An importance-performance analysis of service quality in spa hotels

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This paper identifies the results of a questionnaire designed to measure service quality in spa hotels in the Republic of Serbia. Service quality was measured with a model based on the original SERVQUAL model. Due to the fact that many previous research papers have shown that SERVQUAL is insufficient to identify and measure all determinants of service quality in hospitality, the original SERVQUAL model has been slightly changed. Namely, this modified version of SERVQUAL was adjusted to measure a large number of tangible and intangible elements of the service quality in spa hotels. Based on the research results, seven dimensions of the service quality were identified: assurance, food and benefits, empathy, entertainment, recreation facilities and wellness, responsiveness and reliability. After applying the modified SERVQUAL model, an Importance – Performance Analysis (IPA) was performed. By using an Importance – Performance Analysis (IPA), this paper examines the efficiency of hotel resources allocation and the possibility of designing management strategies to improve the quality of hotel service.

Keywords: SERVQUAL; IPA; spa hotels

JEL classification: C10, C38, L15

1. Introduction

According to the size of its territory and the number of thermo-mineral springs, the Republic of Serbia is one of the richest in Europe. It is estimated that there are between 310 and 350 mineral springs on 275 known locations, although not all appearances of thermo-mineral springs have been identified yet. Statistics records business in 30 different spa centres, and with so-called ‘folk spas’, there is a total of 45 spa centres. However, tourist circulation is concentrated only in the few larger spas (Nikolić, 2006).

Although the first data on tourist traffic in Serbia was recorded in 1896 in Vrnjačka Banja, spa tourism started developing faster after the Second World War. The largest number of visitors appeared in the 1980s, when 493,000 visitors stayed in spas in Serbia in 1985, with only 1.6% of them foreigners. One of the main characteristics of spa tourism in Serbia is the domination of domestic guests; the number of foreign guests is very low. From the beginning of the 1990s, the number of visitors in spas began declining and in 2000 it reached 330,000. Stagnation was typical for tourist traffic until the end of the first decade of the twenty-first century (Jovičić, 2008). The second
decade of the twenty-first century brought a steady rise in numbers and, in 2011, the total reached 375,324 visitors (Statistical Office of the Republic of Serbia, 2012). Most of the spas in Serbia have bad tourist traffic regardless of their favourable geographical position and natural potential for spa tourism development. There are numerous reasons for that, including a non-systematic approach to tourism development, unbuilt roads, lack of marketing (Jovičić, 2008).

The most visited spa centres are those where the research for this survey was conducted and which, in 2009, recorded 65% (Statistical Office of the Republic of Serbia, 2010) and in 2011 recorded 63% of the overall tourist circulation (Statistical Office of the Republic of Serbia, 2012). Spa tourism represents a rather significant category of economic development, mostly due to the quality and a large number of well-springs with different therapeutic properties. However, despite exceptional natural potentials, this product is still oriented exclusively towards domestic demand (Radosavljević, Čolić, & Joksić, 2006) which is the result of the fact that spa tourism in Serbia primarily overlaps with the concept of health tourism, since the majority of guests in spa centres come there for therapeutic reasons (Čutović, 2006).

Owing to the large number of spa centres and the inherited concept of health and social protection, this form of tourism is very common but also has numerous problems: for example, deterioration of accommodation capacities, maladjustment to contemporary demands, unfinished privatisation, and lack of market research directed towards the demands of service users. In order to overcome all the existing problems it is necessary to start with the market research and identification of ‘weak points’ of the hotel product (Jovanović, Nikolić, Savić, Sajfert, & Daković, 2010). Hotel guests or buyers of any product or service prefer only the quality that meets their expectations, either directly or compared with service quality of other corporations. Their evaluation of certain attributes that make overall satisfaction with the hotel product – both as far as the perception of quality (performance evaluation) and the importance of those products when deciding on the particular purchase are concerned – should serve hotel managers as a control element that shall enable the improvement of those attributes that they can influence.

This paper attempts to identify both the importance and performance of the attributes of the hotel product in spa hotels using the Importance–Performance Analysis (IPA) model. By identifying the needs, desires and expectations of different segments, hoteliers will be in a better position to develop marketing strategies to cater for their target customers and to achieve competitive advantages.

