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# SERVICE QUALITY AND CUSTOMER SATISFACTION MEASUREMENT OF DAILY TOURS: AN APPLICATION OF DAILYSERV SCALE

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## **ABSTRACT**

The purpose of this research is to measure daily tour service quality and customer satisfaction. It aims to understand the nature of relationship between these two constructs. Data were collected from 193 participants of daily tours in Dubrovnik city area using DAILYSERV scale. To examine the influence of daily tour service quality dimensions on overall service quality and on overall satisfaction, multiple regression analysis was performed. Significant and positive effects of daily tour service quality dimensions on overall service quality and on overall satisfaction were detected. Dimensions "activities carried out" and "transportation" have the highest impact on daily tour overall service quality. In addition, tour guide and activities carried out are the most critical daily tour features that significantly influence overall satisfaction with daily tour. Thus, daily tour operators should invest in these dimensions to enhance overall service quality and customer satisfaction.

Key words: service quality, customer satisfaction, daily tours, DAILYSERV scale, measurement

#### 1. INTRODUCTION

Day tours are on-site tours that last a day or even a few hours and do not contain an overnight stay. Such trips may enrich travel experience and increase tourist awareness about the country's values and realities (Štetić et al., 2011). Moreover, they improve overall tourist satisfaction (Albayrak, Caber, 2018). In terms of destination marketing, daily tours may both be designed to increase the total

tourism revenues and be used as a promotion tool to present the tourism offerings of a destination (Ap, Wong, 2001; Wong, McKercher, 2012). Therefore, destination authorities should be aware of the critical service encounters which maintain tourist satisfaction with daily tour experience.

In the tourism and travel literature, several researchers have argued that service attributes have varying effects on overall tourist satisfaction (e.g., Albayrak, Caber, 2013b; Füller, Matzler, 2008; Mikulić et al., 2016). There are just few studies that have attempted to investigate daily tours and their main service dimensions. Štetić, et al. (2011) only conceptually explained daily tours and its importance for rural destination development. In an island context, Reyez Velez et al. (2018) showed that from all the services examined (transportation by boat, food and beverage, tourist guide and visits), transportation had the highest impact on daily tour satisfaction and behavioural intentions. However, there are only a few studies that have focused on daily tours and link with tourist satisfaction. This study is one of the first attempt to examine the concept of daily tours with overall daily tours service quality and overall tourist satisfaction in the city.

Therefore, first objective of the study is to determine the effects of daily tour service quality dimensions on daily tour overall service quality. The second is to define the effects of daily tour service quality dimensions on overall satisfaction with daily tour.

This paper is structured as follows. First, the literature review provides an overview of past studies of service quality, tourist satisfaction and daily tour service quality concept and measurement model. Second, the methodology section describes the research framework, data collection process, and statistical methods used to examine relationships between constructs in the proposed models. The third part identifies daily tours service quality dimensions and their impact on overall service quality and overall satisfaction with daily tours. Based on theoretical and empirical findings, last section of the paper offers a discussion of managerial implications, limitations, and avenues for future research.

#### 2. THEORETHICAL FRAMEWORK

## 2. 1 Service quality

The concept of service quality has received a great deal of attention from both academics and practitioners throughout the past four decades. Many authors agree that the term "service quality" defines fulfilment of tourists' expectations and perceptions (Gronroos, 1984; Lewis, Mitchell, 1990). Parasuraman et al. (1985) describe it as overall evaluation that results from comparison between a customer's expectations and service received from a provider. In that sense, the quality is high when performance exceeds expectation and quality is low when performance does not meet expectation. Based on this concept, stated authors developed the SERVQUAL instrument to monitor and assess a service provider's performance. The model consists of five service quality dimensions: tangibles, reliability, responsiveness, assurance, and empathy. The proposed model has been extensively used in tourism: travel agencies (Bigne, Blesa, 2003; Shahin, Janatyan, 2011; Katircioglu et al., 2012; Setó-Pamies, 2012; Bhadra, Rajesh, 2018), hotels (Marković, 2004; Ladhari, 2009; Marković, Raspor Janković, 2013; Kim-Soon et al., 2014; Ounsri, Thawesaengskulthai, 2019), and restaurants (Marković et al., 2010; Nam, Lee, 2011; Hansen, 2014; Saneva, Chortoseva, 2018).

