Hospitality Students’ Perception of College Library Service Quality: Importance-Performance Analysis

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ABSTRACT

The purpose of this research is to examine the perceived importance and perceived experiences of library service quality for hospitality management students. Also, an effort was made to identify the strengths and weaknesses of library service quality based on their perception of library services. The researchers have used LibQUAL+®, a popular tool that libraries use to assess the perception of library service quality over the years. Undergraduates and postgraduate’s students studying in one of the premier private hotel management institutes in India participated in this study. The findings of the study suggest that library service providers need to understand the needs of students and should have the inclination to help students in making the library a gateway for study, learning and research. The future research may include faculty members’ perception of importance and performance of library service quality. This type of survey can be repeated at regular intervals to distinguish the varying needs of library users.

Keywords: Hospitality students; Perception; Library services quality; LibQUAL+®; Importance-Performance Analysis

1. INTRODUCTION

The Ministry of Tourism established the National Council for Hotel Management and Catering Technology (NCHMCT) in the year 1982 to impart hospitality education in India. Quality is one of the important subjects discussed among education institutions and is being studied extensively. Among other service providing departments, college library plays an important role in catering to their customer’s academic needs. The collection assessment was the primary focus of traditional library service quality surveys. However, for the last ten years, academic library service providers have progressively documented the implications of evaluating their library services. Nevertheless, measuring library quality based solely on collections of learning resources is obsolete. Thus, the conventional evaluation of library quality has moved from collection assessment to other supporting services such as; assessment of information and learning services, digital content, availability and accessibility of learning resources, and library and information technology services (Characteristics of Excellence, 2006). This change in assessment is the lead for the transformation of academic libraries from a collection-centric view to a customer-centric view.

According to Zeithaml, Parasuraman, and Berry (1990), only the customers can judge the quality of services and all other judgments are fundamentally unrelated. Therefore, it is essential for the library administrator to assess the quality of services through customer surveys. LibQUAL+® is one such survey, which is wildly used by college and university libraries.

It is one of assessment tools used by the academic libraries to measure the library service quality. One of the advantages of this survey instrument is ease of administration. In addition, the LibQUAL+® test scale has been proved to be a reliable and valid survey instrument. However, some researchers find that LibQUAL+® respondents do not fully understand the three service levels minimum desired, and perceived asked in the survey. Researchers also found the gap scores calculated on these service level scores were not constant since respondents’ expectations change with experience. Therefore, it is recommended to adopt additional matrix for a pinpoint evaluation of library service quality. Thus, this study additionally adopts Importance-Performance Analysis (IPA) to evaluate the services provided by the library.

IPA proposed by is one such matrix widely used for the evaluation of service and product. IPA identifies satisfaction as the function of two components: the importance of a product or service to a customer and the performance of the products or service. The combined rating of these two components provides an overall view of satisfaction with clear instructions for the decision makers where to focus for further improvements. IPA is widely used in service industries such as travel and tourism; Higher education; E-Government services; and other sectors. Thus, this tool can effectively be used for measuring the importance-performance attributes of library services for the further enhancement of library service quality. Even though there are numerous research findings available in the literature on adoption of IPA in higher education, there are no research studies which focused its application to library service quality particularly using LibQUAL+®.
2. LITERATURE REVIEW

2.1 Library Service Quality

LibQUAL+®, the extension of SERVQUAL37 was developed by Association of Research Libraries38 (ARL) in collaboration with Texas A & M University in 1999 with the objectives to assess and measure library service quality. This measurement tool is a thoroughly tested and validated web-based survey tool; to assess, measure, and improve library services, change organizational culture, and market the library. It permits library service providers to perform systematic assessment and measure of library service quality. Furthermore, this tool is used and tested in variety of libraries, including, academic39,40; agricultural41; health42; college43; university44,45 and public libraries46. LibQUAL+® helps libraries to assess the services provided by them and to develop the library services to meet the customers’ expectations38. The survey data helps library service providers in identifying best practices, analyze shortfall, and effectively reallocate resources based on customers’ perception. Library service providers have successfully used LibQUAL+® survey data to identify best practices, study discrepancies, and effectively assign human resources23,47-50. Furthermore, the combination of gap model and IPA has been used by the researchers in recent years in a different area of study51-53. Thus, it can be assumed that an integrated approach of combining gap model and IPA works very well first to evaluate service quality and then to classify service items into different category in terms of importance-performance54.

