Using the SERVQUAL Model in Prediction of Customer Satisfaction in Czech Fitness Centres

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The aim of this study is to examine the applicability of the SERVQUAL model which predicts customer satisfaction in the area of fitness in the Czech Republic. Three hundred and fifty-six respondents from three Prague fitness centres and one fitness centre in Příbram, Central Bohemia, participated in the research. Service quality was measured by the SERVQUAL model, and satisfaction was measured by the Oliver scale. Two files of data were gathered: the first with the aim to find out customer expectation with which customers attend their fitness centre; and the second with the aim to find out their quality perception. A difference of measured values was set and these results were subsequently used to predict customer satisfaction. The results of the study do not support the usage of the SERVQUAL model to predict customer satisfaction in fitness centres throughout the Czech Republic. The results indicate the need for another study of factors that determine customer satisfaction in the area of fitness in the Czech Republic.

Keywords: fitness, services, quality, satisfaction, SERVQUAL, Oliver scale

Introduction

Service quality, customer satisfaction, and their loyalty are generally considered important questions in most sectors of services including sports (Crompton, MacKay, & Fesenmaier, 1991; Guest & Taylor, 1999; McDonald, Sutton, & Milne, 1995; Robinson, 1995; 1999; 2006; Wright, Duray, & Goodale, 1992). High quality is a way to gain new customers and keep the existing ones. It is mainly in the area of fitness where sports institutions are dependent on regular and frequently repeating attendance of their members.

Literature of management suggests many approaches and concepts to evaluate service quality in the area of fitness (Cronin & Taylor, 1994; Howat, Absher, & Milne, 1996; Kouthouris & Alexandris, 2005; Tsitskari, Tsiotras, & Tsiotras, 2006; Yong, 2000). There are also many different concepts, in which the term “service quality” should be understood with regard to sports (Chang, Chen, & Hsu, 2002; Javadein, Khanlari, & Estiri, 2008; Shonk & Chelladurai, 2008; Šíma & Ruda, 2011).

The consensus on this can be found only in the fact that one important aspect in evaluating or improving service quality is determining the quality core or their dimensions (Brady & Cronin, 2001; Chelladurai &
Chang, 2000; U. Lehtinen & J. R. Lehtinen, 1991; Parasuraman, Zeithaml, & Berry, 1988). However, these dimensions must always be adapted to that current environment where service quality is observed (Brady, 1997; Yong, 2000).

Services in the area of fitness have their specifics as well. Recipients of these services usually participate actively in the progress of service provision. They frequently choose how services are provided to them. It is not unusual that customers only use sports facilities of the provider without even meeting them. However, if they meet them, the effect of the provider can also have an educational character (Chang & Chelladurai, 2003; Chelladurai, Scott, & Haywood-Farmer, 1987).

Evaluating the level of service quality of sports services is generally problematic. Sports organizations have a range of characteristics which distinguish them from other service organizations. Mainly, household budgets for sports services are left to open consideration and can be considered luxurious. Secondly, customers usually take part in sports organizations in their free time, and finally, it is about their emotional investment to sports organization, such as support a sports team, be its member or go exercising, and improve their physical condition. These factors can, according to Robinson (2006), lead to much higher demands or expectations from sports organizations than from other service providers.

Relationship Between Service Quality and Customer Satisfaction

The influence of service quality on customer satisfaction has become a frequently discussed topic. Nowadays, it has been understood that service quality directly influences customer satisfaction. It is probably that customers with positive perception of service quality show high level of satisfaction (Caruana, 2002; Cronin & Taylor, 1992; Spreng & Chiou, 2002; Spreng & McKoy, 1996; Woodside, Frey, & Daly, 1989).