However, Tribe and Snaith (1998) argue that SERVQUAL had some drawbacks when researchers used it to evaluate tourist experiences at a tourist destination. In their opinion SERVQUAL model does not include some important factors for destination service quality evaluation such as: attractions, entertainment, cultural experience and similar.

The current research used three items to evaluate overall service quality of daily tours: excellent, high standard and superior service (Dabholkar et al., 2000). According to Lee et al. (2016), providing excellent service quality directly leads to customer satisfaction.

## 2. 2 Tourist satisfaction

Tourist satisfaction is another important concept in tourism business. Many authors use terms "service quality" and "satisfaction" interchangeably, but they are in fact distinct constructs. While service quality is an evaluation or appraisal of attribute performance, satisfaction represents the impact of the attribute performance on customer's feeling states (Olsen, 2002). Service quality has a significant influence and positive relationship on customer satisfaction (Alroub et al., 2012; Osman, Sentosa, 2013; Bakhtiar, Mutmainah, 2021).

Tourist satisfaction has usually been defined as an emotion that a tourist feels after service consumption or effective response to a service (Oliver, 1999; Baker, Crompton, 2000; Zeithaml, Bitner, 2003; Um et al., 2006). Zeithaml and Bitner (2003) define customer satisfaction as a customer's evaluation of a product or service in terms of whether that product or service has met the customer's needs and expectations. Moreover, satisfaction is defined in relation to pre-travel expectations and post-travel evaluations (Chen, Chen, 2010). It plays an important role in survival and future of any tourism products and services since it influences the choice of destination and decision to return.

Most assessments of tourist satisfaction within a particular destination are based on multiple attributes, including service quality, price, cleanliness, infrastructure of destination (Ragavan et al., 2014; Dwyer et al., 2016; Rašovska et al., 2021). Moreover, transportation and infrastructure (Guzman-Parra et al., 2016; Kozak, 2003; Shahrivar, 2012; Singh and Tanwar, 2018), as well as destination management activities (Kozak, Rimmington, 2000; Singh, Tanwar, 2018), and behaviour of residents (Guzman-Parra et al., 2016; Ragavan et al., 2014; Rašovska et al., 2021; Shahrivar, 2012) can also influence tourist's satisfaction. Those attributes and their importance depend on destination type and visitor characteristics. Such information is important for tour operators and travel agencies while creating daily tours.

## 2. 3 Daily tours

Daily tours are type of package tours that refer to visits or travel to locations near to tourism destinations for a limited length of time. Such short trips last for less than 24 hours and are also known as day-tours or same-day trips and they often do not include overnight services (Albayrak, Caber, 2018). In large world metropolis and important cultural and historic centres such type of trip is called "sightseeing". The tourism practitioners also use the term "excursions" which originally comes from the Latin 'excursio,' meaning a trip, a short travel for a fun (Vujaklija, 1970 in Štetić et

al., 2011). This refers to the idea of group travel, where the purpose of the trip is educational or simply includes leisure activities. Those activities are usually organized by tours operators or travel agencies who offer professional tour guide, transportation, food and beverage services, and visits to cultural, natural, or sports-related attractions.

Tour guides play a vital role in ensuring tourist satisfaction and revisiting destinations (Zhang, Chow, 2004; Lin et al. 2009; Huang et al., 2015; Jahwari et al., 2016; Alazaizeh et al., 2019). They act as storytellers about the destinations. Furthermore, type of transportation (bus, boat, train, and others) and service delivery may impact service quality of transportation during a tour, various vehicles can be included in the tour program, depending on the content of the tour. Such tours can be a combination of two or more experiences (such as city tours with shopping opportunities or museum visits) (Štetić et al, 2011). A great advantage of such tours is an opportunity to learn more about the host country and enrich the whole travel experience (Holloway, 1981; Gu, Ryan, 2008). For tour operators they represent additional revenue, while for local travel agencies, they are their main source of income. Therefore, they try to organize daily tours that have high sales potential and are attractive to various market segments (Albayrak, Caber, 2018). Even though in recent years online tools are available for tourists to organize their own tour, travel agencies and tour operators still offer non replaceable advantages such as professional services, time, and costs savings. Such service has an impact on overall tourist satisfaction. In the literature, there is no consensus on how daily tour service quality should best be categorized and evaluated.

