



## COMPARATIVE ANALYSIS OF FOOD QUALITY AND SERVICE QUALITY'S IMPACT ON THE OVERALL SATISFACTION OF GUESTS RATING RESTAURANTS ON TRIPADVISOR

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### Abstract

This paper aims to present a comparative analysis of the impact of food quality and service quality on the overall satisfaction of guests who rate restaurants on the TripAdvisor website. Through the conducted research, we collected and analysed written comments and ratings of the guests of 3,163 restaurants in Belgrade, Zagreb, Ljubljana, Sarajevo, Skopje and Podgorica, made during a period of five years preceding the pandemic. After the analysis of 118,884 reviews, we presented the results of the impact of the ratings of various attributes of the restaurant service (atmosphere, food quality, service quality, price-quality ratio) on overall guest satisfaction, and a comparative analysis of the impact of food quality and service quality on the overall satisfaction of the guests who evaluated the observed restaurants. The results of the research showed that not all attributes have the same impact on overall guest satisfaction and that food quality, without exception, had a greater impact than service quality on the overall satisfaction of restaurant users on the TripAdvisor website during the observed period, in relation to the analysed restaurants.

**Key words:** restaurant ratings, guest satisfaction, food quality, service quality, TripAdvisor.

## КОМПАРАТИВНА АНАЛИЗА УТИЦАЈА КВАЛИТЕТА ХРАНЕ И КВАЛИТЕТА УСЛУГЕ НА УКУПНО ЗАДОВОЉСТВО ГОСТИЈУ КОЈИ ОЦЕЊУЈУ РЕСТОРАНЕ НА САЈТУ *TRIPADVISOR*

### Апстракт

Циљ истраживања у овом раду је компаративна анализа утицаја квалитета хране и квалитета услуге на укупно задовољство гостију који оцењују ресторране на сајту *TripAdvisor*. Спроведеним истраживањем прикупили смо и анализирали писане ко-

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ментаре и оцене гостију за 3.163 ресторана у Београду, Загребу, Љубљани, Сарајеву, Скопљу и Подгорици у петогодишњем периоду пре пандемије. Након анализе 118.884 рецензија, приказани су резултати утицаја оцена различитих атрибута ресторатерске услуге (атмосфера, квалитет хране, квалитет услуге, однос цене и квалитета) на укупно задовољство гостију, а затим и компаративна анализа утицаја квалитета хране и квалитета услуге на укупно задовољство гостију који су оцењивали посматране ресторане. Резултати истраживања показали су да у анализираним ресторанима немају сви атрибути једнак утицај на укупно задовољство гостију и да је квалитет хране, без изузетка, имао већи утицај од квалитета услуге на укупно задовољство корисника ресторана на сајту *TripAdvisor* током посматраног периода.

**Кључне речи:** оцене ресторана, задовољство гостију, квалитет хране, квалитет услуге, *TripAdvisor*.

## INTRODUCTION

The quality of service and the quality of food in the restaurant industry are quite often considered in both expert literature and practice. One of the most frequent conclusions made upon revision is that these two – quality of service and quality of food are precisely the attributes that create a key difference in the positioning of restaurant companies (Brdar, 2023). Following this, we have decided to measure and compare the influence of these two attributes on the overall satisfaction of guests rating restaurants on the *TripAdvisor* website. Throughout the conducted research, we collected and analysed the written comments and ratings of the guests, and the results that we will present herein should indicate the difference in the influence of the ratings of various attributes of the restaurant service (atmosphere, food quality, service quality, price-quality ratio) on the overall satisfaction of the guests. Based on the obtained results, our key goal is to determine whether and to what extent food quality had a greater impact than service quality on the overall satisfaction of restaurant users on the *TripAdvisor* website during the observed period, in relation to the analysed restaurants. With the intention of comparing these two attributes to determine the differences in their influence and indicate which of them requires special attention, as well as everything that can affect the improvement of the quality of the described attribute, we present an overview of previous research on this topic, along with the results of our research in which we processed written comments and ratings of the guests for 3,163 restaurants in Belgrade, Zagreb, Ljubljana, Sarajevo, Skopje and Podgorica made during the period of five years preceding the pandemic.

