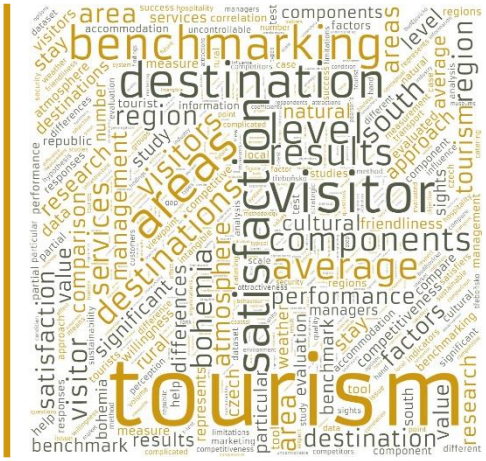
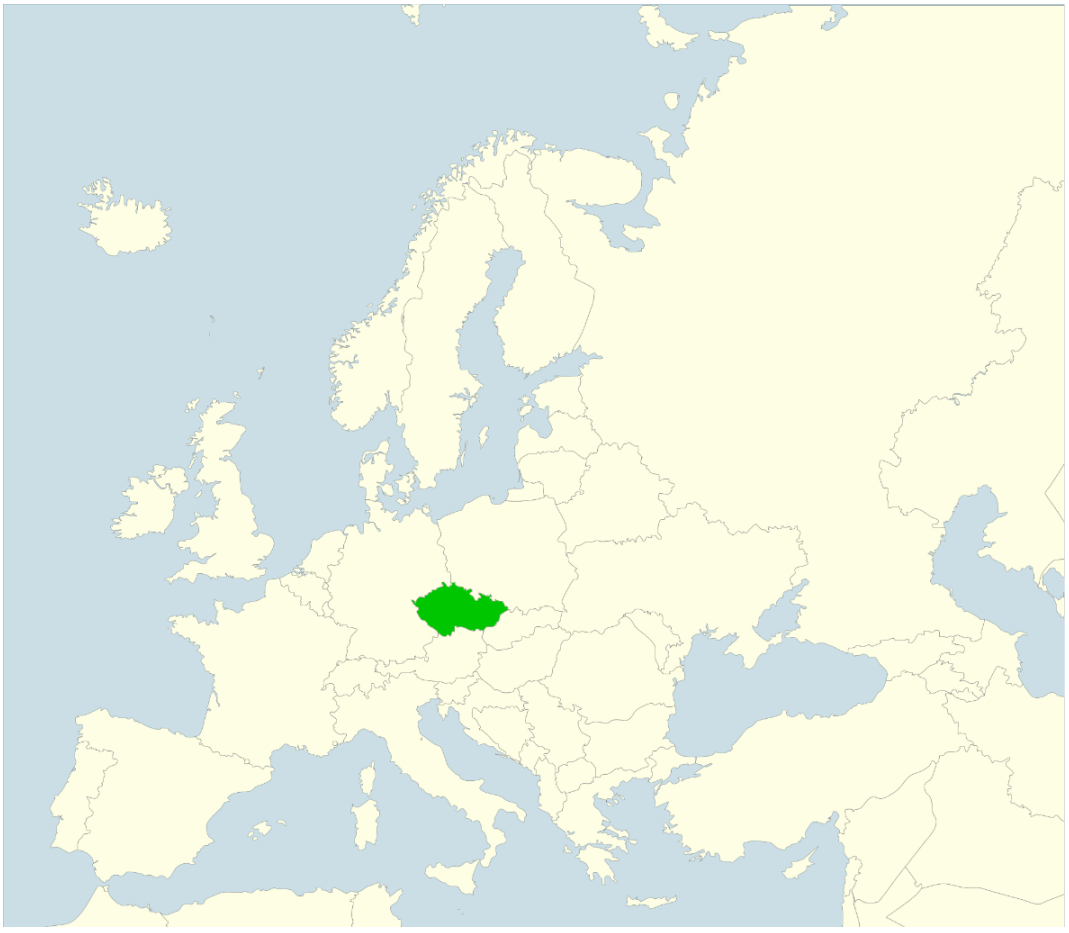
European Countryside | volume 14 | No. 2 | p. 346-362 | DOI: 10.2478/euco-2022-0017

