

Measuring the Quality of the Lakeside Tourist Destinations: Case Study of Lake Palić and Lake Srebrno (Serbia)

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Abstract: The purpose of this study is to determine the dimensions of the lakeside tourist destinations quality through the cases of Lake Palić and Lake Srebrno (Serbia), by interviewing daily visitors and tourists and to determine which dimensions of quality have a crucial impact on the overall satisfaction of daily visitors and tourists. Various models have been developed to measure quality. In this paper, the quality is measured by the model that is appropriate for lakeside tourist destinations, developed by Ryan, Huimin, and Chon (2010). Five dimensions of quality were identified and named as: additional tourist infrastructure, lake water quality, natural environment, hospitality and cleanness of the place. The results showed that the measured quality model largely predicts overall satisfaction of daily visitors and tourists on the destination. The dimension lake water quality has the most effects on the overall satisfaction. Further research could use this research by adding some other quality dimensions into consideration (e.g. quality of service, situational conditions, destination management) in examining the effect of destination's quality on satisfaction of daily visitors and tourists. The research is important to managers of lakeside tourist destinations who tend to have highly satisfied guests and who work on promotion and improvement of destination quality.

Key words: *lakeside tourist destinations, quality, tourist satisfaction, Mann-Whitney U test, multiple regression analysis, variance analysis.*

1. Introduction

Mountains, lakes, rivers, the seaside and other natural sites are the places where people escape from everyday life and which offer relaxation, excitement and adventure (Beedie and Hudson, 2003). Some lakes have been known as tourist destinations for a long time (Lake Balaton in Hungary, Lake Bled in Slovenia, Lakes Como, Maggiore and Garda in Italy, the Great Lakes in the USA and Canada, etc.) and

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have been attracting millions of tourists (Chubb, 1989; Puczkó and Rátz, 2000; Hall, 2003; Pilotti et al., 2011). There is a large number of natural and artificial lakes in Serbia, but few of them have been valorized. Although, the Serbian National Tourist Organization promotes many well-known lakeside tourist destinations in the country, such as Lake Ludaš, Lake Vlasina, Bela Crkva lakes, etc. (<http://www.serbia.travel/nature/rivers-and-lakes/>), in the moment, the most popular lakes, in the term of tourism development, are Lake Palić and Lake Srebrno. The Lake Palić has the longest period of tourism development in Serbia (since the end of the 19th century) and Lake Srebrno has been developing most intensely for approximately ten years, in terms of lakeside tourist destinations. Another factor which influenced the research topic is water pollution, which is particularly high on Lake Palić.

The notion of quality is one of the most significant in the fields of management and marketing. In the field of tourism, quality has become a very important factor in the overall tourist experience (Michalkó, Bakucz and Rátz, 2013) and it dictates the success of tourist business management (Kvist and Klefsjo, 2006; Johann and Anastassova, 2014). The consumer is considered the most important link in the production chain, so the identification of quality is inseparable from the consumer's needs and expectations (Taylor and Baker, 1994; Cronin et al., 2000). It is highly important to understand the needs and expectations of the consumers and take measures in order to satisfy or even exceed them (Kandampully, 2000).

Therefore, quality can be defined as 'a set of characteristics an entity has in order to satisfy all of the demands set, desires expected and consumers' preferences. The meaning of the notion of 'entity' can be related to material product, service, process, activity, organization, employees, etc. (Kosar and Rašeta, 2005). In this study, the notion of 'entity' refers to tourist destination and the notion of 'consumers' refers to tourists and visitors of the tourist destination. What follows is that the quality of a tourist destination is a set of characteristics which the destination has in order to satisfy all of the demands, expected desires and preferences of the *tourists* and *daily visitors*.

In this paper, the authors deal with determining dimensions of the lakeside tourist destinations quality through the cases of Lake Palić and Lake Srebrno via questionnaires distributed to tourists and daily visitors and examining the difference in perception of these two types of guests. Those two lakes are chosen for the investigation due their long tourism tradition and equal popularity among tourists and daily visitors in Serbia (all other tourism affirmed lakes are not even close to those two lakes in terms of annual visiting, tourism facilities and number of accommodation on the lakeshores). For these reasons, the authors chose to compare these two lakeside destinations, because one lake could not be enough for the quality

evaluation. Apart from that, it is examined to which extent the measured dimensions of quality affect the overall satisfaction of daily visitors and tourists. The study made by Sarker, Amin and Begum (2012) shows that marketing mix elements could have considerable impact on the tourists' satisfaction in a destination. According to them, six out of seven marketing mix elements were positively related to tourists' satisfaction, but price imposed by the authority is not satisfactory to the visitors. To determine possible differences between the qualities of lakeside tourist destinations on Lake Palić and Lake Srebrno, a contrastive analysis of these two destinations will be performed.

