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RESTAURANT MANAGERS' PERCEPTIONS OF SERVICE QUALITY: THE MEDIATING ROLE OF RESTAURANT SIZE AND SEATING CAPACITY

Abstract: *The aim of this study was to analyse which quality attributes are, according to managers' beliefs, the most important in determining overall service quality, as well as to investigate the relative importance of restaurant size (square meters) and seating capacity (number of seats) on managers' perceptions of restaurant quality. The sample was composed of 148 managers of individually operating restaurant SMEs in Slovenia. The DINESERV instrument was applied to measure managers' perceptions of service quality. Exploratory factor analysis was used to analyse the importance of different quality attributes, and confirmatory factor analysis (SEM) was used to investigate the impact of restaurant size and seating capacity on managers' perceptions of quality. Results revealed that only twelve quality items belonging to three quality attributes – Assurance, Empathy, and Tangibles – are important in determining restaurants' service quality. The identified three quality attributes explained 56.65% of managers' perceptions of service quality. Results also showed that restaurant size and number of seats significantly influence managers' perceptions of service quality. These results are of great importance for restaurant managers aiming to improve their service quality.*

Keywords: *Restaurant industry; Quality management; Managers' perceptions; DINESERV; Slovenia.*

1. Introduction

The tourism industry is one of the most important and fastest-growing markets in the world. In 2018, 10 percent of the entire working population of the world was employed in tourism and tourism-related activities, while on a global scale tourism accounted for more than 10 percent of the gross domestic product (GDP). Moreover, growth rates have been higher in tourism for several years in comparison to other sectors of the global economy (WTTC, 2019). The restaurant industry is a vital and integral element of the tourism sector and one of the

largest employers worldwide (Hallak et al., 2018; Kim & Kim, 2019). As part of the tourism sector, the restaurant industry is also experiencing rapid growth and globalisation (De Larrea et al., 2019; WTTC, 2019). In Slovenia, the tourism industry is one of the most important sectors of the economy, as it enables the employment of almost 13% of the working population and accounts for almost 12% of the GDP in the country (AJPES, 2019; WTTC, 2019). In 2018, 4.2% of all companies in the country were operating in this sector of the economy.

The restaurant industry is facing a constant increase in the number of new facilities, sales

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volume, and the number of employees, and this trend is expected to continue in the future (Statista, 2019). The industry is characterised by several factors that significantly influence the level of its operational performance (e.g., many small and medium-sized restaurant enterprises (SMEs) and family-run businesses, seasonality and volatile demand, high labour cost and turnover, guests' price sensitivity, severe competition, etc.) (Kukanja & Planinc, 2018; Kim, Li, & Brymer, 2016). In this volatile and highly competitive business environment, one of the major challenges for restaurant managers is to determine how to provide high-quality offerings (Liu & Tse, 2018). Guests will be satisfied if the level of services offered can fulfil or exceed their quality expectations (Parasuraman et al., 1988).

To satisfy restaurant guests' on-going quality expectations, individual demands and needs, as well as to ensure the financial success of restaurant businesses, restaurant managers must continuously measure the quality of their offerings (Fang & Hsu, 2014; Kim et al., 2016). In the scientific literature, several techniques for assessing the quality of services have been proposed (Chin & Tsai, 2013; Kukanja et al., 2017; Parasuraman et al., 1988; Saeida Ardakani et al., 2015). One of the most popular tools in the restaurant industry is the DINESERV instrument (Lee et al., 2016; Liu & Tse, 2018; Pai et al., 2018). DINESERV measures service quality based on 29 quality variables (quality items), which are combined into five quality attributes (also referred to as quality dimensions) – Reliability, Assurance, Tangibles, Empathy, and Responsiveness (RATER). Tangibles are related to the physical environment (also called the servicescape), while the other four quality attributes are related to the quality of the service staff. According to Grönroos (1990), service quality can also be simply categorised into technical (tangible – physical elements) and functional (intangible – staff performance) categories.