The purpose of using IPA in this study was to identify important attributes of library service in terms of four quadrants of IPA: 1. Concentrate here, 2. Keep up the good work, 3. Possible overkill, and 4. Low priority, so that the library administrators can gain insights to improve the service quality of library.

2.2 Importance-performance Analysis

The importance-performance analysis (IPA) is a popular tool used as a research framework by many researchers for the measurement of service quality55-60. This IPA model is divided into four quadrants (Fig. 1) with performance on the x-axis and importance on the y-axis resulting in, four quadrants viz. Concentrate Here, Keep up the Good Work, Low Priority, and Possible Overkill. The quadrants are as follows:

Quadrant I (High Importance/ Low Performance) is labeled ‘Concentrate Here’. The variables fall into this quadrant need more attention and library service providers need to consider this as a top priority. Quadrant II (High Importance/ High Performance) is labeled “Keep up the good work.” The variables fall into this quadrant are the strength of the library services. Library service providers can continue to do good work on these areas of the library. Quadrant III (Low Importance/ Low Performance) is labeled ‘Low Priority’. Thus, any of the variables which fall in this quadrant are not important and doesn’t need more attention, and possible variables for cost cutting strategies. Quadrant IV (Low Importance/ High Performance) is labeled ‘Possible Overkill’. Variables fall into this quadrant are overly emphasised by the library, and therefore libraries should deploy their focus more on quadrant I and II.

This matrix is successfully used in measuring the different dimensions of education. For example, students psychological and social adoptions61, to explore attractiveness of higher education, for evaluation educational process62, choice of college63, IT governance strategies in university64, quality assurance in higher education65, and course evaluation66. The survey conducted by association of higher education facilities offices reveals that services like labs, classroom buildings, libraries are becoming increasingly important as a factor for college choice67. Students expressed library services as one of the important facilities for decision making for the choice of college. Thus, this matrix can be used along with LibQUAL model to evaluate the library service quality for further improvement by the library service providers.

### Figure 1. IPA Grid adopted from Martilla & James (1977).

3. RESEARCH METHODOLOGY

This study used LibQUAL®, as a survey instrument to gather data from the undergraduate and postgraduate students of a hospitality management college. It was a census study covering the entire population. As the population was small enough, the researcher decided use the entire population to ensure that everybody who mattered represented. Considering the level of maturity and intellectual understanding, only the ‘senior’ students of both undergraduate and postgraduate hospitality programs were made to participate in the study. The sample consisted of 124 senior students of final year of Bachelor of Hotel Management and second year of Master’s in Hospitality studies. The students were asked to rate both importance-performance of all variables on a 7-point Likert scale where; 1 is being low, and 7 is being high. The total number of a questionnaire distributed were 124, out of which 95 questionnaires were usable resulting in the response rate of 91%. Hence, a total of 95 questionnaires were considered for further analysis.

3.1 WGSHA Library

Welcomgroup Graduate School of Hotel Administration (WGSFA), which is one of the constituent institutes of
Manipal University, provides Bachelors and Master’s degree programs in Hospitality, Tourism, and Culinary Arts. WGSHP library has nearly 11, 300 books, 60 journals, and magazines, and has access to online databases and e-journals. This library has readerships of about 1200. The collection ranges from hospitality, tourism, food science, dietetics, nutrition, culinary arts, and other allied subjects. The library also focuses on general reading and personality development books. The library provides services like document delivery on demand, current awareness service, and selective dissemination of information to the readers. All the operations of the library are automated. The online databases and e-journals are IP enabled and available to all the readers in the campus.

3.2 Survey Instrument

Researchers used LibQUAL+®, a survey tool comprising of 22 items to measure the perception of library services on three dimensions of library service:

i. Affect of library services (nine items);
ii. Information Control (eight items); and
iii. Library as a place (five items).

