Service Quality in the Open and Distance Learning
– The Perspective of Learners in Malaysia

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ABSTRACT

The purpose of this paper is to examine the learner’s perceptions of the service quality in an open and distance learning institution in Malaysia. Focus group sessions and structured questionnaires were used to collect the relevant information from the respondents. A total of 44 respondents participated in the focus group and 124 participated in the self-administered questionnaire survey. The results of the study showed that service quality in the open and distance learning has several characteristics different from traditional higher institutions. As such new perspectives on service quality was proposed and subsequently tested in a Malaysian institution. The quantitative analysis of the study also showed that gender, type of employment, academic programs, and location of learning centers have an effect on perceived service quality in the open and distance learning. The implications of the study are also discussed.

INTRODUCTION

The Malaysian economy experienced an economic boom in the mid-1990s. At the same time, the demand for higher education increased tremendously. By 2003, there were more than 17 public universities and 13 private universities in Malaysia and more than 500 private colleges offering a myriad of courses ranging from the certificate level to the degree level in collaboration with local and foreign colleges and universities. Two main factors have contributed to the growth of higher education in Malaysia, namely the economic slowdown as a result of the Asian crisis, and the democratization of education by the Malaysian government. The rapid development of tertiary institutions in the country was mainly dominated by the traditional mode of learning, namely the face-to-face education. However, with the advent of the internet era, this has resulted to the demand for more flexible approaches to learning, namely the open and distance learning. Consequently, two institutions had been established to provide such learning modes, Universiti Tun Abdul Razak (Unitar) and Open University Malaysia.

Open University Malaysia (OUM) was established in August 2000 to replace the many of the distance learning programs provided by the public universities at that time. As such, a consortium of 11 public universities in Malaysia agreed to establish METEOR Sdn Bhd, and the Ministry of Education invited METEOR to form the Open University Malaysia.
Since then, more than 16 types of diploma and degree programs have been launched with a total enrollment of about 19,000 students.

Although OUM had experienced high growth rates in the last 3 years of its inception, little information is known on the reaction and response of the learners on the service quality provided by OUM. As such it is appropriate to assess the quality of services provided by OUM to its learners as it may have strategic implications on the management of the organization and marketing strategy in the long run. Further, considering the plethora of educational providers in Malaysia, it is also important to know the reaction of the learners (consumers of open and distance learning) in view of the intense nature of competition in the tertiary education industry.

RESEARCH OBJECTIVES

The purpose of this research is to examine the perceptions of the learners on the service quality of the open and distance learning (ODL) education in Malaysia. Specifically, this research aims to:

i) determine the learner’s expectations about the quality of educational services provided in ODL,

ii) assess their perceptions of service quality in the ODL, and

iii) examine the effects of gender, type of employment, academic programs, and learning centre on perceived service quality in ODL.

SIGNIFICANCE OF STUDY

This study is particularly important as it will provide insights on the nature and extent of service quality provided in the open and distance learning education. Considering the potential high growth rates of distance education in the near future, it is imperative to assess the perceptions of the learners on the service quality provided in ODL as it can provide ideas on how to improve the existing service quality. The findings of this study will also provide important theoretical implications on the existing literature on service quality, particularly in the open and distance learning education which is quite limited. Finally, this study can also provide managerial implications to educational providers in Malaysia and those providing the ODL mode of learning in general.

LITERATURE REVIEW

Service quality has been seen to be an important factor in determining the success of the service oriented organizations. One of the most well known methods for measuring service quality is SERVQUAL developed by Parasuraman et al. (1988). According to Parasuraman et al (1988), SERVQUAL consist of five dimensions namely tangibles, reliability, responsiveness, assurance and empathy. Carman (1990) tested the
SERVQUAL in service settings like dental school patient, business school placement centre, and acute hospital care. He suggested that the dimensions identified by Parasuraman et al were not generic and suggested adding new dimensions or factors under different situations. Soutar and McNeil (1996) used a revised version of SERVQUAL in evaluating service quality in an Australian university. They found that the students were quite satisfied with the quality of the academic units surveyed. However, there were gaps (between perception and expectation) in reliability, responsiveness, assurance, empathy, knowledge and communication for the academic units surveyed. For the non-academic service quality, the gap was larger, that is the more unfavorable assessment of the service quality delivered as compared to the expectations.