In the restaurant industry literature, most of the studies have focused on guests'

expectations, perceptions and satisfaction about restaurant quality. Providing high-quality offerings positively influences restaurant guests' satisfaction and loyalty (Khan et al., 2016; Kukanja et al., 2017; Mosavi & Ghaedi, 2012) and increases the restaurant's image (Clemes et al., 2018) and profitability (Kim et al., 2016; Kukanja & Planinc, 2018). The scientific literature has clearly highlighted the importance of quality for the restaurant industry. Therefore, restaurant management should be market-oriented and should clearly understand the needs and expectations of current and future guests (Kaminakis et al., 2019). Although management's unrealistic perceptions of guests' quality expectations represent the first gap in providing high-quality services (Parasuraman et al., 1988), only a few studies (Kukanja & Planinc, 2018; Namkung & Jang, 2008) have investigated the importance of different quality attributes for providing high-quality service to guests, according to restaurant managers' beliefs. Moreover, to our knowledge, no previous study has analysed the importance of physical environment (restaurant size and number of seats) on managers' perceptions of service quality. Research is conducted to find answers to uncertainties related to the relationship between restaurant managers' perceptions of service quality and restaurants' physical characteristics. The main motivation for research is to disseminate research findings, to share new knowledge with other researchers in the field of service quality and restaurant management, and to assist practitioners in improving the quality of their offerings.

In order to address the lack of a comprehensive evaluation, the purpose of this study is to investigate restaurant quality from the management perspective. Our first research objective (RO1) is to analyse which quality attributes managers perceive as most important for delivering higher service quality, while our second research objective (RO2) is to investigate the impact of restaurants' size and seating capacity on

managers' perceptions of service quality.

The methodological approach used in this study consists of a literature review, secondary data analysis, and field research. The study is organised into five sections. Following the introduction, in Section 2 the theoretical background is presented. In section 3 the methodological approach is explained. In Section 4, research results are analysed, while Section 5 is concerned with the discussion of the findings. Finally, Section 6 concludes, summarising the main findings and critiques of the study and presenting suggestions for future practice and research.

2. Theoretical background

2.1. Service Quality Measurement

According to the Model of service quality (also referred to as the five steps model or the gap model), five quality gaps, respectively: knowledge, standards, delivery, communication, and service, are important for delivering high-quality services (Parasuraman et al., 1988). The authors have also developed the SERVQUAL instrument, which measures the fifth quality gap (the gap between guests' quality expectations and perceptions). Accordingly, a service provider must meet or exceed guests' quality expectations in order to deliver high-quality services.

Despite the fact that guests' assessment of service quality assessment is highly subjective, the SERVQUAL instrument captures the essential characteristics of service quality. The instrument comprises 31 quality variables that are logically merged into five (RATER) quality dimensions. SERVQUAL was developed as a generic instrument for different service industries. Thus, several theoretical attempts have been made to adapt it to the specifics of the tourism and hospitality sector. For example, Stevens et al. (1995) developed the DINESERV tool; Raajpoot (2002) introduced the TANGSERV

scale for measuring tangible elements of service quality; Ryu and Jang (2008) proposed DINESCAPE, a measurement scale for the physical environment of upscale restaurants; Lin et al. (2009) combined service quality gap analysis and importance-performance analysis (IPA); while Eid and Abdelkaber (2017) developed a modified version of SERVQUAL instrument for measuring Muslim Service Quality perceptions (MSQ).

Scholars have also proposed some alternative quality models. For example, Chin and Tsai (2013) developed a new quality model for measuring service quality in luxurious restaurants; Chen et al. (2015) introduced the GR SERV scale (a tool adapted for measuring service quality in green restaurants); Saeida Ardakani et al. (2015) proposed a fuzzy approach to service quality diagnosis; while Kukanja et al. (2017) developed a market-oriented (7P) scale for service quality measurement in the restaurant industry. A major problem with the proposed alternative (experimental) models is that none of them has yet been subjected to sufficient scientific evaluation (Lee & Cheng, 2018). According to the authors, all new models are predominantly based on the concept of the generic Service quality model. Accordingly, Liu and Tse (2018) have stated that the SERVQUAL instrument with all its modifications (e.g. DINESERV, TANGSERV, SERVIMPERF etc.) remains the predominant academic tool for service quality evaluation in tourism and hospitality research.