## LITERATURE REVIEW

In the 21st century, food in restaurants has become a new topic for the World Tourism Organization, and a very important element of diversification and image. Additionally, food and wine as parts of modern life

have become an integral part of the development of tourism, as a special niche of tourism (Meneguel et al., 2019; Brdar, 2021). It is believed that catering establishments use food to convey the identity of the destination to tourists and bring them closer to the lifestyle of the local community (Lai et al., 2018). Food quality is always an important element when it comes to the hospitality and tourism offer, both for the overall satisfaction of guests visiting a destination (Živadinović, 2020) and for attracting guests to restaurants and, thus, generating significant income (Jia, 2020). Accordingly, one of the most frequently mentioned attributes of restaurant service today, when it comes to consumer satisfaction, is food quality. A large volume of research in the previous period dealt with food quality (Mehr-bakhsh, et al., 2021), and its positive impact on overall guest satisfaction (Gu et al., 2021). Along with the quality of the food and the attractiveness of the menu, the positioning of the restaurant on the market largely depends on the quality of the service (Carvache-Franco et al., 2021). Muhammad Shoaib Farooq et al. (2017) point out that the relationship between perceived service quality and customer satisfaction is strong. Therefore, in modern business, the priority is the satisfaction of guests and their loyalty (Stanković & Đukić 2009). A satisfied guest remains loyal, and service quality is a precursor to customer satisfaction (Knezevic et al. 2017). The quality of service is directly related to the satisfaction of employees, who should be motivated to work, because the interaction of employees with guests greatly contributes to consumer satisfaction (Kordić & Milićević, 2019). Based on quality staff that will provide high-quality service and achieve guest satisfaction (Živković & Brdar, 2018), restaurants maintain their competitive position (Kim & Jang, 2020). One of the biggest challenges in restaurants today is pairing food with atmosphere and service in order to jointly achieve the desired results (Jia, 2020). The prerequisite for this is adequate communication, which is an indispensable part of the service provision process and, as such, greatly affects the perception of quality and the satisfaction of guests in restaurants (Kim et al., 2022), and the overall quality of service is primary when it comes to guest satisfaction (Đukić et al., 2018). Guests feel that their expectations have been exceeded only if they feel that they got more than what they paid for (Radić & Popesku, 2018).

In response to new requirements, restaurant employees will have to include a larger assortment of food and drinks in their offer in the future, which will have to be constantly changed (Zrnić et al., 2021). Dealing with the assessment of critical points for the satisfaction and/or dissatisfaction of guests in luxury hospitality facilities, Padma and Ahn (2020) came to the conclusion that inadequate service results in negative comments on social networks. Posting comments on social networks and specialised websites enabled a very quick exchange of experiences among consumers (Knežević et al., 2017). This state of affairs allows managers to monitor guest satisfaction. Precisely because of this, a significant number of authors

decide to analyse the ratings and comments posted by guests on social networks and specialised websites in their research (Knežević et al., 2014). Thus, Mehrbakhsh (2021) analyses data from the TripAdvisor website in a study of the impact of food quality on the overall satisfaction of guests.

TripAdvisor has proven to be a valuable source of data, and based on the data from this site, the attributes of the hospitality service can be ranked in order of importance. It is characterised by a high level of interaction. As such, it is useful for both consumers and management (Tepavčević et al., 2018). The public display of real images by guests (reviewers) provides potential consumers with a true picture of the observed object, in which the consumer is interested. The site helps those who are already users of a certain catering facility to find the nearest content that would be interesting to them, using the 'near me' option.

This site offers access to millions of comments and allows users to write and rate their impressions and advise other tourists based on their experience. In addition, it is possible to compare the prices of restaurants and other catering facilities on this site, as well as to reserve catering products. The site has over 860 million comments and numerical ratings for 8.7 million catering establishments worldwide (Zlatanov, 2022). The number of online views on the site was one million in 2005, and it was more than 570 million in 2017 (Sánchez-Franco et al. 2019). During 2018, it had an average of more than 490 million visitors per month (Taecharungroj & Mathayomchan, 2019).