# IS VISITOR SATISFACTION HIGH ENOUGH? A CASE OF RURAL TOURISM DESTINATION, SOUTH BOHEMIA




Petr Štumpf[1], Petr Janeček[2], Viktor Vojtko[3]



[1] Ing. Petr Štumpf, Ph.D., Assistant Professor, Department of Marketing, Trade, and Services, Faculty of Economics, University of West Bohemia in Plzeň, Czechia, e-mail: stumpf@kmo.zcu.cz, ORCID: 0000-0003-2581-9701

[2] Ing. Petr Janeček, Ph.D., Assistant Professor, Department of Marketing, Trade, and Services, Faculty of Economics, University of West Bohemia in Plzeň, Czechia, e-mail: janecp00@kmo.zcu.cz, ORCID: 0000-0003-3437-8012

[3] Ing. Viktor Vojtko, Ph.D., Assistant Professor Department of Geography Faculty of Education University of South Bohemia in České Budějovice, Czechia, e-mail: vojtko@pf.jcu.cz, ORCID: 0000-0002-1296-761X

**Received 22 October 2021, Revised 28 January 2022, Accepted 11 February 2022**

**Abstract:** Satisfaction of visitors in tourism destinations is one of the most discussed topics in destination management and marketing. Many destinations report high satisfaction of their visitors. The objective of this study is to analyze overall satisfaction and satisfaction components in eleven tourism areas within South Bohemia, a typical Czech rural region, and to define the high level of satisfaction using benchmarking as a methodological approach. Using ANOVA and Pearson's correlation, we identified the high level of satisfaction following the against-the-best benchmarking and the against-the-industry average approach. The results also show that perceived atmosphere in a destination, willingness to help and friendliness are the most significant components correlating with overall satisfaction.

**Keywords:** Benchmarking, Czech Republic, Rural Area, South Bohemia, Tourism Destination, Visitor Satisfaction

---

**Abstrakt:** Spokojenost návštěvníků je jedním z nejvíce diskutovaných témat v oblasti destinačního managmentu a marketingu. Mnoho destinací vykazuje vysokou spokojenost svých návštěvníků. Cílem této studie je analýza celkové spokojenosti a jejích komponent v jedenácti turistických oblastech jižních Čech, typického českého venkovského regionu, a definovat vysokou úroveň spokojenosti při využití benchmarkingu jako metodologického přístupu. Prostřednictvím ANOVA a Pearsonovy korelace byla identifikována vysoká úroveň spokojenosti na základě benchmarkingových přístupů porovnání s nejlepším a porovnání s průměrem. Výsledky dále ukazují, že vnímaná atmosféra v destinaci, ochota pomoci a přátelský přístup jsou komponenty spokojenosti, které nejvýznamněji korelují s celkovou spokojeností.

**Klíčová slova:** benchmarking, Česká republika, venkovská oblast, jižní Čechy, destinace turismu, spokojenost návštěvníků

---

**Highlights:**

- Benchmarking represents a tool for evaluating destination visitor satisfaction.
- Destination benchmarking can identify a high level of visitor satisfaction.
- Differences in satisfaction levels were identified in similar rural destinations.
- Overall satisfaction with a stay is evaluated better than its components.
- Overall satisfaction correlates most with the component of perceived atmosphere.

---

## 1. Introduction

Competitiveness and sustainability represent general goals of tourism destinations. In the concept of competitiveness, satisfactory services and memorable experiences of visitors are required. Attracting visitors with respect to a clear profitability for a destination and its residents leads to sustainability (Moreno-Izquierdo et al., 2018). But in order to recognize that a destination is more or less competitive in the tourism market, benchmarking of tourism destinations represents one of the options and is an important tool for managing sustainable and competitive destinations, especially on the regional and local level (Kozak, 2004b).