The main goal of the study was to determine the dimensions of the lakeside tourist destinations quality and their impact on the overall satisfaction of daily visitors and tourists with the observed lakeside destination. Starting from the general assumption that dimension lake water quality has the highest impact on the overall satisfaction, the study involves two most developed tourist destinations in Serbia - Lake Palić, where pollution is extremely expressed and Lake Srebrno, where pollution is present in a smaller degree.

2. Literature overview

The quality and value are the notions that allow an insight into the condition of a product and its overview from the consumers' point of view. Creating the perception of quality in tourists is not an easy task, considering that it is a complex and abstract service (Murphy et al., 2000). The significance of quality is particularly visible when the degradation of the tourist destination negatively affects the number of tourists, the number of overnight stays, the number of re-visits and consequently creates a low degree of tourist income (Dharmaratne and Brathwaite, 1998; Kozak and Nield, 2004).

There is no unique definition to describe a tourist destination. Pilotti et al., (2011) state that tourist destination is a territory whose borders vary, but which differentiates the demand and supply and which is characterized by one or more attractions which allow the tourists to distinguish it from other destinations. Murphy et al., (2000) present a model of the destination product which affects the visitors' perception of quality. There are two components in the model, which include destination environments and service infrastructure. Within destination environments there are natural environment, cultural factors, social factors, technological factors, political factors and economic factors. Within service infrastructure there are: accommodation services, food services, transportation services, travel services, shopping services and recreation and attraction services.

Quality is particularly significant when it comes to the competitiveness of a tourist destination. It is very important for the destinations to be familiar with the market competitiveness (Hassan, 2000; Pechlaner et al., 2014).

The tourist destination's competitiveness has been described and studied in detail by: Crouch and Ritchie (2003); Claver-Cortes, Molina-Azorin and Pereira-Moliner (2007); Cracolici and Nijkamp (2009). In that context, the tourist destination's competitiveness depends on four groups of factors. These factors are: core resources and attractors (they consist of primary factors, which are the basic motive for a tourist to pick a certain destination), supporting factors, destination management and destination policy. Enright and Newton (2005), among other things, state a group of business factors which also affect the tourist destination competitiveness.

Dwyer and Kim (2003) distinguish endowed giving resources (natural and cultural heritage), created resources (tourist infrastructure, special events, range of activities available, entertainment and shopping) and supporting resources (quality of service, destination accessibility, hospitality and marketing connections). According to same authors, the competitiveness of a tourist destination consists of:

- resources and attractors, which make the destination appealing to potential visitors (including the natural and heritage resources and support factors);
- destination management (including the destination management organization, destination marketing management, destination policy planning and development, human resources development, the environmental management);
- situational conditions which are exogenous but under the control of the management (destination location, competitive micro-surroundings, competitive macro-surroundings, safety, security and price competitiveness) and demand's conditions (tourists' preferences, destination awareness and destination reputation).

When it comes to quality evaluation of the lakeside tourist destinations, the paper of Ryan, Huimin and Chon (2010) could be considered important. In this paper, it states that the center of the tourist experience is the lake which attracts visitors, but the lakescape (its characteristics which are specific for each lake in terms of water quality, diversity of the aquatic life and riparian edges) and the landscape which surrounds the lake (valleys, hills, vegetation) are what attracts the visitors. According to the same authors, there are three main things that affect the visitors' perception of quality: degree of pollution, the infrastructure of tourism industry present at the lake (number of hotels, walking tracks, restaurants, urbanization, etc.) and natural environment.

The authors study the degree of tolerance to pollution, i.e. whether other lake components could compensate for the pollution. Whether the lake remains attractive despite being endangered by pollution is particularly discussed. They create the quality evaluation model for two main reasons. Firstly, because the quality evaluation

model is crucial for tourism development in both lakeside tourist destinations and, secondarily, in this model, a special attention is given to the quality of the lake water and the degree of pollution, which is very significant, especially if swimming tourism is being developed on the lake.

3. Research locations

The research has been conducted at two lakeside destinations in Serbia, which have been known as tourist destinations for many years and have recorded certain tourist development. These are Lake Palić and Lake Srebrno (Fig. 1).