2.2. The DINESERV tool

Since its introduction in the mid-nineties by Stevens et al. (1995), many studies have used the DINESERV tool. Data from several studies (studies are presented below) suggest that different quality attributes are important for delivering high-quality service in the restaurant industry. The first systematic study based on the DINESERV methodology was reported by Knutson et al. 1996. This study

showed that Reliability was the most important quality attribute for Quick Service, Casual/Theme, and Fine Dining Restaurants. Later, Johns and Tyas (1996) used a modified version of the DINESERV tool to measure a contracted catering service's quality performance. Authors did not confirm the same quality structure as Knutson et al. (1996), as they had found that other, specific quality factors, such as food quality and staff attitude were crucial for quality assurance.

DINSERV was also used to investigate the relationship between restaurant quality and guests' loyalty. Fu and Parks (2001) examined restaurant quality and guests' loyalty among elderly customers. The authors have found that for this segment of guests' specific quality factors, such as individual attention and friendly service are the most important elements of service quality. Similarly, Kim et al. (2003) used DINESERV to analyse service quality in Korean ethnic restaurants. The authors reported that two quality attributes – Responsiveness and Tangibles, were crucial for assuring service quality in Korean casual-dining restaurants. In a study investigating service quality in Croatian restaurants, Marković et al. (2010) reported that the quality of the physical environment was the most important quality attribute. Similarly, Djekic et al. (2016) reported that cultural characteristics significantly influence guests' quality perceptions in different European cities. In their interesting analysis of moderating influences of first-time and revisiting customers on service quality perceptions, Kuo et al. (2018) reported that the frequency of visits to the same restaurant units significantly influence guests' overall quality perceptions.

Together, these studies indicate that the importance of different quality attributes cannot be generalised. Individual guests, as well as different guest segments, may have completely different expectations from different restaurant providers (e.g. fast food vs. fine dining). Collectively, the presented studies clearly indicate the complexity of service quality management in the restaurant

industry. Although some authors (Hanks et al., 2017) have criticized the generic DINESERV tool for its incapacity to even more precisely determine the service quality construct, it has, according to Kleinhans et al. (2016), proven to be a reliable tool for measuring service quality in the restaurant industry.

2.3. Importance of the Physical Environment – The guests' perspective

The importance of the physical (tangible) environment has been emphasized by several authors (Hanks et al., 2017; Lee, Lee, & Dewald, 2016; Ryu & Jang, 2008), as it represents an important attribute of restaurant service quality. Especially elements associated with noise and cleanliness significantly influence guests' overall perception of restaurant quality (Barber et al., 2011). Mosavi and Ghaedi (2012) reported that physical elements have a different impact on guests who are visiting the restaurant for the first time (first time buyers) than on revisiting guests. Similarly, Lee et al. (2016) reported that a statistically significant relationship between the following tangible service factors – presentation value, table aesthetics, sensory perceptions, hygiene purity, and vehicle convenience, and the diners' satisfaction exist within the upscale dining segment. In their study, Kukanja et al. (2017) found that physical evidence is the third most important quality attribute (out of seven – 7P) for delivering restaurant service high-quality. Using a modified version of the DINESERV tool, Hanks et al. (2017) found that the perceived restaurant density (measured as human and built density) significantly influence guests' perceptions of anticipated service quality. Similarly, Song and Noone (2017) also reported that a curvilinear relationship between perceived pace (visually measured as low and high spatial density) and guests' satisfaction exist in different types of restaurants.

