (mean=3.69), quality (mean=3.62), and accessibility (mean=3.57) than transparency, quick feedback, and interactivity.

Table 7: Friedman test of electronic information resources in terms of information resources' richness

Variable Electronic information resources	Rank of Mean	Rank	No.	Chi square	df	P-value
Up datedness of information resources	3.76	1				
Transparency of information resources	3.39	5				
Interactivity of information resources	3.56	3				
Quick feedback ability of information resources	3.42	4	380	28/194	5	0/000
Quality of information resources	3.23	6				
Accessibility of information resources	3.64	2				

Results in Table 7 indicate that based on students' perspective electronic information resources do not equally have the features of information resources richness. Information resources contain more features of up datedness (mean=3.76), accessibility (mean=3.64), and interactivity(mean=3.56) than the quick feedback, transparency and quality.

Discussion and conclusion:

People's referral to information resources and using them is under the influence of their perceived information need. In other words, the information need is a stimulus for people to escape from unstable condition they feel and it disappears through getting information.In addition to information need, that could have the feature of primary stimulus for seeking information, various information channels and carriers represent information to people with so much diversity.Thus, library and its information resources areone of the options for people to meet information needs. It is clear that information need of users of academic libraries is mainly rooted in the educational and research functions of the parent organization (university)and with an awareness of this issue,academic library provides information resources. In this study,the academic library information resources were specified in three general categories circulating and reference books, printed periodicals, journals and newspapers, and electronic information resources (web resources and databases) and the usagerate of eachas well as thefrequency of referring to them were examined.

In terms of students' use of academic libraries information resources, the results showed that the condition is not desirable.In other words, the usage rate of information resources is located on the slopes of low and very low levels. Compared with previous studies, it contrasts with some of the findings of the Shahsavari (2001), Iroun (2005), and Motianget al. (2014) and is in line only with a part of the findings of Kashmiripour (2010).Because libraries are one of the costly sectors and subsections of universities and for this purpose are mainly located under the magnification of

organization managers, some of the reasons for the poor condition of using information resources can be stated as follow:

- *Inefficiency and inability of library resources (in terms of quantity, quality, update, accuracy, precision, accessibility and usability) to provide user's information needs.*

- *Lack of appropriate study space in the library.Because part of the users' needs would be diminished by visiting or using on-site resources,lack of facilities such as reading rooms for users with this kind of information needis difficult and restrictive.*

- *Lack of awareness of users from the existence of new information resources especially in relation to electronic information resources and free and shared databases.*

- *The inability of libraryto introduce resources, services, and capabilities to users. This particularly becomes much more important when todayusersare facing many information dissemination channels that could potentially be the library and its resources replacement forthem.*

- *The inability of users to use information resources especially electronic information resources.*

Features of information resources were investigated following the media richness and information richness theory in six dimensions of up datedness, transparency, interactivity, quick feedback, quality and accessibility. Being updatedand novelty of information resources can be considered as one of the important featuresin the use of the source.As regards the information need of people is

affected by different factors such as situation and condition, occupation, cognitive level, etc.and these conditions and factors are dynamic and variable over time and, a packet of information cannot have the ability to meet the need of individualsat any time and place.Therefore, libraries and information centers perform the process of collection management and provisionto revitalizethe collection. Up datedness of information is measured byexamining the production date of information, the latest updating date, the date of the next update, and update time interval.Information up datednessis an essential factor inthe evaluation of information resources because non-updated information may be useless, incorrect or misleading. Making a judgment aboutthe novelty of information has two aspects: one is to know theproduction date of document and second is to inspectthe latest revisiondate and see when it is edited.As we know information has value-added, the more updated, and timely this information is given to users, the more valuable it is.And has a significant effect on the promotion of the scientific and research purposes, production of scientific resources, and students' educational development.It can be said that up datedness of existing information sources in the library enhances the users' tendency to use libraries' information resources. In this study, the use of resources with regard to people's perception of its update and noveltywas investigated and results indicated that students' use of information resources with regard to the update feature is in a favorable condition.The perceived desirability of individuals indicates the quality of provision and collection management, identification of the information need of the use community, and the provision ofvarious information resources. Moreover, with respect to thiscomponent, library can increase the use of

resources to improve client satisfaction.The findings of this study confirm some parts of the studies of Moradmand (2006), Gilasi (2007), Arablu et al.(2012) and are not in line with thefindingsofthe studies ofMalekiNojedehi (1994), Ghorbani et al. (2009), and Kashmiripour (2010).

