

Service Quality of the Wellness and Spa Centers in the Czech Republic: Application of SERVQUAL Model

Daniel Temesgen Adane,¹ Mohsin Javed²

Abstract: While much literary work is increasing in the tourism business, little attention is given to the service quality of wellness and spa centers. Therefore, the present work aims to assess the service quality of the wellness and spa centers in Luhačovice, the Czech Republic using the SERVQUAL scale model. The study, which is cross-sectional, and quantitative, consists of 90 randomly selected participants visiting Wellness and Spa centers during 2 months of the data collection period. Data were analyzed using confirmatory factor analysis indices to establish the modified SERVQUAL scale's reliability, underlying dimensionality, and convergent, discriminant validity. Results show a moderate negative quality gap for overall wellness and spa center service quality. It also indicates a moderate negative quality gap on each service quality scale dimension, especially in the 'Tangibility dimension'. The scope of the present work is limited to the Luhačovice wellness and spa centers due to time and other resource constraints. However, the study's major contribution is that it offers a general framework to assess the service qualities of the wellness and spa centers.

Keywords: Tourism, Wellness and Spa, Service Quality, SERVQUAL, Czech Republic.

JEL Classification: G32, G33, C35

1 Introduction

The tourism industry of the Czech Republic has seen a perpetual growth in the number of tourists over the previous decade. In 2019, it generated 2.9% of the country's GDP and employed 239,506 people, or 4.4% of all jobs (<https://www.oecd.org>. 2022). Even though the COVID-19 pandemic had an undeniable impact, the GDP contribution of tourism nearly halved (to CZK 82 billion) in 2020, accounting for 1.5% of the whole GDP. Employment in the tourism industry decreased by 17,494 people, or 7.3%, with less impact. Spas in the Czech Republic which are traditionally considered impossible to separate from European cultural heritage have consistently stood to be an attractive tourism center with notable economic benefits for the Czech Republic. The economic benefit was majorly due to the long-term stays of spa guests who spent an average stay of about 15 days (Vystoupil, J., Šauer, M., & Bobková, M. (2017). From 1989 onwards, the Czech Republic's Spa sector has changed and is privatized. This change, which took place in 1992, has resulted in more than 50 new spa organizations from 12 originally state spa organizations. Though this change at first caused the extinction of smaller spas, it has increased the standard range of treatment stays for new forms of relaxation and regeneration stays which is mainly health tourism. Spa tourism then became a popular way of spending leisure time (Smolová & Szczyrba, 2005). As privatization increases, competition in business also does. As the Competitive landscape sharpens and the external environment becomes more challenging, concern for service quality grows. According to Zeithaml et al. 1988, service quality is defined as “an assessment of customers from the overall excellence of services” or simply, “How well a particular service meets customers’ needs or expectations”. according to Asubonteng et al., (1996). Parasuraman et al., (1985) also put service quality as “The gap between consumers’ perceptions of services given by a particular service center and their expectations about firms giving such services”. If service quality is to become the hotspot of marketing strategy, the marketer must have the tools to evaluate it. Service quality, however, is difficult to measure. The reason is unlike products service businesses have a few characteristics like intangibility, heterogeneity, and inseparability from utilization that make them more troublesome to be assessed. Service quality measurement metrics help managers to be able to spot problems and enhance both the efficiency and effectiveness of services, to attain customer satisfaction, Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Defining a service from the customer's perspective comes beside a few expressions like confidence, encounter, security, and feeling which are hard to pin down because of the intangibility nature of services (Gronroos, 1988). Although researchers have general agreement on the significant role of service quality in customers' satisfaction and the performance of firms, there is no unanimous consensus on the model

¹ Tomas Bata University in Zlin, Faculty of Management and Economics, Department of Business Administration, Mostni 5139, 76001 Zlin, Czech Republic, d_adane@utb.cz

² Tomas Bata University in Zlin, Faculty of Management and Economics, Department of Business Administration, Mostni 5139, 76001 Zlin, Czech Republic, javed@utb.cz

of service quality measurement. Service quality is multidimensional (Brady & Cronin, 2001a; Parasuraman et al., 1988) and dimensions can vary according to the different service industries (Pollack, 2009). There are several well-known service quality models used across different service sectors, and a few of the most typical ones are the GAP model, SERVQUAL model, SERVPERF Model, RATER model, Grönroos Model, and Importance-Performance Analysis (IPA), Seth, N., Deshmukh, S. G., & Vrat, P. (2005). In Academic papers, numerous studies have adopted SERVQUAL as a benchmark model for effectively measuring and analyzing service quality. Park, J., & Jeong, E. (2019). The SERVQUAL model is an instrument developed by Parasuraman et al. (1985; 1988). It is a tool used to measure the customer's perception of service quality. Using data from interviews conducted in focus groups, Parasuraman et al. (1985). SERVQUAL is a tool widely regarded as a significant deviation from the conventional strategy of utilizing perception-based measures as a predictor of customer satisfaction. It proposes the use of expectation/perception, or the service quality gap, as a persistent perception that forecasts client satisfaction with a service provider in place of perception. (Babakus and Mangold, 1992; Parasuraman et al., 1991a).

