



The Study of Library User's Satisfaction on Academic Performance

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Abstract In this paper, service quality, information quality, infrastructure/space quality and library staff efficiency was investigated to evaluate the library user's satisfaction on the academic library performance between library user's satisfactions on academic library performance. This paper was applied quantitative method through disseminating questionnaires as research instrument. This study was involved undergraduates student from eight different faculties in UiTM Puncak Perdana in order to collect the data. The collected data was analyzed by using IBM Statistical Analysis Software Package (SPSS). It was analyzed that service quality is the most reliable and significant relationship between library user's satisfaction on academic library performance. The service quality was shown to be an effective way to analyzing the satisfaction among academic library users. A new theoretical framework for library user's satisfaction is proposed, based on evaluation from this study.

Keywords academic, quantitative, spss, performance, framework, library, UiTM Puncak Perdana, evaluation

Introduction

Academic library can be referring as the "third house" of the learning and education community that offering a place for learners to developing and improving the knowledge and for academic purposes. The academic libraries have to increase the continuing communication with their user society since the academic library is committed to provide outstanding library services and resources. In the other meaning, academic libraries must have to advance the library performance quality in order to continue exist in this explosive competitive atmosphere. Besides that, it is critical to assessing the library service from the viewpoint of the library users'. The library users' survey is one of the most important instruments that can be applied to assess and evaluate the quality of library services. In addition, to find out the library users' needs, it is unattainable to assess the changing of the library users' needs and expectations unless the user surveys are being carry out. According to Lancaster [1], he stated that library users' surveys are changing their prominence toward the library usage patterns, library user, and the extent to what kind of user expectations and needs that have to being met. Busha and Harter [2], in their text on the research methodological, revealed that user studies are needed to validate and develop the library usage and library services in order to study more about the way of people communicate. Nowadays, in the digital era, academic libraries are currently faced with challenges as a movement of the approach of technology innovation. The introduction of information technology has turned to an increase in rivalry amongst information contributors. In order to ensure libraries enable to tolerate with the challenges of information explosion in the digital era, they must improve the quality of their services. As for the most crucial part in assessing the service quality is customer or user satisfaction. Service oriented organizations have identified to satisfy the customer or user is most important part in appraising the library service quality.



Therefore, in order to be successfully accepted in academic libraries, it is essential to examine and evaluate what kind of library service quality which is influenced to the library users. Nowadays, the rapid growth of advanced technology has changes the academic library performance evaluation from all aspects which are includes and involving library services quality, library information/collections quality, library infrastructure/place/space quality and also user expectation. Libraries get high expectation from the library users on the library services and facilities. Library need to pay attention in develop the new idea in creating the new instructional spaces, through the use of smart technologies whereby the library users nowadays more frequently using the technology computing as medium in their daily lives. In order to prevent the library infrastructure/space/place quality is becoming deserted or obsolete in the digital age, the librarian and library must have to learning, re-learning and unlearning, and better understanding what kind of library infrastructure/space/place quality elements that are influenced and satisfied the library users' to their needs and perspectives. There are substantial differences in influencing the library users' satisfaction across the part. Library users' satisfaction is positively related with the perceived quality of library services, environments and information resources. Thus, these elements must be to evaluate and analyze for better improving in providing to influence the library users' satisfaction. The biggest academic libraries, the highest level of library users' satisfaction must be achieved. Therefore, in term of academic libraries, library services, library information resources and library environment and space are undoubtedly very much valued by the students because it is a part of their university experience as well as their learning and education activities.

Background of Study

This study is focusing on the evaluating of library user's satisfaction on the academic library performance topic. In this study, the librarian should consider and concerned about the library users perspective and needs in utilizing the library service, facilities, information, and infrastructure/space/place. This study is intended to better understanding of the library users' satisfaction and their perspectives on the library performance. This study is focus on what aspects and factors that can influence the library users' satisfaction towards library performance. This study will be conducted in Universiti Teknologi MARA, Kampus Puncak Alam, Shah Alam. Additionally, this study will involve approximately 30 respondents of undergraduates' students from eight different faculties.