2. Literature review

2.1. Importance–Performance Analysis

Importance–performance analysis (IPA), first introduced by Martilla and James (1977), identifies which product or service attributes a firm should focus on to enhance customer satisfaction (Matzler, Bailom, Hinterhuber, Renzl, & Pichler, 2004). IPA has been used in hospitality and tourism research for years. Ease of application and the appealing methods of presenting both data and strategic suggestions seem to be among the many factors that contribute to wide acceptance of the technique (Oh, 2001).

The Importance-Performance Analysis conceptually rests on multi-attribute models. This technique identifies strengths and weaknesses of a market offering in terms of two criteria that consumers use in making a choice. One criterion is the relative importance
of attributes. The other is consumers’ evaluation of the offering in terms of those attributes (Kitcharoen, 2004).

Since the seminal work by Martilla and James (1977), the IPA framework has gained popularity among researchers in the hotel industry (Almanza, Jaffe, & Lin, 1994; Beldona & Cobanoglu, 2007; Chu & Choi, 2000; Hemmasi, Strong, & Taylor, 1994; Lewis, 1985; Martin, 1995), in tourism (Chon, Weaver, & Kim, 1991; Duke & Persia, 1996; Evans & Chon, 1989; Uysal et al., 1991; Wade & Eagles, 2003), the restaurant business (Hsu, Byun, & Yang, 1997; Keyt, Yavas, & Riecken, 1994), leisure and recreation (Fletcher, Kaiser, & Groger, 1992; Guadagnolo, 1985), education (Alberty & Mihalik, 1989; Kitcharoen, 2004; Ortinau, Bush, Bush, & Twible, 1989) and healthcare marketing (Dolinsky & Caputo, 1991; Hawes & Rao, 1985).

Chu and Choi (2000) compared the importance and performance of 26 hotel attributes as perceived by business and leisure travellers in Hong Kong. They point out that hotel managers can tailor-make marketing strategies according to the findings displayed in the four quadrants of IPA. They also adapted information from Evans and Chon (1989), Hemmasi et al. (1994), Keyt et al. (1994), Martilla and James (1977) and Martin (1995), and then presented an illustration and interpretation of the IPA grid divided into four quadrants. Figure 1 illustrates the IPA grid.

The Y-axis shows the guests’ perceived importance of specific attributes while the X-axis reflects the service’s performance when compared with these attributes. The four quadrants are as follows: Concentrate Here, Keep Up the Good Work, Low Priority and Possible Overkill. In the quadrant called Concentrate Here, respondents described attributes as very important. However, performance levels are seen as rather low. This sends quite a clear message that improvement efforts should be concentrated here. In the Keep Up the Good Work quadrant, respondents described attributes as very important while, at the same time, the organisation seems to have high levels of performance in relation to these activities. In the Low Priority quadrant, attributes have both low importance and low performance. Although performance levels are low in this cell, managers do

![Figure 1. Importance - Performance Analysis grid. Source: Chu and Choi (2000).](image-url)
not have to be too concerned since the attributes in this cell are not recognised as very important. Limited resources should be expended on this ‘low priority’ cell. Finally, the Possible Overkill quadrant contains attributes of low importance and of relatively high performance. Respondents are satisfied with the performance of the organisations, but managers should consider their efforts on the attributes of this cell as being overexploited (Chu & Choi, 2000).

2.2. Exploring of service quality in hotel industry

Parasuraman, Zeithaml and Berry have developed a SERVQUAL model for measuring service quality, consisting of five determinants of quality (‘tangibility’, ‘reliability’, ‘responsibility’, ‘safety’ and ‘empathy’) and 22 questions. After the first results of the applied SERVQUAL model had been published (Parasuraman, Zeithaml, & Berry, 1985), the authors continued developing the model and publishing research results through a series of publications (Parasuraman et al., 1985, 1988, 1994a, 1994b).