Joseph and Joseph (1997) examined the service quality in New Zealand, and found that there were 7 factors determining service quality: program issues, academic reputation, physical aspects, career opportunities, location, time and other factors like family and word of mouth influences. When comparing between the perceptions of their own university and that of an ideal quality university, they found that New Zealand universities have not achieved a high perceived level of service quality which could give them a competitive advantage. On a scale of five-point scale, the mean response to the question about their satisfaction with their university was 3.749. Their results also showed significant differences between male and female respondents on physical aspects, location and other factors. Using Joseph and Joseph (1996) instrument, Ford et al. (1999) found that U.S. students rated greater importance to academic reputation, cost/ time issues, program issues, other, physical aspects, and choice influencers.

In another study by Oldfield and Baron (2000), they found that there were 3 factors important in determining quality of higher education in the U.K., namely requisite, acceptable, and functional.

LaBay and Comm (2003) conducted a pilot study assessing the comparative student satisfaction between distance education and traditional course delivery. Using the gap analysis, they found that there were gaps between students’ expectations and delivery perceptions for the traditional and distance education. For the traditional delivery, the gap suggests that the expectations exceeds the delivery, while for the distance education, the gaps showed that the delivery exceeded expectations. However, the findings of the study also suggest that traditional and online students hold similar expectations concerning course outcomes, regardless of the delivery method of the course.

Based on these studies, it can be discerned that there are many approaches to measure service quality in education. However, in view of the universality of the SERVQUAL model, this approach will be adopted in assessing service quality in the open and distance learning context in Malaysia. In other words, this will be used as a basis to define and redefine the key dimensions of service quality in this study.
METHODOLOGY

Since there were no past studies on service quality in ODL in Malaysia and no relevant information on ODL abroad, it was proposed that this study will adopt a dual approach in getting the appropriate information. The first approach would be to solicit relevant information on service quality in ODL from the tutors and learners by using the focus group. In this approach, the researchers firstly met with 8 key academics for a discussion on service quality in distance education. Then, a structured questionnaire was developed as a basis to ask the learners on their perceptions of OUM service quality. The researchers, then, met 14 learners in Tawau, Sabah (about 2000km from OUM main campus) and 30 learners in Kota Bahru (about 500km from OUM main campus). These learners were selected at random at the learning centres. The learning centres were selected by convenience to the researchers. Each focus group session lasted about 1.5 – 2 hours.

From the findings of this focus group session from the key academics in OUM, the researchers developed a structured questionnaire relevant for ODL and incorporated the dimensions suggested by Parasuraman et al (1988) and Joseph and Joseph (1997) studies. Conceptually, it was based on the five dimensions, namely the reliability, responsiveness, assurance, empathy, and tangibility. The items were measured on a 5 point Likert scale, ranging from strongly disagree (1) to strongly agree (5).

It should be noted that tests on reliability and validity of the instrument would be carried out before collecting the final data. Pre-tests of the structured questionnaire would also be done before data collection.

After collecting the relevant information from the focus group discussion, the researchers pre-tested the preliminary structured questionnaire with a group of key academics and a small group of students/learners to get their feedback. A total of 51 items were generated from the feedback process from the learners and key academics. Due to limited time constraints, the preliminary questionnaire was self-administered to the 100 learners in OUM main campus, Klang Valley and 40 learners in Kuantan (about 350 km from OUM main campus). A total of 91 questionnaires were returned from OUM main campus in Kuala Lumpur and 32 were returned from Kuantan within one week.

As such a total of 168 questionnaires were used for the quantitative analysis in this research study including the 44 responses received from the focus group sessions.

The quantitative data was analyzed by using SPSSx program. Descriptive statistics, t-tests and ANOVA will be used to analyze the relevant data. ANOVA and multiple regression will also be used to analyze the effects of gender, ethnic group, academic program, age and academic performance on perceived service quality.
FINDINGS AND DISCUSSION

Focus Group Sessions

In the early discussion with the key academics in distance education from OUM, two key questions were asked: What is service quality?, and What are the key characteristics of service quality in OUM?. Overall, it was found that service quality was viewed in terms of ‘satisfaction’, ‘performance, and ‘expectations’. Other defined it in terms of benefit gained, fulfillment of desires or need, and ‘the effect of provision of various services to consumer’. These suggest that the participants had a clear view of what is service quality concept.