Every tourism destination makes an effort to satisfy its visitors. Satisfied customers are not only valuable customers who would use the service again but are positively disposed towards it and may even recommend it to others. In other words, high overall satisfaction in tourism leads to increased loyalty and satisfaction is considered a crucial predictor of visitor loyalty (Chen, 2015; Cong, 2016; Matzler et al., 2007; Ramseook-Munhurrun et al., 2015; Romão et al., 2014).

Satisfaction of visitors represents a crucial factor of destination sustainability and competitiveness (Iniesta-Bonillo et al., 2016; Jarvis et al., 2016; Sukiman et al., 2013), and is also considered one of the essential objectives and indicators of success in tourism destination management (Mazanec et al., 2007; Štumpf & Vojtko, 2016). However, measuring visitor satisfaction at tourism destinations is more complicated than in the case of individual tourism services.

The number of tourism destinations report a "high satisfaction level" of their visitors (Parola et al., 2014; Štumpf et al., 2021). Destination managers use the share of satisfied/dissatisfied visitors, or the mean value calculated from different scales. However, the question is, if the satisfaction at those destinations is high enough in comparison with competing destinations. Moreover, how high should a "high level of satisfaction" be. The benchmarking of tourism destinations can bring the answer and fill the gap in knowledge of how to measure, compare, and evaluate the level of satisfaction and how to learn from the results.

In this study, we benchmark a wide range of satisfaction components and their influence on overall satisfaction with a stay in the South Bohemia region in the Czech Republic. The questionnaire survey was carried out in eleven tourism areas within the region. South Bohemia is one of the most popular tourism regions in the Czech Republic and represents a typical Czech rural region. The region is characterized by incompactly distributed settlement structure and low population density in contrast to a relatively large area. Due to the absence of large towns, South Bohemia is perceived as an area with a high proportion of agricultural, forestry and fishing activities (Pártlová et al., 2020) and belongs to three most significant rural areas in the Czech Republic (Antosova et al., 2017). South Bohemia as a tourism region is divided into eleven smaller units – tourism areas (see Figure 1) with similar tourism attractiveness.




*Fig 1. Tourism Areas of the South Bohemian Region, Czech Republic. Source: JCCR (n.d.)*

The objective of this study is to benchmark overall satisfaction and satisfaction components in particular tourism areas to identify the level of overall satisfaction with a stay in South Bohemia Region and to define the "high level" of visitor satisfaction. Using several satisfaction components, we can benchmark not only overall satisfaction, but also the satisfaction components to identify the strengths and weaknesses of these tourism areas.

Based on our study, we fill the gap in evaluation between visitors' needs and Destination Management Organizations' (DMO) performance. We see the gap in current knowledge in how to use the benchmarking concept to compare visitors' satisfaction in several destinations as well as to better understand the satisfaction components and their influence on overall reported satisfaction.

## 2. Theoretical Background

In the last few decades, we have been facing increasingly demanding tourism customers in a rapidly changing and volatile tourism marketing environment. New philosophy of tourism destination management called smart tourism destination has been developed in recent years. It is based on the use of information technologies, proper analysis and measurement, strategic planning, and marketing focus on tourists (Gretzel, 2018). Understanding customers is one of the key success factors when providing services. This is the reason why researchers, providers, and local governments are interested in visitor and tourist behaviour, attitudes, motivation for travelling, and satisfaction.

### 2.1 Visitor satisfaction

Satisfaction with a tourism product is considered one of the essential objectives and indicators of success in tourism destination management (Mazanec et al., 2007; Štumpf & Vojtko, 2016), but the measurement of visitor satisfaction in tourism destinations is more complicated than in the case of individual tourism services.

Visitor satisfaction with holidays at destinations is usually measured as overall holiday satisfaction, as well as the effect of the particular components, including, but not limited to: satisfaction with accommodation; catering; various aspects of the infrastructure; price-quality perceptions; and service quality on overall satisfaction. Many researchers focus on particular components of satisfaction and their influence on overall satisfaction (Truțescu, 2020).