In terms of transparency,it can be said that information resources containing this feature are able to convey a clear understanding of the embedded concepts and meanings.Steuer(2016) stresses that audio-visual media such as television, because of having more transparency features, shouldhave a stronger impact on the presence of mind than the printed media (written).Transparency and openness in presenting information along with completeness of the information are important features that help the user ofinformation resource to save time and not to make an extra effort to find information resources.On the one hand, this is consistent withthe saturation principle of Jeanne and Fine octal principles(Quotedfrom Davarpanah, 2007) - that is a person who is in need of information if concluded thatby receiving certain quality/quantity of information his need has been removed does not make an extra effort-and on the other hand, is linked by the fourth principle of librarianship (Ranganathan). Another issue in transparency of information is the ability of the source to help people to be aware of the existence of information and specific information resources and understandingtheinformation.In the present study explicitnessin presenting information and assistance to understand information as the featuresof transparency of rich information source have been evaluated. The results showed that students' use of information resources in academiclibraries with regard to transparency is in a desirable condition.The findings

of this study are consistent with the results of the studies of Lin (2012), and Magsa et al. (2014). The reason of the desirability of this componentcan be expressed in the following cases.

1. *The recognition oflibrarians and policy makers at university libraries from information needsof the use;*

2. *The existence of a good relationship between librarypatrons and librarians that led to their mutual understanding;*

3. *The recognitionof the ability oflibrary patrons via librarians;*

4. *Purposeful acquisition of information based on the needs of users.*

Interactivity was another feature that was investigated. Information resource isa source that transfers information in a way that is attractive to usersand thus causes the user to be engagedwith more senses in the process of receiving information. The engagement of more senses in absorption ofinformation, on the one hand,provides a better condition for the understanding of the individual; and on the other hand makes it possible to correct errors or remove ambiguities.The results indicated that students' use of information resources in academic libraries with regard to the interactivity feature is in an intermediate status. In this respect, it is consistent with the findings of Arablu et al. (2012).The reason for the users' understanding of the interactive feature of information resources in academic librariesis these libraries' reliance on book and printedinformation resources. Book,despite the richnessof content, is a passive carrierand in the best caseonly provides information in the form of text and image. In other words, book is ineligible

to engage several senses at the same time in the process of communication and transfer of information.Thus, managers and policy makers of libraryresources provision should benefit more from electronic information resources that are capable of transmitting information in the form ofmultimedia.

In connection with the feedback feature, receiving information can never be recognized as the end point of a process of transferring the information. Werner Gitt, with the criticism of the mathematical theory of communication byShannon and Weaver, defined information as a coded and symbolically presented message which conveys the expected action and the intended purposeand there exists only when all five levels (statistics, syntactic, semantic, action and purpose) are observed hierarchically in a system (Baldwin, 2005).Due to this, the reaction of the receiver of a message might not conform tothe intention of message sender. In other words, the level of action depends on recipient understanding and the behavior that he demonstrates because of receiving information while the level of intention represents the goal and initial expectation due to which the sender has shaped and transmitted the message. However, in connection with a source of information as the vehicle for the transmission of information, the question is what causes the sender of a message to make surewhether his goal has been achieved. The answer lies in the existence of feedback in the system.So, feedback feature in information resource ensures the correct transmission of information and similarly it is a mechanism that the receiver,with the help of the resource, gets close to the real understanding. Therefore, itcan be said that each source of information, which provides the mechanism of feedback,may be of most interest and use. According

to the results, students' use of information resources in academic libraries with regard to the quick feedback is desirable.These findings are consistent with findings of Arablu et al. (2012). Perhaps the attitude of students to use electronic information resources is one of the reasons for the perceived desirability.

In terms of the quality of information resources, it can be said that high-quality sources are those, which are updated, havetransparency and accuracy "reliability", havequick feedback, areinteractive and access to them is easily possible. In simple terms, the quality of information can be considered as a state or feature of it, whichconvinces the user in the use of a resource to meet his need.Anyone with information need, regarding the disparity or contradiction that they understand in their state of knowledge, uses some information containing relevance, accuracy, precision, reliability, validity, update, usability, completeness, impeccability and sufficiency that this amountmay have a different degree for different people and even for one person in different circumstances.Results of different studies have shown that thebehavior of managers' use of information resources is influenced by their perception of accessibility, quality (Babalhavaeji and Hosseini, 2011; Babalhavaeji and Farhadpoor, 2011) as well as the perceived richness of information and information resources (Sepahvand and Arefnezhad, 2013, Bahmani, 2014, Meysaminejad,2015 and Hosseini, 2014).In this study, the dependability source of information was evaluated as indicators of quality. In this studythe reliability of information resource as a feature of quality was in good condition. In this respect, it is consistent with the findings of Arablu et al. (2012) and Fahimnia and Mantegh (2013).The desirability of this feature is attributed to the type of

libraries' information resources that are mainly book sources and electronic information resources available at universities are mainly validdatabases on which judgment and editing are done.