The present work aims to assess the service quality of the Czech Republic's wellness and spa centers, specifically Luhačovice, using the SERVQUAL model to spot strengths and areas for improvement in customer satisfaction.

This paper contributes to a structured approach, using the SERVQUAL model, to assess the service quality of the wellness and spa centers in the Czech Republic. It can also be applied by similar businesses to measure customer satisfaction and in turn to set a strategic plan to enhance customer loyalty.

This paper is organized as follows: Section 2 reviews the literature on the fundamental concepts of service quality and the SERVQUAL model. Section 3 outlines the methodology used to evaluate service quality. Section 4 presents the key results and discussion. Finally, Section 5 concludes the paper by summarizing the main insights and providing recommendations for further studies, along with references for additional citations.

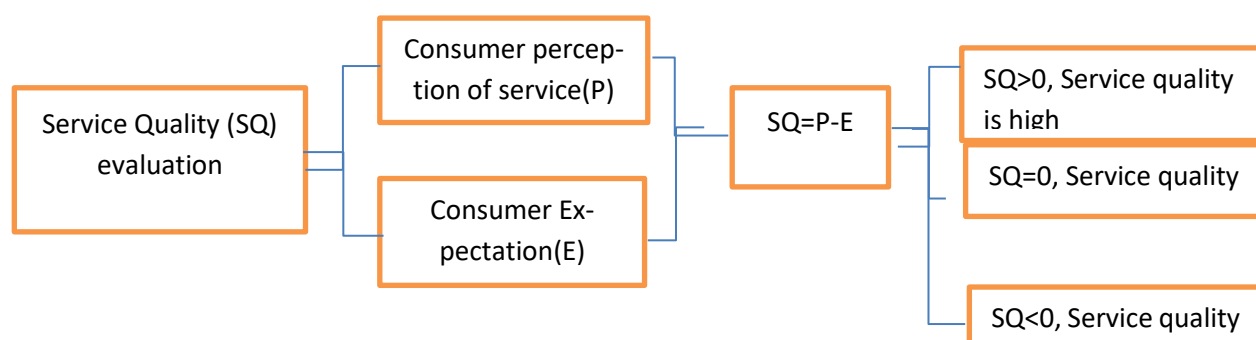
2 Literature Review

SERVICE QUALITY and SERVQUAL

Insight into service quality concepts can profoundly affect service providers' activities in competing to acquire and retain customers. The definition of service quality has been evolving. Quality according to Juran, 1974 is "Fitness for use" while (Crosby, 1979) took the strictest approach with a "Zero defect". Even though Juran's definition can be taken as a broad one, both can be applied to the manufacturing and service industries indiscriminately. However, service, unlike products, has an intangible characteristic that will make it difficult to measure like a product. As the services are intangible, determining their quality might be more difficult. The quality of service is measured by how much it meets the customer's expectations. The degree to which a service lives up to client expectations is measured by its quality. Researchers typically use the term perceived service quality to quantify the quality of intangible services. (Yarimoglu, E. K. (2014). Arguably, one of the groundbreaking definitions of service quality is indicated by Parasuraman et al, (1988) which refers to 'the difference between what customers believe they received and what they expected from the service.' Parasuraman et al. have put a critical emphasis on the satisfaction of the customer relating to the customer's loyalty.

The SERVQUAL model's authors recommend evaluating service quality by subtracting customer expectations from their perception scores ($Q = P - E$). (Parasuraman et al., 1985). The result is elaborated in the figure below. The intangible nature of services has led many researchers to disregard expectations when measuring service quality, concluding that service performance should be the sole driver of customer satisfaction (Patterson et al., 1997; Sharma and Ojha, 2004). Though subject to ongoing criticism in service quality research, the SERVQUAL model continues to be widely used for measuring service quality in various industries.

Fig. 1. Service quality assessment process (Shi, Z., & Shang, H. (2020).



3 Method

The SERVQUAL scale, developed by Parasuraman et al. (1988), is a versatile tool that has been used to assess various dimensions of service quality—Tangibles, Reliability, Responsiveness, Assurance, and Empathy—and can be modified to measure service quality across different sectors. Accordingly, we have adopted and prepared our initial questionnaire based on the recommendations of the previous studies. However, we have modified the questionnaire by consulting experts such as local spa center professionals and academics. In total, 22 items were selected to capture these five service quality dimensions. This alteration in the questionnaire can effectively measure customer expectations and other customer perceptions. The measurement of expectation and perception is valid in line with the earlier studies (Parasuraman et al., 1988). We used a five-point Likert scale, from 1 (strongly disagree) to 5 (strongly agree). The questionnaire also included questions regarding respondent demographics. The survey is limited to the wellness and spa centers visitors to Luhačovice. The study was descriptive and cross-sectional in nature. Questionnaires were randomly distributed to those visiting the Luhačovice wellness and spa centers in July and August of 2024. A total of 90 questionnaires were distributed to eligible respondents and were usable for further analysis. Data were analyzed using the SMART PLS software to calculate the confirmatory factor analysis.