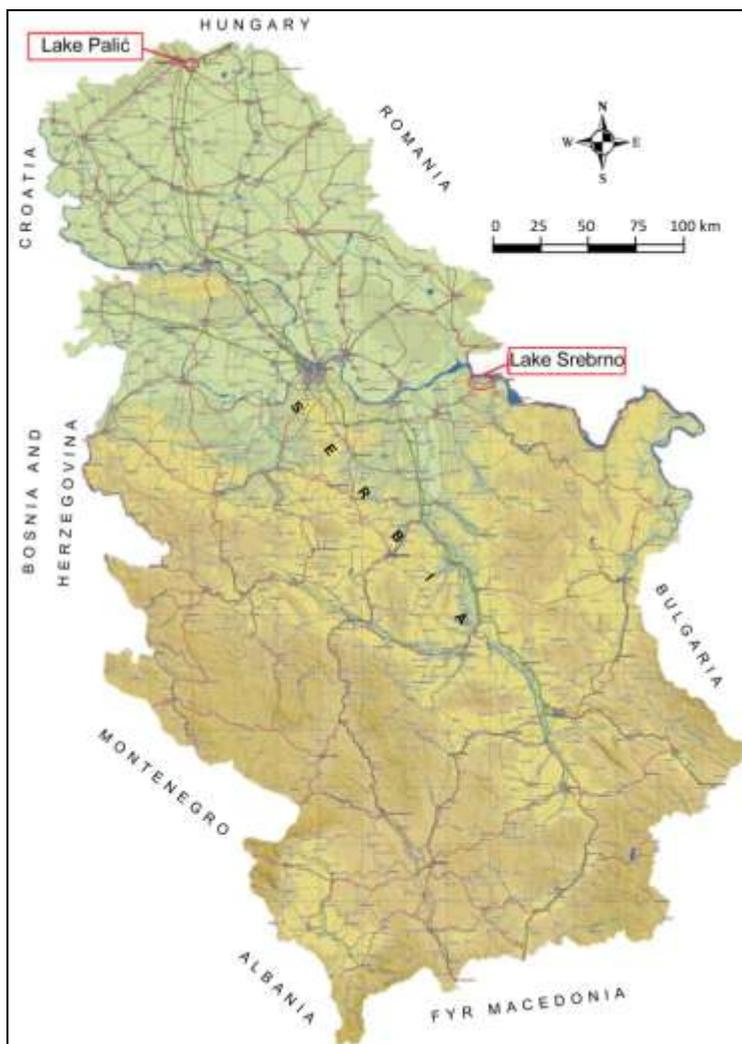


Figure 1. Geographical location of Lake Palić and Lake Srebrno in Serbia
Source: <http://www.381info.com/autokartarsrbije.php>

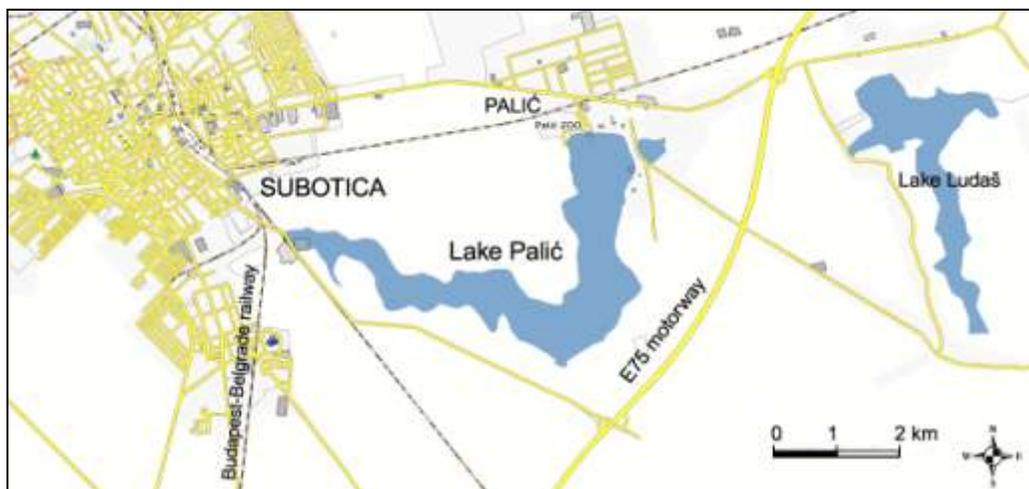


Figure 2. Local position of Lake Palić



Figure 3. Local position of Lake Srebrno

Lake Palić is located in Northern Serbia, near the Hungarian border. It is located 8 km from Subotica and 108 km from Belgrade (Fig. 2). The lake has a shape of crescent moon, with its arms oriented towards the north and the south-west. The wider, northern arm is called 'Veliki Palić' and the narrower, southern arm is called 'Mali Palić'. It is 8.250 m long, 350-950 m wide, with average depth of 2 m and the maximum depth of 3.5 m. It covers the area of 5.6 km², and it is located at 101 m above sea level. According to its origin, it is a natural, eolian lake (Štetić, 2007).

