The Impact of Intangible Components of Service Quality on Guest Satisfaction

Goran Perić

Toplica Academy of Applied Studies, Blace, Serbia
Bijeljina University, Faculty of Agriculture, Bijeljina, RS, Bosnia and Herzegovina
https://orcid.org/0000-0001-7954-7663

Sandra Dramićanin

Toplica Academy of Applied Studies, Blace, Serbia
https://orcid.org/0000-0001-6533-2071

Marko Gašić

Toplica Academy of Applied Studies, Blace, Serbia
https://orcid.org/0000-0002-5256-4794

Mihajlo Đurović

Toplica Academy of Applied Studies, Blace, Serbia
https://orcid.org/0009-0003-5356-319X

Nataša Novaković Božić

Toplica Academy of Applied Studies, Blace, Serbia
https://orcid.org/0009-0007-2863-272X

Abstract
Background: The intangible components of service quality (reliability, responsiveness, assurance and empathy) play a crucial role in shaping guest's satisfaction in the hotel industry. Although these components, unlike tangible ones, are more difficult to measure, they often determine the overall guest experience and their level of satisfaction. In the context of the Serbian hotel industry, research focusing specially on intangible service quality components remains limited, indicating the need for a deeper understanding of their impact on guest satisfaction.
Purpose: The purpose of this research is to examine and analyze the influence of intangible service quality components, such as reliability, responsiveness, assurance and empathy, at the level of guest's satisfaction in hotels in Serbia. The research aims to determine which component has the greatest impact on guest satisfaction.
Study design/methodology/approach: The research was conducted using an online questionnaire distributed via social media and directly to hotel guests, applying a convenience sampling method. A total of 333 respondents participated in the study. Hypothesis testing was performed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method, using SmartPLS 4 software.
Findings/conclusions: The results indicate that intangible components of service quality play a significant role in shaping guest satisfaction in the hospitality industry. Reliability, responsiveness, and assurance were identified as statistically significant dimensions with a positive effect on guest satisfaction. Although empathy exhibited a positive relationship with guest satisfaction, its effect was not statistically significant, suggesting that guests may be less likely to explicitly recognize the emotional aspects of the service relationship as decisive for their satisfaction.
Limitations/future research: The use of a convenience sampling method limits the generalizability of the findings, as respondents were not randomly selected. Future research should employ probabilistic sampling methods to enhance representativeness and generalizability. Additionally, extending the research to an international context could provide valuable insights into the role of cultural differences in shaping the relationship between intangible service quality components and guest satisfaction.
Keywords
Service quality, intangible components, reliability, responsiveness, assurance, empathy, guest satisfaction

Introduction

Understanding guest expectations and preferences represents the foundation of successful operations in the hotel industry. Therefore, it is essential for hotel management to have a clear understanding of guests' needs before making strategic and operational decisions, in order to identify the key determinants that lead to high levels of guest satisfaction (Lu et al., 2015; Rajaguru & Hassanli, 2018). In the context of hotel organizations, guest satisfaction largely depends on the quality of services provided (Perdomo-Verdecia et al., 2024), while service quality stands out as a crucial factor in achieving operational success in hotel operations (Song et al., 2022). Recent studies also indicate that broader market influences, including social networks, play an important role in shaping guests' expectations and behavioral intentions (Petković et al., 2024).

In the hospitality literature, service quality is most commonly examined through the SERVQUAL model, which encompasses both tangible and intangible dimensions of service quality. Intangible dimensions include interpersonal aspects such as reliability, responsiveness, assurance, and empathy (Grönroos, 1984; Parasuraman et al., 1988). Despite the visibility of tangible elements, previous research indicates that intangible components have a stronger influence on guests' perceptions of overall service quality and satisfaction (Kandampully et al., 2018; Ladhari, 2009).

Within the hospitality industry, where experiences and perceptions play a central role, intangible service quality components-such as personalized attention and employee behavior-significantly shape guest satisfaction (Han et al., 2009). Studies conducted in different countries suggest that guests of higher-category hotels expect not only high-quality tangible facilities but also superior interpersonal interactions throughout the service delivery process, which contribute to positive guest experiences (Kim et al., 2009).

Although intangible dimensions of service quality are widely recognized as key determinants of guest experience and satisfaction, they are often examined only in conjunction with tangible components, rather than as independent constructs. This research gap is particularly evident in the context of the Serbian hotel industry, where empirical studies focusing exclusively on intangible service quality dimensions remain limited. Moreover, much of the existing research treats service quality as a unidimensional construct, without clearly distinguishing or quantitatively assessing the individual effects of reliability, responsiveness, assurance and empathy on guest satisfaction. The aim of this research is to examine and analyze the influence of intangible components of service quality - reliability, responsiveness, assurance and empathy - on the level of guest satisfaction in high-end hotels in Serbia. The research seeks to identify which of these components have the greatest importance in shaping guest satisfaction.

The manuscript is structured to first present a review of the relevant literature and the theoretical foundations of the research, followed by the development of hypotheses and a description of the methodology. The empirical section includes the assessment of the measurement and structural models, as well as the presentation of the results of hypothesis testing, while the final section provides a discussion, conclusion, and an overview of the theoretical and practical implications.

1. Literature review and hypotheses development

1.1. Service quality

Service quality in the hospitality industry is best understood by first defining the nature of services themselves. In the literature, definitions of services vary across authors, reflecting different perspectives on their role in the economy.

According to one of the most commonly used definitions, a service is "an act or performance that one party offers to another, and although the process may involve a physical product, the performance itself is intangible and does not result in ownership of any factor of production" (Lovelock et al., 2015, p. 15). Palmer (2013) defines a service as "any benefit or activity that one party offers to another that is essentially intangible and does not involve ownership of any element of the service" (p. 2). On the other hand, Grönoors (2015) defines service as "a process consisting of a series of more or less intangible activities that usually, but not necessarily always, take place between customers and employees and/or physical resources or goods and/or systems of a service provider, which are offered as a solution to a customer's problem" (p. 48). Previously presented definitions emphasize the intangibility of services,

indicating the difficulty of defining and determining their quality in a simple and straightforward manner. Hotel service represents an experience for guests. Human participation in service delivery is therefore recognized as one of the defining characteristics of hotel services (Hsu & Powers, 2001). Service quality has been widely analyzed, initially resulting in ten evaluating dimensions: "tangibility, reliability, responsiveness, competence, courtesy, credibility, security, accessibility, communication, and customer understanding" (Parasuraman et al., 1985, p. 47), while later studies, using various statistical methods, consolidated these dimensions into five key factors: "tangibility, reliability, responsiveness, assurance and empathy" (Parasuraman et al., 1988, p. 23). Based on empirical data collected within five different service sectors, Parasuraman et al. (1988) developed the SERVQUAL model, suggesting that these dimensions most effectively explain perceptions of service quality (Tešić, 2020). These dimensions of service quality are also considered highly relevant to the hotel industry, which has been confirmed by numerous studies conducted in this field (Ali et al., 2019; Albayrak et al., 2017; Ezeh et al., 2022; Herstein et al., 2018; Jasinskas et al., 2016; Omar et al., 2020; Perić et al., 2020; Stefano et al., 2015). Guests who are dissatisfied with service quality tend to abandon their purchase decisions and turn to the competitors. For this reason, hotel organizations should focus on delivering high-quality services, as this leads to numerous positive outcomes, ranging from gaining competitive advantage and increasing market share (Butnaru & Liacu, 2017; Hu et al., 2009), to enhancing customer satisfaction, retention and loyalty, as well as improving profitability and overall business performance (Harter et al., 2002; Yoo & Park, 2007; Pan, 2015; ; Shah et al., 2018; Wilkins et al., 2009).