As far as the measurement of service quality in the tourism and hotel industry sector is concerned, the majority of authors modify the SERVQUAL model and adapt it to the characteristics of services within these activities. When researching service quality in the hotel industry, Saleh and Ryan (1991) identify five determinants: transparency, tangible elements, trust, sarcasm avoidance, and empathy. Unlike the SERVQUAL questionnaire,

Table 1. Demographic information of tourists ($n = 295$).

| Variables       | Sample size | Percentage |
|-----------------|-------------|------------|
| Age             |             |            |
| 20–29           | 15          | 5.1        |
| 30–39           | 77          | 26.1       |
| 40–49           | 79          | 26.8       |
| 50–59           | 56          | 19.0       |
| 60–69           | 34          | 11.5       |
| 70+             | 34          | 11.5       |
| Gender          |             |            |
| Male            | 130         | 44.1       |
| Female          | 165         | 55.9       |
| Education       |             |            |
| Elementary school | 11       | 3.7        |
| High school     | 123         | 41.7       |
| College         | 83          | 28.1       |
| University      | 78          | 26.4       |
| Occupation      |             |            |
| Executive position | 60     | 20.3       |
| Employee        | 131         | 44.4       |
| Pensioner       | 74          | 25.1       |
| Student         | 9           | 3.1        |
| Unemployed      | 8           | 2.7        |
| Private enterprise | 13   | 4.4        |
| Place of residence |       |            |
| Serbia          | 264         | 89.5       |
| Republika Srpska | 9         | 3.1        |
| Montenegro      | 15          | 5.1        |
| Bosnia and Herzegovina | 4  | 1.4        |
| FYR Macedonia   | 3           | 1.0        |

Source: Authors based on analysis in SPSS.17.
they included 33 questions into their research. Ekinci, Riley, and Fife-Schaw (1998) tested the SERVQUAL model based on the research conducted in coastline hotels in Turkey. This research represents a model based upon tangible and intangible quality determinants. Based on the research of service quality in Turkish business hotels, Akbaba (2006) created a questionnaire consisting of 29 questions based upon the SERVQUAL model. Getty and Thompson (1994) developed a scale called LODGQUAL (from lodging quality) used for measuring the quality of hotel accommodation. Soriano (2002) conducted research into the quality of restaurant service in Spain, in which he tested: food quality, service quality, ambience quality and relationship between price and quality. Stevens, Knutson, and Patton (1995) developed a model called DINESERV, also based on the SERVQUAL model, which contains 29 questions split into the five quality determinants of the SERVQUAL model. As a result of a two-month research among tourists in Mauritius, Ramsaran-Fowdar (2007) identified seven quality determinants. Apart from the components taken from the original SERVQUAL model, there is also a large number of new ones and thus the model contains 59 quality components. Knutson, Beck, Kim, and Cha (2009) identified the dimensions of a guest’s hotel experience, using data from a web-based survey of guests at a midwestern hotel and conference centre. These scale-development procedures result in an 18-item index consisting of four factors: environment, accessibility, driving benefit, and incentive. Snoj and Mumel (2002) conducted research into service quality in spa centres in Slovenia in 1991 and 1999. The authors provided 23 questions allocated into the five determinants of the SERVQUAL model. The first determinant, tangible elements, contains 12 questions.

3. Methodology

3.1. Survey instrument

The base for the model for measuring service quality in spa hotels that was used in this research was the SERVQUAL model initiated by Parasuraman et al. (1985, 1988, 1994a, 1994b).

Based on the detailed analysis of the mentioned models, the authors first made the list of 28 hotel attributes. The list of items was then sent to academic staff in the Department of Geography, Tourism and Hotel Management, University of Novi Sad, for comments. Members of the group were asked to rate each of the 28 hotel attributes on a 5-point Likert scale ranging from 5 – extremely important to 1 – extremely unimportant. Twenty-four attributes were selected after analysing the comments and advice provided by employees at the Department.