# 2. 4 Daily tours service quality dimensions

The existing studies have explored the topic of all-inclusive package tours and their service quality (Bowie, Chang, 2005; Lee et al., 2011; Wang et al., 2000; Wang et al., 2012; Wong, McKercher, 2012). Researchers have mostly examined the motivation and satisfaction of participants, as well as the relationship between tour guide or tour leader and the overall tour satisfaction.

Research done by Wang et al. (2000) is one of the earliest one analysing package tours. They used following dimensions for measuring tour service quality: pre-tour briefing, airports, hotels, restaurants, bus services, scenic spot, optional tours, shopping, and other elements. Similarly, Wang et al. (2012) developed a scale comprising transportation, hotels, shopping arrangements, tour leaders, local guides, and optional tours as main features of package tours service quality.

Furthermore, Chan et al. (2015) found that tour guides, food, transportation, and accommodation deemed as core tour elements, while attractions, shopping, and recreation and entertainment can be identified as supporting tour features. Following that research, Albayrak et al. (2016) stated that package tour service quality can be described with following dimensions: flight, transfer service, vehicle, hotel, guide, and information.

It can be concluded that majority of scholars have selected group packages tours (GPTs) performed at host destinations and identified their service encounters. A limited number of studies have attempted to investigate daily tours and their main service dimensions. Štetić, et al. (2011) conceptually explained daily tours and emphasized the importance of same-day trips for rural destination development. However, these authors fail to propose the service dimensions of a typical daily tour.

Albayrak and Caber (2018) proposed DAILYSERV scale. The scale measures daily tour service quality based on six dimensions, namely, transportation, food and beverage, tour guide, shopping facility, stopover facility, and museums and sites. Reyes Vélez et al. (2019) modified the proposed DAILYSERV scale for measuring service quality of Ecuadorian island day tours, using tour guide, boat transportation, food and beverage, and visit as main daily tour service quality dimensions.

In addition, Brochado et al. (2020) have sought to identify sustainable tour dimensions from the tourist's perspective. The study confirmed the three overall groups of dimensions identified by Chan et al. (2015) and dimensions proposed by Albayrak and Caber (2018) and Reyes Velez et al. (2019) in DAILSERV scale. The final research identified 12 main themes which are related to sustainability such as tour guide, experience, hike, service, food, recommendation, fun, return, walk, difference, and wildlife.

The most recent study done by Terziyska (2021) identified the salient attributes of one-day cultural tours provided by ground operators. The research focused on tourist satisfaction of daily tours and identified following five dimensions of service experience: the quality of tour guiding, the overall organization of the trip, sites visited, comfort of transport vehicles, and value for money.

Table below presents major recent findings of daily tour service quality dimensions.

Table 1. Daily tour service quality dimensions

Reference	Research Context	Data analysis	Daily Tour Service Quality Dimensions
Albayrak, Caber (2018)	Anatolia, Turkey N = 186 and N = 424	EFA, CFA, correlation	<ul> <li>transportation,</li> <li>food and beverage,</li> <li>tour guide,</li> <li>shopping facility,</li> <li>stopover facility,</li> <li>museum and sites</li> </ul>
Reyes Vélez et al. (2019)	Day tours, Isla de la Lata, Ecuador N = 195	PLS, SEM	<ul><li>tour guide,</li><li>boat transportation,</li><li>food and beverage,</li><li>visit</li></ul>
Brochado, et al. (2020)	Portugal N=878	Qualitative narrative and quantitative computer- assisted content analyses methods	<ul> <li>core services (tour and service),</li> <li>tour guide services (guide),</li> <li>sustainable support services (hike, food, walk, and wildlife),</li> <li>emotional experiences (experience, difference, and fun),</li> <li>post-purchase behaviours (recommendation and return)</li> </ul>
Terziyska (2021)	Cultural day tour, Bulgaria N= 233	Netnography method, online Trip Advisor customer reviews	<ul><li>tour guide</li><li>transportation</li><li>attractions/activities</li><li>value for money</li></ul>

Source: Authors

According to Table 1, researchers define daily tour service quality as a multidimensional construct, that consists of both, tangible and intangible features. Furthermore, main daily tour service quality dimensions are transportation and tour guide.