The water in Lake Palić is supplied through its inflow waters (little rivers and streams) and water from the atmosphere, as well as over 30 km long *Palić-Tisa* channel. The lake only has one active inflow river, which flows in on the west side of Mali Palić. The lake loses water through an outflow river, aspiration, infiltration and

transpiration. The river is located on the north-east side of Veliki Palić where superfluous water from the lake flows away into Tisa River via the vent *Palić-Ludaš* channel, Lake Ludaš and the Kereš watercourse (Stanković, 2005).

Lake Palić records an intensive tourism development since the end of the 19th century, when it became a swimming place and a spa. Since the 1970s, Lake Palić has been dealing with water pollution and mass fish death issues for decades, which present a problem even today (Štetić, 2007).

Lake Srebrno is located in Eastern Serbia near the Romanian border (Fig. 3). It is located 3 km from town of Veliko Gradište and 120 km away from Belgrade. It originated in 1971, when a Danube effluent was bypassed by a dam. Lake Srebrno is an oxbow lake. It is 14 km long, 300 m wide and covers the area of 4 km². It is located at 70 m above sea level and its maximum depth is 8 m. Its water is supplied from the Danube by ground, i.e. the natural filtration through the sand drifts, as well as directly by receiving water from the Kisiljevački stream and a channel near a village called Ostrovo. There is a tourist complex on the east part of the lake, a couple kilometers west from Veliko Gradište. Intensive tourism development has been recorded here since the 1980s (Martinović-Vitanović et al., 2009).

4. Data and methods

4.1. Sample and research procedure

A questionnaire was used to collect the data. The data was being collected during the summer time (June, July and August) of 2012. We randomly distributed the questionnaire to all respondents who expressed an interest in taking part in this research on both research sites. At the beginning, we informed the respondents about the subject of examination. The questionnaire has been distributed at Lake Palić and Lake Srebrno directly to the tourists and/or daily visitors, as well as via internet. In order to ensure respondents' anonymity, we emphasized that they will not write their names or profession on the questionnaires. A total of 182 respondents were included in the research. Among them, 38 tourists and 50 daily visitors were surveyed on Lake Palić and 37 tourists and 57 daily visitors were surveyed on Lake Srebrno (Table 1).

Table 1. *Sample characteristics on Lake Palić and Lake Srebrno*

Demographic characteristics	Lake Palić Percentage (%)	Lake Srebrno Percentage (%)
Gender:		
male	45.5%	39.4%
female	54.5%	60.6%
Age:		
younger than 20	14.9%	11.7%
21-30	49.4%	26.6%
31-40	17.2%	24.5%
41-50	4.6%	22.3%
51-60	9.2%	12.8%
over 60	4.6%	2.1%
Education:		
elementary school	9.1%	4.3%
high school	31.8%	46.2%
college	17.0%	33.3%
graduate	22.7%	8.6%
post-graduate (M.Sc.)	15.9%	5.4%
post-graduate (Ph.D.)	3.4%	2.2%
Monthly income:		
less than 200 euros	32.9%	14.6%
201-400 euros	35.4%	45.1%
401-600 euros	18.3%	20.7%
601-800 euros	7.3%	6.1%
801-1000 euros	6.1%	4.9%
over 1001 euros	0%	8.5%
I visited Lake Palić as:		
a daily visitor	56.8%	54.3%
a tourist	43.2%	45.7%

Source: Data gained in the research.

4.2. Instrument

The measuring instrument for the assessment of the quality of a lakeside destination was taken from Ryan, et al. (2010). Through 20 measuring elements the authors have covered key dimensions which are significant when it comes to evaluating the quality of lakeside destinations. A 7-point Likert scale, where no. 1 stands for 'lowest quality' and no. 7 stands for 'highest quality' was used for the measuring of the elements. Another general element was used in measuring the satisfaction of daily visitors and tourists, also measured with the 7-point Likert scale.

4.3. Research hypotheses

In the paper, we examined which dimensions of quality have a crucial impact on the overall satisfaction of daily visitors and tourists on the observed destinations. Five dimensions of quality were identified and named as: *additional tourist infrastructure*, *lake water quality*, *natural environment*, *hospitality* and *cleanness of the place* (according of the model that is appropriate for lakeside tourist destinations, see in Ryan et al., 2010). The general assumption of the paper is that dimension *lake water quality* has the highest impact on the overall satisfaction of the tourists and daily visitors. Nevertheless, several hypotheses were formulated:

Hypothesis 1: *Additional tourist infrastructure shows a statistically significant difference in relation to the overall satisfaction of daily visitors and tourists.*

Hypothesis 2: *Lake water quality shows a statistically significant difference in relation to the overall satisfaction of daily visitors and tourists.*