The study by Tse et al. (2002) offers probably the most comprehensive empirical analysis of

guests' attribution behaviour. Authors have found, that when guests perceive a restaurant as very crowded, they would attribute the high level of crowdedness to low food price, high food quality, and good reputation that draw people to the restaurant. Conversely, in case of a quiet restaurant, guests would associate this with high food price, low food quality and poor reputation.

2.4. Managers' perceptions of guests' expectations of service quality

Previous studies in the service quality management literature have generally emphasized the importance of guests' quality perceptions (Aquilani et al., 2017). According to Kukanja and Planinc (2018), scholars have not sufficiently considered the importance of the first quality gap (the gap between managers' perceptions of guests' expectations of quality), as the prerequisite for delivering high-quality services. According to Dedeoğlu and Demirer (2015), hotel managers in Turkey most often have unrealistic perceptions about guests' expectations of service quality. The existence of gaps between guests' and managers' perception of service quality in hotels in Northern Poland was also reported by Grobelna and Marciszewska (2013). Yavas and Rezayat (2003) found that hotel managers' perceptions of service quality are mainly conditioned by their personal and cultural characteristics. This view was also supported by Wilkins et al. (2007). Authors reported that hospitality managers most often simplify the importance of the overall service quality construct and neglect the relevance of different service quality factors. According to Kukanja et al. (2017) restaurant managers must constantly monitor guests' perceptions of service quality in order to gain a realistic perception of the expected service quality level. Although different factors have proved to influence service quality perceptions, based on the literature review, we could determine the importance of restaurant size and seating capacity for managers' quality

evaluation.

3. Experimental research

3.1. Sample description and data collection

A total of 148 managers of restaurant SMEs in Slovenia were included in the study. The sample was selected using the simple random sampling technique in IBM SPSS Statistics – version 24.0. Restaurants were chosen from the larger set (n=3.717) of restaurant SMEs, provided by the Slovenian Business Register (AJPES, 2019). A total of 186 questionnaires (5% of restaurant firms listed in the register) were distributed by four researchers to restaurant managers in October 2018. If needed, the researchers helped the managers answer the written questionnaire by providing additional explanations. Some managers refused to participate in the study for a variety of reasons (most often lack of time). Therefore, the final analysis is based on 148 (89%) valid questionnaires. In collecting the data, we explicitly emphasised that the results of the survey would be used only for academic purposes.

The questionnaire was composed of two sections. The first section included answers related to demographic data (gender, age, education) and restaurants' physical characteristics (size in square meters and seating capacity). In the second section, service quality was measured by using the variables included in the DINESERV questionnaire. The questionnaire consisted of five quality attributes with 29 quality variables, specifically designed to measure the perceptions of service quality in restaurant settings (Stevens et al., 1995). Quality perceptions of the five attributes were measured as follows (see also Table 1): Tangibles (10 variables: attractive exterior, attractive interior, staff appearance, restaurant's decor consistent with image and price level, readable menu, attractive menu, comfortable dining area, clean restrooms, clean dining areas, comfortable seats);

Reliability (five variables: on-time service, correction of mistakes, service consistency, bill accuracy, error-free service); Responsiveness (three variables: constant speed and quality of service, service promptness, guests' special requests handled appropriately); Assurance (six variables: staff can answer guests' questions completely; comfortable and confident feeling; staff knowledgeable about menu; guests' feeling safe; trained, competent and experienced staff; management support to employees); and Empathy (five variables: individual attention, guests' special feeling, anticipation of guests' needs, sympathetic and reassuring employees, guests' best interests at heart).

Responses to each of the 29 variables were scored on a seven point Likert-type ordinal scale with a neutral value, ranging from 1 (strongly disagree) to 7 (strongly agree). Cronbach's alpha (α) was used to verify the internal consistency of the questionnaire ($\alpha=0.89$).