1.2. Tangible and intangible components of service quality

The demands and expectations of hotel guests are continuously evolving, whereas the perception of the core values of service quality remains relatively stable. In this context, the role of digital transformation and artificial intelligence in hospitality has received increasing attention in recent research (Vukolić et al., 2025), particularly in relation to improving service processes and guest experience. The guest experience may be described as receiving the desired service at the appropriate moment, accompanied by respect and courtesy on the part of the employees (Mola & Jusoh, 2011). Although expectations formulated in this way may appear overly general, they clearly indicate that hotel guests simultaneously demand both tangible and intangible components of service quality. Considering the key dimensions of service quality, identified in previous research, it can be argued that intangible components play a particularly important role in shaping guests' overall perceptions of service performance. Wakefield and Blodgett (1999) emphasize that service quality components can be labeled as tangible and intangible. Grönroos (1984) was among the first authors to clearly establish the division of service quality into tangible and intangible components, highlighting two main dimensions of quality: technical and functional quality. Technical quality refers to tangible aspects of the service, while functional quality includes intangible elements related to the service delivery process, namely the way the service is created and provided, as well as how guests experience and receive the service. Factor analysis has identified tangible and intangible components of hotel service quality (Marić et al., 2016). Research has shown that both components play an important role in the evaluation of the service quality, guest satisfaction, and the final hotel selection decision (Vujić et al., 2020). Tangible components of service quality, include the physical environment of a hotel where the service is provided and where the interaction between the organization and the customer occurs, as well as other material aspects associated with the service. In hotel industry tangibility refers to the aesthetic appearance of the hotel and its premises, modern equipment and the appropriate appearance of the employees. Previous research suggests that tangible aspects of hotel services may have a greater influence on overall guest satisfaction, as they can be more easily adjusted and improved compared to intangible dimensions (Albayrak et al., 2010). In business hotels, tangibility is considered a key determinant of service quality (Oberoi & Hales, 1990). Subsequent studies further confirm that greater attention devoted to the material elements of service can contribute to enhancing guest satisfaction (Jones et al., 2004). In spa hotels, the importance of tangible components has been recognized as a key factor in improving service quality and guest satisfaction (Bakirtzglou et al., 2018).

The intangible aspects of hotel service, refer to the overall relationships and interactions during the provision and use of the service, i.e. the way the guest experiences and receives the service. The importance of these intangible elements is reflected in the fact that they contribute to increasing the value of the service and guest's satisfaction. If the intangible aspect of the service does not meet the expectations of guests, even the high quality of the tangible components will not be able to compensate for their dissatisfaction with the overall hotel experience (Vujić et al., 2020).

Numerous empirical studies emphasize the relevance of intangible components in service quality assessment, especially in the hospitality industry (Blešić et al., 2011; Ekinci et al., 2003; Kara et al., 2005; Marić et al., 2016; Malik et al., 2020; Marković et al., 2013; Vujić et al., 2020). For example, a study conducted among British tourists on the island of Crete used an adapted SERVQUAL model with two dimensions – tangible and intangible components and showed that guests valued intangible elements more, which significantly contributed to their satisfaction (Ekinci et al., 2003). Similar studies conducted in hotels in Croatia and Slovenia, also using a modified SERVQUAL model, indicated high expectations as well as perceptions of service quality among guests, with a special emphasis on the importance of intangible dimensions (Marković et al., 2013). Research results in hotels in the Kolubara District confirm that intangible components contribute to increasing service value and guest satisfaction (Vujić et al., 2020).

1.3. Guest satisfaction

Guest satisfaction is one of the central research topics in the field of hospitality, as it is widely recognized as a key determinant of consumer behavior, including guest loyalty, revisit intention and positive word-of-mouth communication (Chi & Gursoy, 2009; Yoon & Uysal, 2005). In the complex and highly competitive hotel environment, understanding the factors that shape guest satisfaction is essential for improving service quality and achieving sustainable competitive advantage. Numerous authors emphasize that guest satisfaction isn't exclusively related to quality of services provided, but rather to a broader range of factors that influence the overall service experience. These factors include personal attention, ambiance, employees' attitudes towards guests, and perceived value for money (Nadiri & Hussain, 2005; Yüksel & Yüksel, 2001). In this

context, the dimensions of service quality developed through the SERVQUAL model (Parasuraman et al., 1988) largely overlap with the elements that determine guest satisfaction in hotel services. According to Oliver (2014), satisfaction is defined as an effective response resulting from the evaluation of perceived experience in comparison with previously formed expectations. Karakas (2014) believes that guest satisfaction occurs when the service performance meets or exceeds guest expectations.

According to Godolja and Spaho (2014), guest satisfaction in hotels is widely regarded as a critical factor for business success. Research indicates that achieving high level of guest satisfaction represents a significant challenge for hotels management, as satisfied guests tend to demonstrate greater loyalty and stronger willingness to return (Dominici & Guzzo, 2010). Managers can contribute to achieving and maintaining high levels of guest satisfaction by identifying key factors that influence positive and negative guest feedback (Čelić et al., 2022), which can improve the hotel's competitive advantage and its financial performance (Janjić et al., 2015) and that contributes to its long-term survival (Mitrović et al., 2021).

1.4. Hypotheses development

Analyzing the relationship between service quality and customer satisfaction has been the subject of numerous empirical studies. In some cases, the terms "quality" and "satisfaction" are used synonymously, as they are considered conceptually similar (Iacobucci et al., 1995). However, clear differences can be identified between these two concepts. Service quality is generally viewed as a long-term construct related to customer expectations, whereas satisfaction is associated with a short-term, emotional or personal response to a specific service encounter (Hernon et al., 1999). Cronin and Taylor (1992) explain that "perceived quality represents a form of attitude and a general, long-term evaluation" (p. 56). On the other hand, satisfaction represents a specific judgement related to an individual service experience. Furthermore, service quality assessment is predominantly cognitive in nature, while satisfaction encompasses both cognitive and affective components (Dortyol et al., 2014). Most researchers agree that a causal relationship exists between service quality and customer satisfaction. Some studies suggest that consumer satisfaction can influence perceptions of service quality, a

relationship supported by the Bitner model (1990) and confirmed by Bolton and Drew (1991). Nevertheless, the prevailing view in the literature is that service quality represents an antecedent of customer satisfaction. This perspective has been confirmed by numerous empirical studies (Cronin & Taylor, 1992; Culiberg & Rojšek, 2010; Kitapci et al., 2013; Lau et al., 2013; Lee et al., 2000; Nunkoo et al., 2020; Palazzo et al., 2021).

Empirical research conducted in the hospitality industry further supports the assumption that service quality significantly influences guest satisfaction and that both concepts have positive implications for the performance of hotel organizations (Anabila et al., 2021; Ahmad et al., 2019; Palazzo et al., 2021).

As a dimension of service quality, reliability refers to a hotel's ability to consistently and accurately fulfill its commitments to guests (Asgeirsson et al., 2024; Ayvaz-Çavdaroğlu et al., 2024; Olawuyi & Kleynhans, 2025). Empirical studies indicate that reliability has a statistically significant and positive effect on guest satisfaction, with higher levels of reliability leading to greater guest satisfaction (Akmaz & Akmeşe, 2025; Amin et al., 2025; Djajnto, 2017; Edike & Joseph, 2020; Ezeh & Ezeuduji, 2023; Lucein et al., 2025; Mareeswaran & Balasubramani, 2024; Parakash et al., 2016; Marković & Raspor Janković, 2013; Rita Inoni, 2025; Temory, 2024). Consistent with previous research, accuracy and consistency in service delivery are identified as key determinants of guest satisfaction (Crossman, 2024). Based on existing research, reliability can be regarded as one of the fundamental determinants of guest satisfaction in the hotel industry. Accordingly, the following hypothesis is proposed.

