



BOUNCING FORCES ON ACCESSING E-RESOURCES IN PUBLIC LIBRARIES

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Abstract

The present study aimed that to know the factors inducing to access e-resources in public libraries in Erode district. Because, a public library is a significant element in the life of an educational community, an academic library is not only an essential part of an educational institution and also a society and a special library is necessary in Government departments, large business and industrial organizations. Modern society is characterized by an increasing need for specialized institutions in different fields of activity. For the routine of their day-to-day functions as well as research and consultancy work, these institutions offer access to published information. The study used 400 samples from public libraries in Erode district by means of questionnaires. The respondents were selected by using simple random sampling method from the public libraries in Erode district.

Key Words: E-resources, Educational, Academic, Society, Public.

Introduction

The libraries are ordinarily imagined as the place where print material is placed, especially, books and periodicals for readers. The visual is more like a building or a room for keeping literature. Occasionally the library is thought in terms of a collection like the Shakespeare library. A modern library, however, has been defined as a dynamic institution engaged in the acquisition and maintenance of collection both general and specialist information and knowledge, using a variety of media, with a view to serve readers by providing reference, information, and referral service. Libraries are generally recognized as essential social institutions. No community is considered complex without library. The gradual spread of education, the intensification of research activities and rapid increases in production of recorded knowledge have led to the expansion of libraries and the development of their services. The e-resources have made an incredible impact on the researchers, business people and the students. With the arrival of e-resources, a significant transmission can be seen in their approach and the way they search for information and the methods they employ for research and the learning activities. This has become probable as e-resources provide a wealth of new course material and acts as an authoritative supplement to the transitional ways of study and learning e-resources have now facilitated electronic communication, exchanges of ideas and collaboration in search globally. E-resources can be accessed for the most recent development in one's area of research at an astounding speed. It also plays an important role in distance education, medical, business, conferencing and thus transforming the academicians as facilitators providing guidance, to students and steering observations. Public libraries in the present stage due to more collaborated and inter library initiatives, not only within the region but across the globe through computer networks and internet, INFLIBNET, Worldcat, Delnet, UNESCO library networks, other international library networks and information systems paved a platform for libraries to work together not only on resource sharing but also on collection building, information processing, metadata description, and establishing public library forums on various specific library issues. There should be a target audience and an expected level of use. An analysis of frequency of using e resources is an important aspect of impact of internet on learning purpose among the public. It is important to analysis the motivating factors behind the application of internet and e resources for learning and research purpose, and also the problems, barriers and obstacles in the application of electronic research in learning and research. The present study aimed that to know the factors inducing to access e-resources in public libraries in Erode district.

Materials and Methods

Pearce (2010) examined the recent development of an e-research agenda. E-Research is considered as the most recent stage of the e-science programme, which - as developed in tandem with web 2.0 tools - has begun to be adopted by researchers. The study discussed these research infrastructures before current research investigating the relationship between academic researchers and technology is reviewed. The results of a survey undertaken in 2007 within a UK research-led university are presented and analyzed in order to answer the questions about the uptake of these technologies by academic researchers and the relationship between the two technological infrastructures. If e-research enhances research, it must include web 2.0 developments alongside e-science initiatives. Anunobi and Ezeani (2011) presented one of the ways in which digital library technology is employed in providing twenty-first century library and information services to a university community in a developing country, together with the challenges and prospects of such an application. It also provides librarians with an insight into how developing countries understand and apply digital technology to library operations and services. It also provides other libraries and related institutions with an opportunity to learn from a concrete experience.

Methodology is a way to scientifically solve the research problems. It explains the different steps that are generally adopted by the researcher in studying the research problems along with the logic behind it. This study has used both primary data and secondary data. For collecting primary data field survey technique was undertaken in the study. The researcher has collected 400 samples from public libraries in Erode district by means of questionnaires. The respondents were selected by using simple random sampling method from the public libraries in Erode district. Structural Equation modeling analysis was used for further analysis.

Results and Discussions

Structural Equation Modeling is a very general statistical modeling technique, which is widely is used in the behavioural sciences. It can be viewed as a mixture of factor analysis and regression or path analysis. The interest in SEM is often on theoretical constructs, which are represented by the latent factors. The relationships between the theoretical constructs are represented by regression or path coefficients between the factors. The structural equation model implies a structure for the covariance structure modeling. However, the model can be extended to include means of observed variable or factors in the model, which makes covariance structure modeling a less accurate name. An attempt was made to find out the factors inducing to access e-resources in public libraries of Erode district. For this purpose, the variable is categorized into nine manifest variables and is presented in Table no. 1. The research hypotheses have been defined on the basis of the factors regarding accessing e-resources in public libraries.