3.2. Statistical data analysis

The data were analysed using statistical program SPSS 24.0 and its plug-in AMOS. Descriptive statistics (average and standard deviation) were calculated in order to gather basic information about variables. Exploratory factor (EF) analysis was used to formulate quality factors. After the normality distribution tests, the factor analysis with maximum likelihood and varimax rotation was undertaken to examine which factors of the scale comprised coherent groups of items. Pearson's correlation test (r) was used to measure the correlation between the two continuous variables (size and seating capacity) and the extracted quality variables. All variables had statistically significant correlations (>0.05). Next, confirmatory factor (CF) analysis was performed. The maximum likelihood method was also used for performing CF analysis in AMOS, as it

assumes multivariate normality of the observed variables. The Kaiser criterion was used to select the number of factors, and the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity were applied to measure the sampling adequacy.

Structural modelling of equations (SEM), as a technique representing an extended version of many multivariate modelling techniques (Hair et al., 2012), was used, as the interaction between latent and manifest variables and their impact were studied simultaneously. In this sense, the technique appears to be the most appropriate in the context of this research, where it makes sense to consider all the characteristics that define the studied population as a complex whole rather than at the level of individual characteristics. First, we had built a measurement model that fit the data and met other validity and reliability indicators, and, second, we modelled complex relationships involving latent constructs using SEM.

4. Research results

4.1. Descriptive statistics

Most restaurant managers were male, representing 63.7% of the sample. The mean age of all managers included in the sample was 46.7 years. The vast majority of managers had finished vocational school (71.2%); 25.6% had finished high school; 0.9% had completed only elementary education; and 2.3% had obtained a college degree. Regarding restaurants' physical characteristics, the average size per restaurant was 240.25 m² (indoor + terrace), and the average seating capacity was 121.31 chairs per restaurant unit. Descriptive statistics of the 29 quality variables are presented in Table 1. Results reveal that the majority of variables were evaluated relatively highly (average mean score was 6.23).

Table 1. Restaurant managers’ evaluations of 29 variables – mean values (M) and standard deviations (SD)

| Variables | M | SD |
|------------------------------------------------|----------|-----------|
| Attractive exterior | 5.59 | .83 |
| Attractive interior | 5.96 | .97 |
| Positive staff appearance | 6.34 | .86 |
| Decor consistent with image and price level | 6.48 | .87 |
| Readable menu | 6.54 | .99 |
| Attractive menu | 6.01 | 1.02 |
| Comfortable dining area | 6.16 | 1.14 |
| Clean restrooms | 6.29 | .89 |
| Clean dining areas | 6.43 | .93 |
| Comfortable seats | 6.19 | 1.05 |
| On-time service | 6.45 | .79 |
| Correction of mistakes | 6.49 | .72 |
| Service consistency | 6.61 | .69 |
| Bill accuracy | 6.65 | .61 |
| Error-free service | 6.38 | .73 |
| Constant speed and quality of service | 5.76 | .98 |
| Service promptness | 6.34 | .81 |
| Guests’ special requests handled appropriately | 6.38 | .76 |
| Staff can answer guests’ questions completely | 6.15 | .94 |
| Guests’ feel comfortable and confident | 6.34 | 1.03 |
| Staff knowledgeable about menu items | 6.13 | .91 |
| Guests feel safe | 6.51 | 1.08 |
| Trained, competent and experienced staff | 6.23 | .99 |
| Management support to staff | 6.19 | .89 |
| Individual attention to guests | 5.58 | 1.1 |
| Guests feel special | 6.03 | .78 |
| Anticipation of guests’ needs | 5.89 | 1.13 |
| Sympathetic and reassuring employees | 6.31 | 1.50 |
| Guests’ best interests at heart | 6.29 | .93 |