H1 Reliability has a positive effect on guest satisfaction.

Responsiveness refers to a hotel's ability to promptly assist guests and provide timely service in response to their needs and requests (Ayvaz-Çavdaroğlu et al., 2024; Olawuyi & Kleynhans, 2025). In contemporary hospitality, prompt response and employees' willingness to address guest needs are widely regarded as key indicators of service quality. Research indicates that timely and efficient service enhances perceptions of professionalism and trust among guests, thereby contributing to higher levels of guest satisfaction (Ahmad et al., 2019; Akmaz & Akmeşe, 2025; Ali, 2015; Amin et al., 2025; Djajnto, 2017; Edike & Joseph, 2020; Ezeh & Ezeuduji, 2023; Lucien et al., 2025; Mareeswaran & Balasubramani, 2024;

Parakash et al., 2016; Marković & Raspor Janković, 2013; Rita Innoni, 2025; Temory, 2024). Based on the preceding discussion, the following hypothesis is formulated:

H2: Responsiveness has a positive effect on guest satisfaction.

As a dimension of service quality, assurance reflects the level of trust guests place in hotel employees and the organization. It is based on employees' competence, courtesy and credibility, which through their professional conduct foster a sense of security and trust among guests (Ahmad et al., 2019; Amin et al., 2025; Asgeirsson et al., 2024; Olawuyi & Kleynhans, 2025). Research in the hospitality industry indicates that assurance significantly influences perception of service quality, as guest satisfaction is closely linked to the trust and sense of security experienced in interactions with staff and service delivery (Ahmad et al., 2019; Ali et al., 2021; Djajnto, 2017; Edike & Joseph, 2020; Ezeh et al., 2022; Gangananda et al., 2022; Lucien et al., 2025; Mareeswaran & Balasubramani, 2024; Rita Innoni, 2025). Based on prior research, the following hypothesis is formulated:

H3: Assurance has a positive effect on guest satisfaction.

Empathy involves paying special attention to each guest through effective communication, understanding, and individualized service in order to recognize and meet their specific needs (Ayvaz-Çavdaroğlu et al., 2024; Olawuyi & Kleynhans, 2025). This dimension reflects employees' ability to identify with the guest's perspective, recognize their expectations, and accordingly tailor the service. Empirical evidence indicates that an empathetic approach by staff is one of the strongest predictors of guest satisfaction, as guests value not only the speed or accuracy of service, but also the manner in which they are understood and acknowledged as individuals (Ahmad et al., 2019; Ali et al., 2021; Amin et al., 2025; Djajnto, 2017; Edike & Joseph, 2020; Ezeh & Ezeuduji, 2023; Ezeh et al., 2022; Mareeswaran & Balasubramani, 2024; Temory, 2024). Demonstrations of understanding and genuine concern by staff foster a sense of closeness and trust among guests, leading to higher levels of emotional satisfaction and more positive perceptions of overall service quality. Based on this discussion, the following hypothesis is formulated:

H4: Empathy has a positive effect on guest satisfaction.

2. Methodology

2.1. The questionnaire

To test the proposed hypotheses, a structured questionnaire was used, consisting of statements related to the intangible dimensions of service quality and guest satisfaction. The questionnaire was divided into three parts. The first part provided instructions on how to complete the questionnaire correctly. The second part collected demographic data about the respondents, while the third part included statements designed to measure the intangible components of service quality and guest satisfaction. All statements in the third part of the questionnaire were evaluated by respondents using a five-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"). This scaling method is widely used in hospitality and service quality research, as it enables respondents to express the intensity of their perceptions and attitudes in a clear and consistent manner.

The intangible components of service quality were measured using the well-known SERVQUAL model (see Appendix) developed by Parasuraman et al. (1988). For the purposes of this study, the tangibility dimension was excluded, while the remaining dimensions-reliability, responsiveness, assurance and empathy-were retained. Guest satisfaction was measured using four statements (see Appendix) taken from relevant previous studies (Chi &Gursoy, 2009; Jung & Yoon, 2013).

2.2. Participants and sampling

This study used a convenience sampling method based on selecting respondents who were easily accessible and willing to participate in the research. This sampling approach was considered appropriate given that it does not require the complex respondent selection procedures and involves minimal resources for data collection (Etikan et al., 2016; Kumar, 2018). The survey was conducted electronically, primarily via social media platforms and by distributing questionnaires directly to hotel guests. The sample was formed based on the availability of respondents and their willingness to participate in the study.

Data collection was carried out between February and April 2025. Respondents who had not stayed in four- or five-star hotels were excluded from further analysis. The final sample consisted of 333 respondents. The demographic characteristics of the sample are presented in Table 2.

Table 2   Demographic characteristics

Characteristics	F	%
Gender		
Male	108	32.43
Female	225	67.57
Years of age		
18-30	40	12.01
31-40	118	35.44
41-50	135	40.54
51 and older	40	12.01
Level of education		
High school	61	18.32
College and university	214	64.26
Master's and doctoral studies	58	17.42
Motive of stay		
Business	55	16.52
Vacation	195	58.56
Conference - seminar	78	23.42
Other	5	1.50

Source: the authors

2.3. Data processing and analysis

The collected data were processed and analyzed using the SmartPLS 4 software. Before conducting the analysis, the questionnaires were examined for completeness and accuracy of response coding resulting in exclusion of incomplete and invalid responses from the dataset.

Data analysis was conducted in several stages. In the first stage, the reliability and validity of the measurement instrument were assessed by examining indicators of internal consistency (Cronbach's alpha and composite reliability), as well as the convergent and discriminant validity of the constructs. The criteria for model acceptance were based on the recommendations of Hair et al. (2021), according to which satisfactory values include Cronbach's $\alpha \geq 0.7$, composite reliability (CR) ≥ 0.7, and average variance extracted (AVE) ≥ 0.5.

In the second stage, the structural model was assessed to test the hypotheses concerning the relationships between the intangible components of service quality and guest satisfaction. The significance of the path coefficients was evaluated using the bootstrapping procedure with 5.000 resamples, while t-statistics, and p-values were used to determine the statistical significance of the relationships.

The selection of the PLS-SEM approach is justified by its capacity to simultaneously evaluate measurement and structural relationships, making it particularly suitable for complex models with multiple latent variables and relatively small sample sizes (n=333).

3. Results

The PLS-SEM method was applied to evaluate the research model. The PLS-SEM analysis consisted of two steps: assessment of the measurement model and assessment of the structural model. Additionally, the bootstrapping method was used to test the hypotheses.

3.1. Measurement model assessment

Authors implemented the PLS-SEM algorithm for the estimation of the measurement model and confirmatory factor analysis. The results presented in Table 2 show the factor loadings of the indicators, the reliability and internal consistency estimates (α and CR), and the convergent validity estimate (AVE). The results verifying the constructs were obtained with the use of Confirmatory Factor Analysis (Ali et al., 2018; Hair et al., 2012). Hair et al. (2021) recommend that the factor loading of the indicators should be equal to or greater than 0.7. All indicators listed in Table 2 meet this condition. Internal consistency indicator Cronbach alpha confirms the validity of the measurement model for all components, with the values ranging from 0.741 to 0.801 (Hair et al., 2021). Composite reliability for all constructs is above the recommended values, ranging from 0.808 to 0.863. Convergent validity indicates the relationship between constructs and their associated variables and their value according to Hair et al. (2021) should be at least 0.50 or higher. All AVE values exceed the recommended minimum of 0.50, which means that convergent validity is established. Variance inflation factor (VIF) indicates that multicollinearity is not present in the measurement model, considering that all values are between 1.352 and 1.833. Multicollinearity is present when at least one indicator has a VIF value greater than 5 (Hair et al., 2021).