In spite of the fact that some authors use terms “service quality” and “customer satisfaction” alternatively, most authors agree that both constructions are different, even though interconnected (Parasuraman, Zeithamlová, & Berry, 1988; Spreng & Mackoy, 1996; Taylor & Baker, 1994). According to Zeithamlová and Bittner (2003), “satisfaction” is a broader term than “service quality”. In fact, it includes both cognitive evaluation and effect evaluation (functional), whereas service quality evaluation is a procedure exclusively cognitive (Tian-Cole & Crompton, 2003). Many studies from the area of service marketing consider these two constructions mutually strongly interconnected (Alexandris, Dimitriadis, & Kasiara, 2001; Caruana, 2002; Spreng & Chiou, 2002).

Several authors have examined the immediate influence of service quality and customer satisfaction in the area of fitness. It has been confirmed by some of them on the basis of their researches (Javadein, Khanlari, & Estiri, 2008, Murray & Howat, 2002; Shonk & Chelladurai, 2008); others say that any direct connections cannot be fully confirmed (Kouthouris & Alexandris, 2005; Yong, 2000).

This research in the area of fitness in the Czech Republic should contribute to the initiated discussion.

Aim

The aim of the study was to determine to what extent it is possible to predict satisfaction on the basis of service quality evaluation with the help of the Czech version of the SERVQUAL questionnaire. A partial aim was then to identify possible insufficiencies in services provision in the area of fitness.

Methods

There were in total 356 customers ($N = 356$) of four fitness centres in Prague and Central Bohemia
participating in the research. They filled in questionnaires without any help of inquirers. The questionnaire consisted of items trying to find out customer expectation and their quality perception, and also three separate questions evaluating customer satisfaction with their participation in fitness programmes. The questionnaire for customers combined the SERVQUAL method to determine service quality and the Oliver scale to determine customer satisfaction. Demographic characteristics are shown in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Demographic Characteristics of the Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Males</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Females</td>
</tr>
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<td></td>
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</tbody>
</table>

Service Quality Evaluation

The SERVQUAL method comes out of an assumption that service quality is determined by five dimensions: reliability, assurance, tangibles, empathy, and responsiveness approach. Reliability expresses the ability to provide the service promised reliably and accurately. Assurance expresses customer conviction that they will receive the services they expect. Tangibles express physical environment of the organization, such as the interior, facilities, equipment, and communication materials. Empathy expresses care and individual attention of the services providers’ employees to customers. Finally, responsiveness reflects the willingness to help customers and provide them with a quick service. Each dimension is evaluated by four or five indicators, which were items in the questionnaire for customers of the fitness centre. The questionnaire has in total 2 × 22 items. The first set of questions evaluates customer expectation; the second is how customers perceive the quality of services provided. In both cases, customers express their agreement/disagreement within the Likert scale from 1 to 7 where 1 represents “Strongly disagree” and 7 represents “Strongly agree”.

Customer Satisfaction Evaluation

Satisfaction was measured by three indicators; (items in the questionnaire) borrowed from the satisfaction evaluation method created by Oliver (1980). Individual statements in the questionnaires were the following: “I am satisfied with my decision to attend this fitness centre”, “I am satisfied with the choice of movement activity I am doing here”, and “I am convinced that these movement activities can help me achieve my goals”. Altogether with other statements, even with these fitness centres, customers expressed the extent of their agreement on the Likert scale from 1 = “Strongly disagree” to 7 = “Strongly agree”.


Table 2
Descriptive Statistics and Reliability Analysis for the Service Quality Expectation, Service Quality Perception and Satisfaction