Hypothesis

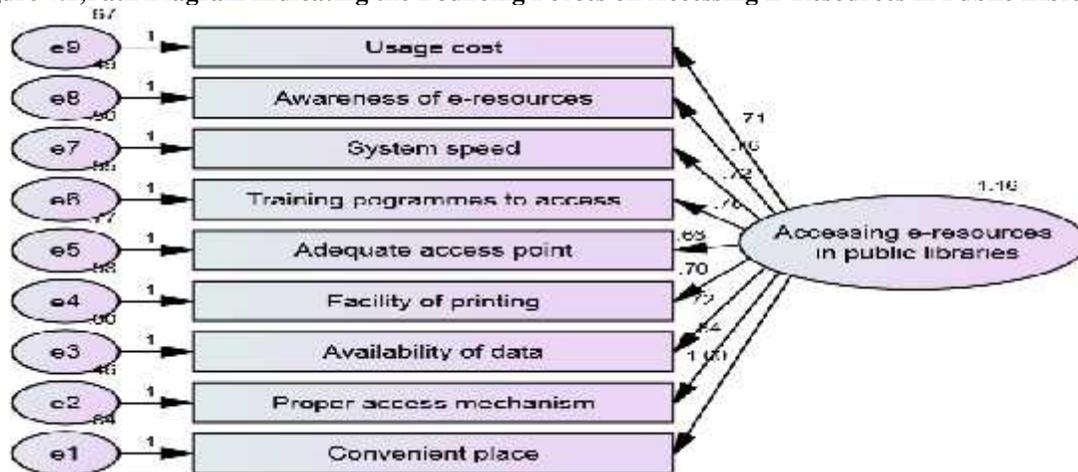
Null Hypothesis (H₀) : There is no significant relationship between manifest variables and bouncing forces on accessing e-resources in public libraries.

Alternative Hypothesis (H₁): There is a significant relationship between manifest variables and bouncing forces on accessing e-resources in public libraries.

Table 1, Manifest Variables and Latent Variable Considering For Measuring The Bouncing Forces on Accessing E-Resources In Public Libraries (Estimates)

Manifest Variables	Latent Variables
Convenient place	BOUNCING FORCES ON ACCESSING E-RESOURCES IN PUBLIC LIBRARIES
Proper access mechanism	
Availability of data	
Facility of printing	
Adequate access points	
Training programmes to access	
System speed	
Awareness of e-resources	
Usage cost	

Figure 4.1, Path Diagram Indicating the Bouncing Forces on Accessing E-Resources in Public Libraries



(Note: Chi-square = 60.901, Degrees of freedom = 27 and Probability level = .000)

In the above path diagram, the values attached to one-way arrows / directional effects are regression coefficients. The regression coefficients and correlations measure the strength of the relations between the variables. The overall regression coefficient value is 1.16 indicates substantial relationship with accessing e-resources in public libraries. The study applied model fit indices to decide whether to accept this model or to fine tune the model further. The result of model fit test is presented in Table No. 2.

Table 2, Model Fit Indices of Bouncing Forces on Accessing E-Resources in Public Libraries

S.No.	Test Factor	Calculated Value	Acceptable Value
1	GFI (Goodness-of-fit-index)	0.966	>=0.90 and above satisfactory fit 0.80 to <0.9 acceptable fit (Hair et al.2006)
2	AGFI(Adjusted goodness-of-fit-index)	0.944	
3	CFI(Comparative fit index)	0.981	
4	NFI (Normed fit index)	0.967	
5	TLI (Tucker-Lewis index)	0.975	
6	RMSEA (Root mean square error of approximation)	0.05	0.05 or less would indicate a close fit of the model

The table 2 indicates that the model fit indices of factors influencing to access e-resources in public libraries. The Goodness of fit index (GFI) score is 0.966, adjusted goodness of fit index (AGFI) score is 0.944, comparative fit index (CFI) score is 0.981, normed fit index (NFI) score is 0.967, Trucker Lewis index (TLI) score is 0.975. The roots mean Squared Error of Approximation (RMSEA) secured 0.05 that indicates that the model is a close fit with a reasonable error of approximation. From the analysis, it is inferred that all the nine variables selected for the analysis are well fit and it proves that all these variables clearly indicates their relationship with accessing e-resources in public libraries in the study area.