Table 2 Factor loadings, reliability, and validity statistics for constructs

Construct and Item	Factor loadings	VIF	α	CR	AVE
Reliability			**0.801**	**0.808**	**0.558**
REL1	0.812	1.833			
REL2	0.734	1.563			
REL3	0.726	1.558			
REL4	0.739	1.592			
REL5	0.721	1.534			
Responsiveness			**0.773**	**0.854**	**0.595**
RES6	0.733	1.441			
RES7	0.784	1.599			
RES8	0.790	1.656			
RES9	0.777	1.565			
Assurance			**0.788**	**0.863**	**0.611**
ASS10	0.766	1.541			
ASS11	0.792	1.635			
ASS12	0.795	1.657			
ASS13	0.776	1.579			
Empathy			**0.768**	**0.852**	**0.590**
EMP14	0.763	1.506			
EMP15	0.805	1.676			
EMP16	0.799	1.616			
EMP17	0.703	1.352			
Guest Satisfaction			**0.741**	**0.837**	**0.563**
GS18	0.720	1.374			
GS19	0.794	1.537			
GS20	0.721	1.374			
GS21	0.765	1.441			

Source: the authors

3.2. Structural model estimation and hypothesis testing

The structural model demonstrates a high level of predictive accuracy, with an R^2 value of 0.749. This means that intangible components of service quality explain 74.9% of the variance in guest satisfaction, which represents a strong explanatory power by the standards of structural equation modeling. This R^2 value indicates a strong association between intangible service quality components and guest satisfaction, which is in line with the recommended thresholds in the literature (Hair et al., 2021), according to which values above 0.75 are considered very satisfactory in the context of Structural Equation Models. In the context of the present study and the analyzed sample, intangible components of service quality explain 74.9% of the variance in guest satisfaction. The bootstrapping method was used to test the research hypotheses, and the results are shown in Table 3. The results indicate that reliability (REL) ($\beta=0.282$; $p=0.000$) and responsiveness (RES) ($\beta=0.329$; $p=0.000$) have positive effect on guest satisfaction (GS). The results also show that there is a positive and statistically significant relationship between assurance (ASS) and guest satisfaction (GS) ($\beta=0.238$; $p=0.000$). Responsiveness (RES) ($\beta=0.329$; $p=0.000$) has the strongest influence to guest satisfaction, followed by reliability (REL) ($\beta=0.282$; $p=0.000$), while assurance (ASS) ($\beta=0.238$; $p=0.000$) has a slightly smaller contribution.

Table 3 Results of hypothesis testing

Relationship	β	t-value	*p*-value	Results
REL → GS	0.282	4.212	0.000	Supported
RES → GS	0.329	6.256	0.000	Supported
ASS → GS	0.238	4.443	0.000	Supported
EMP → GS	0.096	1.391	0.163	Not Supported

Source: the authors

Based on the findings of the statistical analysis that include the aforementioned relationships, it can be concluded that hypotheses 1, 2 and 3 are confirmed. Empathy demonstrated a positive but statistically non-significant relationship with guest

satisfaction so hypothesis 4 (β=0.096; p=0.163) was not supported.

Figure 1 depicts the structural model with the results of the bootstrapping analysis, demonstrating the established relationships among the constructs and highlighting the relative strength of the effects of individual service quality dimensions on guest satisfaction.
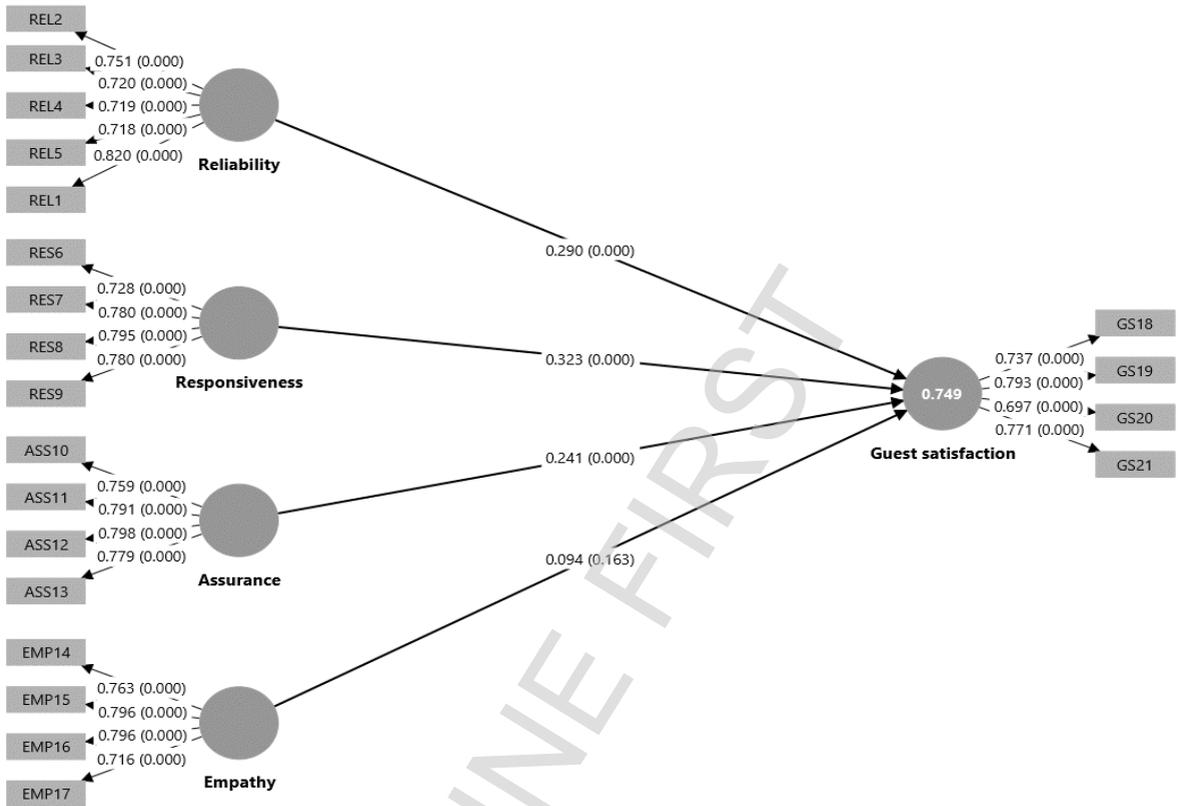

Figure 1   Structural model with bootstrapping results
Source: the authors

4. Discussion

This study examined the influence of intangible components of service quality on guest satisfaction. The empirical findings confirm that reliability, responsiveness and assurance have statistically significant and positive effects on guest satisfaction, whereas empathy, although positively related, did not show a statistically significant influence.