<table>
<thead>
<tr>
<th>Service quality expectation</th>
<th>Number of items</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Coefficient alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>5</td>
<td>6.12</td>
<td>0.87</td>
<td>0.73</td>
</tr>
<tr>
<td>Assurance</td>
<td>4</td>
<td>6.33</td>
<td>0.82</td>
<td>0.81</td>
</tr>
<tr>
<td>Tangibles</td>
<td>4</td>
<td>5.84</td>
<td>1.06</td>
<td>0.68</td>
</tr>
<tr>
<td>Empathy</td>
<td>5</td>
<td>6.05</td>
<td>0.79</td>
<td>0.85</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>4</td>
<td>6.44</td>
<td>0.68</td>
<td>0.81</td>
</tr>
<tr>
<td>Service quality perception</td>
<td>Service quality expectation</td>
<td>Number of items</td>
<td>Mean</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Reliability</td>
<td>5</td>
<td>5.51</td>
<td>0.91</td>
<td>0.70</td>
</tr>
<tr>
<td>Assurance</td>
<td>4</td>
<td>5.77</td>
<td>0.84</td>
<td>0.76</td>
</tr>
<tr>
<td>Tangibles</td>
<td>4</td>
<td>6.09</td>
<td>1.12</td>
<td>0.53</td>
</tr>
<tr>
<td>Empathy</td>
<td>5</td>
<td>5.36</td>
<td>0.84</td>
<td>0.81</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>4</td>
<td>5.90</td>
<td>0.97</td>
<td>0.84</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>3</td>
<td>6.64</td>
<td>0.66</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Results

An average score in five followed characteristics was calculated, always for expectation and for service quality perception. Regarding customer expectation, the results showed that the highest customer expectation is connected with responsiveness of employees (6.44). They mainly expect that the fitness centres employees will always be willing to help customers and provide them with a quick service. The lowest expectation is within tangibles (5.84). It turned out that customers do not care so much about modern equipment of the fitness centre. More important is the approach of the fitness centre employees. Therefore, they are more critical. Average figures of tangibles quality evaluation (6.09) surpassed customer expectation (5.84) and it is therefore possible to say that quality perception of organization environment surpassed customer expectation. Other characteristics observed showed opposite results. The worst evaluated was employees’ empathy (5.36), meaning their empathizing to the needs of customers and the individual attention paid to them.

It was important to identify gaps in individual characteristics of service quality and focus on room for possible improvement of the quality of services provided. Determining the size of a gap was done as a difference between average figures of customer quality perception and their satisfaction. Negative figures expressed room for services improvement because customer expectation was higher than quality perception. These figures were measured within reliability (-0.61), assurance (-0.56), empathy (-0.69), and responsiveness (-0.54). Positive figures expressed sufficient service quality because customer quality perception surpassed their expectations. These figures were measured within tangibles (0.25).

From the results mentioned, it would be possible to conclude that the biggest “problem” customers see is how employees empathize to their needs—in this case, the gap was the biggest (-0.69). However, such an interpretation of results would be misleading. It is necessary to considered that each characteristic of service quality observed is differently important for customers. That was the reason why customers were, in the end, asked to divide an imaginary 100 points among individual characteristics according to their importance. These average figures were then used to multiply the gaps.
The results in Table 3 clearly show that the biggest gap is within reliability—characteristics expressing customer conviction that the service will be done as promised. After the scale of importance of individual characteristics was taken into consideration, the gap reached the resulting figure of -17.08.

Table 3

<table>
<thead>
<tr>
<th>Service quality factor</th>
<th>Service quality perception (mean)</th>
<th>Service quality expectation (mean)</th>
<th>Differences between factor scores (mean)</th>
<th>Scale of importance (rounded, in percents)</th>
<th>Resulting differences between factor scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>5.51</td>
<td>6.12</td>
<td>-0.61</td>
<td>28</td>
<td>-17.08</td>
</tr>
<tr>
<td>Assurance</td>
<td>5.77</td>
<td>6.33</td>
<td>-0.56</td>
<td>23</td>
<td>-12.88</td>
</tr>
<tr>
<td>Tangibles</td>
<td>6.09</td>
<td>5.84</td>
<td>0.25</td>
<td>14</td>
<td>3.5</td>
</tr>
<tr>
<td>Empathy</td>
<td>5.36</td>
<td>6.05</td>
<td>-0.69</td>
<td>17</td>
<td>-11.73</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>5.90</td>
<td>6.44</td>
<td>-0.54</td>
<td>18</td>
<td>-9.72</td>
</tr>
</tbody>
</table>