With regards to the characteristics of service quality in OUM, the participants identified the following dimensions: academic/ administrative service, learning and teaching/ pedagogy, and support services. They also identified the term ‘flexibility’ as an important characteristic in OUM service delivery. Flexibility was referred in terms of choices of academic programs, choice of courses, changing courses and programs, mode of learning and mode of payment. In the academic/ administrative services, the participants considered the essential services as registration, orientation, examination, learner service centre, and admissions and records. In teaching and pedagogy, the items identified were curriculum, tutor/ subject matter expert (SME), learning mode, and modules. In the support services, the items identified were physical classroom, laboratory and computer labs, learning centers, service centers, library, broadband, accessibility and human resources.

Based on these responses, the participants regrouped the key characteristics into 8 categories namely mode of learning, tutors and pedagogy, modules, learner services, program issues, cost/ fees, physical facilities, and others. Subsequently, a total of 51 items were generated to define/ operationalise the key dimensions in OUM service quality. After further refinement, a total of 57 items were identified as a preliminary questionnaire for it to be used to the learners in OUM. The mode of learning has 6 items, while the dimension on tutors and pedagogy has 8 items. There were 5 items on modules, 10 items on learner services, 11 items on program issues,, 4 items on cost/ fees, 7 items on physical facilities, and 6 items on others like problem solving, information search, complaints and communication with staff.

In the focus group session conducted with the learners in Tawau and Kota Bahru, similar questions were asked to the learners. The learners in Tawau defined service quality in terms of customers’ satisfaction, response to problems, physical facilities, and academic reputation. The responses from the learners in Kota Bahru were no different from Tawau. With regards to the question of service quality in OUM, the participants provided their positive and negative comments on the level of service quality provided by OUM. The responses were similar to the key dimensions identified earlier in the session with the academic staff in OUM. They identified items like modules, computer facilities, academic and other administrative issues as critical in the service delivery of OUM distance education. The participants in Kota Bahru also identified similar issues/ items.
With regards to expectations of service quality, the participants also highlighted potential areas to be improved as defined in the 8 categories identified above like myLMS services, quality of modules, examination management, learning mode, library, tutors and pedagogy. This indicated their high expectations of the level of service quality to be rendered by OUM to them. The participants ranked program issues as most important (33.3%), followed by cost/time (20.5%), and learner services (17.9%) in looking at distance education tertiary institution. Least important were mode of learning (10.5%), tutors and pedagogy (10.3%), and modules (5.1%).

The results of the focus group discussion showed support the presence of 8 key dimensions in service quality in OUM. Before the end of the session, the researchers asked the participants to fill up the preliminary structured questionnaire to get a quantitative assessment of their responses.

Quantitative Analysis

The 168 responses received by the researchers were from 6 learning centers, including from the centres in Tawau and Kota bahru. The other learning centers were from Kuala Lumpur main centres, Shah Alam (Klang valley), and Kuantan (about 350 km east of Kuala Lumpur). In the sample, 25.8% of the respondents were pursuing the business and management programs, 54.8% were pursuing the education programs, and 19.4% were pursuing the IT programs. About 21.9% were pursuing the diploma programs and the rest were pursuing the bachelor’s degree programs. In terms of gender, 50.3% were male and 49.7% were female. In terms of age group, about 58.8% were between 30-39 years old, about 24.4% were below 30 years old, and 16.9% were above 40 years old. About 41.1% of the respondents were in year 1 of their study, 40.4% were in year 2, and the rest in year 3 of their study. In terms of employment, 5.8% were self-employed, 74.8% were working in the public sector, 17.3% were working in the private sector, and 2.2% were not employed. With respect to the academic performance of the respondents, 29.6% have cgpa below 2.50 and 70.4% have cgpa above 2.50.

With regards to the respondents’ perceptions of service quality in ODL, the 57 dimensions were regrouped into 8 dimensions based on the a priori categories. The reliability tests for each of the dimensions ranges from 0.7579 to 0.8702, suggesting a high level of internal consistency in the responses. See Table 1.