Accessibility is one of the most widely used concepts in studies of recent decades and mental challenges of the managers of intelligence agencies and researchers. Academic libraries provide a variety of information resources electronically or in a printed format and present them to patrons. The feature of accessibility to a resource means the ability to use information resource. Accessibility is a feature that part of it is rooted in the inherent capabilities of the source and other part of it is the result of processes conducted on the information resource in the library.For example, due to technological advances and the development of information and communication infrastructures, electronic information resources are more accessible compared to traditional and printed resources and using them does not usually entail observing the principle of same timeand place; while using book is limited to observe time and spaceconditions. The results of the investigation of this feature showed that students' use of information resources in academic libraries with regard to the accessibility feature is in good condition. By comparison, the findings of this study are consistent with some parts of findings ofMalekiNojehdehi (1994), Gilasi (2007), Magesa et al. (2014), and Motianget al. (2014)whereastheycontrast with findings of Moradmand (2006). The desirability of the feature of accessibility to academic library information resources can be argued as follows.

- *Attention to the use of library web-basedsoftware and allowing access to these resources by visiting the university portal.*

- *Sharing prestigious databases such as Science Direct, Scopus, EBSCO and Wiley Inter-Science, and providing access to them based on university IP.*

- *Allowing the ability to use purchased e-books and the ability to download a copy.*

- *Allowing the ability to search and download the first 25 pages of university dissertations through the portal.*

In addition, in this study up datedness, transparency, interactivity, quality, accessibility, and the possibility of quick feedback were examined as the features of rich information resource and the result of investigating the relationship between understanding these features of source and the attitude of students to use them showed a significant positive correlation with the amount of r=0.689.Also,the comparison of the correlation relationship at the level of sub-scales of information resources richness showed that the relationship between all features and the attitude to use resources is positive and significant. What the result of testing this hypothesis implies is that updated information resources increase users' attitudes to use them.Furthermore, improving the quality, increasing transparency, and increasing interaction and attraction of information resources can also contribute to an increase in users' attitude touse information resources. Considering the fact that today one of the main concerns of library managers and policymakers of cultural sector is the diminishing number of patrons, one reason could be the ineffectiveness of existing information resources in libraries.Hence, paying attention to these features in providing

resources and strengtheningthe existing resources in terms of creating a mechanism to enrich them can contribute to the referral and greater use of library resources.

Results, with respect to the features of information richness of resources, showed that electronic information resources have a better condition. In addition, circulating and reference books regarding quality feature, printed periodicals, journals and newspapers regardingup datedness feature, and electronic information resources alsoin terms ofup datednessfeature were superior compared to other features.Therefore, this issue should be considered by policymakers and decision makers in the field of information, informing and libraries, and with regard to features of resources and their importance for users of information, endeavor to manage the collection.

References

Abdulsalami, T. L. (2013). Information accessibility and use by of dealers Nigerian bottling company PLC Kaduna plant. Advances in Applied Science Research. 4(1):16-57.

Aguolu, C. C. &Aguolu, I. E. (2002). Libraries and information management in Nigeria: seminal essays on themes and problems. Maiduguri, Nigeria: Ed-Lin form Services.

Arablu, H., Norouzi, J. &Maghsoudi, A. (2012). Investigating the satisfaction with the provision of central library services of Science and Research Branch of Islamic Azad University with a marketing approach.Journal of knowledge. 23(3): 89-99.

Babalhavaeji, F. & Farhadpoor, M. R. (2011).Environmental scanning for the collection and use of information in decision-making activities of managers of central libraries of Islamic Azad University of the Iran.Journal of Academic Librarianship and Information Science Researches.45(56): 132-152.

Babalhavaeji, F. &Hosseini, I. (2011).Environmental scanning in the collection and use of information by managers of private publishers in Tehran.Iranian Journal of Information Processing and Management. 27(1): 398-418.

Bahmani, Z. (2014). Evaluation of factors affecting environmental scanning behavior in collecting and use of information for decision making by managers of companies in 2nd Ahvaz industrial area. MA thesis [unpublished]. Advisor: M. R. Farhadpoor, [Ahvaz]: Islamic Azad University of Ahvaz, 231 pages.