It is difficult to compare the obtained results because the studies mostly examined the relationship between service quality as a unidimensional construct and guest satisfaction, while a number of studies did not use the service quality dimensions from the SERVQUAL model. When service quality is considered as a whole, the results of this research are largely consistent with previous studies examining the effect of service quality on guest satisfaction (Anabila et al., 2021; Ali et al., 2021; Ali, 2015; Ahmad et al., 2019; Choi & Chu, 2001; Djajnto, 2017; Edike & Joseph, 2020; Liat et al., 2014; Marković & Raspor Janković, 2013). The following discussion begins with the analysis of the component that has the strongest effect on guest satisfaction. Responsiveness as an intangible component of service quality demonstrated the strongest effect on guest satisfaction in hotels in Serbia. This suggests that employees in Serbian hotels are generally prompt, willing to assist and quick to respond to guest needs and requests - elements that guests highly value. These findings correspond to earlier studies identifying responsiveness as a key predictor of satisfaction (Ahmad et al., 2019; Akmaz & Akmeşe, 2025; Ali, 2015; Amin et al., 2025; Djajnto, 2017; Edike & Joseph, 2020; Ezeh & Ezeuduji, 2023; Lucien et al., 2025; Mareeswaran & Balasubramani, 2024; Parakash et

al., 2016; Marković & Raspor Janković, 2013; Rita Innoni, 2025; Temory, 2024) Reliability was identified as the second strongest predictor of guest satisfaction, suggesting that guest trust, employee competence and professionalism meaningfully contribute to the overall experience. The above findings indicate the ability of hotels in Serbia to consistently and accurately fulfill the promises made to guests. These conclusions are consistent with findings in diverse hospitality contexts (Akmaz & Akmeşe, 2025; Amin et al., 2025; Djajnto, 2017; Edike & Joseph, 2020; Ezeh & Ezeuduji, 2023; Lucein et al., 2025; Mareeswaran & Balasubramani, 2024; Parakash et al., 2016; Marković & Raspor Janković, 2013; Rita Inoni, 2025; Temory, 2024). Some other studies have yielded opposite results where the positive impact of reliability on guest satisfaction has not been confirmed (Ahmad et al., 2019), as well as where a negative impact of this component on guest satisfaction has been identified (Ali et al., 2021).

Assurance also showed a slightly smaller positive and statistically significant influence on guest satisfaction, suggesting that guest trust, employee competence and professionalism meaningfully contribute to the overall experience. These conclusions are consistent with findings in diverse hospitality contexts (Ahmad et al., 2019; Ali et al., 2021; Djajnto, 2017; Edike & Joseph, 2020; Ezeh et al., 2022; Gangananda et al., 2022; Lucien et al., 2025; Mareeswaran & Balasubramani, 2024; Rita Innoni, 2025). Although empathy, as an intangible dimension of service quality, did not demonstrate a statistically significant effect, its positive coefficient indicates that personalized attention is still appreciated, even if guests do not perceive it as a decisive determinant of satisfaction. The above results are in agreement with studies conducted in the hospitality industry, i.e. it can be stated that most studies that examined the relationship between empathy and guest satisfaction came to the same results (Ahmad et al., 2019; Gangananda et al., 2022; Parakash et al., 2016; Marković & Raspor Janković, 2013). However, there are also studies that determined that empathy as a component of quality has a positive and statistically significant effect on guest loyalty (Ahmad et al., 2019; Ali et al., 2021; Amin et al., 2025; Djajnto, 2017; Edike & Joseph, 2020; Ezeh & Ezeuduji, 2023; Ezeh et al., 2022; Mareeswaran & Balasubramani, 2024; Temory, 2024). Also, it should be noted that this component in the initial research by Parasuraman

et al. (1988) was marked as the least important in the assessment of service quality.

Conclusion

This study contributes to a better understanding of the relationship between intangible service quality components and guest satisfaction among guests who stayed in four- and five-star hotels in Serbia. The findings suggest that the SERVQUAL model can be applied in this context, while pointing to the importance of examining individual service quality dimensions separately. These results may be useful for hotel managers when developing strategies aimed at improving service performance and guest satisfaction.

The theoretical contribution of this study lies in examining the effects of individual intangible service quality dimensions, as defined within the SERVQUAL model, on guest satisfaction. Unlike most previous studies, which have treated service quality as a unidimensional construct, this research offers additional insight into the specific effects of each dimension on guest satisfaction. These results contribute to the ongoing discussion on the role of individual service quality dimensions, particularly empathy and reliability. Moreover, they emphasize the importance of a contextualized approach and the need for further research that takes into account cultural factors and diverse guest expectations.

The research findings indicate several important practical implications for the management of hotel organizations. As responsiveness was identified as the strongest determinant of guest satisfaction, hotel managers may consider improving the efficiency and speed of employee responses through continuous training programs, clearer procedures and the digitalization of service processes, including real-time communication with guests. Consistency in delivering the promised service, which corresponds to the reliability dimension, can be an important element of the hotel's organizational culture. This involves clearly defining service standards, regular monitoring of guest satisfaction, and the establishment of feedback systems aimed at ensuring the timely resolution of potential issues. Regarding the assurance dimension, investment in the development of employees' professional competencies may be particularly important, especially for those in direct contact with guests. Training programs focused on communication skills and emotional intelligence can strengthen guests' trust in the professionalism and credibility of hotel staff. As for the empathy dimension,

although it did not exhibit a statistically significant effect, its positive direction suggests that an individualized and personalized approach to guests should not be overlooked. Personalizing services by recognizing the preferences of regular guests, adopting a proactive approach and demonstrating genuine care can contribute to creating positive experiences and strengthening trust-based relationship between guests and the hotel.

More generally, the implications of this study can serve as a basis for shaping quality policies in the Serbian hospitality sector. Integrating intangible components of service quality into strategic documents, standards and training programs may contribute not only to improved guest satisfaction, but also to strengthening the competitiveness of hotels.

Despite the presented results, theoretical and practical implications, it is necessary to acknowledge certain limitations that should be taken into account when interpreting the findings. The study was conducted using a convenience sampling method, which limits the possibility of generalizing the results to the entire population of hotel guests in Serbia. Respondents were recruited via social networks and through direct distribution of questionnaires to hotel guests, which may have introduced sample bias. Additionally, the research focused exclusively on hotel guests in Serbia, and therefore, the results cannot be automatically applied to other countries or contexts, as perceptions of service quality may vary depending on cultural or regional differences. Consequently, the findings should be interpreted within the framework of the local context.

Given these limitations, future research is recommended to employ probabilistic sampling methods in order to ensure greater representativeness and generalizability of the results. Furthermore, conducting studies in different countries and cultural settings would enable comparative analysis and help identify both universal and culturally specific intangible components of service quality that influence guest satisfaction. It would be particularly valuable to examine how national differences in guest expectations and behaviors shape perceptions of individual intangible service quality dimensions within the hospitality industry. Future studies could also examine the effects of intangible service quality components on guest loyalty, intention to revisit, and word-of-mouth promotion.

Declarations

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Funding

Acknowledgements

References

Ahmad, S. Z., Ahmad, N., & Papastathopoulos, A. (2019). Measuring service quality and customer satisfaction of the small-and medium-sized hotels (SMSHs) industry: lessons from United Arab Emirates (UAE). *Tourism Review*, *74*(3), 349-370. https://doi.org/10.1108/TR-10-2017-0160

Akmaz, A., & Akmeşe, H. (2025). The Effect of Service Quality and Value on Satisfaction and Loyalty in Halal Concept Hotel Enterprises: The Case of Turkey. *Turkish Journal of Islamic Economics*, *12*(2), 104-132. https://doi.org/10.26414/A495

Albayrak, T., Caber, M., & Aksoy, Ş. (2010). Relationships of the tangible and intangible elements of tourism products with overall customer satisfaction. *International Journal of Trade, Economics and Finance*, *1*(2), 140-143. https://doi.org/10.7763/IJTEF.2010.V1.25

Albayrak, T., Caber, M., & Öz, E. K. (2017). Assessing recreational activities' service quality in hotels: An examination of animation and spa & wellness services. *Journal of Quality Assurance in Hospitality & Tourism*, *18*(2), 218-234. https://doi.org/10.1080/1528008X.2016.1208550

Ali, B. J., Gardi, B., Othman, B. J., Ahmed, S. A., Ismael, N. B., Hamza, P. A., ... & Anwar, G. (2021). Hotel service quality: The impact of service quality on customer satisfaction in hospitality. *International Journal of Engineering, Business and Management*, *5*(3), 14-28. http://dx.doi.org/10.22161/ijebm.5.3.2

Ali, F. (2015). Service quality as a determinant of customer satisfaction and resulting behavioural intentions: A SEM approach towards Malaysian resort hotels. *Tourism: An International Interdisciplinary Journal*, *63*(1), 37-51.

Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2018). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International journal of contemporary hospitality management*, *30*(1), 514-538. https://doi.org/10.1108/IJCHM-10-2016-0568

Ali, S., Md, I. M., & Mutsumi, T. (2019). Using SERVQUAL to determine Generation Y's satisfaction towards hoteling industry in Malaysia. *Journal of Tourism Futures*, *5*(1), 62-74. https://doi.org/10.1108/JTF-01-2018-0004

Amin, I., Mishra, A., Yousaf, A., & Ali, F. (2025). Beyond the Pandemic: Effect of Hotel's Perceived Health Safety Service Quality on Revisit Intentions. *Journal of Quality Assurance in Hospitality & Tourism*, 1-25. https://doi.org/10.1080/1528008X.2025.2528949

Anabila, P., Ameyibor, L. E. K., Allan, M. M., & Alomenu, C. (2021). Service Quality and Customer Loyalty in Ghana's Hotel Industry: The Mediation Effects of Satisfaction and Delight. *Journal of Quality Assurance in Hospitality & Tourism*, 1-23. https://doi.org/10.1080/1528008X.2021.1913691

Asgeirsson, M. H., Gudlaugsson, T., & Jóhannesson, G. T. (2024). The relationships between service quality, reputation, and performance in hospitality. *Tourism and Hospitality*, *5*(3), 736-752. https://doi.org/10.3390/tourhosp5030043

Ayvaz-Çavdaroğlu, N., Iyanna, S., & Foster, M. (2024). Smart service quality in hospitality–A quantitative assessment using MCDM and clustering methods. *International Journal of Hospitality Management*, *123*, 103931. https://doi.org/10.1016/j.ijhm.2024.103931

Bakirtzoglou, P., Vryoni, S., & Ioannou, A. (2018). Hotel spa managers' perceptions of service quality in Greece. *Serbian Journal of Management*, *13*(2), 323-334. https://doi.org/10.5937/sjm13-13687

Bitner, M. J. (1990). Evaluating service encounters: the effects of physical surroundings and employee responses. *Journal of Marketing*, *54*(2), 69-82. https://doi.org/10.1177%2F002224299005400206

Blešić, I., Tešanović, D., & Psodorov, Đ. (2011). Consumer satisfaction and quality management in the hospitality industry in South-East Europe. *African Journal of Business Management*, *5*(4), 1388-1396.

Bolton, R. N., & Drew, J. H. (1991). A multistage model of customers' assessments of service quality and value. *Journal of Consumer Research*, *17*(4), 375-384. https://doi.org/10.1086/208564

Butnaru, G. I., & Licau, O. R. (2017). Service Quality and its Competitive Advantage. Case Study of a Hotel. *Acta Universitatis Danubius. Œconomica*, *13*(3), 70-87.

Čelić, I., Seočanac, M., Milašinović, M., & Milojević, S. (2022). Guest satisfaction and dissatisfaction with hotels in Vrnjačka Banja: The situation analysis during the COVID-19 pandemic. *BizInfo Blace, 13*(2), 117-123. https://doi.org/10.5937/bizinfo2202117C

Chi, C. G.-Q., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: An empirical examination. *International Journal of Hospitality Management*, *28*(2), 245–253. https://doi.org/10.1016/j.ijhm.2008.08.003

Choi, T. Y., & Chu, R. (2001). Determinants of hotel guests' satisfaction and repeat patronage in the Hong Kong hotel industry. *International Journal of Hospitality Management*, *20*(3), 277-297. https://doi.org/10.1016/S0278-4319(01)00006-8

Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of Marketing*, *56*(3), 55-68. https://doi.org/10.1177/2F002224299205600304

Crossman, S. (2024). Impact of Service Quality on Customer Satisfaction in Boutique Hotels. *Journal of Hospitality and Tourism*, *4*(3), 1-9. https://doi.org/10.47672/jht.2385

Culiberg, B., & Rojšek, I. (2010). Identifying service quality dimensions as antecedents to customer satisfaction in retail banking. *Economic and Business Review*, *12*(3), 151-166. https://doi.org/10.15458/2335-4216.1245

Djajanto, L. (2017). The influence of the dimensions of service quality on customer satisfaction at hotels in Batu City, Indonesia. *Journal of Management and Marketing Review*, *2*(3), 67-72. https://doi.org/10.35609/jmmr.2017.2.3(10)

Dominici, G., & Guzzo, R. (2010). Customer satisfaction in the hotel industry: A case study from Sicily. *International Journal of Marketing Studies, 2*(2), 3-12. https://doi.org/10.5539/ijms.v2n2p3

Dortyol, I. T., Varinli, I., & Kitapci, O. (2014). How do international tourists perceive hotel quality?: an exploratory study of service quality in Antalya tourism region. *International Journal of Contemporary Hospitality Management*, *26*(3), 470-495. https://doi.org/10.1108/IJCHM-11-2012-0211

Edike, J. M., & Joseph, U. (2020). Intangible service quality on customer satisfaction of hotel guest in Nigeria. *International Journal of Scientific and Research Publications (IJSRP)*, *10*(1), 713-720. http://dx.doi.org/10.29322/IJSRP.10.01.2020.p97104

Ekinci, Y., Prokopaki, P., & Cobanoglu, C. (2003). Service quality in Cretan accommodations: marketing strategies for the UK holiday market. *International Journal of Hospitality Management*, *22*(1), 47-66. https://doi.org/10.1016/S0278-4319(02)00072-5

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). *Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11

Ezeh, P. C., & Ezeuduji, I. O. (2023). Effects of SERVPERF dimensions on guests' satisfaction and loyalty to low-cost hotel: Mediating role of satisfaction. *Journal of Quality Assurance in Hospitality & Tourism*, 1-23. https://doi.org/10.1080/1528008X.2023.2280112

Ezeh, P. C., Okeke, T. C., & Nkamnebe, A. D. (2022). Moderating role of religion in the relationship between SERVQUAL dimensions and hotel guest satisfaction. *Journal of Islamic Marketing*. https://doi.org/10.1108/JIMA-09-2020-0271

Gangananda, A. M. N. M., Bandara, W. M. A. H., Ranatunga, R. A. D. D. N., Pattiyagedara, P. G. S. S., & Yashodha, G. B. (2022). How service quality effects on guest satisfaction in boutique hotels: with special reference to Central Province. *Management Journal for Advanced Research*, *2*(5), 6-12. https://doi.org/10.54741/mjar.2.5.2

Godolja, M., & Spaho, A. B. (2014). Critical Incident Analysis in Measurement of Hotel Guest Satisfaction. A Case Study from Tirana, Albania. *Journal of Educational and Social Research*, 4(4), 437–444. https://doi.org/10.5901/jesr.2014.v4n4p437

Gronroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing, 18*(4), 36–44. https://doi.org/10.1108/EUM0000000004784

Grönroos, C. (2015). *Service management and marketing: managing the service profit logic*. John Wiley & Sons.

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook* (p. 197). Springer Nature. https://doi.org/10.1007/978-3-030-80519-7

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the academy of marketing science*, *40*, 414-433. https://doi.org/10.1007/s11747-011-0261-6

Han, H., Back, K. J., & Barrett, B. (2009). Influencing factors on restaurant customers' revisit intention: The roles of emotions and switching barriers. *International journal of hospitality management*, *28*(4), 563-572. https://doi.org/10.1016/j.ijhm.2009.03.005

Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *Journal of Applied Psychology*, *87*(2), 268-279. http://dx.doi.org/10.1037//0021-9010.87.2.268

Hernon, P., Nitecki, D. A., & Altman, E. (1999). Service quality and customer satisfaction: An assessment and future directions. *The Journal of Academic Librarianship*, *25*(1), 9-17 https://doi.org/10.1016/S0099-1333(99)80170-0

Herstein, R., Gilboa, S., Gamliel, E., Bergera, R., & Ali, A. (2018). The role of private label brands in enhancing service satisfaction in the hotel industry: Comparing luxury and boutique hotels. *Services Marketing Quarterly*, *39*(2), 140-155. https://doi.org/10.1080/15332969.2018.1437250

Hsu, C. H., & Powers, T. (2002). *Marketing Hospitality*. John Wiley & Sons.