#### 3. RESEARCH METHODOLOGY

## 3. 1 Research framework

The main purpose of present research was to empirically measure daily tour service quality and customer satisfaction with daily tour. In particular, the research aimed to: (a) determine the effects of daily tour service quality dimensions on daily tour overall service quality, and (b) determine the effects of daily tour service quality dimensions on overall satisfaction with daily tour.

Based on the main purpose of this research, as well as following the main findings from literature review presented in theoretical part of this paper, the present research aimed to test the following hypotheses:

H1: Daily tour service quality dimensions have positive and significant impact on daily tour overall service quality.

H2: Daily tour service quality dimensions have positive and significant impact on overall satisfaction with daily tour.

To address research aims and to test proposed hypotheses, empirical research was based on primary data, collected with on-site questionnaire.

# 3. 2 Questionnaire design

To investigate the daily tour service quality and satisfaction, questionnaire was designed based on the literature review. For this purpose, authors of the present study adopted and modified the DAILYSERV scale developed by Caber and Albayrak (2018), as recommended by Reyes Velez et al. (2019).

The questionnaire employed in present research includes four sections, intended to measure three main research constructs, as well as respondents' demographic profile. Thus, the first section includes 18 items for measuring daily tour service quality attributes, organized in four dimensions, namely, transportation, tour guide, food and beverage, and activities carried out. The second section comprises three items for measuring daily tour overall service quality, while the third section measures overall satisfaction with daily tour using three items. Hence, all the research constructs are measured using multiple-item scales. In addition, a seven-point Likert scale ranging from "strongly disagree" (as 1) to "strongly agree" (as 7) was used to measure the extent of the agreement with proposed items.

Fourth section of the questionnaire was designed to measure respondents' demographic profile. For this purpose, the following set of respondents' characteristics was collected: gender, age, marital

status, level of education, economic status, households' monthly income, country of residence, frequency of participating in daily tours, and daily tour organization.

## 3. 3 Data collection

The city of Dubrovnik (Croatia) served as the site for collecting primary data. Thus, the target population in present research is participants of daily tours in Dubrovnik city area.

Data were collected via self-administered questionnaires during September 2021. Before data collection started, the daily tour organizer was contacted for permission to conduct the survey. Questionnaires were randomly distributed to tourists at the end of their daily tour, and were collected onsite, after they were completed. Participation in the survey was voluntary.

Data collection resulted with a total of 193 questionnaires usable for data analysis.

## 3. 4 Data analysis

Software package SPSS (version 25) was utilized to perform descriptive statistics, reliability analysis, correlation analysis, and multiple regression analysis.

Descriptive statistics were calculated to examine the sample profile and to determine the level of perceived service quality and overall satisfaction with daily tour. The reliability of constructs was estimated with Cronbach alpha coefficients, while correlation coefficients were calculated to assess construct validity. Correlation analysis was also used to assess possible multicollinearity in the regression models. The influence of daily tour service quality dimensions on overall service quality and overall satisfaction was evaluated with multiple regression models. By adopting multiple regression analysis, main research hypotheses were tested.

#### 4. RESEARCH FINDINGS

In this part of the paper research findings are presented. Firstly, reliability and validity of each construct in measurement instrument are estimated. Next, sample characteristics are described, followed by the results describing levels of daily tour service quality and satisfaction. Finally, effects of daily tour service quality dimensions on overall service quality and overall satisfaction with daily tour are tested.

## 4. 1 Reliability and validity analyses

Cronbach alpha coefficients were calculated to estimate the reliability of each construct in the measurement instrument. Table 2 shows that values range between 0.828 and 0.946. These are high values and show good internal consistency and stability of the constructs. Since all values are higher than 0.7, according to Hair et al. (2010) all measurement constructs are highly reliable.

Table 2. Reliability analysis

Construct	Cronbach alpha	Number of Items
Transportation	0.861	4
Tour guide	0.898	5
Food and beverage	0.828	4
Activities carried out	0.891	5
Service quality	0.946	3
Satisfaction	0.940	3

Source: Authors

In addition, to ensure that questionnaire measures what is intended to be measured, validity of the questionnaire was examined. Firstly, content validity was established by addressing literature review to extract the items related to all constructs in measurement instrument, namely, daily tour service quality dimensions, daily tour overall service quality, and overall satisfaction with daily tours. This was reported in theoretical section of this paper.