This study has delimited into four factors that have influenced the library users' satisfaction as independent variables that are includes of service quality, information quality, infrastructure/space/place quality and library staff efficiency in order to generate the theoretical framework for this study. From this study, all these selected independent variables have significance relationship between the dependent variable that is namely library users' satisfaction (LUS). Theoretically, this study will construct the knowledge on evaluating of library user's satisfaction on library performance in which all factors of library user's satisfaction variables are be tested in this study. Moreover, the findings of this study can be utilized in order enhanced and develop other research in this area topic. This study gives good contribution to the following parties' especially academic institutions which is Universiti Teknologi MARA. This study is important for them because it can be as a guidance and they can better understand more on library user's needs and demands which is what are the factors of library performance concepts can be satisfied their library users in order to utilizing all the services, facilities and information provided by library. Besides that, this study is contribute to the library staff as guidance for them in understanding the library user's needs and demands towards the evaluating on the library performance. Then, they also could be more concern on the factors of good elements in developing a satisfaction in library performance among library users. Additionally, this study is not only contributes for Universiti Teknologi MARA, however, it is also give good contribution to the future researchers and other academic institutions (universities and colleges) in Malaysia because this study can provides and improves their knowledge in the information about the library user's needs and demands towards evaluating the library performance. This study is important for them as guidance to explore more on measuring the library performance. Meanwhile, they can produce new ideology and theory on the developing library performance to the library users.



Based on the first previous study, the author stated the purpose of this is to investigating the user satisfaction over presently available in library services and resources. Revising on users' satisfaction on the academic library services have been accomplished within the entire world [3-4]. Assemble the information and research needs of users through the provision of library services and facilities are the ultimate objective in academic libraries. It is essential elements to satisfy the information of users' needs. According to Adeniran [3], in order to accumulate the information of users' needs, libraries must have to establish in providing the library information resources. The advancement of information technology system and the accessibility of information in printed or electronic format showed that the rapid development of the library users' expectations is progressively more. In this literature, the authors stated that there will be something wrong with the library if the library users' are not satisfied with the services and resources provided. Nowadays, in order to satisfy the library users' needs and expectations, the libraries are at in critical phase where the users are faced with diversity of information delivery service and there is competitive in creating the latest technology. Thus, in order to endure the competitive in creating the latest technology content, the libraries must have to enhance their services that provide to their library users [5-6].

Based on the second previous study, it is clearly stated that the quality of library services, information and facilities is a major influenced to library users' satisfaction. It is tends to enhance the library usage to become more intensively. This study was focused on the aspects of the technical and functional quality where improving the productivity in providing the library services quality as well as to meet the users' satisfaction. Technical services focusing on the library services outcomes meanwhile, the functional services relates to the process of service. These both of services direct affected on the library users' satisfaction and the library performance. In this study, the authors are states that the library's environment influenced the students' perceptions where they believe that they can utilize the library services and resources. In addition, the increasing of the library information and resources usage, and the users' satisfaction happened because of the library environment modification. The service quality concept has been proposed as the alternative direction in order to assessing the library performance to lead the library users' satisfaction and perceptions.

Research Methodology

The research methodology is being employed in order to conducting this study to discover the extension solutions to the problem statement and answering the research questions that had been mentioned in the chapter one before. Research methodology is a way to find out the result of a given problem on a specific matter or problem that is also referred as research problem. Methodology it is the way of searching or solving the research problem [7]. The research methodology is designated and be used entirely in conducting this study to find out the evaluating of library user's satisfaction on library performance among the undergraduates' students from eight different faculties includes Faculty of Art and Design, Faculty of Pharmacy, Faculty of Hotel and Tourism Management, Faculty of Accountancy, Faculty of Business Management, Faculty of Education, Faculty of Health Science and Faculty of Architecture, Planning and Surveying in Universiti Teknologi MARA, Kampus Puncak Alam, Shah Alam. This chapter describes and briefly explains an overview on how this study will be accomplished. The research onion presented by *Sander et al.* [8-9] was used as a guide in designing this research methodology for this study (as shown as in Figure 1).

Overview and Justification of Research Context

This study will be presented at Universiti Teknologi MARA, Kampus Puncak Alam. The purpose of doing this study at Universiti Teknologi MARA, Kampus Puncak Alam is to make easy and save time in distributing the questionnaires process to the respondents. The purpose of conducting this study at Universiti Teknologi MARA, Kampus Puncak Alam is to examine the relationship between service quality, information/collection quality, infrastructure/place/space quality and library staff efficiency and library users' expectation. This study will involve undergraduates' students of 8 different faculties which are Faculty of Art and Design, Faculty of Pharmacy, Faculty of Hotel and Tourism Management, Faculty of Accountancy, Faculty of Business Management, Faculty of Health Science and Faculty of Architecture, Planning and Surveying in Universiti Teknologi MARA, Kampus Puncak Alam, Shah Alam. The populations of this study will involve 300



undergraduates' students of 8 different faculties. The sample size of populations that are 30 respondents are being involved due to time and cost constraint. Moreover, using big size of respondents will be lack on validity and reliability of data collection analysis. The purpose of doing this study in involving these populations in order to examine and discover the factor that related and meet to library user's satisfaction. It is also to better understanding on how to approach and what the best factors to produce are and provides the better quality in improving and developing the library performance among of library users.