Hypothesis 3: *Natural environment shows a statistically significant difference in relation to the overall satisfaction of daily visitors and tourists.*

Hypothesis 4: *Hospitality shows a statistically significant difference in relation to the overall satisfaction of daily visitors and tourists.*

Hypothesis 5: *Cleanness of the place (pollution) shows a statistically significant difference in relation to the overall satisfaction of daily visitors and tourists.*

4.4. Data analysis

The SPSS Statistics 20 was used for analyzing data. Descriptive statistics was used in demographic data processing. The mean value was used for the analysis of the quality of the lakeside tourist destinations - Lake Palić and Lake Srebrno. When the distribution of data differed significantly from the normal distribution (Kolmogorov–Smirnov test, $p < 0.05$), we used Mann–Whitney U test to check the differences in the assessment of quality perception between tourists and daily visitors. Factor analysis was applied to the set of lakeside tourist destinations quality elements for the purpose of obtaining the underlying dimensions or factors. Multiple regression analysis was used to measure the effect of the dimension of quality of the lake on the overall satisfaction of tourists and daily visitors. Variance analysis was used for the comparative analysis of the qualities of lakeside tourist destinations on Lake Palić and Lake Srebrno.

5. Results and discussion

5.1. The quality of the lakeside tourist destinations of Lake Palić and Lake Srebrno

First, all 20 elements of quality, measured by tourists and daily visitors, were analyzed. The indicators of the assessment of quality are shown as mean ranks in Table 2.

Table 2. The destination quality assessment and overall satisfaction.

El.	Quality elements	Guest type	Lake Palić			Lake Srebrno		
			Mean (STD)	Total	Mann-Whitney U-test	Mean	Total	Mann-Whitney U-test
E1	The beauty of the landscape	Daily visitors	5.58 (1.401)	5.59 (1.370)	954.5	5.31 (1.233)	5.44 (1.171)	1,159.5
		Tourists	5.61 (1.346)			5.58 (1.083)		
E2	The beauty of the lake	Daily visitors	4.58 (1.885)	4.97 (1.691)	1,196.0 (**)	5.16 (1.397)	5.19 (1.315)	1,074.5
		Tourists	5.47 (1.246)			5.23 (1.226)		
E3	The history and heritage of this area	Daily visitors	5.02 (1.407)	4.94 (1.368)	875.0	5.00 (1.291)	4.92 (1.381)	846.0
		Tourists	4.84 (1.326)			4.83 (1.483)		
E4	The friendliness of local people	Daily visitors	4.92 (1.510)	4.81 (1.388)	835.0	5.53 (1.532)	5.56 (1.412)	928.0
		Tourists	4.66 (1.214)			5.58 (1.292)		
E5	The variety of flowers and plants around the lakeside	Daily visitors	4.92 (1.676)	5.23 (1.460)	1,168.5 (*)	5.00 (1.572)	4.92 (1.434)	919.0
		Tourists	5.63 (.998)			4.83 (1.276)		
E6	The variety of the wildlife on the lake	Daily visitors	4.40 (1.738)	4.61 (1.636)	1,100.0	4.30 (1.720)	4.40 (1.600)	965.5
		Tourists	4.89 (1.467)			4.51 (1.467)		
E7	The quality of accommodation	Daily visitors	4.94 (1.316)	4.89 (1.217)	870.0	5.51 (.994)	5.42 (.941)	767.5
		Tourists	4.82 (1.087)			5.32 (.888)		
E8	The cost of accommodation	Daily visitors	4.04 (1.160)	4.16 (1.092)	1,087.0	4.58 (1.495)	4.58 (1.377)	832.0
		Tourists	4.32 (.989)			4.58 (1.259)		
E9	The quality of the restaurants	Daily visitors	5.20 (1.340)	5.15 (1.255)	868.0	5.28 (1.307)	5.32 (1.351)	1,045.5
		Tourists	5.08 (1.148)			5.38 (1.409)		
E10	The access to tourist information	Daily visitors	4.26 (1.651)	4.16 (1.604)	870.0	4.52 (1.383)	4.56 (1.509)	949.5
		Tourists	4.03 (1.551)			4.60 (1.646)		
E11	The range of shops	Daily visitors	2.56 (1.417)	2.70 (1.332)	1,125.5	3.82 (1.623)	3.76 (1.583)	908.5
		Tourists	2.89 (1.203)			3.69 (1.553)		
E12	The night life in the area	Daily visitors	3.30 (1.515)	3.55 (1.538)	1,151.5 (*)	4.53 (1.911)	4.54 (1.653)	797.5
		Tourists	3.87 (1.528)			4.56 (1.297)		
E13	The water-based	Daily	4.00	4.49	1,337.5	4.86	4.97	1,052.0