Secondly, construct validity was assessed with testing the degree to which construct variables that theoretically should be related, are in fact related. Analysis showed that correlation coefficients between all 18 variables in daily tour service quality construct vary from 0.350 to 0.733, with p < 0.01, indicating significant moderate to strong inter-item relationship. What is more, correlation coefficients between 3 variables in daily tour overall service quality construct vary from 0.831 to 0.887, with p < 0.01, as well as correlation coefficients between 3 variables in overall satisfaction construct vary from 0.822 to 0.862, indicating strong inter-item relationship, as well.

It can be concluded that questionnaire in present research meets validity criteria.

## 4. 2 Sample description

The sample description presents demographic and daily tour characteristics of the respondents. Firstly, respondents' demographic characteristics are shown in Table 3.

Table 3. Respondents' demographic characteristics

	Characteristics	Frequency	Percentage
6 1	Male	54	28.0
Gender	Female	139	72.0
	16-25	14	7.3
	26-35	28	14.5
	36-45	70	36.3
Age	46-55	53	27.5
	56-65	22	11.4
	66 and above	14	7.3
	Married	89	46.1
Marital status	In a relationship	52	26.9
	Single	52	26.9
	Primary school	1	0.5
	Secondary school	28	14.5
Level of education	College or university	137	71.0
	Postgraduate	27	14.0
	Part time employment	12	6.2
	Full time employment	96	49.7
	Self-employment	64	33.2
Economic status	Unemployed	2	1.0
	Retired	7	3.6
	Student	11	5.7
	Other	1	0.5
	Less than 2000,00 €	38	19.7
	2001,00 € - 3000,00 €	29	15.0
	3001,00 € - 4000,00 €	61	31.6
Household's monthly income	4001,00 € - 5000,00 €	6	3.1
nicome	5001,00 € - 6000,00 €	3	1.6
	6001,00 € - 7000,00 €	29	15.0
	More than 7001,00 €	27	14.0
	Croatia	22	11.4
	European union	132	68.4
Country of residence	United Kingdom	7	3.6
	USA	11	5.7
	Others	21	10.9

Source: Authors

The sample consisted predominantly of female respondents (72%). Most respondents were above 36 years of age. Most of the daily tour participants in the sample were married, and about 85% of them had completed at least college, university, or postgraduate level of education. Most of the respondents reported they were employed, with average household monthly income ranging between 2000 and 4000 euros. The sample consisted of both, domestic and international daily tour participants, predominantly from different European union countries.

Next, daily tour characteristics of the respondents are shown.

Characteristics Frequency Percentage Frequency of Once per year 42.0 participating in daily 77 2 – 3 times per year 39.9 tours More than 3 times per year 35 18.1 Daily tour By myself 88 45.6 organization By tourist agency 105 54.4

Table 4. Respondents' daily tour characteristics

Source: Authors

According to the results in Table 4, more than 80% of the respondents participate in daily tour one to three times per year. These daily tours are mostly organized by tourist agency.

## 4. 3 Descriptive analysis

The results of descriptive statistics for each research construct are presented next.

Table 5. Descriptive statistics for daily tour service quality attributes

Dimensions and items	Mean	Standard deviation
Transportation	6.11	1.018
The vehicle was clean.	5.94	1.324
The vehicle was comfortable.	5.61	1.362
The driver was polite and respectful to the participants.	6.38	1.145
Appearance of the driver was neat and clean.	6.50	0.980
Tour guide	6.50	0.841
Tour guide gave information about the tour.	6.41	1.053
Tour guide spoke my language fluently.	6.50	1.105
Tour guide answered to the participants' questions.	6.52	0.947
Tour guide was friendly and kind.	6.64	0.812
Tour guide solved the problems occurred.	6.41	1.047
Food and beverage	5.90	0.985
In general, the place where the food was taken was clean.	6.09	1.055
There were variety of meals.	5.50	1.511

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Dimensions and items	Mean	Standard deviation
Meals were of good quality.	5.80	1.156
The time to have a meal was adequate.	6.20	1.073
Activities carried out	6.03	0.997
The tour included variety of activities.	5.93	1.214
Activities included in the tour were interesting.	5.99	1.170
The time to participate in the activities was adequate.	5.93	1.263
The free time was adequate.	5.84	1.329
I felt safe during the tour.	6.47	0.968

Note: mean scores range from 1 ("strongly disagree") to 7 ("strongly agree"); numbers in italics represent overall average values for each dimension.