The 8 dimensions were further analyzed by using the Pearson correlation to examine the extent of convergent validity of the service quality dimensions. The results showed that all the 8 dimensions were highly correlated at p<0.01, suggesting a strong convergent validity in the dimensions of service quality.

Based on these results, the perceptions of the respondents on the service quality were shown in table 2. The respondents perceived that the items on ‘tutors and pedagogy’ was ranked first (highest means score) and followed by the item on ‘mode of learning’. The item of ‘program issues’ was ranked third. The item of ‘physical’ was ranked lowest
(ranked 8th) suggesting that the respondents considered that the physical facilities were lacking. The item on ‘learner services’ also ranked second lowest (ranked 7th) suggesting that the service quality dimension needs to be improved.

Table 1: Reliability Tests for 8 Dimensions of Service Quality

<table>
<thead>
<tr>
<th>Dimensions of Service Quality</th>
<th>Number of items</th>
<th>Cronbach Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode of learning</td>
<td>6</td>
<td>0.8702</td>
</tr>
<tr>
<td>Tutors and pedagogy</td>
<td>8</td>
<td>0.8402</td>
</tr>
<tr>
<td>Modules</td>
<td>5</td>
<td>0.8383</td>
</tr>
<tr>
<td>Learner services</td>
<td>10</td>
<td>0.8600</td>
</tr>
<tr>
<td>Program issues</td>
<td>11</td>
<td>0.8798</td>
</tr>
<tr>
<td>Cost/ Fees</td>
<td>4</td>
<td>0.8401</td>
</tr>
<tr>
<td>Physical</td>
<td>7</td>
<td>0.7973</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>0.7597</td>
</tr>
<tr>
<td>Overall</td>
<td>57</td>
<td>0.9518</td>
</tr>
</tbody>
</table>

With regards to the items in the ‘tutors and pedagogy’ dimension, it was found that the respondents perceived that positively of the tutors in terms of their communication skills, relationship with learner, helpful and encourage learners to learn. They also rated that the tutors managed their tutorials well. With respect to the mode of learning, the respondents rated positively on the ‘flexible mode of learning’ and the ‘blended mode of learning’.

On the contrary, in terms of their expectations, it was found that the respondents had high ranking on the cost/ fees. The dimension on ‘tutors and pedagogy’ was also rated relatively high (2nd rank). However, the dimension on ‘physical facilities’ was ranked lowest (ranked 7th) suggesting that the dimension was not critical in the open and distance learning mode.

From the above results, it can be seen that there is a difference in terms of the respondents perceptions of service quality and their expectations of service quality, particularly relating to ‘cost/ fees’ dimension and ‘mode of learning’ dimension, in which the former was ranked first as opposed to fourth in the perception, while the latter was ranked second in the perception but ranked fifth in the expectation. There are also differences in the results from the focus group sessions. This difference can be attributed to the fact that in assessing their expectations, the respondents were more conscious of the items than in their perceptions. For example, program issues was rated high in the focus group session because the respondents were discussing the key issues relating to the management of academic programs like program structure, program contents, program management, and information on study programs. The respondents in the focus group found these items as pressing issues at that time. The dimension on ‘learner services’ was also rated high in terms of importance by the focus group members but not as compared to the 120 non-focus group respondents. It should be noted that the expected ranking of the 120 non focus group members did not differ from the combined score.
shown in table 2. This also suggests that the ‘gap analysis’ proposed by Parasurman et al. (1988) was relevant and consistent in the present findings.