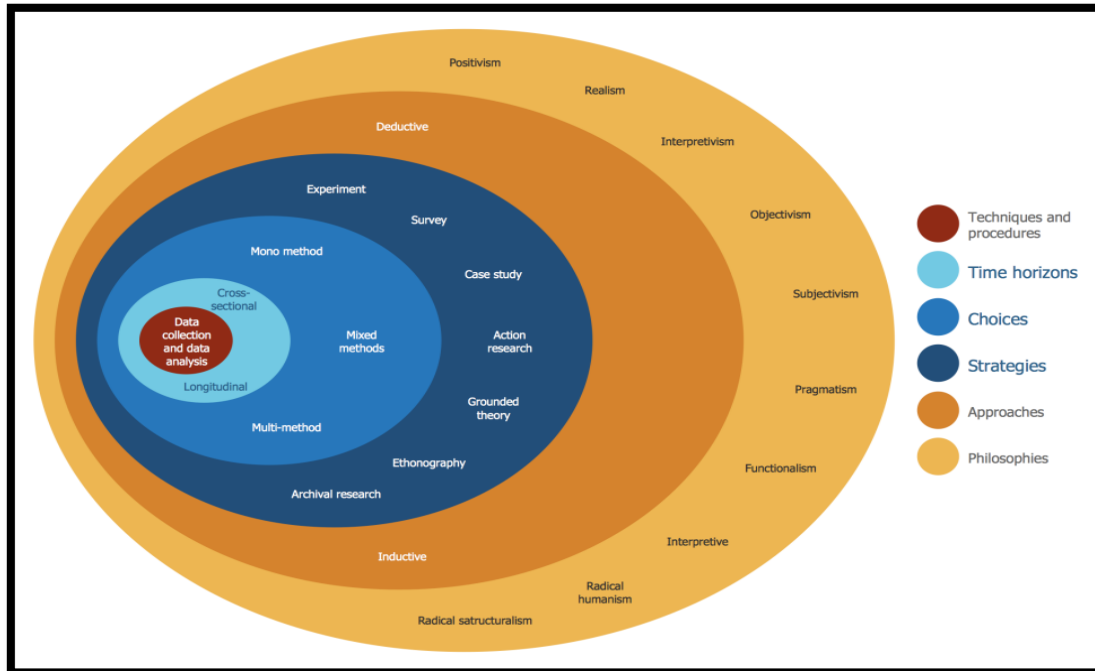


Figure 1: Research onion diagram [8-9]

Findings and Analysis

In this section, the results from the data analysis are accessible as study's finding. This part is purpose to give the details of the findings and the results of this study comprise several steps in analyzing the data includes: (1) Assessing Common Method Bias (Variance), (2) Exploratory Factor Analysis (EFA), (3) Assessing Reliability Analysis (Cronbach Alpha), (4) Descriptive Analysis, (5) Pearson Correlation Analysis and (6) Regression Analysis. This part is presented as the preliminary. The next section, this study would recognize whether the data is experiencing common method bias (variance), then, the Harman's single factor is being employed. The third part would argue on the factor analysis. The factor analysis using the data reduction method, principle component analysis and varimax rotation method that are will be presented in the related table. The fourth part will discuss on the reliability analysis test. The Cronbach Alpha will generated regarding on the variables resulting from the carried out of factor analysis. The fifth section provides a descriptive statistics analysis test for research variables and items that are being tested. In the section of six and seven, the researcher is discussing on the correlation analysis and regression by using Pearson correlation analysis method. This section is purpose find the correlation and relationship between these variable or factors. The results are presented in the related table. The last part will be summarizing the finding obtained from this research through data analysis.