4.2. EF analysis

As we could not confirm a normal distribution of data, the Principal Axis Factoring method was used to perform the EF analysis. Based on the values of the KMO measure (0.897) and the Bartlett’s test ($\chi^2=2704.527$; degrees of freedom=613), we included all 29 variables in the EF analysis. In the process of elimination, variables with too-low communalities (<0.50) were excluded from the analysis. Based on the evaluation process of the factor model, we decided to include 12 variables in the final factor model (see Table 2). Variables with satisfactory

communalities and factors containing more than three variables were retained. The appropriateness of the information for inclusion in the final model was also supported by the values of KMO (0.901) and Bartlett’s test ($\chi^2=1876.351$; degrees of freedom=256). According to a rotated factor solution, three significant factor groups best explain managers’ perceptions (the percentage of total variance explained is 56.65%). Rotated factor solution is presented in Table 2.

Table 2. Final factor solution

| Variables | Factor groups | | |
|--------------------------------------|---------------|-----------|---------|
| | Tangibles | Assurance | Empathy |
| Comfortable dining area | .721 | | |
| Clean restrooms | .831 | | |
| Clean dining areas | .949 | | |
| Comfortable seats | .789 | | |
| <i>Explained variance</i> | 9.97% | | |
| On-time service | | .659 | |
| Correction of mistakes | | .879 | |
| Service consistency | | .508 | |
| Bill accuracy | | .561 | |
| Error-free service | | .592 | |
| <i>Explained variance</i> | | 26.4% | |
| Anticipation of guests' needs | | | .788 |
| Sympathetic and reassuring employees | | | .841 |
| Guests' best interests at heart | | | .657 |
| <i>Explained variance</i> | | | 20.28% |

4.3. CA analysis and SEM

After performing EF analysis, CF analysis was used to check whether the model fit the data adequately. All factor loadings were higher than 0.5, indicating that all latent variables (constructs) were well represented by the indicators. Next, the indicators of reliability and validity of the constructs were calculated. Composite reliability (CR) and convergent validity (CV) were achieved in all cases – Tangibles (CR=0.941; AVE=0.697);

Assurance (CR=0.902; AVE=0.623); Empathy (CR=0.874; AVE=0.676); and Physical (CR=0.918; AVE=0.753). Appropriate internal consistency was confirmed with Cronbach's α coefficient ($\alpha > 0.77$). This confirms that the measurement scales are valid and reliable and that the questionnaire displays high internal reliability. In the next phase, model fit indices were calculated, showing that the model satisfactorily fits the data (see Table 3).

Table 3. Model fit indices

| Indicators | Recommended value | Our model |
|-------------------------------------|-------------------|-----------|
| Minimum of Discrepancy (χ^2) | | 107.98 |
| Degrees of Freedom | | 89 |
| RMSEA | < .05 or .08 | .059 |
| NFI | > .90 | .909 |
| CFI | > .90 | .997 |
| TLI or NNFI | > .90 | .963 |
| PNFI | > .60 | .655 |

The structural model consists of four constructs and 14 observed variables. Standardised regression weights (β) for relative comparison on effect strength are presented in Figure 1. Physical and Tangibles are exogenous constructs with correlations of 0.23.

As can be seen from Figure 1, Tangibles' effect on Assurance is 0.56, explaining, together with Physical, 31% of Assurance. Assurance's effect on Empathy is 0.55, explaining, together with Physical and Tangibles, 30% of Empathy.

Based on the research results, it is clearly evident that both physical elements (size and seating capacity) have a significant and direct influence on managers' perceptions of the quality attribute Tangibles. Through

Tangibles, both physical elements have an indirect influence on managers' perceptions of the other two quality attributes, Assurance and Empathy.