For each item, students were asked to rate the importance-performance of library service quality by giving one to seven score, one being low, and seven being high.

4. DATA ANALYSIS

4.1 Sample Characteristics

The sample consists of 50 males (53 %) and 45 (47 %) female students of hospitality programs at the age group of 18 to 29 years. Out of 95 respondents, 40 (42 %) are undergraduates, and 55 (58 %) are postgraduate students.

4.2 Importance-performance Rating

As per the above table, the five variables that the respondents mentioned as the most important affect of services are:

<table>
<thead>
<tr>
<th>Labels</th>
<th>Questions</th>
<th>Importance A</th>
<th>SD</th>
<th>Performance B</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affect of service</td>
<td>AOS1 Instill confidence in users</td>
<td>5.75</td>
<td>1.86</td>
<td>5.48</td>
<td>1.46</td>
</tr>
<tr>
<td></td>
<td>AOS2 Giving users individual attention</td>
<td>5.6</td>
<td>1.26</td>
<td>5.35</td>
<td>1.51</td>
</tr>
<tr>
<td></td>
<td>AOS3 Consistently courteous</td>
<td>5.53</td>
<td>1.48</td>
<td>5.52</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
<td>AOS4 Readiness to respond to users’ questions</td>
<td>5.8</td>
<td>1.23</td>
<td>5.55</td>
<td>1.38</td>
</tr>
<tr>
<td></td>
<td>AOS5 Knowledge to answer user questions</td>
<td>5.84</td>
<td>1.21</td>
<td>5.59</td>
<td>1.35</td>
</tr>
<tr>
<td></td>
<td>AOS6 Deal with users in a caring fashion</td>
<td>5.46</td>
<td>1.36</td>
<td>5.76</td>
<td>1.33</td>
</tr>
<tr>
<td></td>
<td>AOS7 Understand the needs of their users</td>
<td>5.74</td>
<td>1.27</td>
<td>5.33</td>
<td>1.44</td>
</tr>
<tr>
<td></td>
<td>AOS8 Willingness to help users</td>
<td>5.94</td>
<td>1.17</td>
<td>5.53</td>
<td>1.44</td>
</tr>
<tr>
<td></td>
<td>AOS9 Handling users’ service problems</td>
<td>5.76</td>
<td>1.33</td>
<td>5.61</td>
<td>1.39</td>
</tr>
<tr>
<td>Information Control</td>
<td>IC1 Making electronic resources accessible</td>
<td>5.82</td>
<td>1.55</td>
<td>5.54</td>
<td>1.53</td>
</tr>
<tr>
<td></td>
<td>IC2 Library Web site to locate information on my own</td>
<td>5.67</td>
<td>1.30</td>
<td>5.71</td>
<td>1.44</td>
</tr>
<tr>
<td></td>
<td>IC3 The printed library materials I need for my work</td>
<td>5.62</td>
<td>1.43</td>
<td>5.46</td>
<td>1.60</td>
</tr>
<tr>
<td></td>
<td>IC4 The electronic information resources I need</td>
<td>5.6</td>
<td>1.46</td>
<td>5.5</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td>IC5 Modern equipment that lets me easily access needed information</td>
<td>5.62</td>
<td>1.45</td>
<td>5.64</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td>IC6 Easy-to-use access tools that allow me to find things on my own</td>
<td>5.66</td>
<td>1.35</td>
<td>5.47</td>
<td>1.54</td>
</tr>
<tr>
<td></td>
<td>IC7 Making information easily accessible for independent use</td>
<td>5.75</td>
<td>1.47</td>
<td>5.57</td>
<td>1.53</td>
</tr>
<tr>
<td></td>
<td>IC8 Print and/or electronic journal collections I require for my work</td>
<td>5.66</td>
<td>1.50</td>
<td>5.56</td>
<td>1.49</td>
</tr>
<tr>
<td>Library as place</td>
<td>LP1 Library space that inspires study and learning</td>
<td>5.55</td>
<td>1.62</td>
<td>5.39</td>
<td>1.65</td>
</tr>
<tr>
<td></td>
<td>LP2 Quiet space for individual activities</td>
<td>5.74</td>
<td>1.48</td>
<td>5.54</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td>LP3 A comfortable and inviting location</td>
<td>5.66</td>
<td>1.44</td>
<td>5.38</td>
<td>1.65</td>
</tr>
<tr>
<td></td>
<td>LP4 Library as a gateway for study, learning or research</td>
<td>5.77</td>
<td>1.39</td>
<td>5.37</td>
<td>1.54</td>
</tr>
<tr>
<td></td>
<td>LP5 Community space for group learning and group</td>
<td>5.59</td>
<td>1.60</td>
<td>5.62</td>
<td>1.40</td>
</tr>
</tbody>
</table>