The questionnaire used in this research consists of three parts. The first part of the questionnaire consisted of 24 hotel attributes, for which guests were asked to indicate the perceived importance of the attributes when they choose a hotel, while the second part consisted of a series of 24 questions whose aim was to examine their perceptions of actual hotel performance during their hotel stay. Attributes were measured a five-point Likert type scale ranging from 1, least important to 5, most important, in the Importance part, and from 1, strongly disagree, to 5, strongly agree, in the Performance part. The third part of the questionnaire included respondent demographic information. The questionnaire was prepared in two languages: English and Serbian.
3.2. Data collection

The research was conducted in hotels of the third category (three-star hotels) which are located in the most visited spa centres in Serbia: Vrnjačka banja, Niška banja, Soko banja and Mataruška banja, during the months of September–November 2009. The above-mentioned spa centres recorded 65% of visits and 54% of overnight stays of the total number of visits and overnight stays in all spa centres in Serbia in 2009 (Statistical Office of the Republic of Serbia, 2010). Five researchers conducted the survey. In total, 500 questionnaires were distributed and 295 (59%) usable questionnaires were obtained. The average time spent for filling out the questionnaire was 10 min.

4. Results and discussion

4.1. Characteristics of respondents

The sample comprised 130 (44.1%) males and 165 (55.9%) females among the respondents (Table 1). The main age group was 40–49 and represented 26.8% of the respondents. The next biggest age group was 30–39, which represents 26.1% of the total number of respondents. Most of the respondents (41.7%) had finished secondary school. Most of the respondents came from Serbia (89.5%), followed by Montenegro (5.1%), Republika Srpska (3.1%), Bosnia and Herzegovina (1.4%) and FYR Macedonia (1%). When the variable occupation is concerned, the majority of respondents are employees (44.4%).

4.2. Factor analysis

The hotel attribute importance data were factor analysed using the principal component method and varimax rotation procedure in order to extract the sub-dimensions of those hotel attributes. In this study, all factors with eigenvalue greater than 1 and with factor loadings more than 0.5 were retained. The results of the factor analysis, which suggested a seven-factor solution, included 24 hotel attributes and explained 74.10% of the variance. The Kaiser–Meyer–Olkin (KMO) overall measure of sampling adequacy was 0.71, which was middling (Kaiser, 1974), and Bartlett’s test of sphericity was significant \( p = 0.000 \). The results of the factor analysis produced a clean factor structure with relatively higher loadings on the appropriate factors. Most variables were loaded heavily on one factor and this reflected that there was minimal overlap among factors and that all factors were independently structured. Cronbach’s \( \alpha \) values for each factor were greater than 0.7. The results showed that the alpha coefficients of the seven factors ranged from 0.76 to 0.96. This demonstrates that the scales of the formal questionnaire have considerable reliability (Nunnally, 1978). Table 2 shows the results of the factor analysis.

The first factor was labelled ‘Assurance’. This factor explained 11.71% of the total variance with a reliability coefficient of 0.96. The second factor was ‘Food and amenities’ explaining 11.58% of the total variance with a reliability coefficient of 0.78. The third factor was labelled ‘Empathy’ and explained 11.19% of the variance with a reliability coefficient of 0.92. The fourth factor, labelled ‘Tangibility’ accounted for 10.89% of the variance with a reliability coefficient of 0.76. The fifth dimension ‘Entertainment, recreation and wellness facilities’, accounted for 10.04% of the variance with a reliability coefficient of 0.84. The sixth, ‘Responsibility’ explained 9.63% of the total variance, indicating a reliability coefficient of 0.85. The last factor, ‘Reliability’ explained 9.06% of the variance with a reliability coefficient of 0.77.
Table 2. Results of factor analysis.