The latest research shows that the latest software tools are resorted to in order to make the right decision about choosing a restaurant, and these tools combine data and information posted on social networks (Aguero-Torales, 2019). The site is popular among both managers and consumers because the services on it are free and, additionally, a large amount of information can be collected from it. So far, over 800 million comments have been published on the site, and the greatest growth in the number of comments was achieved in the period between 2014 and 2020 (Abeyasinghe & Bandara, 2022). Four attributes of the restaurant service can be evaluated (service quality, food quality, atmosphere, price-quality ratio) on the TripAdvisor website, and they represent the most important elements in determining guest satisfaction (Tepavčević et al., 2021). These attributes are interdependent, the guests rate them on a scale of 1 to 5, and each of them affects the overall rating of the quality of the restaurant (Zhang et al., 2017). This site also increases the probability of booking (Taecharungroj & Mathayomchan, 2019).

Precisely because of the aforementioned attributes of the restaurant service, and the way in which guests submit ratings on Tripadvisor, we decided to analyse and compare the ratings of food quality and service quality, as well as their impact on overall guest satisfaction in this paper. We conducted research in which we collected and analysed written com-

ments and ratings of guests in restaurants in Belgrade and the capitals of several countries in our area: Zagreb, Ljubljana, Sarajevo, Skopje and Podgorica. We present the methodology we used and the analysis of the obtained results in the following sections of the paper.

## METHODOLOGY

### *Methods and Data Collection*

The data used in the work was compiled (as part of the research for the preparation of a doctoral dissertation) into a database consisting of comments and ratings (called reviews in the following sections of the paper) of consumers from the TripAdvisor website ([www.Tripadvisor.com](http://www.Tripadvisor.com)) related to restaurants in the following cities: Belgrade, Sarajevo, Zagreb, Ljubljana, Skopje, Podgorica. The sample includes all restaurants that were present on the TripAdvisor website in January 2020, and the research included the reviews available for these restaurants in the period between 2015 and 2019. This period is adequate because there was no pandemic during that time interval, and the negative impact of the corona virus pandemic on the restaurant business can be ruled out. The research included both foreign and domestic restaurant patrons, as well as local patrons. A summary of the distribution of reviews is given in the table below.

*Table 1. The number of restaurants and the total number of user reviews by city in the 2015-2019 period on the TripAdvisor website*

City	No of restaurants	No of reviews
Belgrade	1204	34323
Ljubljana	509	30908
Podgorica	150	2843
Sarajevo	336	11568
Skopje	286	6473
Zagreb	678	32769
Total	3163	118884

(Authors' analyses)

The research process included the collection of all available reviews for restaurant service attributes and their analysis, the comparison of their impact on user satisfaction, the extraction of the ratings for food quality and service quality, and finally a comparative analysis of these two attributes with the aim of determining the impact on overall guest satisfaction.

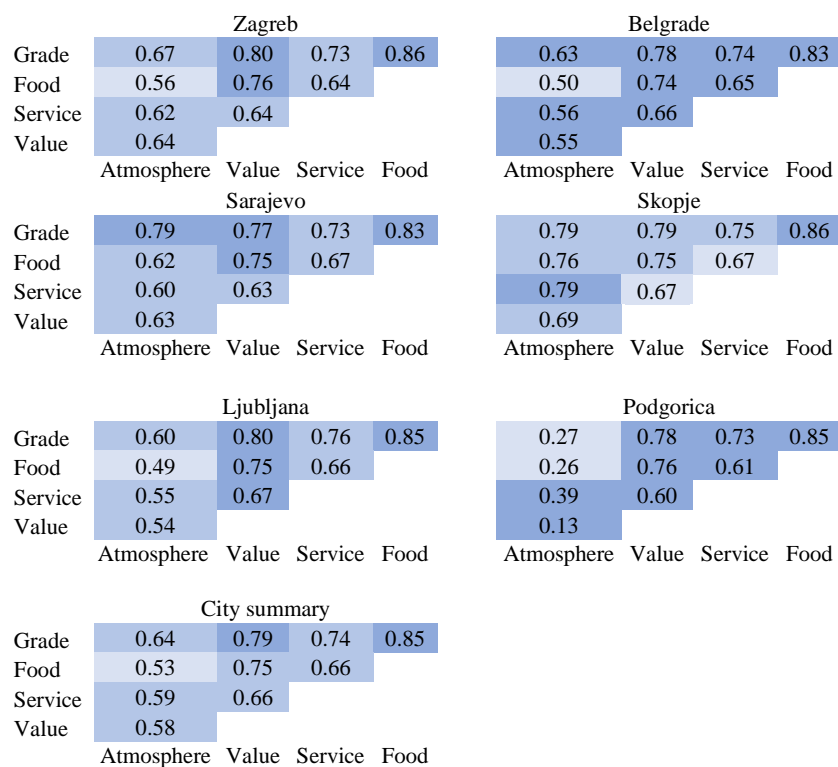
As mentioned earlier, it is possible to write free-form comments related to how the restaurant service was experienced on the TripAdvisor website, and the following attributes of the restaurant service can be evaluated: food quality, service quality, atmosphere, and price-quality ratio.