Hu, H. H., Kandampully, J., & Juwaheer, T. D. (2009). Relationships and impacts of service quality, perceived value, customer satisfaction, and image: an empirical study. *The Service Industries Journal*, *29*(2), 111-125. https://doi.org/10.1080/02642060802292932

Iacobucci, D., Ostrom, A., & Grayson, K. (1995). Distinguishing service quality and customer satisfaction: the voice of the consumer. *Journal of Consumer Psychology*, *4*(3), 277-303. https://doi.org/10.1207/s15327663jcp0403_04

Janjić, V., Todorović, M., & Jovanović, D. (2015). A comparative analysis of modern performance measurement and management models of companies. *Ekonomske teme, 53*(2), 303-318. https://doi.org/10.1515/ethemes-2015-0017

Jasinskas, E., Streimikiene, D., Svagzdiene, B., & Simanavicius, A. (2016). Impact of hotel service quality on the loyalty of customers. *Economic research-Ekonomska istraživanja*, *29*(1), 559-572. https://doi.org/10.1080/1331677X.2016.1177465

Jones, P., Lockwood, A., & Bowen, A. (2004). UK hospitality and tourism SMEs: differentiation by size, location and owner style. *Tourism and Hospitality Planning & Development*, *1*(1), 7-11. https://doi.org/10.1080/1479053042000187766

Jung, H. S., & Yoon, H. H. (2013). Do employees' satisfied customers respond with an satisfactory relationship? The effects of employees' satisfaction on customers' satisfaction and loyalty in a family restaurant. *International Journal of Hospitality Management*, *34*, 1-8. https://doi.org/10.1016/j.ijhm.2013.02.003

Kandampully, J., Zhang, T., & Jaakkola, E. (2018). Customer experience management in hospitality: A literature synthesis, new understanding and research agenda. *International Journal of Contemporary Hospitality Management, 30*(1), 21–56. https://doi.org/10.1108/IJCHM-10-2015-0549

Kara, A., Lonial, S., Tarim, M., & Zaim, S. (2005). A paradox of service quality in Turkey: The seemingly contradictory relative importance of tangible and intangible determinants of service quality. *European Business Review*, *17*(1), 5-20. https://doi.org/10.1108/09555340510576230

Karakas Morvay, K. (2014). *Importance and impact of guest satisfaction.* Applied Studies in *Agribusiness and Commerce, 8*(4), 31–37. https://doi.org/10.19041/apstract/2014/4/5

Kim, W. G., Ng, C. Y. N., & Kim, Y. S. (2009). Influence of institutional DINESERV on customer satisfaction, return intention, and word-of-mouth. *International Journal of Hospitality Management, 28*(1), 10–17. https://doi.org/10.1016/j.ijhm.2008.03.005

Kitapci, O., Dortyol, I. T., Yaman, Z., & Gulmez, M. (2013). The paths from service quality dimensions to customer loyalty: An application on supermarket customers. *Management Research Review*, *36*(3), 239-255. https://doi.org/10.1108/01409171311306391

Kumar, R. (2018). *Research Methodology: A Step-by-Step Guide for Beginners*. SAGE Publications.

Ladhari, R. (2009). Service quality, emotional satisfaction, and behavioral intentions: A study in the hotel industry. *Managing Service Quality, 19*(3), 308–331. https://doi.org/10.1108/09604520910955320

Lau, M. M., Cheung, R., Lam, A. Y., & Chu, Y. T. (2013). Measuring Service Quality in the Banking Industry: A Hong Kong Based Study. *Contemporary Management Research*, *9*(3), 263-282. https://doi.org/10.7903/cmr.11060

Lee, H., Lee, Y., & Yoo, D. (2000). The determinants of perceived service quality and its relationship with satisfaction. *Journal of Services Marketing*, *14*(3), 217-231. https://doi.org/10.1108/08876040010327220

Liat, C. B., Mansori, S., & Huei, C. T. (2014). The associations between service quality, corporate image, customer satisfaction, and loyalty: Evidence from the Malaysian hotel industry. *Journal of Hospitality Marketing & Management*, *23*(3), 314-326. https://doi.org/10.1080/19368623.2013.796867

Lovelock, C., Patterson, P., & Wirtz, J. (2015). *Services marketing*. Prentice Hall and Pearson.

Lu, C., Berchoux, C., Marek, M. W., & Chen, B. (2015). Service quality and customer satisfaction: qualitative research implications for luxury hotels. *International Journal of Culture, Tourism and Hospitality Research*, *9*(2), 168-182. https://doi.org/10.1108/IJCTHR-10-2014-0087

Lucien, M. P., Kibuuka, M., Wandiba, A., Jérémie, B. M., Trésor, K. S., Justin, S. B., & Ntwali, Y. N. C. (2025) Service Quality and Customer Satisfaction in Selected Hotels in Goma, Democratic Republic of Congo. *International Journal of Business and Management Invention (IJBMI), 14*(10), 01-11.

Malik, S. A., Akhtar, F., Raziq, M. M., & Ahmad, M. (2020). Measuring service quality perceptions of customers in the hotel industry of Pakistan. *Total Quality Management & Business Excellence*, *31*(3-4), 263-278. https://doi.org/10.1080/14783363.2018.1426451

Mareeswaran, M. & Balasubramani, R. (2024). Tourist satisfaction in relation to service quality: a study of Tamilnadu hotel sector. *Revista de turism-studii și cercetări în turism, (38)*. https://doi.org/10.4316/rdt.38.2798

Marić, D., Marinković, V., Marić, R., & Dimitrovski, D. (2016). Analysis of tangible and intangible hotel service quality components. *Industrija*, *44*(1), 7-25. https://doi.org/10.5937/industrija1-8437

Marković, S., & Raspor Janković, S. (2013). Exploring the relationship between service quality and customer satisfaction in Croatian hotel industry. *Tourism and Hospitality Management, 19*(2), 149-164. https://doi.org/10.20867/thm.19.2.1

Marković, S., Raspor, S., Ivankovič, G., & Planinc, T. (2013). A study of expected and perceived service quality in Croatian and Slovenian hotel industry. *European Journal of Tourism Research*, *6*(1), 36-52. https://doi.org/10.54055/ejtr.v6i1.115

Mitrović, A., Knežević, S., & Milašinović, M. (2021). Profitability analysis of hotel companies in the Republic of Serbia. *Hotel and Tourism Management, 9*(1), 121-134. https://doi.org/10.5937/menhottur2101121M

Mola, F., & Jusoh, J. (2011). Service quality in Penang hotels: A gap score analysis. *World Applied Sciences Journal (Special Issue of Tourism & Hospitality), 12*(1), 19-24.