	activities like swimming, boating, fishing	visitors	(1.641)	(1.597)	(***)	(1.654)	(1.566)	
		Tourists	5.13 (1.298)			5.10 (1.465)		
E14	The range of physical activities available	Daily visitors	4.08 (1.455)	4.32 (1.443)	1,159.5 (*)	4.52 (1.424)	4.50 (1.453)	936.5
		Tourists	4.63 (1.384)			4.47 (1.502)		
E15	The range of sightseeing facilities	Daily visitors	4.34 (1.479)	4.31 (1.359)	920.0	4.04 (1.621)	4.21 (1.676)	993.5
		Tourists	4.26 (1.201)			4.41 (1.728)		
E16	The quality of the lake waters	Daily visitors	2.12 (1.423)	2.50 (1.516)	1,295.0 (***)	3.74 (1.772)	3.68 (1.698)	910.0
		Tourists	3.00 (1.507)			3.62 (1.626)		
E17	The absence of litter and rubbish	Daily visitors	4.04 (1.470)	4.27 (1.362)	1,160.0 (*)	4.71 (1.665)	4.42 (1.769)	794.5
		Tourists	4.58 (1.154)			4.07 (1.849)		
E18	The cleanliness of the air	Daily visitors	4.82 (1.410)	4.78 (1.351)	930.0	5.56 (1.098)	5.61 (1.116)	1,050.0
		Tourists	4.74 (1.288)			5.67 (1.146)		
E19	It is safe to swim in the lake	Daily visitors	2.64 (1.613)	2.67 (1.514)	1,011.0	4.43 (1.624)	4.59 (1.666)	1,138.5
		Tourists	2.71 (1.393)			4.77 (1.726)		
E20	It is safe to eat fish from the lake	Daily visitors	2.16 (1.448)	2.30 (1.366)	1,131.0	4.04 (1.819)	4.24 (1.650)	890.0
		Tourists	2.47 (1.246)			4.50 (1.404)		
Overall satisfaction		Daily visitors	4.52 (1.165)	4.60 (1.130)	1.024.5	5.00 (1.336)	5.10 (1.220)	1,144.0
		Tourists	4.71 (1.088)			5.21 (1.071)		

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.1$

When assessing the quality of Lake Palić, the highest-rated elements were: the beauty of the landscape (M=5.59), the variety of flowers and plants around the lakeside (M=5.23), the quality of the restaurants (M=5.15), the beauty of the lake (M=4.97) and the history and heritage of this area (M=4.94). The lowest-rated elements were: it is safe to eat fish from the lake (M=2.67), the range of shops (M=2.70) and the night life in the area (M=3.55).

In the assessment of the quality of Lake Srebrno, the highest-rated elements were: the cleanliness of the air (M=5.61), the friendliness of local people (M=5.56), the beauty of the lake (M=5.44), the quality of accommodation (M=5.42) and the quality of the restaurants (M=5.32). The lowest-rated elements were: the quality of the lake waters (M=3.68), the range of shops (M=3.76), the range of sightseeing facilities (M=4.21), it is

safe to eat fish from the lake (M=4.24) and the variety of the wildlife on the lake (M=4.40).

If we compare the highest-rated elements of both lakes, we notice that two elements overlap: the beauty of the lake and the quality of the restaurants. As far as the lowest-rated elements are concerned, three elements overlap: the quality of the lake waters, the range of shops and if it is safe to eat fish from the lake.

5.2. Difference in the perception of tourists and daily visitors

In the destination quality assessment of Lake Palić, it can be noticed that the perception of quality by tourists is higher in 13 elements than by daily visitors. When examining the significance of the difference by using the Mann-Whitney U-test, it has been determined that there is a statistically significant difference in perception of quality between tourists and daily visitors in seven elements: the beauty of the lake; the variety of flowers and plants around the lakeside; the night life in the area; the water-based activities; the range of physical activities available; the quality of the lake waters and the absence of litter and rubbish. In these elements, tourists have a significantly higher perception of quality compared to daily visitors.

Also, tourists gave a higher score to 13 out of 20 elements on Lake Srebrno than daily visitors. However, when examining the significance of the difference by using the Mann-Whitney U-test, it has been determined that there is no statistically significant difference in perception of quality and that tourists and daily visitors have similar opinions when it comes to the lakeside destination quality in terms of tourism.

5.3. Underlying dimensions of lakeside tourist destination quality

The perceived levels of tourist destination quality elements were factor-analyzed using principal component analysis with orthogonal VARIMAX rotation, to identify underlying dimensions or factors. Table 3 illustrates the result of the factor analysis.