The attributes of restaurant services on the TripAdvisor website can be rated on a scale from 1 to 5. This type of assessment is a Likert-type scale. As the Likert-type scale is common for comparing restaurant service attributes and customer satisfaction, it is appropriate to use Spearman's correlations (Spearman, 1961) because they are appropriate in cases in which one of the following conditions is met: the variables do not have a normal distribution; the variables were measured using an ordinal scale; the sample is small; and the relationship between two variables is not linear. Taking into account that the Likert-type scale represents an ordinal and not a nominal variable in this case, Spearman's correlations were used. Spearman's correlations are used to examine the existence or type of relationship/influence between restaurant service attributes as one variable and another variable representing customer satisfaction. The higher the correlation, the stronger the connection between the two variables. However, on the other hand, it is necessary to compare the differences between the Spearman correlations. The significance of the differences in the obtained correlations depends on the number of comments. To compare statistically significant differences between correlations, the method formulated by Dunn and Clark (1969) was used, employing the cocor R package (Diedenhofen & Musch 2015). This method was chosen because it is adequate for comparing the intensity of correlations when the correlations are dependent, i.e., are based on the same comments, and when the correlations are overlapping, i.e., when, as in this case, we have one common variable. In the correlations 'satisfaction-service quality', 'satisfaction-food quality', 'satisfaction-atmosphere quality', and 'satisfaction-price-quality ratio', the common variable is satisfaction. The intensity of the correlations is shown on heat maps, and our initial hypotheses are as follows: (H1) the attributes of the restaurateur's service do not have the same impact on the overall satisfaction of the guests of the observed restaurants on the TripAdvisor website during the analysed period; and (H2) the quality of the service has the same influence as the quality of the food on the overall satisfaction of the guests of the observed restaurants on the TripAdvisor website during the analysed period.

## *RESULTS AND DISCUSSION*

At the very beginning of the analysis, we looked at the impact of all restaurant service attributes on the overall satisfaction of the guests of the observed restaurants on the TripAdvisor website. The intensity of the correlations is shown through the influence of various attributes (atmosphere quality - Atmosphere, price and quality ratio - Value, quality of service - Service, food quality- Food) on the overall satisfaction of guests (marked as Grade in the picture) in all observed restaurants, which are sorted according to the cities in which they are located and observed collectively (City summary). The results shown in Figure 1 clearly show that the relationship

between the ratings of restaurant service attributes and the ratings of overall guest satisfaction in the observed restaurants is different, i.e., that not all attributes have the same influence on the overall satisfaction of guests in the observed restaurants. With the exception of Skopje, in which the Quality of Atmosphere has the same influence as the Price-Quality Ratio, there are differences in the influence of the attributes on overall guest satisfaction in all other cities. When the evaluations of the influence of the attributes on overall guest satisfaction are looked at collectively for all restaurants in all of the observed cities, we come to the conclusion that each attribute has a different effect on the overall satisfaction of guests in the observed restaurants. Accordingly, we can conclude that the initial hypothesis (H1) is confirmed.



correlation  
 0.00 0.50 1.00

*Figure 1. The intensity of the correlation between guest satisfaction and restaurant service attributes (Authors' analyses)*

As in the previously mentioned research (Brdar, 2023), this research also shows that the attributes of restaurant service have a different influence on the overall satisfaction of the guests, but we must note that, in the ratings of the guests that we observed, not every attribute is commented on and rated the same number of times on the TripAdvisor website. For the purposes of this research, a total of 118,884 reviews were collected, and of that number, the quality of the atmosphere attribute was commented on and rated the least number of times. We will show below (Table 2) how many times each restaurant service attribute was evaluated in the total number of analysed reviews.