Nadiri, H., & Hussain, K. (2005). Perceptions of service quality in North Cyprus hotels. *International Journal of Contemporary Hospitality Management*, *17*(6), 469-480. https://doi.org/10.1108/09596110510612112

Nunkoo, R., Teeroovengadum, V., Ringle, C. M., & Sunnassee, V. (2020). Service quality and customer satisfaction: The moderating effects of hotel star rating. *International Journal of Hospitality Management*, *91*, 102414. https://doi.org/10.1016/j.ijhm.2019.102414

Oberoi, U., & Hales, C. (1990). Assessing the quality of the conference hotel service product: towards an empirically based model. *Service Industries Journal*, *10*(4), 700-721. https://doi.org/10.1080/02642069000000083

Olawuyi, O. S., & Kleynhans, C. (2025). A Bibliometric Analysis of Service Quality in the Hospitality Industry (2014–2024). *Administrative Sciences*, *15*(6), 215. https://doi.org/10.3390/admsci15060215

Oliver, R.L. (2014). Satisfaction: A Behavioral Perspective on the Consumer: A Behavioral Perspective on the Consumer. Routledge, Abington, UK, New York, NY, USA. https://doi.org/10.4324/9781315700892

Omar, M. K., Azman, N. S. S., Jusoh, R., Jamaludin, R., & Kadir, S. A. (2020). Chalet and Resort Guests Expectation and Perception of the Quality Factors Using SERVQUAL Dimension. *European Journal of Molecular & Clinical Medicine*, *7*(3), 589-608.

Palazzo, M., Foroudi, P., & Ferri, M. A. (2021). Examining antecedents and consequences of perceived service quality in the hotel industry: a comparison between London and New York. *The TQM Journal*, *33*(7), 193-221. https://doi.org/10.1108/TQM-09-2020-0203

Palmer, A. (2013). *Principles of Services Marketing*. Seventh edition McGraw-Hill.

Pan, F. C. (2015). Practical application of importance-performance analysis in determining critical job satisfaction factors of a tourist hotel. *Tourism Management*, *46*, 84-91. https://doi.org/10.1016/j.tourman.2014.06.004

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, *49*(4), 41-50. https://doi.org/10.1177/2F002224298504900403

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 12–40. https://doi.org/10.1177/002224298504900403

Perdomo-Verdecia, V., Garrido-Vega, P., & Sacristán-Díaz, M. (2024). An fsQCA analysis of service quality for hotel customer satisfaction. *International Journal of Hospitality Management*, *122*, 103793. https://doi.org/10.1016/j.ijhm.2024.103793

Perić , G., Dramićanin , S., & Milenkovski , A. (2020). Measuring perception of service quality of Serbian rural tourism using RURALQUAL scale. *BizInfo Blace, 11*(1), 1-17. https://doi.org/10.5937/bizinfo2001001P

Petković, T., Tepavčević, J., & Blešić, I. (2024). The influence of social networks on the intent to visit hotels. *BizInfo Blace, 15*(2), 31-37. https://doi.org/10.5937/bizinfo2402031P

Prakash, N., Somasundaram, R., & Krishnamoorthy, V. (2016). A study on linkage between service quality and customer satisfaction in hotel industry. *Asian Journal of Research in Social Sciences and Humanities*, *6*(4), 285-295. http://dx.doi.org/10.5958/2249-7315.2016.00059.9

Rajaguru, R., & Hassanli, N. (2018). The role of trip purpose and hotel star rating on guests' satisfaction and WOM. *International Journal of Contemporary Hospitality Management*, *30*(5), 2268-2286. https://doi.org/10.1108/IJCHM-01-2017-0044

Rita Inoni, O. (2025). Service Quality, Customer Satisfaction and Guest Loyalty to Hotels in Delta State. *AKSU Journal of Management Sciences, 10*(1), 185–196. https://doi.org/10.61090/aksujomas.10112

Shah, S. N. U., Jan, S., & Baloch, Q. B. (2018). Role of service quality and customer satisfaction in firm's performance: Evidence from Pakistan hotel industry. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, *12*(1), 167-182.

Song, Y., Liu, K., Guo, L., Yang, Z., & Jin, M. (2022). Does hotel customer satisfaction change during the COVID-19? A perspective from online reviews. *Journal of Hospitality and Tourism Management*, *51*, 132-138. https://doi.org/10.1016/j.jhtm.2022.02.027

Stefano, N. M., Casarotto Filho, N., Barichello, R., & Sohn, A. P. (2015). A fuzzy SERVQUAL based method for evaluated of service quality in the hotel industry. *Procedia CIRP*, *30*, 433-438. https://doi.org/10.1016/j.procir.2015.02.140

Temory, M. D. (2024). The effect of service quality on customer satisfaction and loyalty: a case study of hotel industry in Afghanistan. *International Journal of Business and Management Review*, *12*(5), 21-38. https://doi.org/10.37745/ijbmr.2013/vol12n52138

Tešić, D. (2020). Measuring dimensions of service quality. *Strategic Management*, *25*(1), 12-20. https://doi.org/10.5937/StraMan2001012T

Vujić, M., Sekulić, D., & Cvijanović, D. (2020). The importance of intangible elements in the assessment of service quality in hotels in Kolubara District. *Hotel and Tourism Management*, *8*(2), 43-52. https://doi.org/10.5937/menhottur2002043V

Vukolić, D., Gajić, T., & Popović, A. (2025). Digital transformation in hospitality: the role of AI in enhancing business through gastronomic offerings. *BizInfo Blace, 16*(1), 1–9. https://doi.org/10.71159/bizinfo250004V

Wakefield, K. L., & Blodgett, J. G. (1999). Customer response to intangible and tangible service factors. *Psychology & Marketing*, *16*(1), 51-68. https://doi.org/10.1002/(SICI)1520-6793(199901)16:1<51::AID-MAR4>3.0.CO;2-0

Wilkins, H., Merrilees, B., & Herington, C. (2009). The determinants of loyalty in hotels. *Journal of Hospitality Marketing & Management*, *19*(1), 1-21. https://doi.org/10.1080/19368620903327626

Yoo, D. K., & Park, J. A. (2007). Perceived service quality: Analyzing relationships among employees, customers, and financial performance. *International Journal of Quality & Reliability Management, 24*(9), 908–926. https://doi.org/10.1108/02656710710826180

Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tourism Management*, 26(1), 45–56. https://doi.org/10.1016/j.tourman.2003.08.016

Yüksel, A., & Yüksel, F. (2001). The expectancy-disconfirmation paradigm: a critique. *Journal of hospitality & tourism research*, *25*(2), 107-131. https://doi.org/10.1177/109634800102500201

✉ **Correspondence**

Goran Perić

Bijeljina University, Faculty of Agriculture, Bijeljina
Kralja Petra I 1, 18420 Blace, Serbia

E-mail: goran.peric@vpskp.edu.rs

Appendix

Subscale	Item	Source
REL1	The hotel consistently provides the service it promises.	
REL2	The hotel demonstrates strong commitment to resolving guests' problems.	
REL3	The hotel delivers appropriate and reliable service from the first interaction.	
REL4	The hotel provides services within the time frame it promises.	
REL5	The hotel strives to deliver services without errors.	
RES6	Hotel employees inform guests in advance about when a service will be provided.	
RES7	Hotel employees provide prompt service to guests.	
RES8	Hotel employees are always prepared to assist guests.	
RES9	Hotel employees are willing to respond to guests' requests without delay.	Parasuraman et al., 1988.
ASS10	Hotel employees instill a sense of trust in guests.	
ASS11	Guests feel secure when carrying out transactions at the hotel.	
ASS12	Hotel employees consistently show courtesy toward guests.	
ASS13	Hotel employees possess adequate knowledge to address guests' needs.	
EMP14	The hotel's operating hours are convenient and meet the guests' needs.	
EMP15	Hotel employees give individual attention to guests.	
EMP16	Hotel prioritizes what is best for the guests.	
EMP17	Hotel employees understand the specific needs of guests.	
GS18	I am satisfied with my stay at the hotel.	
GS19	I am highly satisfied with the services the hotel provides.	Chi & Gursoy, 2009
GS20	The hotel has exceeded my expectations.	
GS21	Overall, I am satisfied with my experience at the hotel.	Jung & Yoon, 2013