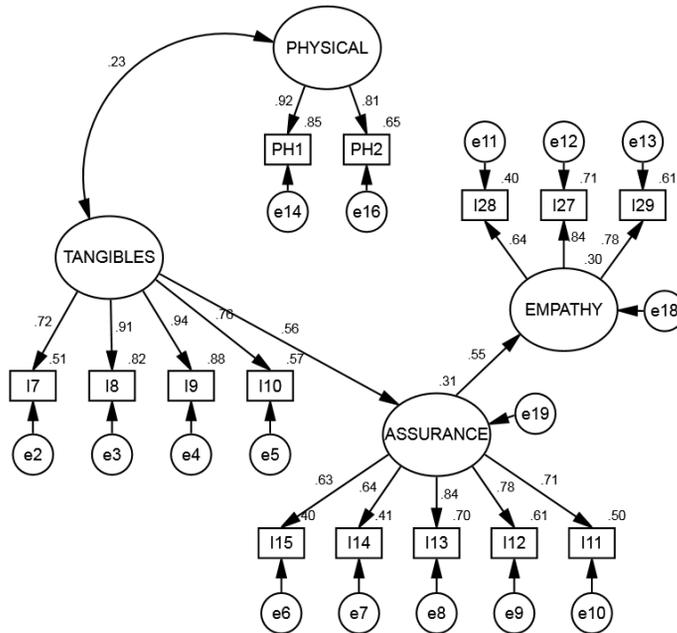


Figure 1. Structural model – standardized values (β)

5. Discussion

Offering high-quality services in today's highly competitive environment is a prerequisite for all restaurant businesses that want to survive and prosper. Maintaining high-quality offerings is important, as quality has a direct influence on guests' satisfaction (Clemes et al., 2018) and retention (Kukanja et al., 2017), as well as restaurants' profitability (Kim et al., 2016). Thus, restaurant managers should focus on how to satisfy their guests' quality expectations.

In the first part of the study, restaurant managers were asked to what extent different DINESERV quality attributes were important to them for delivering service quality (RO1). Research results showed that, according to managers' beliefs, two quality attributes

related to the quality of staff (Assurance and Empathy) and the attribute Tangibles, which indicates the quality of physical environment, are the most significant for delivering high-quality services. Assurance was the most significant factor loading (the explained percentage of the total variance was 26.4%), followed by Empathy (20.28%), and Tangibles (9.97%). Furthermore, the following (individual) quality variables had the highest factor loadings (see also Table 2): Clean dining areas (0.949), Correction of mistakes (0.879), and Sympathetic and reassuring employees (0.841). The two quality attributes reflecting the quality of people (functional quality) were found to be the most important quality attributes, followed by tangibles (technical quality). The results of our study are in line with previous

studies indicating that in restaurant facilities, guests' satisfaction is mainly predicted by the quality of staff (Mosavi & Ghaedi, 2012; Ryu & Lee, 2017). Tangibles were found to be the third most important quality attribute. This finding is also in agreement with the results of previous studies (Kaminakis et al., 2019; Lee et al., 2016; Wu & Mohi, 2015), which showed that guests' satisfaction in restaurants is also highly influenced by the quality of the physical environment. According to Raajpoot (2002), tangible quality (the physical environment) provides the necessary prerequisite for delivering functional quality. Overall, based on the results of our study, it seems that restaurant managers are relatively satisfied with the quality of the services they offer to their guests (mean value 6.23).

The second part of the study investigated the importance of restaurants' size and seating capacity to managers' perceptions of quality (RO2). Results revealed that restaurant size (PH 1) and seating capacity (PH 2) significantly influence managers' perceptions of quality. Both elements make part of the

physical environment and, therefore, have a direct influence (0.23) on the quality assessment of Tangibles. Interestingly, through tangibles they also have an indirect influence on managers' perceptions of Assurance and Empathy. Although Tangibles were identified as only the third most important quality attribute, it is clearly evident that Tangibles, as well as restaurant size and seating capacity, have a crucial influence on managers' perceptions of restaurant quality (see also Figure 1).

Considering the unstandardized (B) regression weights presented in Table 4, predictions in measurement units are also possible. For example, if Assurance improved by 1 point, on a scale ranging from one to seven, this would improve Empathy by 1.143 points, whereas improving Tangibles by 1 point would improve Assurance by only about 0.325 points. The results of the present study also reveal that the relations between different quality attributes are complex, and, as such, they cannot be simplified or reduced to the importance of individual factors.

