Impact of Library Collections on User Satisfaction: A case study

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Abstract

Academic library is the heart of any university which assists to conduct research programs successfully. The study explores to identify the impact of library collections on user satisfaction of the students reading at the Faculty of Management Studies and Commerce of University of Jaffna. In the present study, library collections and user satisfaction are considered as independent variables and dependent variable respectively. The study was analyzed by using both primary and secondary data with 202 students. Results revealed that 11.1 % of user satisfaction is determined by library collections according to the Regression analysis. This survey contributes to the Library, University of Jaffna to strengthen the user satisfaction through collections and makes key recommendations.

Keywords: Library Collections, User Satisfaction, University of Jaffna.

1. Introduction

University libraries have a huge collection of resources and managing them according to user satisfaction is also very important (Rupak Chakravarty and Shalini Wasa, 2012). If collection of a library is up to the mark, users will automatically be satisfied. The Library collections available in the University of Jaffna can be looked into five categories such as reference materials, lending materials, periodicals, archival materials and electronic resources. The library subscribes to 495 titles of periodicals covering a wide range of disciplines. Over 200, 000 Books are shelved in the subjects of general & pure science, agriculture, Medicine, arts & humanities, commerce & management, communication, information technology, electronics, space technologies, robotics, hand Books and other statistical data. The academic libraries are currently facing their greatest challenge due to global digital revolution (Chandrasekar and Murugathas, 2012). Users can access the libraries' resources without stepping into the library building. They can also easily access those resources online. According to Kotso (2010), libraries assist research process by collecting, preserving and making available an array of information resources relevant to their research community. An effective and efficient library system can significantly contribute to the lecturers, students and other users' development in a wider perspective.

2. Research Problem

User satisfaction by usage of library collections is an important issue in terms of survival of an academic library. The research question is what the research intends to answer, and how it will expand the academic body of knowledge. The present study is initiated to find out the relationship between collections of the Library materials and user satisfaction of students reading at the Faculty of Management Studies and Commerce, University of Jaffna.

3. Objective of Study

The main object of the study is to find out the impact of library collections on user satisfaction and sub objectives are:

- To address the association between library collections and undergraduate satisfaction
- To examine the factors which influence on user satisfaction
- To provide suggestion to improve the collection materials.

4. Review of Literature

Text books usage account for most reasons for library visits (Akobundu, 2007). In the library field, researchers usually approach user satisfaction in traditional way in which researchers emphasize the investigation of user material needs and fulfillment - what users requested and received from libraries (Fei Yu, 2006). Because, the physical objects like books and journals are the main focus of these studies. Library literature usually interprets the fulfillment of user needs by assessing whether users have obtained the materials they were seeking. Popoola (2001) observes that information availability does not mean accessibility and use, and that academic libraries should

stimulate primary demand for their products and services. An under resource library will therefore not serve its cardinal purpose and hence undermine effective academic in improving the academic facility to suit its general expectations. Applegate (1997) defines user satisfaction as a personal and emotional reaction to a library service or product. Gronroos (1990) proposes that service quality can be divided into two dimensions, namely technical quality and functional quality. Technical quality represents the outcome of the service, and functional quality relates to the service process. This study focuses on aspects of functional quality. The functional quality has a clear direct impact on technical quality and both have an impact on customer satisfaction and library productivity. Simmonds (2001) stated several factors that can influence users' satisfaction; these factors include responsiveness, competence and assurances, tangibles and resources. Sowole (1995) implored librarians to make maximum efforts to ensure that their library users derived the best possible benefits from the services they render. Materials are to be provided by libraries to support the learning, teaching and research processes and to provide assistance to users.

Thiruchelvam and Velnampy (2009) internal and external organizational elements have a relationship with employee Psychological Empowerment. Velnampy (2008), in his study on job attitude and employees performance concluded that job satisfaction contains positive influence on the performance of the employees as it enhances job involvement and the higher performance also makes people feel more satisfied and committed to the organization. The satisfaction and performance of the employee works in a cycle and are interdependent. Job satisfaction and involvement of the employee leads him to have high levels of performance. The concept of the psychological contract is at least as important in understanding and managing motivation as the technical elements of the economics and transactions aspects of incentives (Velnampy, 2006).

This paper seeks to determine the user satisfaction among undergraduates with the available library collections, as no significant study has probed the issue of student satisfaction of the Faculty of Management Studies and Commerce, University of Jaffna.

5. Data collection.

The researcher excluded the five respondents who were initially used for the validation of the instrument and questionnaire was pretested to check for its clarity and the redesigned to address the objectives of the assessment. The primary and secondary data were collected for the study. Primary data were collected through questionnaires and secondary data were collected from books, journals, magazines, research reports etc.