Baldwin, R. (2005). Information theory and creationism.[Internet]. Talk Origins: [Cited 2016 Oct 12]. Available from: talk origins.org/faqs/information/gitt.html.

Culnan, M. J. (1984). The dimensions of accessibility to online information: implications for implementing office information systems.ACM Transactions on Information Systems. 2(2): DOI: 141–150. DOI:10.1145/521.523.

Dadzie, P. S. (2005). Electronic Resources: Access and usage at Ashesi University College Campus – wide Information Systems.[Internet]. [Cited 2015 Feb 23]; 22(5). Available from: http//www.emeraldinsight.com.

Daft R. L.,& Lengel R. H. (1986). Organizational information requirements, media richness, and structural design.Management Science. 32(5): 554-571.

Daft R. L., Lengel R. H. & Trevino LK. (1987). Message equivocality, media selection, and manager performance: Implications for information systems. MIS Quarterly. 11(3): 355-366.

Davarpanah, M. R. (2007). Scientific communication: Information need and information seeking behavior.Mashhad: Dabizesh.

De Alwis, S. M. & Higgins, S. E. (2001).Information as a tool for management decision making: a case study of Singapore.Information Research: An International Electronic Journal.[Internet]. [Cited 2015 Jul 17]; 7(1): 114. Available from: http://InformationR.net/ir/7-1/paper114.html.

Dennis, A. R. & Kinney, S. T. (1998).Testing media richness theory in the new media: The effects of cues, feedback, and task equivocality.Information Systems Research. 9(3): 256–74.

Dike, A. (1992).Scarcity of tertiary books in Nigeria: A threat to academic excellence and suggestions for action.Journal of Librarianship and Information Science. 24(2):79-85.

Fahimnia, F. & Mantegh, H. (2013).Investigating the role of quality of services provided by academic libraries in increasing students' confidence to it: The case of central library and documentation center of Tehran University.Journal of Academic Librarianship and Information Science Researches. 47(2):117-137.

Fritch, J. W. & Cromwell, R. L. (2001).Evaluating internet resources: Identity, affiliation and cognitive authority in a networked world.Journal of the American Society for Information science and Technology.52(6): 499–507.

Ghorbani, R., Kamali, Sh., &Momeni, M. (2009).Investigation and students satisfaction of Central Library of Semnan University of Medical Sciences.Knowledge Quarterly. 2(7): 88.

Gilasi, R. (2007). Investigating engineers' information seeking behaviors at National Iranian Drilling Company management services. MA thesis [unpublished]. [Ahvaz]: Islamic Azad University, Science and Research Branch of Ahvaz.

Hosseini, S. (2015).The study of relationship between characteristics of information resources and their use in environmental scanning by Sama vocational school managers of Iran. MA thesis [unpublished]. Advisor: M. R. Farhadpoor,[Ahvaz]: Islamic Azad University of Ahvaz, 148 pages.

Iroun, A. (2005). Satisfaction of Arab users of public libraries of Dasht e Azadegan city.MA thesis. [Ahvaz]. Chamran University.128 pages.

Motiang, I. P., Wallis, M., &Karodia, A. M. (2114). Library services at the university of Limpopo, Medunsa campus (Medical University of Southern Africa). Arabian Journal of Business and Management Review (Oman Chapter).3 (11): 41-58.

Iyoro, A. O. (2004). Serial availability, accessibility and utilization: Perceptions of in-training information professionals in a Nigerian university.The Nigerian Library Link. 11(2): 66-71.

Kahai, S. S., & Cooper, R. B. (2003).Exploring the core concepts of media richness theory: The impact of cue multiplicity and feedback immediacy on decision quality.Journal of Management Information Systems. 20(1):263–299.

Kashmiripour, S. (2010).Investigating research and development of automobile industry specialists usage of the libraries. MA thesis [unpublished]. Faculty of Management and Economics.[Tehran]; Tarbiat Modarres University.

Knight, S. & Burn, J. (2005).Developing a framework for assessing information quality on the World Wide Web.Informing Science Journal [Internet]. [Cited 2015 Feb 17]. 8:159–172. Available from: http://inform.nu/Articles/Vol8/v8p159-172Knig.pdf.

Kuhlthau, C. C. (1991). Inside the search process: Information seeking from the user's perspective. Journal of the American Society for Information Science. 42(5): 361-370.

Kwasitsu, L. 2003. Information-seeking behavior of design, process, and manufacturing engineers.Library and Information Science Research. 25(4): 459–476.