A* Rating obtained from a 7-point Likert scale ranging 1 being low important and 7 being highly important
B* Rating obtained from a 7-point Likert scale ranging 1 being low performance and 7 being high performance
C* Cronbach’s alpha
i. Willingness to help users
ii. Knowledge to answer user questions,
iii. Readiness to respond to users’ questions,
iv. Handling users’ service problems, and
v. Understand the needs of their users.

Two important variables regarding information control are:
(a) Making information easily available for independent use and
(b) Library website to locate information on my own.

The variables: electronic information resources, easy-to-use tools and print/electronic journals are rated equally important. The print media and modern equipment are rated as least important. In the third attribute, i.e., library as a place, the variables that are rated as most important are:
i. Library as a gateway
ii. Quiet space for individual activities
iii. A comfortable and inviting location
iv. Community space for group learning and finally
v. Library space that inspires study and learning.

The mean and standard deviation for aggregated data is calculated to understand the students' perception of importance-performance of library services (Table 1). This Table 1 illustrates, the attribute that students perceive as most important are Affect of service (M = 5.75, SD = 1.86) followed by information control (M = 5.73, SD = 1.78) and library as place (M = 5.66, SD = 1.51). The attribute that students perceive as well performed is Information control (M = 5.53, SD = 1.55) followed by Affect of service (M = 5.48, SD = 1.16) and library as a place (M = 5.4, SD = 1.59).

4.3 Importance-Performance Analysis

Quadrant I: Concentrate Here (High Importance/ Low Performance), which is a key area that needs to be improved based on students rating are:
(a) Library as a gateway for study, and learning/ research (LP4)
(b) Willingness to help users (AOS8)
(c) Understand the needs of users (AOS7).

Quadrant II: Keep the good work (High Importance/ High Performance), all variables which fall in this quadrant are the strength and pride of the library service. These are:
(a) Readiness to respond to users’ questions (AOS4)
(b) Knowledge to answer user questions (AOS5)
(c) Handling users’ service problem (AOS9)
(d) Library website to locate information on my own (IC2)
(e) Making information easily accessible for independent use (IC7)
(f) Quiet space for individual activities (LP2).

Quadrant III: Low Priority (Low Importance/ Low Performance), the variables fall in this quadrant are not important and carry no threat to the library. These are:
(a) Instill confidence in users (AOS1)
(b) Giving users individual attention (AOS2)
(c) Consistently courteous (AOS3)
(d) The printed library materials I need for my work (IC3)
(e) The electronic information resources I need (IC4)
(f) Library space that inspires study and learning (LP1).

Quadrant IV: Possible Overkill (Low Importance/ High Performance), the library gives more importance to the variables that are falling in this quadrant which are perceived as less important by the students. These are:
(a) Deal with users in a caring fashion (AOS6)
(b) Modern equipment that lets me easily access needed information (IC5)
(c) Community space for group learning (LP5).

5. DISCUSSIONS

From the perspective of hospitality students as end users of library services, the main focus areas of importance and performance that leads to satisfaction are identified. As predicted, this helps in the strategic identification of importance-performance of library services based on the user’s needs and wants. The three factors considered for the evaluations are:
i. Affect of services
ii. Information control
iii. Library as a place.