*Table 2. The number of reviews on the TripAdvisor website classified according to the attributes of the restaurant service*

Assessed attribute	Number of reviews
Food Quality	23839
Service Quality	24400
Price-Quality ratio	24145
Atmosphere	1155
Total	118884

(Authors' analyses)

Table 2 indicates that consumers rated atmosphere the least. Taking that into account, in order to use as much of the data as possible during further analysis, and to keep atmosphere as part of the research going forward, the complete comments were divided into two groups. The comments are divided as follows: (1) full reviews that had ratings for expressed satisfaction, food quality, service quality and price-quality ratio, amounting to a total of 23,619 reviews; and (2) full reviews that had ratings for expressed satisfaction, food quality, service quality, price-quality ratio and atmosphere quality, amounting to a total of 1,114 reviews.

All available data was used for each of these two groups. The differences of the Spearman correlations of restaurant service attributes with user satisfaction were compared, and these differences were shown on a heat map (Figure 2).

The heat map (Figure 2) gives us an overview of the intensity of Spearman's correlations for comments on restaurant service attributes in relation to expressed guest satisfaction. Each letter below the number indicating the intensity of correlations indicates statistical significance. If the letters below are identical – e.g., in Sarajevo (Figure 2B) 'a' for atmosphere and 'a' for food, there is no statistically significant difference between the influence of food quality and atmosphere on overall satisfaction. Accordingly, if these marks on the heat map differ, the correlation with a higher value has a greater impact on guest satisfaction. For example, in Zagreb, in Figure 2A, the intensity of food quality is 0.86 and has the mark 'a', the



quality of service has an intensity of 0.73 and the mark 'b', and the price-quality ratio has the mark 'c' and a value of 0.8. All three grades that show the intensity of the influence of restaurant service attributes on guest satisfaction in this example have statistically significant differences (the intensity of food quality has the strongest influence on satisfaction (0.86), followed by price-quality ratio (0.8) and quality of service (0.73)), which has the least influence. In cases in which one of the intensities is marked with two letters on the heat map – e.g., Ljubljana with 'ab' for service quality in Figure 2B, the intensity of service quality on guest satisfaction does not statistically differ from the intensity of the price-quality relationship with guest satisfaction (label 'a'), or from the intensity of food quality's impact on guest satisfaction (label 'b'). In accordance with the presented differences, and bearing in mind the conclusions (Hidayat et al., 2020), which show how important food quality and service quality are for guest satisfaction and loyalty, in the following text we shall deal with the analysis of the impact of these two attributes on the overall guest satisfaction in more detail.

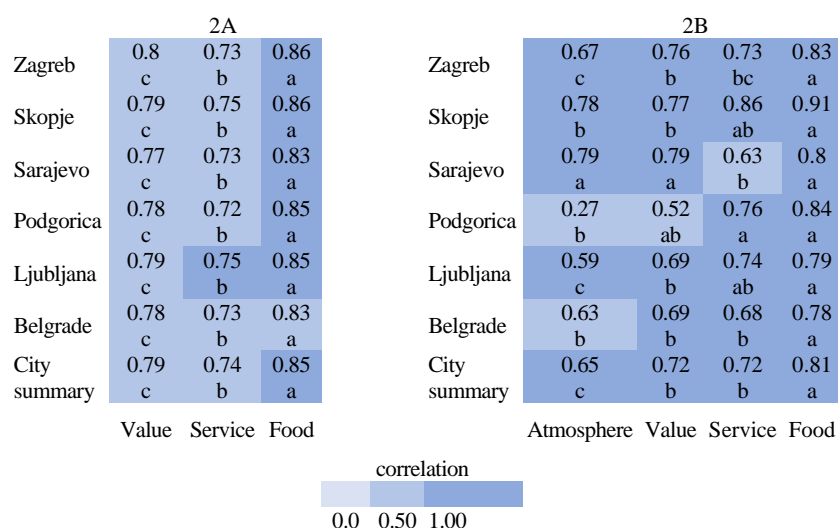


Figure 2. Intensity of Spearman correlations of restaurant service attributes with customer satisfaction (Authors' analyses)