#### Source: Authors

Mean scores for daily tour service quality attributes range from 5.50 to 6.64. The lowest score was given to variety of meals served on daily tour, while the highest score was appointed to tour guide's friendliness and kindness. Overall, all mean scores are above 5, indicating positive evaluation of daily tour service quality attributes. This also shows participants' moderate to very highly perceived attribute service quality.

What is more, respondents perceived "tour guide" as the most dominant daily tour service quality dimension (mean = 6.50), followed by "transportation" (mean = 6.11), "activities carried out" (mean = 6.03), and "food and beverage" (mean = 5.90). These results show highly rated daily tour performance.

Table 6. Descriptive statistics for daily tour overall service quality

Items	Mean	Standard deviation
Excellent overall service quality of daily tour	6.19	1.015
High standard of daily tour services	6.02	1.141
Superior daily tour services	6.04	1.183
Overall men score for the construct "overall service quality"	6.08	1.059

Note: mean scores range from 1 ("strongly disagree") to 7 ("strongly agree").

Source: Authors

Mean scores for items in overall service quality construct, as well as overall mean score for this construct are above the value of 6. These scores indicate very high perceptions of daily tour participants regarding service quality.

Table 7. Descriptive statistics for overall satisfaction construct

Items	Mean	Standard deviation
I am satisfied with this tour.	6.27	1.067
I am pleased with this tour.	6.35	1.016
I have had a favourable experience from this tour.	6.31	1.087
Overall mean score for the construct "overall satisfaction"	6.31	0.998

Note: mean scores range from 1 ("strongly disagree") to 7 ("strongly agree")

Source: Authors

Mean scores for overall satisfaction construct range from 6.27 to 6.35, with overall mean score of 6.31. This shows participants' high levels of satisfaction with daily tour.

# 4. 4 Hypotheses testing

Multiple regression analysis was performed to test the main research hypotheses. For this purpose, two regression models were defined.

Firstly, the impact of daily tour service quality dimensions on daily tour overall service quality was examined. For this purpose, dimensions "transportation", "tour guide", "food and beverage", and "activities carried out" were defined as independent variables, while daily tour overall service quality construct deemed as dependent variable.

The correlation analysis was performed to examine possible multicollinearity in the model (model 1). The results are presented in Table 8.

Table 8. Correlation matrix - model 1

Variables	1	2	3	4	5
1. Transportation	1.000				
2. Tour guide	0.576*	1.000			
3. Food and beverage	0.470*	0.555*	1.000		
4. Activities carried out	0.610*	0.670*	0.674*	1.000	
5. Overall service quality	0.689*	0.698*	0.668*	0.783*	1.000

Note: \* - all correlation coefficients are significant at 0.01 level.

Source: Authors

Correlation coefficients presented in Table 8 range between 0.470 and 0.783, and show moderate to strong, statistically significant intercorrelations among research constructs. All the coefficients have values lower than 0.80, as recommended by Briman and Cramer (2009). Thus, multicollinearity was not an issue in this model.

The results of multiple regression analysis for model 1, where daily tour overall service quality was applied as dependent variable, are summarised in Table 9.

Table 9. Multiple regression analysis - model 1

Independent variable	Ь	Beta	t	Sig.
Constant	-0.699		-2.426	0.016**
Transportation	0.217	0.208	4.123	0.000*
Tour guide	0.261	0.207	3.579	0.000*
Food and beverage	0.171	0.159	3.157	0.002*
Activities carried out	0.455	0.428	7.167	0.000*
F (4, 188) = 166.377, p < 0.01;				
$R = 0.883; R^2 = 0.780$				

Note: Dependent variable: overall service quality; \* - significant at 0.01 level; \*\* - significant at 0.05 level.

#### Source: Authors

As shown in Table 9, results reveal positive, strong, and statistically significant relationship between daily tour service quality dimensions and daily tour overall service quality (R = 0.883, p < 0.01). In addition, according to  $R^2$  value, four daily tour service quality dimensions explained 78 % of variance in daily tour overall service quality. As demonstrated by the F-statistics, the regression model was significant, meaning that the combination of independent variables significantly predicted the dependent variable.