Table 2: Perceptions and Expectations of Service Quality

<table>
<thead>
<tr>
<th>Dimensions of Service Quality</th>
<th>Mean Score* (n=168)</th>
<th>Standard Deviation (n=168)</th>
<th>Perceived Ranking** (n=168)</th>
<th>Expectations Ranking** (n=168)</th>
<th>Focus Ranking** (n=44)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode of learning</td>
<td>2.23</td>
<td>0.54</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Tutors and pedagogy</td>
<td>2.19</td>
<td>0.52</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Modules</td>
<td>2.40</td>
<td>0.71</td>
<td>5</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Learner services</td>
<td>2.62</td>
<td>0.62</td>
<td>7</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Program issues</td>
<td>2.29</td>
<td>0.51</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Cost/ Fees</td>
<td>2.36</td>
<td>0.67</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Physical</td>
<td>2.78</td>
<td>0.64</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Others</td>
<td>2.48</td>
<td>0.59</td>
<td>6</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

(*lower mean score suggests positive perceptions of the service quality delivered)  
(** High rank suggests that the dimension is considered most important)

The results of the survey and focus group sessions found that the respondents were highly satisfied (about 63.4% in the quantitative analysis, and 64.7% in the focus group) with the quality of services provided by OUM. As such about 15-20% of the respondents were not satisfied with the quality of services rendered.

To examine the effects of gender, type of employment, academic programs, and learning centre on perceived service quality in ODL, t-test and one way ANOVA was used in the study as shown in table 3. The results showed that there were differences in the cost/ fees among the gender group. There were also differences among the type of employment, academic programs, and location of learning centers. This means that such factors have an effect on the perceived service quality.

These results suggest that these factors have an influence or effect on the perceptions of service quality. As such, efforts to improve the quality of service quality should take into account these factors.
Table 3: Influence of Selected Demographic Factors on Perceptions of Service Quality

<table>
<thead>
<tr>
<th>Dimensions of Service Quality</th>
<th>Gender (Male – Female)</th>
<th>Type of Employment (Self-employed-Public-Private-Unemployed)</th>
<th>Type of Academic Programs (business-education-IT)</th>
<th>Location of Learning Centres (Tawau-KB-KL-SA-KTN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode of learning</td>
<td>n.s</td>
<td>n.s</td>
<td>n.s</td>
<td>n.s</td>
</tr>
<tr>
<td>Tutors and pedagogy</td>
<td>n.s</td>
<td>n.s</td>
<td>n.s</td>
<td>n.s</td>
</tr>
<tr>
<td>Modules</td>
<td>n.s</td>
<td>p=0.04</td>
<td>n.s</td>
<td>p=0.006</td>
</tr>
<tr>
<td>Learner services</td>
<td>n.s</td>
<td>p=0.025</td>
<td>p=0.004</td>
<td>p=0.001</td>
</tr>
<tr>
<td>Program issues</td>
<td>n.s</td>
<td>n.s</td>
<td>n.s</td>
<td>p=0.013</td>
</tr>
<tr>
<td>Cost/ Fees</td>
<td>p=0.013</td>
<td>p=0.006</td>
<td>n.s</td>
<td>n.s</td>
</tr>
<tr>
<td>Physical</td>
<td>n.s</td>
<td>n.s</td>
<td>p=0.007</td>
<td>p=0.005</td>
</tr>
<tr>
<td>Others</td>
<td>n.s</td>
<td>p=0.001</td>
<td>p=0.001</td>
<td>p=0.05</td>
</tr>
</tbody>
</table>

n.s = not significant at p<0.05

CONCLUSION

The findings of this study showed that there were 8 key dimensions in the service quality of open and distance learning, particularly in the Malaysian. These dimensions indicate the extent of service quality to be measured in such tertiary institution. These dimensions are new but also seem consistent with that suggested by Parasuraman et al. (1988) in terms of the tangible, reliability and responsiveness dimensions. It is also consistent with Joseph and Joseph (1997) in terms of the cost/ fees, program issues and physical aspect. One major implication of the study is that it has suggested an new perspective in measuring service quality in the open and distance learning environment by incorporating the key elements and components of SERVQUAL. The findings of the study also imply that the key choices in service quality do not differ much, but there exist variations in the quality of the services performed depending on the context in which it is served, like the location of the learning centre and academic program offered by the institution. In other words, these factors have an effect on the perceptions of service quality rendered. Finally,
the finding of the study also has managerial implications, particularly to the managers of
open and distance learning institutions in Malaysia and perhaps in this region.

In order to enhance the quality of the proposed service quality model, it is proposed that
further research is needed to test and retest the instrument and model in a larger sample in
Malaysia and elsewhere in the region, thus enhancing the generalisability of the proposed
dimensions of service quality in the open and distance learning environment.

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