6. Population and Sample

The general population for this study is composed of Faculty of Management Studies and Commerce's students. This survey was conducted during February and March 2013 and data was collected on variables related to the materials available in the Main Library. Total population was seven hundred (700) students of the Faculty of Management Studies and Commerce. A sample of 248 students who were using the library facilities at the time of the survey was randomly selected according to the table for determining sample size from a given population (Krejcie and Morgan, 1970) at 95% of confidence level. The researchers gathered 220 questionnaires, yielding a response rate of 89.7 per cent. Finally, 202 (81.4 per cent) questionnaires were fully and correctly completed. All data collection procedures were designed to ensure the anonymity.

Table 1: Member of respondents by Demographic Information

Characteristics		Frequency	Percent
Year of Study	First Year	52	25.7
	Second Year	64	31.7
	Third Year	37	18.3
	Final Year	49	24.3
Gender	Male	105	52.0
	Female	97	48.0
Specialization	Accounting	55	27.2
	Finance	79	39.1
	Marketing	34	16.8
	HRM	34	16.8

It should be noted that every questionnaire was personally handed over and instructions were given to each students before completing the questionnaire. In terms of demographic findings, 52 % of respondents were males, and the remaining 48 % were females. The majority of the respondents with 31.7 % were second year students.

7. Research Methodology

The research instrument in this study is a questionnaire. Self-administered questionnaire which is composed of three sections such as section A, section B and section C was developed for the purpose of collecting the main data for the study. Section A deals with personal information such as year of study, subject specialization, sex, age, and ethnicity. Section B consists of library collections such as reference materials, lending materials, periodicals, archival materials and electronic resources. Section C consists of ten statements which indentify the satisfaction with degree of agreement.

The satisfactory level for each of the dimensions is measured using a group statements on a scale of 1 to 4, where: 4= very satisfied; 3= satisfied; 2 = somewhat satisfied, and 1= dissatisfied.

8. Mode of Analysis

In this study, various statistical methods have been employed to analyze data collected from 202 respondents from various specializations. A well known statistical package called "SPSS" (Statistical Package for Social Science) 16.0 version has been used to analyze data the researcher collected. These methods include Bivariate Analysis, Multiple Regression and Analysis of Variance (ANOVA).

9. Hypothesis and Conceptualization

Following hypothesis were taken for the present study

H_1 – Library Collections are positively associated with user satisfaction.

H_{1a}-There is a relationship between reference collections and user satisfaction.

H_{1b}- There is a relationship between lending collections and user satisfaction.

H_{1c} - There is a relationship between periodicals and user satisfaction.

H_{1d} - There is a relationship between archival materials and user satisfaction.

H_{1e}- There is a relationship between electronic resources and user satisfaction

H_2 – Library collections have an impact on user satisfaction.

The model which shows the relationship between variables is given below.   User satisfaction is considered as dependent variable where library collections are the independent variable.
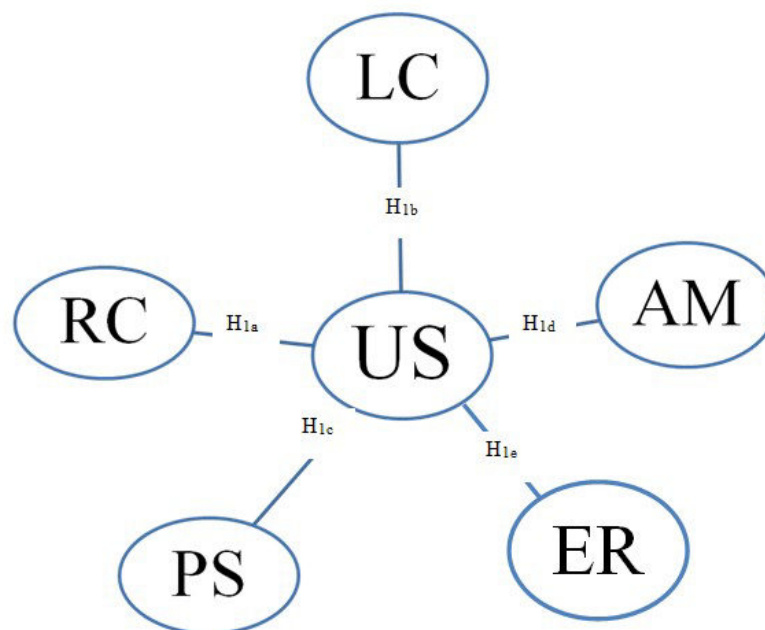

Fig. 1: Research Model

Where RC –Reference Collections, LC –Lending Collections, PS-Periodicals, AM-Archival Materials, ER-Electronic Resources and US-User Satisfaction.

10. Results and Discussion

10.1. Association between Library Collections and User Satisfaction

Correlation co-efficient has been calculated to measure the relationship between variables presented in Table 2.