Table 3, Regression Weights for Bouncing Forces on Accessing E-Resources in Public Libraries

Measured Variable		Latent Variable	Estimate	S.E.	C.R.	P
Convenient place	<---	Accessing e-resources in public libraries	1.000			
Proper access mechanism	<---	Accessing e-resources in public libraries	.839	.051	16.531	Significant at 1% level
Availability of data	<---	Accessing e-resources in public libraries	.723	.050	14.432	Significant at 1% level
Facility of printing	<---	Accessing e-resources in public libraries	.704	.049	14.347	Significant at 1% level
Adequate access points	<---	Accessing e-resources in public libraries	.657	.052	12.604	Significant at 1% level
Training programmes to access	<---	Accessing e-resources in public libraries	.752	.050	15.043	Significant at 1% level
System speed	<---	Accessing e-resources in public libraries	.725	.048	15.150	Significant at 1% level
Awareness of e-resources	<---	Accessing e-resources in public libraries	.758	.049	15.588	Significant at 1% level
Usage cost	<---	Accessing e-resources in public libraries	.714	.052	13.853	Significant at 1% level

From the result shown in table 3, the analysis indicated that all the variables are having positive relationship with accessing e-resources in public libraries in the study area and significant at 1% level.

Table 4, Residual Covariances

Variable	1	2	3	4	5	6	7	8	9
1	.000								
2	.083	.000							
3	.018	-.054	.000						
4	-.030	.031	-.047	.000					
5	-.081	-.033	.074	.040	.000				
6	-.077	-.020	.038	.065	.003	.000			
7	-.004	-.007	.036	-.026	.019	.004	.000		
8	-.014	-.031	.017	.002	.013	.027	-.018	.000	
9	.063	.042	-.055	-.048	-.032	-.044	.011	.029	.000

Table 5, Sample Correlations

Variable	1	2	3	4	5	6	7	8	9
1	1.000								
2	.661	1.000							
3	.552	.525	1.000						
4	.519	.591	.462	1.000					
5	.428	.477	.507	.478	1.000				
6	.511	.573	.555	.575	.466	1.000			
7	.562	.587	.558	.501	.482	.550	1.000		
8	.569	.583	.554	.538	.489	.583	.547	1.000	
9	.561	.581	.442	.444	.405	.469	.517	.544	1.000

The above table shows the correlation between the variables such as convenient place, proper access mechanism, availability of data facility of printing, adequate access points, training programmes to access, system speed, awareness of e-resources, usage cost. From the path diagram, the measured variables with latent variable of accessing e-resources in public libraries are having positive relationship and also significant at 1 percent level. The analysis of the model, from the viewpoint showing the most influenced on the factors selected for the SEM model, suggests that the variables such as convenient place, proper access mechanism, availability of data facility of printing, adequate access points, training programmes to access, system speed, awareness of e-resources, usage cost of the measured variables are showing significant impact on the accessing e-resources in public libraries.

Suggestions and Conclusion

Dissemination of information or communicating information is mainly an important function of any library. The internet therefore creates an outstanding academic environment where the research community can perform their activities in a revived manner. Hence, it is essential apart from others the research students, business people and others can have excellent opportunities to use Internet based e-resources in public libraries for various purposes such as information access, scientific correspondence, publication of research reports, communication and interactive session with other researchers, business people and students in the field. Thus, it is important to have access and good knowledge about Internet technology apart from other IT competencies, Databases and web resources. E-resources in public libraries have gained widespread attention in the recent years allowing access to digital information from anywhere in the world. They have become broadly accepted and even preferred information sources in areas of education, science, medical, business and other fields. The fast growth of internet and the growing interest in development of digital public library related technologies and collections helped accelerate the digitalization of printed documents in the past few years. The public library should make the direct contribution to the advancement of knowledge, i.e., research at various levels and it should serve as the training ground for those who carry on investigation in government, industry, education, medical and other fields. The demands of the library will reflect the public attitudes towards their aims. The electronic resources must support the curricular and readers' needs of the public.

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