| Extracted factors | Hotel attributes                                      | Factor loading | Eigenvalue | Variance explained | Cronbach’s α |
|-------------------|------------------------------------------------------|----------------|------------|--------------------|--------------|
| F1 – Assurance    | Friendliness of the employees                        | 0.927          | 4.51       | 11.71              | 0.96         |
|                   | Professionalism of the employees                     | 0.967          |            |                    |              |
|                   | Personal and material safety of guests               | 0.973          |            |                    |              |
| F2 – Food and amenities | Quality of hotel food and beverages               | 0.805          | 3.05       | 11.58              | 0.78         |
|                   | Choice of food and beverages                        | 0.686          |            |                    |              |
|                   | Restaurant amenities                                | 0.849          |            |                    |              |
|                   | Room amenities                                       | 0.861          |            |                    |              |
| F3 – Empathy      | Individual care of guests                            | 0.938          | 2.92       | 11.19              | 0.92         |
|                   | Honest and empathic treatment of guests             | 0.910          |            |                    |              |
|                   | Understanding of specific guests’ needs             | 0.918          |            |                    |              |
| F4 – Tangibility  | Hotel location                                       | 0.767          | 2.69       | 10.89              | 0.76         |
|                   | Hotel exterior                                       | 0.769          |            |                    |              |
|                   | Hotel interior                                       | 0.696          |            |                    |              |
|                   | Leaflets, brochures, menus, wine cards              | 0.701          |            |                    |              |
|                   | Appearance of the employees                         | 0.516          |            |                    |              |
| F5 – Entertainment, recreation and wellness facilities | Entertainment facilities                           | 0.744          | 1.96       | 10.04              | 0.84         |
|                   | Recreation facilities                                |                |            |                    |              |
|                   | Wellness facilities                                  |                |            |                    |              |
| F6 – Responsibility | Readiness of the employees to help guests          | 0.840          | 1.50       | 9.63               | 0.85         |
|                   | Readiness of the employees to provide guests with answers |            |            |                    |              |
|                   | Timeliness of the hotel staff                        | 0.782          |            |                    |              |
| F7 – Reliability  | Offering of services in a promised manner of time    | 0.741          | 1.16       | 9.06               | 0.77         |
|                   | Offering of previously arranged services from the first meeting and onwards | 0.763 |            |                    |              |
|                   | Offering services without mistakes                   | 0.881          |            |                    |              |

Source: Authors based on analysis in SPSS.17.

4.3. Importance–performance analysis grid

Table 3 shows the mean scores of the seven factors and their retaining hotel attributes for guests in spa hotels in relation to Importance and Performance. The data were then transferred to the IPA grid presentation.
In Figure 2 the X-axis represents the perception of Performance scores relating to a guest’s experience of hotel services and facilities. The Y-axis represents the relative importance that the seven Importance factors had to the respondents when choosing a hotel. The mean Importance rating for the pooled data was 4.62 while the mean Performance rating was 4.16. The four quadrants are constructed based on the mean scores of the Importance and Performance ratings.

Figure 2 shows that two factors were identified in the ‘concentrate here’ quadrant, three in the ‘keep up the good work’ quadrant, one in the ‘low priority’ quadrant and one in the ‘possible overkill’ quadrant.

The results shown in Figure 2 suggest that special attention should be directed to the second (food and facilities) and the fourth factor (tangibility) which both refer to ‘tangible’ dimensions of hotel service. When hotel attributes represented in the second factor are considered, the interviewed guests experience them as the most important ones when choosing a hotel (4.92). However, they are not satisfied with their performances. The ‘tangibility’ factor received a rather low grade (3.91), while those attributes of hotel service

| Factors and hotel attributes | Importance | Performance |
|-----------------------------|------------|-------------|
|                            | Mean       | Std. Dev.   | Mean        | Std. Dev.   |
| F1 – Assurance              | 4.82 0.37  | 4.75 0.42   |
| Friendliness of the employees | 4.83 0.36  | 4.87 0.36   |
| Professionalism of the employees | 4.80 0.40  | 4.61 0.57   |
| Personal and material safety of guests | 4.81 0.39  | 4.76 0.58   |
| F2 – Food and amenities      | 4.92 0.21  | 4.03 0.88   |
| Quality of hotel food and beverages | 4.95 0.23  | 4.19 0.91   |
| Choice of food and beverages | 4.82 0.39  | 4.13 0.93   |
| Restaurant amenities        | 4.96 0.21  | 4.08 1.03   |
| Room amenities               | 4.97 0.18  | 3.71 1.18   |
| F3 – Empathy                | 3.88 0.86  | 4.37 0.59   |
| Individual care of guests   | 3.87 0.93  | 4.19 0.77   |
| Honest and empathic treatment of guests | 3.81 1.00  | 4.18 0.78   |
| Understanding of specific guests’ needs | 3.97 0.85  | 4.17 0.77   |
| F4 – Tangibility            | 4.72 0.34  | 3.91 0.68   |
| Hotel location              | 4.69 0.51  | 4.64 0.63   |
| Hotel exterior              | 4.52 0.60  | 3.87 0.86   |
| Hotel interior              | 4.78 0.45  | 3.43 1.02   |
| Leaflets, brochures, menus, wine cards | 4.72 0.50  | 3.28 0.90   |
| Appearance of the employees | 4.90 0.30  | 4.34 0.85   |
| F5 – Entertainment, recreation and wellness facilities | 4.45 0.51  | 3.13 0.95   |
| Entertainment facilities    | 4.40 0.69  | 3.09 1.08   |
| Recreation facilities       | 4.45 0.63  | 3.47 1.09   |
| Wellness facilities         | 4.51 0.61  | 2.84 1.29   |
| F6 – Responsibility         | 4.79 0.36  | 4.52 0.48   |
| Readiness of the employees to help guests | 4.79 0.41  | 4.57 0.59   |
| Readiness of the employees to provide guests with answers | 4.78 0.41  | 4.59 0.54   |
| Timeliness of the hotel staff | 4.78 0.42  | 4.41 0.61   |
| F7 – Reliability            | 4.76 0.40  | 4.40 0.93   |
| Offering of services in a promised manner of time | 4.75 0.51  | 4.3761 1.00 |
| Offering of previously arranged services from the first meeting and onwards | 4.68 0.52  | 4.3831 0.98 |
| Offering services without mistakes | 4.86 0.40  | 4.4676 0.97 |