Lin, J. H. (2012). The study of media richness theory influencing individual's perception and behavior. MA thesis [unpublished]. [Taipei]: National Dong Hwa University.Available from: http://handle.ncl.edu.tw/11296/ndltd/68895605798424199876.

Magesa, M. M., Kisangiri, M. &Ko, J. (2014). Agricultural market information services in developing countries: A review. Advances in Computer Science: International Journal. 3(9): 380-470.

Maglaughlin, K. L., & Sonnenwald, D. H. (2002).User perspectives on relevance criteria: A comparison among relevant, partially relevant, and not-relevant judgments.Journal of the American Society for Information Science and Technology. 53(5): 327–342.

MalekiNojehdehi. M. (1994).Investigating the views of students about library services of ShahidBeheshti University in the second semester 1994-1995. MA Thesis [unpublished]. Library and Information Science Department.[Tehran]; Tehran University.

Meysaminejad, L. (2015). investigating the factors affecting the dynamics of technological capabilities of managers of companies active in the field of information and communication. MA thesis [unpublished]. Information Management Department.Advisor: M. R. Farhadpoor, [Ahvaz]: Islamic Azad University of Ahvaz.136 pages.

Mithas, S., Ramasubbu, N., & Krishnan, M. S., &Fornell, C. (2006). Designing web sites for customer loyalty across business domains: A multilevel analysis.Journal of Management Information Systems. 23(3): 97–127.

Moradmand, A. (2006). The satisfaction of users of library services in ShahidChamran university of Ahvaz. Book Review of Generalities, Monthly.68: 187-204.

Neelamegham, A. (1981). Some issues in information transfer: A third world perspective. IFLA Journal. 7(1): 9-13.

Nwachukwu, V. N., Abdulsalami, T. L., & Paulina, F. S. (2014). Availability, accessibility and use of information resources and services among information seekers of Lafia public library in Nasarawa state.Information and Knowledge Management.4(10): 1-11.

Okiy, R. B. (2003). Information for rural development: Challenge for Nigerian rural public libraries. Library Review. 52(3): 126-131.

Palmer, J. P., & Sandler, M. (2003). What do faculty want? Library Journal.[Internet].[Cited 2016 Jun 25]; 26-28. Available from: http://eric.ed.gov/?id=EJ668297].

Parvathamma, N., & Reddy, S. (2009). Use of information resources and services in public libraries: A case of Bidar District, Karnataka State, India.Annals of library and information studies.56: 249-254.

Peterson, M. W., Rowat, J., Krciter, C., & Mandel, J. 2004. Medical students' use of information resources: Is the digital age dawning. Academic Medical. 79(1): 89-95.

Sahin, Y. G., Balta, S., &Ercan, T. (2010). The use of internet resources by university students during their course projects elicitation: A case study. The Turkish Online Journal of Educational Technology, 9(2): 234-244.

Sepahvand, R. &Arefnezhad, M. (2013).Prioritization of factors affecting the success of information systems with AHP (A case study of Industries and Mines Organization of Isfahan Province).International Journal of Applied Operational Research. 3(3): 67-77.

Shahsavari, V. (2001). Evaluation of the knowledge, use and satisfaction of graduate students in computer services of the central library of Isfahan university of Technology. MA thesis [unpublished]. [Shiraz]. Shiraz University.

Skalski, P. &Tamborini, R. (2005).Vividness, social presence, and persuasion: Reconsidering the influence of modality on attitude formation.55th annual meeting of the International Communication Association; 2005; New York.55th Annual Conference.

Steuer, J. (1995). Defining virtual reality: Dimensions determining telepresence. In F. Biocca& M. R. Levy (Eds.), Communication in the age of virtual reality (pp. 33-56). Hillsdale, New Jersey.

Tamborini, R. (2000). The experience of telepresence in violent video games. Paper presented at the 86th Annual Convention of the National Communication Association, Seattle, WA.

Trevino, L. K., Lengel, R. K. & Daft, R. L. (1987).Media symbolism, Media richness and media choice in organizations.Communication Research. 14(5): 553-574.

Yitzhaki, M., & Hammershlag, G. (2004).Accessibility and use of information sources among computer scientists and software engineers in Israel: Academy versus industry.Journal of the American Society for Information Science and Technology. 55(9): 832–42.

Zmud, R. W., Lind, M. R., & Young, F. W. (1990).An attribute space for organizational communication channels.Information Systems Research. 1(4): 440–457. DOI:10.1287/isre.1.4.440.