Furthermore, all the independent variables demonstrated significant effects on daily tour overall service quality. The dimension "activities carried out" had the highest statistically significant standardized coefficient ( $\beta = 0.428$ , p < 0.01). Therefore, this independent variable has the highest impact on daily tour overall service quality. This is followed by the following dimensions: "transportation" ( $\beta = 0.208$ , p < 0.01), "tour guide" ( $\beta = 0.207$ , p < 0.01), and "food and beverage" ( $\beta = 0.159$ , p < 0.01).

Finally, these results demonstrated that activities carried out, transportation, tour guide, and food and beverage can serve as significant predictors of daily tour overall service quality. Thus, Hypothesis H1 is supported.

Next, the impact of daily tour service quality dimensions on overall satisfaction with daily tour was examined. For this purpose, dimensions "transportation", "tour guide", "food and beverage", and "activities carried out" served as independent variables, while overall satisfaction with daily tour deemed as dependent variable.

The correlation analysis was performed to examine possible multicollinearity in this model (model 2). The results are presented in Table 10.

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Table 10. Correlation matrix – model 2

Variables	1	2	3	4	5
1. Transportation	1.000				
2. Tour guide	0.576*	1.000			
3. Food and beverage	0.470*	0.555*	1.000		
4. Activities carried out	0.610*	0.670*	0.674*	1.000	
5. Satisfaction	0.616*	0.683*	0.623*	0.710*	1.000

Note: \* - all correlation coefficients are significant at 0.01 level

#### Source: Authors

As shown in Table 10, correlation coefficients range between 0.470 and 0.710, indicating moderate to strong, statistically significant intercorrelations among research constructs. All the coefficients have values lower than 0.80, as recommended by Bryman and Cramer (2009). Thus, multicollinearity was not an issue in model 2.

The results of multiple regression analysis for model 2, where overall satisfaction with daily tour deemed as dependent variable, are presented in Table 11.

Table 11. Multiple regression analysis - model 2

Independent variable	Ь	Beta	t	Sig.
Constant	-0.291		-1.058	0.291
Transportation	0.200	0.204	3.998	0.000*
Tour guide	0.447	0.376	6.417	0.000*
Food and beverage	0.078	0.077	1.509	0.133
Activities carried out	0.334	0.333	5.504	0.000*
F (4, 188) = 161.342, p < 0.01;				
$R = 0.880; R^2 = 0.774$				

Note: Dependent variable: overall service quality; \* - significant at 0.01 level.

Source: Authors

Results in Table 11 reveal positive, strong and statistically significant relationship between daily tour service quality dimensions and overall satisfaction with daily tour (R = 0.880, p < 0.01). According to  $R^2$  value, four daily tour service quality dimensions explained about 77 % of variance in overall satisfaction with daily tour. As demonstrated by the F-statistics, the regression model was significant, meaning that the combination of independent variables significantly predicted the dependent variable.

Additionally, three out of four independent variables demonstrated significant effects on overall satisfaction with daily tour. The dimension "tour guide" had the highest statistically significant standardized coefficient ( $\beta = 0.0.376$ , p < 0.01). Therefore, this independent variable has the highest impact on overall satisfaction with daily tour. This is followed by the dimensions "activities

carried out" ( $\beta$  = 0.333, p < 0.01), and "transportation" ( $\beta$  = 0.204, p < 0.01). The effect of "food and beverage" is the smallest and not statistically significant ( $\beta$  = 0.077, p > 0.05).

Finally, these results demonstrated that combination of daily tour service quality dimensions (tour guide, activities carried out, transportation, and food and beverage) can serve as significant predictor of overall satisfaction with daily tour. Hence, Hypothesis H2 is supported.

#### 5. CONCLUSION

The present research aimed to explore conceptually and empirically service quality and customer satisfaction in the context of daily tours. Thus, the theoretical part of the research provided brief overview of the main research concepts, while in the empirical part main research hypotheses were tested.

The literature review reveals that the construct of daily tour service quality is perceived through different attributes and dimensions, depending on the research context. Research done by Chan et al. (2015) found that tour guides, food, transportation, and accommodation deemed as core tour elements, while attractions, shopping, and recreation and entertainment can be identified as supporting tour features. Reyes Vélez et al. (2019) measured service quality of island day tours using tour guide, boat transportation, food, and beverage, and visit as main daily tour service quality dimensions. From the all the services examined, transportation had the highest impact on daily tour satisfaction and behavioural intentions. In the present research, the construct of daily tour service quality is measured as the combination of four daily tour features (dimensions), namely, transportation, tour guide, food and beverage, and activities carried out. According to the results of descriptive statistics, daily tour participants highly value tour guide performance, particularly tour guide's friendliness and kindness. On the other hand, food and beverage was perceived as the least important dimension, although it was evaluated with high average score, suggesting positive participants' perceptions toward this daily tour feature.