In accordance with the proposed hypothesis (H2), we will analyse the influence of 'quality of service' and 'quality of food' on the expressed satisfaction of guests in restaurants in each of the cities individually. Since 'atmosphere' as an attribute of the restaurant service was evaluated the least number of times, and it does not participate in the analysis of the impact of 'service quality' and 'food quality' on the expressed satisfaction of the guests, Figure 2A will be used for the further analysis and interpretation

of the data in this part. These values are more representative because they contain a larger number of reviews (23,619) to be compared. Based on the separate grades shown in Table 2, which show the impact of food quality and service quality on overall satisfaction, we can make a comparison and determine the difference in the impact of the mentioned attributes on the overall satisfaction of guests in the restaurants of the cities we observed. Also, in this way, we can determine the existence and significance of the differences in the influence of the two mentioned attributes on the overall satisfaction of guests in restaurants located in different cities (whether the restaurants in Belgrade and Skopje differ by this, for example, or whether the situation is identical regardless of the location of the restaurant). The obtained values for the attributes ‘quality of service’ and ‘quality of food’ are shown separately in Table 3 and Graph 1.

*Table 3. The influence of service quality and food quality on the expressed satisfaction of guests in restaurants*

City	Restaurant service attribute	
	‘Service quality’	‘Food quality’
Belgrade	0,73	0,83
Zagreb	0,73	0,86
Ljubljana	0,75	0,85
Sarajevo	0,73	0,83
Skopje	0,75	0,86
Podgorica	0,72	0,85
All cities collectively	0,74	0,85

(Authors’ analyses)

Based on the data analysis, we come to the conclusion that at the restaurant level in Belgrade, the influence of the attribute ‘quality of service’ on the overall satisfaction of guests and the influence of the attribute ‘quality of food’ on the expressed satisfaction of guests are statistically different and this is shown by different lowercase letters (‘b’ for quality of service, and ‘a’ for quality of food), which are the result of Spearman’s correlations according to the Dunn and Clark method (Figure 2A). The intensity of the attribute ‘quality of service’ on the expressed satisfaction of guests in restaurants in Belgrade is 0.73, and the intensity of the attribute ‘quality of food’ on the expressed satisfaction of guests in restaurants in Belgrade is 0.83. Based on the above, it can be concluded that the influence of the ‘quality of service’ attribute on the overall satisfaction of guests in restaurants in Belgrade is smaller or weaker than the influence of the attribute ‘quality of food’.

Analysing the data of the restaurants in Zagreb, we can conclude that the influence of the attribute ‘quality of service’ on the overall satisfaction of guests and the influence of the attribute ‘quality of food’ on the

overall satisfaction of guests are statistically different, and this is shown by different lowercase letters on graphic A (Figure 2) ('b' for service quality, and 'a' for food quality), which are the result of Spearman's correlations according to the Dunn and Clark method. The intensity of the attribute 'quality of service' on the overall satisfaction of guests in restaurants in Zagreb is 0.73, and the intensity of the attribute 'quality of food' on the overall satisfaction of guests in restaurants in Zagreb is 0.86. Based on all of the above, it can be concluded that the influence of the attribute 'quality of service' on the expressed satisfaction of guests in restaurants in Zagreb is less than the influence of the attribute 'quality of food'.

Looking at the data for restaurants in Ljubljana, it is noticeable that the influence of the attribute 'quality of service' on overall guest satisfaction and the influence of the attribute 'quality of food' on overall guest satisfaction are statistically different ('b' for service quality, and 'a' for food quality), which are the result of Spearman's correlations according to the Dunn and Clark method (Figure 2A). The intensity of the attribute 'quality of service' on the overall satisfaction of guests in restaurants in Ljubljana is 0.75, and the intensity of the attribute 'quality of food' on the overall satisfaction of guests in restaurants in Ljubljana is 0.85. Accordingly, it can be concluded that the influence of the attribute 'quality of service' on the expressed satisfaction of guests in restaurants in Ljubljana is less than the influence of the attribute 'quality of food'.