Table 2: Relationship between Library Collections and User Satisfaction

		Satisfaction	Reference Collections	Lending Collections	Periodicals	Archival Materials	E-Resources	Library Collections
Satisfaction	Pearson Correlation	1						
	Sig. (2-tailed)							
Reference Collections	Pearson Correlation	.213*	1					
	Sig. (2-tailed)	.033						
Lending Collections	Pearson Correlation	.163	.390**	1				
	Sig. (2-tailed)	.105	.000					
Periodicals	Pearson Correlation	.097	.320**	.383**	1			
	Sig. (2-tailed)	.335	.001	.000				
Archival Materials	Pearson Correlation	.287**	.190	.280**	.241*	1		
	Sig. (2-tailed)	.004	.058	.005	.016			
E-Resources	Pearson Correlation	.143	.171	.329**	.202*	.383**	1	
	Sig. (2-tailed)	.156	.088	.001	.044	.000		
Library Collections	Pearson Correlation	.273**	.591**	.734**	.624**	.645**	.680**	1
	Sig. (2-tailed)	.006	.000	.000	.000	.000	.000	

* Significant at 0.05 levels   ** Significant at 0.01 levels

It is illustrated from the table 2 that the correlation values between library collections such as such as reference materials, lending materials, information sources, periodicals, archival materials and e-resources and user satisfaction are .591, .734, .624, .645 and .680 which are significant at 0.01 levels. It means library collections are positively associated with user satisfaction of the students.

10.2. Multi-Collinearity

Two major methods were utilized in order to determine the presence of multi collinearity among independent variables in this study. These methodologies involved calculation of both a Tolerance test and Variance Inflation Factor –VIF (Kleinbaum *et.al*, 1988).The results of this analysis are presented in Table 3.

Table 3: Test of Collinearity

Variable	Collinearity Statistics	
	Tolerance	VIF
Reference Collections	.810	1.235
Lending Collections	.715	1.399
Periodicals	.803	1.245
Archival Materials	.810	1.234
E-Resources	.798	1.253

a. Dependent Variable: User Satisfaction

As per the data, none of the Tolerance level is less than 0.02 and VIF value is well below 10. Therefore, independent variables used in this study do not reach multi-co linearity.

10.3. Impact of Library Collections on User Satisfaction

The multiple regression analysis is carried out in order to investigate the simultaneous impact of library collections on user satisfaction. The results revealed the following the table 4.

Table 4: Impact of Library Collections on User Satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig
1	.332[a]	.111	.063	.33440	0.048

   a. Predictors: (Constant), E-Resources, Reference Collections, Periodicals, Archival Materials, Lending Collections

According to the regression results in the Table 4, it can be observed that user satisfaction is influenced by library collections by 11.1 %. Remaining 88.9 % are determined by other factors. The R^2 value multiplied by 100 tells the percentage of observed variability in library collections can be explained by the differences in the independent variables.

The hypotheses that have been formulated are tested with the assistance of the proposed models. Hypothesis (H_1) states that library collections are positively associated with user satisfaction. The table 2 shows the correlation between library collections and user satisfaction. According to this, results indicate that library collections are positively correlated with user satisfaction. P-value is less than significant level at 5% ($r = .273^{**}$, $p=0.006<0.05$), which illustrates that there is a significant positive relationship between library collections and user satisfaction. Therefore, H1 is accepted.

The Hypothesis (H_2) indicates that library collections have an impact on user satisfaction. It can be seen that from the regression analysis which revealed that R^2 is 0.111. It means that collections of library materials have an impact on user satisfaction at the rate of 11.1 % percentage where significant level is 5 percent level. Therefore, H_2 is accepted.

Table 5: Coefficients for predicators of Satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.068	.224		9.249	.000
Reference Collections	.092	.063	.158	1.466	.146
Lending Collections	.018	.053	.039	.337	.737
Periodicals	-.017	.060	-.031	-.283	.778
Archival Materials	.124	.054	.248	2.298	.024
E-Resources	.006	.046	.014	.129	.898

a. Dependent Variable: User Satisfaction

The results of the regression analysis in table 5 show the coefficients for all five independent variables. In this model, t-values are insignificant for all variables except archival materials. Further, t-value for archival materials is significant at 0.05 levels.

11. Conclusion of the Study

The findings lead to the conclusion that user satisfaction is influenced by the collections of library materials by 11.1 %. Remaining 88.9 % are determined by other factors. This research seeks to make an original contribution to knowledge by investigating the impact of library collections on user satisfaction of the students. Further, this study also contributes to library collections in order to find out the role of the library, University of Jaffna in enhancing user satisfaction. Contributions found in this study will be beneficial to the academicians, researchers as well as students. By studying other factors which influence on user satisfaction, a model could be developed to better represent as a whole.

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