Furthermore, the research findings of multiple regression analysis indicate significant and positive impact of daily tour service quality dimensions on daily tour overall service quality, supporting the hypothesis H1. This implies that highly perceived transportation, tour guide, food and beverage, and activities carried out lead to higher perception of overall service quality. In this sense, activities carried out, and transportation have the highest impact on daily tour overall service quality. In addition, significant and positive effect of daily tour service quality dimensions on overall satisfaction was detected. Hence, the hypothesis H2 is confirmed, as well. This indicates that highly perceived transportation, tour guide, food and beverage, and activities carried out lead to higher overall satisfaction with daily tour. Accordingly, the research highlighted daily tour service quality dimensions that most strongly influence participants' overall satisfaction. In this sense, tour guide and activities carried out are the most critical daily tour features that significantly influence overall satisfaction with daily tour.

Therefore, this research has several implications for travel agencies and tour operators as daily tour providers. It confirms that daily tour activities and transportation features play an important role regarding daily tour overall service quality. Thus, variety of interesting activities, good time

management, feeling safe during the tour, as well as driver's and vehicle appearance have high relevance in enhancing daily tour overall service quality. In addition, the findings suggest that tour guide performance and daily tour activities are significant for ensuring participants' satisfaction. Thus, to increase the level of participants' overall satisfaction, daily tour providers should invest in knowledgeable and courteous tour guide, as well as in interesting, creative, and well managed activities that are carried out during the specific daily tour.

However, the results should be interpreted with caution, because of few research limitations. Firstly, the sample adopted in this research was composed of participants of only one daily tour provider, which could reduce the generalisability of the findings. Also, data were collected during post-season period, which could affect the sample structure. However, specific daily tour provider offers variety of daily tours, sample consists of different tourist segments, and respondents participated in different daily tours, thus the limitations regarding sample and sampling procedure could have a minimum effect on the results generalisability. Secondly, although the set of dimensions in this research observed variety of daily tour features, other relevant dimensions could be included and tested, according to specific elements of different daily tour programmes.

However, limitations of the research create opportunities for future research. In order to deepen understanding of participants' attitudes, the research should focus on different types of daily tours. Also, further studies may examine differences in service quality and customer satisfaction relationship between domestic and foreign daily tour participants. In addition, future research could address moderator effect of selected variable on the relationship between service quality and satisfaction with daily tours.

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# MJERENJE KVALITETE USLUGE I ZADOVOLJSTVA KLIJENTA DNEVNIM TURAMA: PRIMJENA DAILYSERV LJESTVICE

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## **SAŽETAK**

Svrha ovog istraživanja je mjerenje kvalitete usluge i zadovoljstva klijenta dnevnim turama. Cilj je ispitati prirodu veze između ovih dvaju konstrukata. Podaci su prikupljeni primjenom DAILYSERV ljestvice na uzorku od 193 klijenta koji su sudjelovali na dnevnim turama na području grada Dubrovnika. Primjenom višestruke regresijske analize, ispitan je utjecaj dimenzija kvalitete usluge dnevnih tura na ukupnu kvalitetu usluge i na ukupno zadovoljstvo. Rezultati ukazuju na pozitivan i značajan utjecaj dimenzija kvalitete usluge dnevnih tura na ukupnu kvalitetu usluge i na ukupno zadovoljstvo. Dimenzije "aktivnosti na turi" i "transport" najviše utječu na ukupnu kvalitetu usluge dnevnih tura. Također, turistički vodič i aktivnosti na turi najvažniji su elementi dnevnih tura koji značajno utječu na ukupno zadovoljstvo dnevnim turama. Slijedom toga, pružatelji usluga dnevnih tura trebali bi ulagati u ove dimenzije, kako bi unaprijedili ukupnu kvalitetu usluge i povećali zadovoljstvo posjetitelja.

Ključne riječi: kvaliteta usluge, zadovoljstvo klijenta, dnevne ture, DAILYSERV ljestvica, mjerenje