Further analysis of the ratings for restaurants in Sarajevo shows that the influence of the attribute 'quality of service' on overall guest satisfaction and the influence of the attribute 'quality of food' on the expressed satisfaction of guests are statistically different and this is shown by different lowercase letters ('b' for service quality, and 'a' for food quality) which are the result of Spearman's correlations according to the Dunn and Clark method (Figure 2A). The intensity of the attribute 'quality of service' on the overall satisfaction of guests in restaurants in Sarajevo is 0.73, and the intensity of the attribute 'quality of food' on the overall satisfaction of guests in restaurants in Sarajevo is 0.83. Based on the above, it can be concluded that the influence of the attribute 'quality of service' on the overall satisfaction of guests in restaurants in Sarajevo is not equal to the influence of the attribute 'quality of food'.

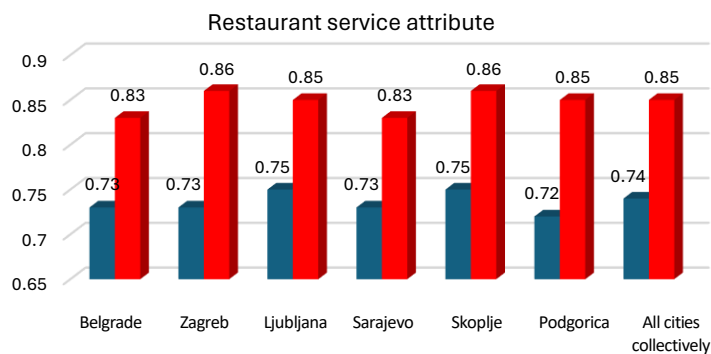
At the level of restaurants in Skopje, the influence of the attribute 'quality of service' on expressed guest satisfaction and the influence of the attribute 'quality of food' on expressed guest satisfaction are statistically different and this is shown by the different lowercase letters in graphic A (Figure 2) ('b' for service quality, and 'a' for food quality). The results on the graph are derived from Spearman correlations according to the Dunn and Clark method. If you look at the mentioned graph, you can see that the intensity of the attribute 'quality of service' on the expressed satisfaction of guests in restaurants in Skopje is 0.75, and the intensity of the attribute

‘quality of food’ on the expressed satisfaction of guests in restaurants in Skopje is 0.86. Based on this, it can be concluded that the influence of the attribute ‘quality of service’ on the overall satisfaction of guests in restaurants in Skopje is not equal (it is smaller) than the influence of the attribute ‘quality of food’.

Analysing the ratings for restaurants in Podgorica, we conclude that the influence of the attribute ‘quality of service’ on the expressed satisfaction of guests and the influence of the attribute ‘quality of food’ on the expressed satisfaction of guests are statistically different. This is supported by the different lowercase letters (‘b’ for service quality, and ‘a’ for food quality) which are the result of Spearman’s correlations according to the Dunn and Clark method (Figure 2A). The intensity of the attribute ‘quality of service’ on the overall satisfaction of guests in restaurants in Podgorica is 0.72, and the intensity of the attribute ‘quality of food’ on the overall satisfaction of guests in restaurants in Podgorica is 0.85. Based on the above, it can be concluded that the influence of the attribute ‘quality of service’ on the overall satisfaction of guests in restaurants in Podgorica is not equal to the influence of the attribute ‘quality of food’ – it is smaller, as in all previous cases.

Based on the presented results, we can conclude that when we look at the impact of the analysed attributes according to the location (city) where the restaurants are located, there are differences, but they are not significant (the range of ratings for service quality is 0.72 - 0.75, and 0.83 - 0.86 for food quality). However, unlike other authors who investigated the influence of only one of the mentioned attributes (Panchapakesan, et al., 2022), our goal is to determine the differences between the influence of these two attributes on overall guest satisfaction. The results are presented in the following text.