Source: Authors based on analysis in SPSS.17.
that it is represented by tangibility are given a relatively high importance (4.72). Given that the results are realistic and reflect the present conditions in spas in Serbia (ambience and facilities of the hotel and rooms, appearance of the object itself, assortment, quality of additional services, and so on) this sends an important message to hotel managers and the people responsible for the development of tourism in Serbia, that investing in planning and reconstruction of deteriorating hotel capacities represents the basic precondition for accomplishing the satisfaction of visitors and achieving better business results.

In the quadrant ‘keep up the good work’ we have the following dimensions: assurance (F1), responsibility (F6) and reliability (F7), which all represent three highly

Table 4. Results of T-test analysis.

| Factor   | Means       | t-value | Factor   | Means       | t-value |
|----------|-------------|---------|----------|-------------|---------|
|          | Female (n=165) | Male (n=130) | F1   | 4.82 | 4.81 | -0.228 |
|          | F2   | 4.93 | 4.93 | -0.270 |
|          | F3   | 3.80 | 3.99 | 1.923 |
|          | F4   | 4.76 | 4.67 | -2.221* |
|          | F5   | 4.49 | 4.41 | -1.290 |
|          | F6   | 4.78 | 4.79 | 0.296 |
|          | F7   | 4.76 | 4.77 | 0.362 |
|          | F1   | 4.68 | 4.84 | 3.452** |
|          | F2   | 3.78 | 4.34 | 5.906** |
|          | F3   | 4.25 | 4.52 | 4.176** |
|          | F4   | 3.75 | 4.11 | 4.717** |
|          | F5   | 2.87 | 3.46 | 5.695** |
|          | F6   | 4.44 | 4.63 | 3.665** |
|          | F7   | 4.18 | 4.69 | 5.229** |

*p < 0.05; **p < 0.01.
Source: Authors based on analysis in SPSS.17.
ranked factors on the scale of performance grades. Guests experience these dimensions of the hotel service as very important when choosing a spa hotel. Similarly, respondents highly grade those hotel attributes that refer to ‘intangible’ dimensions of hotel service, i.e. human factors (politeness, professionalism, responsibility of the staff, and so on).

The third quadrant was called ‘low priority’ because the factors in this area were considered relatively less important, although the actual performance is below the mean score of all the other attributes’ performances (Lee & Lee, 2009). This quadrant contains the fifth factor ‘entertainment, recreation and wellness facilities’, which received the lowest grades on the performance scale (3.13). At the same time, it represented a factor of relatively low priority when choosing a hotel.

The quadrant ‘possible overkill’ contains the ‘empathy’ factor. The importance of these attributes is low but their actual performance is higher than the mean score of the overall performance. The respondents ranked the dimension of the quality of hotel service that refers to the empathy of the employees the lowest but at the same time they are satisfied with the performance, which is better than the three dimensions that refer to the ‘tangible’ dimension of quality (F5, F4 and F2).