The results show that the alpha coefficients for the five factors were acceptable ranging from 0.86 to 0.64.

Factor 1 included six elements and was named as the „Additional tourist infrastructure“. It explained 31.07 per cent of the variance in the data. *Factor 2*, called „Lake water quality“ contained three elements and accounted for 11.79 per cent of the variance. *Factor 3*, the „Natural environment“ comprised five elements with 7.56 per cent of the variance. *Factor 4* accounted for 6.21 per cent of the variance and was named as „Hospitality“. The last one, *Factor 5*, included only two elements with 5.69 percent of the variance and called „Cleanness of the place“.

Table 3. Dimensions of lakeside tourist destination quality (N=182)

	Eigen value	Cronbach alpha α	Factor loading	Percentage of variance
Factor 1: Additional tourist infrastructure	6.215	0.8123		31.073
E15 The range of sightseeing facilities			0.755	
E14 The range of physical activities available			0.684	
E12 The night life in the area			0.654	
E11 The range of shops			0.646	
E10 The access to tourist information			0.553	
E13 The water-based activities, like swimming, boating, fishing etc.			0.435	
Factor 2: Lake water quality	2.359	0.8613		11.794
E19 It is safe to swim in the lake			0.864	
E16 The quality of the lake waters			0.853	
E20 It is safe to eat fish from the lake			0.794	
Factor 3: Natural environment	1.512	0.7613		7.558
E1 The beauty of the landscape			0.753	
E2 The beauty of the lake			0.693	
E3 The history and heritage of this area			0.669	
E5 The variety of the wildlife on the lake			0.615	
E6 The variety of flowers and plants around the lakeside			0.582	
Factor 4: Hospitality	1.241	0.6954		6.207
E7 The quality of accommodation			0.743	
E8 The cost of accommodation			0.705	
E9 The quality of the restaurants			0.642	
E4 The friendliness of local people			0.420	
Factor 5: Cleanness of the place	1.139	0.6415		5.694
E17 The absence of litter and rubbish			0.770	
E18 The cleanliness of the air			0.625	

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser.

5.4. The dependence of the overall satisfaction of daily visitors and tourists on the dimensions of quality of a lakeside destination

Apart from assessing lakeside destination quality, overall satisfaction of daily visitors and tourists was also being measured. Some authors (Mehmetoglu and Normann, 2013; Osman and Sentosa, 2013) state that many factors could influence on tourists' overall holiday experience, such as trust, product components related to the

tourism company, transport to destination, accommodation, and restaurant/dining facilities, etc. Mean score of overall satisfaction on Lake Palić was 4.6 and on Lake Srebrno 5.1. In examining the dependence of the overall satisfaction of tourists and daily visitors on the dimensions of the quality of a lakeside destination, a multiple regression analysis was used.

Table 4. Relative importance of the observed lakeside destinations quality dimensions (by predicting the overall satisfaction of daily visitors and tourists)

Dimensions of quality	β	t	Sig. t
Factor 1: Additional tourist infrastructure	0.225	3.234	0.002
Factor 2: Lake water quality	0.303	5.284	0.000
Factor 3: Natural environment	0.244	4.056	0.000
Factor 4: Hospitality	0.094	1.458	0.147
Factor 5: Cleanness of the place	0.244	4.100	0.000

$R=0.788$, $R\text{ Square}=0.621$, $Adj. R=0.608$, $F=47.916$, $p<0.001$

The coefficient of multiple correlation (R) is high, which means that the combination of the lakeside destination quality dimensions highly affects the overall satisfaction of tourists and daily visitors (Table 5). The coefficient of determination (R^2) shows that the overall satisfaction of tourists and daily visitors is at 62% determined by the values of the dimensions of the lakeside destination quality. Results showed that *Factor 2* (Lake water quality, ($\beta = 0.303$, Sig. t = 0.000)) was the most important dimension affecting overall satisfaction of the tourists and daily visitors. *Factor 3* (Natural environment) and *Factor 5* (Cleanness of the place) were the second ($\beta = 0.244$, Sig. t = 0.000), followed by the *Factor 1* ($\beta = 0.225$, Sig. t = 0.002).

5.5. Comparative analysis of lakeside destination qualities of Lake Palić and Lake Srebrno

The comparative analysis of Lake Palić and Lake Srebrno shows that Lake Palić scored higher in the perception of quality in only five out of 20 elements measured. These are: the beauty of the lake, the history and heritage of this area, the variety of flowers and plants around the lakeside, the variety of the wildlife on the lake and the range of sightseeing facilities. However, further analysis of variance of those five elements showed that the differences in quality are not statistically significant.