In the end, in order to confirm or reject the initial hypothesis (H2), we collectively analysed the impact of the ‘service quality’ attribute on overall guest satisfaction and the impact of the ‘food quality’ attribute on overall guest satisfaction at the level of all restaurants. The obtained results are statistically different and this is shown by different lowercase letters (‘b’ for service quality, and ‘a’ for food quality), which are the result of Spearman’s correlations according to the Dunn and Clark method (Figure 2A). The intensity of the attribute ‘quality of service’ on the expressed satisfaction of guests in all restaurants is 0.74, and the intensity of the attribute ‘quality of food’ on the overall satisfaction of guests in all restaurants is 0.85. Accordingly, it can be concluded that the influence of the attribute ‘quality of service’ on the overall satisfaction of guests in all restaurants in the mentioned cities is not equal to the influence of the attribute ‘quality of food’.



*Graph 1. The impact of service quality and food quality on the expressed satisfaction of guests in restaurants*

Legend: blue color represents "quality of service"; red color represents "quality of food"

Based on the presented analysis and the results shown in Figure 2 and Graph 1, which unequivocally show that the total intensity of the attribute 'quality of food' (0.85) is greater than the total intensity of the attribute 'quality of service' (0.74), we can conclude that the *starting hypothesis (H2) is rejected*, because the impact of the attribute 'quality of food' on the overall satisfaction of guests in the observed restaurants during the analysed period is greater than the impact of the 'quality of service' attribute.

## CONCLUSION

A large volume of research in the previous period dealt with the analysis of the contribution of food quality, in relation to other elements and attributes, to the overall satisfaction of guests in restaurants. The results of the research presented in this paper showed that not all attributes have an equal impact on overall guest satisfaction and that food quality, without exception, had a greater impact than service quality on the overall satisfaction of restaurant patrons on the TripAdvisor website during the observed period, and in relation to the analysed restaurants in Belgrade, Sarajevo, Zagreb, Ljubljana, Skopje and Podgorica. Accordingly, the recommendation for restaurant management is that special attention should be paid to the quality of the food in future activities, without neglecting the importance of the other attributes of restaurant service. Taking into account the presented results, and in accordance with the analysed data, one of the possibilities for future research can be an analysis of the influence of restaurant service attributes according to different market segments, starting from the assumption that not all restaurant service attributes are equally important to all types of guests.

At the very end, we must refer to the limitations of the research presented in this paper. Namely, this research covers a period of five years preceding the pandemic, and reviews left during and after the coronavirus pandemic were not included, which would certainly be a recommendation for future research, so as to compare ratings in the pre- and post-pandemic period and determine whether there were any changes in guest ratings and what these changes are reflected in. Also, this research covers only one platform, so an additional recommendation for future research would be to include other platforms in order to get a more comprehensive and objective insight into the satisfaction of guests in restaurants.

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## КОМПАРАТИВНА АНАЛИЗА УТИЦАЈА КВАЛИТЕТА ХРАНЕ И КВАЛИТЕТА УСЛУГЕ НА УКУПНО ЗАДОВОЉСТВО ГОСТИЈУ КОЈИ ОЦЕЊУЈУ РЕСТОРАНЕ НА САЈТУ *TRIPADVISOR*

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### Резиме

Квалитет хране и квалитет услуге се веома често посматрају, како у стручној литератури тако и у практичном раду, као атрибути који праве кључну разлику у позиционирању ресторатерских предузећа. У складу са тим, одлучили смо да у нашем истраживању измеримо и упоредимо утицај ова два атрибута на укупно задовољство гостију који оцењују ресторане на сајту TripAdvisor. Спроведеним истраживањем прикупили смо и анализирали писане коментаре и оцене гостију, а резултати су потврдили различитост утицаја оцена различитих атрибута ресторатерске услуге (атмосфера, квалитет хране, квалитет услуге, однос цене и квалитета) на укупно задовољство гостију. Резултати истраживања показали су да је



квалитет хране, без изузетка, имао већи утицај од квалитета услуге на укупно задовољство корисника ресторана на сајту TripAdvisor током посматраног периода у анализираним ресторанима. На основу тога можемо закључити да овај атрибут захтева посебну пажњу, заједно са свим што може утицати на унапређење квалитета описаног атрибута (нпр. квалитет намирница од којих се храна припрема и опрема и запослени који се тим пословима баве).