The findings of this study reveal that aspect of the services is rated as most important by hospitality students followed by information control and library as a place. The detailed importance-performance rating of LibQUAL+® variables reveal that willingness to help users is most important aspect of services for hospitality students. Also, this variable fall in the Quadrant I: Concentrate Here, which suggests that library staff need to concentrate on this area of service quality. This is in line with the study conducted by , which suggests that willingness to help users is one of the services highly expected from the users. Another variable which fall in quadrant I that needs more attention is understand the needs of user. Clearly, this is another service highly expected from the users as per the study. It is very important for the library service providers to understand needs of its users to provide specific information sought by the users. The third variable which fall in quadrant I is library as a gateway for study/ learn. The students consider library as a place to study, learn and carry their research. This is an important area where library service providers can focus their resource for further improvement.
Library staff are encouraged for more involvement in students learning activities by providing individual attention to the students.

6. CONCLUSIONS

IPA is a simple and useful technique that helps library service providers to identify the strength as well as key areas needed to be improved to increase overall customer satisfaction. From the research perspective, this study supports the adoption of the IPA as a research framework for evaluating students' perception of importance-performance of library service quality. Though students identified many variables as the strength of the library service, the library service providers or staff need to focus on the Affect like willingness to help users and understand the needs of users. Also, it is necessary to understand that library plays an important role as a gateway for study, learning, and research. Library staff need to be motivated towards this. However, a generalization of this study need not be overstated. The future research should include a large sample drawn from students and faculty members for an understanding of importance-performance of library services. A similar evaluation method can be applied in future research to compare the importance levels attached to identify the relative satisfaction levels of end users.

REFERENCES


27. Faché, W. Methodologies for innovation and improvement of services in tourism. 


33. Wang, C.-H. & Fong, H.-Y. Integrating fuzzy Kano model with importance-performance analysis to identify the key determinants of customer retention for airline services. 

34. Blose, Julia E.; Tankersley, William B.; Flynn, L.R. Managing service quality using data envelopment analysis. 


37. Parasuraman, A.; Zeithaml Valarie, V.A. & Berry, L.L. A multiple-item scale for measuring consumer perceptions of service quality. 
   *J. Retail.*, 1988, **64**, 12–40.

38. Green, D. & Kyriillidou, M. Charting library service quality. 


40. Pourahmad, A. A.; Neshat, M. & Hasani, M. R. Using LibQUAL model for improving the level of students’ satisfaction from quality of services in academic libraries: A Case Study in North Khorasan Province, Iran. 

41. Xi, Q.; Li, X.; Zhao, H.; He, Q. & Cai, Z. Service quality assessment at the Nanjing Agricultural University Based on LibQUAL. 

42. Pedraminia, S.; Modiramani, P. & Ghavami Ghanbarabadi, V. An analysis of service quality in academic libraries using LibQUAL scale. 


44. Khan, B. Performance Audit through LibQUAL+ Technique: The Experience of Burduan University and Visva-Bharati Library Users. 

45. Killick, S.; van Weerden, A. & van Weerden, F. Using LibQUAL+® to identify commonalities in customer satisfaction: The secret to success? 

46. Kamaruddin, N.A.; Baharuddin, M.F. & Mustaffar, M.Y. Assessment of service quality using LibQUAL+ three key dimensions tool at public libraries in Klang Valley, Malaysia. 


48. Kachwala, T.; Dasgupta, C. & Mukherjee, P. N. Service quality in library from customers’ Point of View. 

49. Association of College and Research Libraries. Library support for accreditation: A guide to online resources. 

50. Thompson, B.; Cook, C. & Heath, F. How many dimensions does it take to measure users’ perceptions of libraries?: A LibQUAL+Study. 

51. Lu, Y. & Wu, H. Applying IPA in evaluating service quality requirements of passengers of Taiwan high speed rail. 
   *J. Qual.*, 2010, **17**(1), 21-43.


54. Olimpia, B. The construction of importance-performance grid in tourist services research without the direct determination of the attributes importance. 


57. Gata, W. & Gilang, O.H. Analysis of information system


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She contributed to this paper through questionnaire development, data collection, data, data analysis and in developing the content of this article.

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She contributed to this paper in data analysis and developing discussion content of this article.