Service Quality (SEQ)

The table 1 below showed that the descriptive analysis for Service Quality (SEQ) dimension. The highest mean was recorded for item SEQ5 at 2.93, provide document delivery services. Meanwhile, the lowest mean for SEQ dimension is both of items for SEQ10 (satisfied on reference services) and SEQ11 (asking on user's best interest for service quality) at 1.93. Based on the finding, it can be concluded that respondent tending to agree with the item. Then, the Standard Deviation (StDev) (σ) of the SEQ dimension is between 0.521-0.850. The highest StDev of SEQ is SEQ6 at $\sigma=0.850$, meanwhile, the lowest StDev of SEQ is SEQ5 at $\sigma=0.521$.



Table 1: Descriptive Statistics for Service Quality

	Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	
SEQ1	30	2	1	3	2.20	0.147	0.805	0.648
SEQ2	30	2	1	3	2.37	0.140	0.765	0.585
SEQ3	30	2	1	3	2.07	0.151	0.828	0.685
SEQ4	30	3	1	4	2.77	0.114	0.626	0.392
SEQ5	30	2	2	4	2.93	0.095	0.521	0.271
SEQ6	30	2	1	3	2.03	0.155	0.850	0.723
SEQ7	30	2	1	3	2.57	0.141	0.774	0.599
SEQ8	30	3	1	4	2.60	0.123	0.675	0.455
SEQ9	30	2	1	3	2.13	0.142	0.776	0.602
SEQ10	30	2	1	3	1.93	0.135	0.740	0.547
SEQ11	30	2	1	3	1.93	0.143	0.785	0.616
Valid N (listwise)	30							

Information Quality (INQ)

The table 2 below showed that the descriptive analysis for Information Quality (INQ) dimension. The highest mean was recorded for item INQ7 at 2.63, satisfied on comprehensive multimedia resources. Meanwhile, the lowest mean was recorded at 2.00 for item INQ 4, satisfied on comprehensive online databases. Based on the finding, the researcher can be concluded that respondent tending to agree with the item. Then, the Standard Deviation (StDev) (σ) of the INQ dimension is between 0.490-0.791. The highest StDev of INQ factors is INQ1 at $\sigma=0.791$, meanwhile, the lowest StDev of INQ dimension is INQ7 at $\sigma=0.490$.

Table 2: Descriptive Statistics for Information Quality

	Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	
INQ1	30	2	1	3	2.17	0.145	0.791	0.626
INQ2	30	2	1	3	2.03	0.140	0.765	0.585
INQ3	30	2	1	3	2.03	0.131	0.718	0.516
INQ4	30	2	1	3	2.00	0.127	0.695	0.483
INQ5	30	2	1	3	2.13	0.124	0.681	0.464
INQ6	30	2	1	3	2.03	0.122	0.669	0.447
INQ7	30	1	2	3	2.63	0.089	0.490	0.240
INQ8	30	2	1	3	2.13	0.142	0.776	0.602
INQ9	30	2	1	3	2.57	0.133	0.728	0.530
INQ10	30	2	1	3	2.27	0.143	0.785	0.616
INQ11	30	2	1	3	2.23	0.114	0.626	0.392
INQ12	30	2	1	3	2.07	0.135	0.740	0.547
Valid N (listwise)	30							

Library Staff Efficiency (LSE)

The table 3 below showed that the descriptive statistics analysis for Library Staff Efficiency (LSE) variables or factors. The highest mean was recorded for item LSE3 at 2.07, satisfied on the library staff gives individual



attention to users. Meanwhile, the lowest mean was recorded at 1.70 for item LSE7 which is satisfied on effectiveness of librarians in assisting and teach them on using e-databases, e-journals and e-books. Based on the finding, the researcher can be concluded that respondent tending to agree with the item. Then, the Standard Deviation (StDev) (σ) of the LSE variables or factors is between 0.743-0.907. The highest StDev of LSE variables or factors is LSE3 at $\sigma=0.907$, meanwhile, the lowest StDev of LSE dimension is LSE4 at $\sigma=0.743$.