The data were subjected to the confirmatory factor analysis (CFA) and assessed using multiple fit measures such as Chi-square, Goodness of Fit Index (GFI), and Normal Fit Index (NFI). The GFI demonstrates the degree to which the model accurately represents the data. This battery included absolute fit measures like the chi-square statistic, demonstrating that predicted and actual matrix differences are nonsignificant for a model to be acceptable. The GFI is a commonly used absolute fit index, with a result of 0.9 or above indicating an acceptable model fit (Meyers et al., 2006). The other fit indices include relative fit measures like CFI and NFI. These are measures of fit relative to the independent model (Meyers et al., 2006). A researcher must use a range of fit indices to determine how well the data aligns with the proposed model.

4 Data Analysis and Results:

Aligned with previous research, five expectation and perception dimensions were employed as reflective indicators (Parasuraman et al., 1988). Each indicator variable was calculated as a composite score from its corresponding subscale. Reflective indicators imply that changes in measured indicators are driven by the underlying latent construct, directing the model paths from latent to observed variables (Jarvis et al., 2003). These reflective indicators were used to create new correlation matrices. The results demonstrate that each construct's correlations were consistently stronger than those between other constructs, meeting the requirements for measurement scale discriminant validity (Bagozzi, 1981). (See Tables 3 and 4). The first-order confirmatory analysis was carried out using SMART PLS. The model examines how well service perception and expectation indicators benefit the data. The model was assessed using a maximum likelihood procedure and evaluated using chi-square, GFI, and CFI. The first-order model retains all its original variables (see Table XI and Figure 1). The Chi-square was significant at 170.6 and the p-value was 0.0001.

Table 1. SERVQUAL attribute's internal reliability

Dimension	Items	Expectation	Perception
Tangibles	4	0.885	0.945
Reliability	5	0.901	0.882
Responsiveness	4	0.881	0.953
Assurance	4	0.865	0.862
Empathy	5	0.945	0.903

Source: Author's processing

Table 2 Respondents Profile

Variable	Frequency	Percent
Gender		
Male	23	25.56
Female	67	74.44
Age		
15-25	0	
26-35	0	
36-45	18	20
46-65	41	45.55
66 and above	31	34.44
Education Level		
Primary Education	0	
Secondary Education	68	75.55
Vocational Training/Certificate	22	24.45
Bachelor's degree	0	
Master's Degree	0	
PhD	0	
Occupational Status		
Student	0	
Private Employed	22	24.44
Government Employed	1	1.11
Own Business	0	
Retired	77	85.55
Category of the Respondents		
Local/Domestic Visitors	88	97.77
Foreign Tourists	2	2.23
Marital Status		
Single	0	
In a Relationship	0	
Married	12	13.33
Divorced	36	40
Widower/widow	42	46.66

Source: Author's Own processing

Table 3 Correlation matrix: composite service quality indicators formed from expectation dimensions

	E1	E2	E3	E4	E5
Tangibles(E1)					
Reliability(E2)	0.99				
Responsiveness(E3)	0.99	1.03			
Assurance(E4)	0.93	0.95	0.94		
Empathy(E5)	0.78	0.82	0.79	0.96	

Source: Author's Own processing

Table. 4 Correlation matrix: composite service quality indicators formed from perception dimensions

	P1	P2	P3	P4	P5
Tangibles(P1)					
Reliability(P2)	0.86				
Responsiveness(P3)	0.87	0.94			
Assurance(P4)	0.84	0.89	1.00		
Empathy(P5)	0.81	0.84	0.81	0.87	

Source: Author's processing

Table 5. Model fit index:

Model fit indices	Chi	p-value	CFI	GFI	NFI
First order CFA	170.9	0.0001	0.836	0.74	0.806