Even though negative gaps were identified within most observed service quality characteristics, service quality was perceived quite highly—on the seven-grade scale, it was in the average of 5.726. Therefore, it is impossible to evaluate the quantity of services provided as low-quality with respect to low figures of gaps. It is only possible to claim that customer expectation was neither fulfilled nor surpassed. However, this does not mean that customers are not satisfied. As Table 4 shows the average figure expressing customer satisfaction is 6.64. This figure expresses the fact that the majority of customers indicated on the seven-grade scale the maximal possible satisfaction with their decision to attend “their” fitness centre. Most customers are also fully satisfied with their movement activity choice and are convinced that by doing this activity, they will achieve their goals. The most frequent are lose weight, shape up, and keep or improve their physical condition.

Table 4

<table>
<thead>
<tr>
<th>Number of items</th>
<th>Mean</th>
<th>Coefficient alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service quality expectation</td>
<td>22</td>
<td>6.16</td>
</tr>
<tr>
<td>Service quality perception</td>
<td>22</td>
<td>5.73</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>3</td>
<td>6.64</td>
</tr>
</tbody>
</table>

The results mentioned clearly show that even though customer expectation was not completely fulfilled, customers are highly satisfied with services provided. The average figure on the seven-grade scale shows even higher figures than the average figure of quality perception by fitness centres customers is.

Discussion and Conclusion

The aim of this study was to examine the figures of service quality in relation to possible customer satisfaction prediction in the area of four Czech fitness centres. Service quality in sports and fitness is, according to many authors, the key factor for customer satisfaction (Howat, Murray, & Crilley, 1999; Murray & Howat, 2002; Tsuji, Bennet, & Zhang, 2007; Shonk & Chelladurai, 2008; Alexandris, Zahariadis, Tsorbatzoudis, & Grouios, 2008). This fact can also be logically assumed. Customers will be satisfied if services provided are of high quality, and on the contrary, they will probably not be satisfied with services that cannot be considered first-rate. This statement is not disproved by our study. Fitness centre customers
subjectively consider provided services first-rate and that is apparently the reason why they are also satisfied with their decision to attend the fitness centre. They are also satisfied with the choice of movement activity and are convinced that these movement activities can help them achieve their goals.

However, professional literature also defines satisfaction as a difference between customer expectation and service quality perception (Parasuraman, Zeithaml, & Berry, 1985; Bronin & Taylor, 1994; Wisniewski, 2001; Kotler & Keller, 2009), where a satisfied customer is that person whose expectations are fulfilled or even surpassed. Authors of the SERVQUAL method also prefer such a perception of customer satisfaction. Nevertheless, our study has not come up with any evidence that the SERVQUAL method is a suitable method for customer satisfaction prediction. Even though customer satisfaction was not fulfilled within most of indicators observed, customers were mostly satisfied and in the majority of cases they even marked the utmost figure expressing maximal satisfaction on the Likert scale.

Results of this study call the universal usage of the SERVQUAL model into question similarly to how some previous studies had already done (Bronin & Taylor, 1994; Brady & Cronin, 2001). The SERVQUAL model was developed and initially tested in the area of banks and health centres. However, the area of fitness is specific. One of its specificities is a fact that (unlike banks and health centres) we attend fitness centres voluntarily with pleasure and mostly experience nice feelings, such as fun, experience, and enjoyment. Another fact is that if customers were not satisfied with services provided, they would probably change the service provider or would stop using fitness services. The respondents approached by this research logically belong to the group of satisfied customers who have no reason to change their service provider. This confirms the assumption that customers will be satisfied with their decision to attend “their” fitness centre regardless service quality evaluation, or rather size of gaps between their expectations and service quality perception.

The results discovered indicate that the SERVQUAL model cannot serve as a predictor of customer satisfaction in the area of Czech fitness centres but can “only” serve as a tool to identify negative gaps as room for possible improvement of provided services.

**References**