Table 3: Descriptive Statistics for Library Staff Efficiency

	Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
LSE1	30	2	1	3	1.87	0.157	0.860	0.740
LSE2	30	2	1	3	1.83	0.145	0.791	0.626
LSE3	30	2	1	3	2.07	0.166	0.907	0.823
LSE4	30	2	1	3	2.00	0.136	0.743	0.552
LSE5	30	2	1	3	2.00	0.152	0.830	0.690
LSE6	30	2	1	3	1.80	0.139	0.761	0.579
LSE7	30	2	1	3	1.70	0.145	0.794	0.631
Valid N (listwise)	30							

Library User's Satisfaction Evaluation (USE)

The table 4 below showed that the descriptive statistics analysis for Library User's Satisfaction Evaluation (LUS) variables or factors. The highest mean was recorded for item USE2 at 2.13, satisfied with library support for learning and research needs. Meanwhile, the lowest mean was recorded at 1.93 for item USE4 which is satisfied with the library staff dependability in handling user's service problems. Based on the finding, the researcher can be concluded that respondent tending to agree with the item. Then, the Standard Deviation (StDev) (σ) of the USE variables or factors is between 0.785-0.871. The highest StDev of USE variables or factors is USE1 and USE6 at $\sigma=0.871$, meanwhile, the lowest StDev of USE dimension is USE4 at $\sigma=0.785$.

Table 4: Descriptive Statistics for Library User's Satisfaction Evaluation

	Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
USE1	30	2	1	3	2.00	0.159	0.871	0.759
USE2	30	2	1	3	2.13	0.157	0.860	0.740
USE3	30	2	1	3	2.07	0.151	0.828	0.685
USE4	30	2	1	3	1.93	0.143	0.785	0.616
USE5	30	2	1	3	2.10	0.147	0.803	0.645
USE6	30	2	1	3	2.00	0.159	0.871	0.759
USE7	30	2	1	3	2.10	0.147	0.803	0.645
Valid N (listwise)	30							

Overall Result of Correlation

The table below showed that the Service Quality (SEQ) dimension has correlated with the Information Quality (INQ) dimension where the result obtained is Sig. (2-tailed)=0.007 and Pearson Correlation=0.481**.



Meanwhile, the Library Staff Efficiency (LSE) dimension has correlated with the Library User's Satisfaction Evaluation (USE) dimension where the data indicated is Sig. (2-tailed)=0.013 and Pearson Correlation=0.450*. Based on the test result of the Pearson correlation analysis is presented in table 5. The explanation above would conclude that the fourth hypothesis is more acceptable for this study. Thus, through this analysis, the researcher comes out with new hypothesis which is *Hn/H4: There is significance between service quality and information quality.*

Table 5: Overall correlation test result

		Correlations			
		ALL_SEQ	ALL_INQ	ALL_LSE	ALL_USE
ALL_SEQ	Pearson Correlation	1	0.481**	0.018	-0.060
	Sig. (2-tailed)		0.007	0.926	0.754
	N	30	30	30	30
ALL_INQ	Pearson Correlation	0.481**	1	0.031	0.100
	Sig. (2-tailed)	0.007		0.869	0.599
	N	30	30	30	30
ALL_LSE	Pearson Correlation	0.018	0.031	1	0.450*
	Sig. (2-tailed)	0.926	0.869		0.013
	N	30	30	30	30
ALL_USE	Pearson Correlation	-0.060	0.100	0.450*	1
	Sig. (2-tailed)	0.754	0.599	0.013	
	N	30	30	30	30

** . Correlation is significant at the 0.01 level (2-tailed).
 * . Correlation is significant at the 0.05 level (2-tailed).

Conclusions

However, in the previous chapter four discussed that there only three variables and one hypothesis accepted in this research. Then, a new hypothesis is being come out after correlation and regression analysis was carried out. Thus, only two variables that have been identified as the strongest predictors. Unfortunately, these variables are not significant relationship within the dependent variable, library user's satisfaction, but, within the new finding that is the relationship between service quality and information quality. There is one variable that have been identified as the medium predictors, but have a significant relationship between the library user's satisfactions. However, the researcher is intends to focus on three variables (two variables are strongest and one variable is medium predictor). Therefore, there are the recommendations are being suggested regarding on these three factors. Firstly, the researcher intends to focus on the service quality dimension. Regarding on this research, it was found that this variable is the strongest predictors towards assessing the library performance by performing the information quality. The researcher has been discovered new hypothesis for this research which is strongly related to the effectiveness of providing the service and sustain the service quality through performing the information quality such providing best and proper services. Undeniably, service quality plays a major role in the context of library especially academic library, then, enabler of effectiveness on performing the library activities. Service quality is important to the library performance because it is would help the library management and library staff in performing services right for library user's needs and demands and also assist in improving the library performance. Then, in order to better understanding of the user's best interest, the library management needs to enhance the quality of the library services and products. Possibly, service quality should be improved in order to increase the academic library performance as to influence the library user's satisfaction level.

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