4.4. T-test

The t-test of independent samples was applied with the aim of comparing the attitudes of two groups of respondents – males and females. The results shown in Table 4 indicate that there is a statistically significant difference compared with the gender of the respondents when the fourth factor ‘Tangibility’ \((p < 0.05)\) is considered. Female respondents give higher marks to the tangible attributes of hotel service than do male respondents. The obtained results are similar to the results of the research conducted by Pullman and Robson (2007), which indicate that women expect more than men as far as the physical characteristics of hotel service are concerned (interior attractiveness, design, decoration and similar).

As far as the domain of the perception of the quality of hotel service is concerned, there are statistically significant differences compared with the gender of the respondents when all seven factors are considered \((p < 0.01)\). Men generally rank higher, i.e. estimate that all determinants of service quality are higher than do women. The tendency that women complain more about the quality of hotel services is proved by the research conducted in Hong Kong. According to the results of this research, women and the younger population more often lodge a complaint than do men and customers who are more than 45 years old (Heung & Lam, 2003).

5. Discussion and implications

This study has categorised the 24 hotel attributes into seven factors: Assurance, Food and amenities, Empathy, Tangibility, Entertainment, recreation and wellness facilities, Responsibility and Reliability. Using IPA, this study has compared the importance and performance of the factors, as perceived by the guests in spa hotels. The IPA grids have illustrated that the factors Food and amenities and Tangibility fell into the Concentrate Here quadrant; Assurance, Responsibility and Reliability in the Keep Up the Good Work quadrant; Entertainment, recreation and wellness facilities in the Low Priority quadrant; and Empathy in the Possible Overkill quadrant. When choosing a hotel, hotel guests considered Food and facilities to be the most important to them, while the hotel attributes represented by the Assurance factor were experienced as the most quality attributes when measuring the performances of hotel services.
The results of an independent sample t-test show that there is a significant difference between female and male tourists. When choosing a hotel, female respondents considered the Tangibility factor more important than did male respondents. When the perception of service quality in spa hotels is considered, there is also a significant difference in guests’ attitudes within all seven factors. As a rule, female tourists ranked attributes lower than male respondents. Results obtained in this work by the t-test can significantly help hoteliers when creating market segments. Identification of groups of customers who share characteristics when demanding a certain product plays a very important role in market positioning. Analysing perceptions of quality in terms of different segments can help hoteliers to formulate marketing strategies to meet the needs of each specific segment (LeBlanc, 1992). Age, gender, education, occupation, material status as well as their wishes and needs can influence their decision on hotel choice and on the level of satisfaction with certain hotel services.

The IPA technique has helped to divide the hotel selection factors into four identifiable quadrants, so that hoteliers are better able to understand how customers perceive their products and services. This is a useful and effective way for management to identify what problems exist (Chu & Choi, 2000). The results of IP analysis in this work showed that the main problem when offering a quality service in spa hotels is inadequate organisation and appointments of hotels. Deterioration of accommodation capacities, poor adjustment to contemporary market demands, unfinished privatisation, as well as lack of market research directed towards the demands of users are some of the reasons that contributed to the appearance of this problem, whose solution ought to be sought in the creation of a developmental strategy with short- and long-term plans and stimulations for investing in the development of spa tourism. The main marketing objective in the introductory stage of new hospitality products is creating product awareness (Chen & Myagmarsuren, 2010). The basic task of management in this case is the creation of strong relationships with guests, continuous monitoring of changes in consumers’ demands and the creation of service standards that reflect identified demands by customers, including that physical evidence of service through well-planned and designed service ambience is provided. Improvement of quality should be the priority task not only for management but also for state bodies, economic organisations, and educational, scientific and health institutions. The goal of the entire process of quality implementation and improvement should enable guests’ satisfaction and achievement of better business results (Inic, Milutinovic, Jergovic, & Vucelja, 2010).

We suggest that the sample, in some future research, is enlarged by means of continuous interviewing of guests over the course of one year. Considering the fact that the respondents in this research are only guests in three-star hotels, it is advisable to include guests of higher category hotels (four- and five-star hotels). Moreover, future research should also include interviewing employees in hotels in order to gain a thorough insight into attitudes of both external and internal clients.

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