By using variance analysis, it has been determined that there is statistical significance in 10 of the elements measured: the friendliness of local people ($F=12.764$, $p<0.001$), the quality of accommodation ($F=10.399$, $p<0.01$), the cost of accommodation ($F=4.761$, $p<0.05$), the range of shops ($F=23.075$, $p<0.001$), the night life in the area ($F=16.661$, $p<0.001$), water-based activities ($F=4.125$ $p<0.05$), The quality of the lake

waters ($F=24.438$, $p<0.001$), the cleanliness of the air ($F=20.102$, $p<0.001$), if it is safe to swim in the lake ($F=62.447$, $p<0.001$) and if it is safe to eat fish from the lake ($F=70.239$, $p<0.001$). All of the elements were rated higher on Lake Srebrno. There is a statistically significant difference in measuring the overall satisfaction of daily visitors and tourists as well ($F=7.994$, $p<0.01$), which is higher on Lake Srebrno.

6. Conclusions

As mentioned before, this study had two main goals. The first goal was to determine the dimensions of the lakeside tourist destinations quality. The second goal was to determine which dimensions of quality have a crucial impact on the overall satisfaction of daily visitors and tourists with lakeside destination. After applying the factor analysis on the model developed by the authors Ryan et al. (2010), five dimensions of quality were identified: *additional tourist infrastructure*, *lake water quality*, *natural environment*, *hospitality* and *cleanness of the place*. According to the results, the research hypothesis 1 is not confirmed, since additional tourist infrastructure are *not statistically significantly different* in relation to the overall satisfaction of daily visitors and tourists ($p=0.002$). On the other side, hypothesis 2 is confirmed because lake water quality is *statistically significantly different* in relation to the overall satisfaction of daily visitors and tourists. Starting from the general assumption that dimension *lake water quality* has the highest impact on the overall satisfaction, the study involves Lake Palić, where pollution is extremely expressed and Lake Srebrno, where pollution is present in a smaller degree ($p=0.000$). The further results show that hypothesis 3 is also confirmed, since natural environment is *statistically significantly different* in relation to the overall satisfaction of daily visitors and tourists ($p=0.000$). Hypothesis 4 is disproved considering that hospitality are *not statistically significantly different* in relation to the overall satisfaction of daily visitors and tourists ($p=0.147$). Finally, hypothesis 5 is confirmed, since the cleanness of the place (pollution) *not statistically significantly different* in relation to the overall satisfaction of daily visitors and tourists ($p=0.000$). According to all presented results, it could be concluded that *additional tourist infrastructure* together with *hospitality* segments of the quality in the observed destinations are the least important for respondents' satisfaction. As opposite to this statement, *natural environment*, *cleanness of the place* and especially *the lake water quality* are the most important issues in respondents' satisfaction on the observed destinations.

By comparative analyzes of Lake Palić and Lake Srebrno, it was found that lake that has smaller pollution has significantly greater satisfaction of tourists and daily visitors. In this case, it is Lake Srebrno. It has been determined that there is no statistically significant difference in perception of quality of tourists and daily visitors in most measured elements, i.e. considering this issue, their

attitude is quite similar. Modern development of tourism has great impact on the authentic quality of resources (Petrović and Marković, 2013) and the application of the rules of environmental protection may largely affect on the customer satisfaction, which is the most important concern of destination management. Moreover, the increased number of tourists and daily visitors raise demands for housing, roads, water, trash disposal, etc. (Marković and Petrović, 2013). According to Nenковиć-Riznić et al., (2014), it is necessary to consider all effects of environmental elements for the purpose of reducing the negative effects.

The biggest limitation is the attitude of the observed respondents, i.e. the research sample. Gursoy et al., (2010: 383) came to a conclusion that “attitudes and perception of the local residents towards the effect of tourism on their community should be continually monitored, as they change in time”, which was earlier noted by researchers Huh and Vogt (2008). Based on this conclusion, there may be a need to repeat the research in the same destinations in the future, in order to determine potential differences in attitudes and opinions of the respondents. It is particularly important to conduct such research in destinations where there have been significant changes in tourist activities. Together with these, it would be useful to extend the sample size in the future.

Lake Palić and Lake Srebrno are primarily summer tourist destinations where is expressed swimming tourism which can increase the importance of lake water quality. It is necessary to investigate whether the other lakeside destinations where climatic conditions do not allow swimming have the similar results and influences. Future research can be based on the discovering other elements which would affect the overall satisfaction of daily visitors and tourists, which can help tourism planners when designing a tourist product. Also, according to Cronin and Taylor (1992), further research can be used the multiple-item model for measuring the overall satisfaction of daily visitors and tourists. It would be an important contribution to this research topic.

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