Table 4. Unstandardized and Standardized Regression Weights

| Variance % | Regression weights | | B | β | |
|------------|--------------------|---|------------|-------------|------|
| 31% | ASSURANCE | < | TANGIBLES | .325 | .559 |
| 30% | EMPATHY | < | ASSURANCE | 1.143 | .551 |
| | | | Covariance | Correlation | |
| | PHYSICAL | < | TANGIBLES | 12.634 | .229 |

6. Conclusion

This study had two research objectives – to analyse which quality attributes managers believe to be the most important for delivering higher service quality (RO1) and to investigate the importance of restaurants' size and seating capacity on managers' perceptions of quality (RO2). Service quality is the focus area of restaurant management theory and practice (Lee et al., 2016). Restaurant quality is one of the major determinants of guests' satisfaction and loyalty and, as such, significantly influences

restaurants' operational profitability (Kim et al., 2016). According to theory (Parasuraman et al., 1988), five quality attributes conceptualize service quality and determine guests' satisfaction. Therefore, restaurant managers must understand guests' quality expectations in order to deliver high-quality services. Previous studies (Hanks, et al., 2017; Kukanja et al., 2017; Liu & Tse, 2018) have highlighted the importance of different quality attributes for the restaurant industry, indicating that quality attributes cannot be generalised. The results of this study indicate that, from managers' perspectives, only three

quality attributes – Assurance, Empathy, and Tangibles, are important for guests' satisfaction in the restaurant industry (RO1).

The second part of the study focused on investigating the importance of restaurant size and seating capacity on managers' perceptions of quality (RO2). Results suggest that both elements (size and number of seats) significantly influence managers' perceptions of quality. Moreover, Tangibles (technical quality) has a major influence on the perceptions of attributes indicating the quality of staff (functional quality). In the attempt to improve restaurant quality, managers must invest in both the technical and functional aspects of service quality, as previously suggested by Khan et al. (2016). Overall, these results indicate that the relations between different quality attributes are heterogenous and complex and cannot be simplified. Highlighting the importance of few selected attribute(s) might unconsciously affect the perceptions of other quality attributes.

This research extends our knowledge of service quality management. Based on our knowledge, this is the first time that restaurant size and seating capacity have been analysed in relation to the DINESERV instrument. Research results clearly indicate, that restaurant managers' perceptions of service quality are subjected to restaurant size and seating capacity. Both elements proved to be important for delivering high-quality service in the restaurant industry. These findings contribute to our understanding of service quality management in relation to restaurants' physical environment and provide a basis for future research in the field of restaurant quality management, architecture, interior (layout) planning, and design.

This study was limited by the absence of guests' quality evaluations. In terms of recommendations for future research, further studies could also determine any potential differences between different dining segments, managers, restaurant facilities, geographical areas, and so on. Service quality evaluation of first-time and revisiting guests could also be investigated, as suggested by Kuo et al. (2018). Scholars might also use other research approaches (e.g., qualitative research techniques, randomised controlled trials, etc.) to get a deeper insight into service quality management. Based on research results it is also suggested to include both physical elements in future restaurant quality studies (design of research instruments).

The findings of this study have also an important implication for practice. These findings suggest that restaurant size and seating capacity should also be considered as important elements of restaurant quality management. Restaurant size and seating capacity are important elements of a feasibility study and significantly influence the decision to open a restaurant business. As restaurant size and seating capacity are most often difficult and expensive to change in the post-opening (operational) phases, restaurant planning and layout design should also be aligned with the quality management strategy in the pre-opening phase. For managers, the presented results indicate the on-going necessity of examining their own and guests' quality perceptions. In planning internal education and training in service quality, restaurant managers should also take into consideration the importance of restaurant size and seating capacity. Restaurant service quality undoubtedly deserves constant monitoring and critical evaluation from both academic and practical perspectives.

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