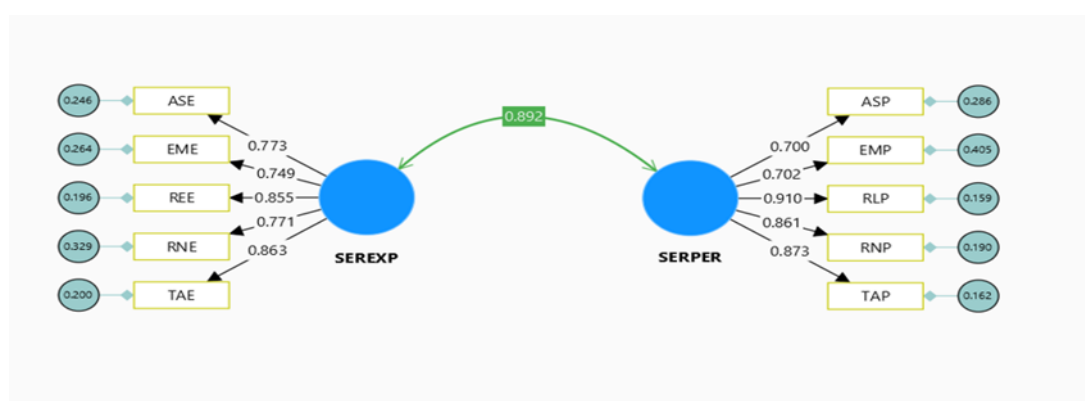
Source: Author's processing

The first-order model retains all its original variables. Chi-square was significant =170.9 and $P < 0.05$. Other indices also indicate that both CFI (0.836) and NFI (0.806) are excellent fits (Hu and Bentler, 1999).

Note: GFI– Goodness of Fit Index, between 0 and 1, where 1 indicates a perfect fit; CFI– Comparative Fit Index, where values close to 1 indicate a very good fit.

Figure 2. First-order confirmatory factor model for Wellness and Spa Center's service quality: The first-order model retains all its original variables (see Figure 2 below) with a 0.892 difference which could reflect an overall gap across all measured attributes in the service quality construct.

Figure 2. First-order confirmatory factor model for wellness and spa service quality



Source: Author's processing

5 Discussion

In wellness and spa facilities, it is crucial to comprehend service user experiences from the customer's viewpoint. If expectations and perceptions are clarified and appropriately addressed, providers can build a partnership with their clients instead of taking a one-way approach (Crosby, 1979). Spas can obtain a competitive edge in the market by providing high-quality services. For the employees of the organization offering these services, it is crucial. Any business cannot afford to fall short of or surpass the quality expectations of its clients; doing so could spell disaster. Therefore, creating a metric that consistently assesses the quality of spa services could greatly aid in service enhancement. A tool that gauges consumer expectations and perceptions aids in opportunity identification, and general and targeted service quality improvement.

To help service providers systematically analyse service delivery processes and allocate resources where the greatest benefit can be obtained, SERVQUAL measures both global and individual service quality dimensions in each setting. However, this does not imply that service providers can disregard the dimensions that show smaller gaps in quality.

According to our research, SERVQUAL is a reliable tool for assessing the level of service provided by wellness and spa facilities in the Czech Republic. The expectation and perception dimensions of the scale were found to be a unidimensional construct with high validity and reliability. As a result, the scale is a great way to measure spa service expectations and perceptions objectively. Our findings also showed a strong correlation between spa services perception and expectation indicators on their respective dimensions. Therefore, if any one of the indicators is not met, it may result in a general negative opinion of the service provider.

By measuring service quality gaps and regularly implementing corrective actions, private spa service providers can begin addressing quality issues with the help of existing research. According to our findings, Luhačovice wellness and spa service expectations are higher than what clients believe is provided in practice. Although the gaps are small for each service dimension and the entire scale, they are all in negative territory, which suggests a significant issue.

The negative gap on the overall scale, subscale, and individual items indicates that these quality gaps require an answer. The greatest negative scores were given to service tangibility, indicating that customers were not sufficiently satisfied with the physical facilities. Service users, particularly those with back pain and allergies, reported experiencing issues with beds, baths, and the physical surroundings in general. The Czech Republic's private spas must prioritize modern physical amenities and an aesthetically pleasing setting to remain competitive in the rapidly growing private spa sector.

6 Conclusions

Using the SERVQUAL model, our study sought to evaluate the level of service provided by Luhačovice wellness and spa facilities. To efficiently identify the gaps in the service quality of businesses aiming for ongoing expansion, we employed the SERVQUAL model. To ensure long-term business survival, it is necessary to continuously monitor and measure customer expectations and perceptions due to shifting demographics, preferences, and competition. The issue of excellent service in wellness and spa facilities is highly demanding. Apart from its financial benefit, a high level of service quality can also improve the general health condition of the guests. Customer satisfaction and loyalty, a competitive advantage, and long-term success can thus be guaranteed by improving service quality in wellness and spa facilities

through ongoing SERVQUAL assessment. By estimating quality gaps, the SERVQUAL approach makes it evident where service employees are falling far short of customer expectations. Any effort made by businesses to bridge these gaps will inevitably improve the perception of service quality, which will ultimately result in more satisfied customers. For instance, a low tangibility score suggests there should be an increase in overall infrastructure setup improvements.

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