Many different methods have been used in research of visitor satisfaction and data analyses for these purposes. Above basic statistics, structural equation modelling (del Río et al., 2017; Romão et al., 2014); path analysis (Matzler et al., 2007); formative modelling (Cong, 2016); t-tests; ANOVA; MANOVA; regression; and correlation (Agyeiwaah et al., 2016; Jensen et al., 2017; Parola et al., 2014), or combinations of these are often used to explain overall visitor satisfaction at tourism destinations.

Boccia et al. (2020) used factor and cluster analysis to find how tourists evaluate satisfaction with the destination. They identified three groups of people with similar evaluations: satisfied tourists, partly satisfied tourists, and unsatisfied tourists. However, they used standard values (text values) of satisfaction like excellent, good, poor, and bad. It is common practice to use Likert-type scales to capture and measure visitor satisfaction. Unfortunately, this kind of measurement can be imprecise, and the final data could be even more vague. Consequently, D'Urso et al. (2020) used a different approach to make a connection between satisfaction and tourism expenditure behaviour in their study to quantify a level of satisfaction.

As mentioned above, searching for the most important destination visitor satisfiers is a challenging task. Visitors usually evaluate satisfaction components on average worse than overall satisfaction with the stay at a destination as a whole (Vajčnerová et al., 2014). From the viewpoint of specific satisfaction components, Atiq et al. (2018) established the significant effect of atmosphere, environment, and tourist attractions on visitor satisfaction.

Based on these research findings, we postulate the following hypotheses:

*H1: The overall satisfaction differs from the average of satisfaction components*

*H2: Perceived atmosphere as a destination satisfaction component, correlates most with the overall satisfaction*

### 2.2 Destination Benchmarking and Visitor Satisfaction

Destination benchmarking is considered a conceptual approach for the evaluation, measurement, and comparison of destination competitiveness, sustainability, or performance. The importance of developing benchmarking tools for tourism destinations has been highlighted in the last two decades with the main aim of increasing the competitiveness and sustainability of destinations (Cernat & Gourdon, 2012; Iamkovaia et al., 2020; Kozak, 2004b; Krishnamoorthy et al., 2014). Benchmarking represents a tool for evaluating many types of components of satisfaction or other indicators and has been used as a method for measuring the quality of services or products in the public as well as business sector. This method is based on a comparison with the best in the industry, which brings the best way to identify the subject's market position and how to improve its performance. Consequently, important steps have been taken regarding the development of authentic benchmarking models and tools for tourism destinations generally focusing on competitiveness (Blancas et al., 2017; Kozak & Nield, 2004; Kozak & Rimmington, 1998; Li & Petrick, 2007; Moore & Taplin, 2014; Narayan et al., 2008; Wöber & Fesenmaier, 2004; Xiang et al., 2007). Many authors define benchmarking in the field of tourism (Blancas et al., 2017; Kozak, 2004b; Wöber & Fesenmaier, 2004). According to Luštický & Bína (2014), benchmarking represents a method based on systematic comparison of characteristics with the aim of finding the best transferable practices and thus reach a better competitive position. The core of benchmarking lies in the continuous learning and implementation of good practice.

There are many ways to use benchmarking in the tourism field, e.g., for traveller segmentation (Uçar & Karahoca, 2021), destination performance indexes (Lee & Li, 2019), business competitive positioning and success (Bernini & Guizzardi, 2015; Min et al., 2002; Zhang et al., 2013). Benchmarking is a very helpful tool that is used to: (1) comparatively analyse destination market data; (2) evaluate the performance of tourism destinations, and, (3) enable destinations to identify and learn the best practices to improve their competitive advantage (Xiang et al., 2007). Blancas et al. (2017) discusses some limitations in the use of benchmarking at destinations, which come from static and dynamic parameters that are compared. They develop a differential dynamic index methodology for evaluating sustainable tourism destinations which combines static and dynamic components.

There are several approaches that can be used for tourism destination benchmarking, such as ongoing process benchmarking, benchmarking against the best, benchmarking against the industry average (Krishnamoorthy et al., 2014), performance improvement benchmarking, and gaining new information (Kozak, 2004b, 2004a; Kozak, 2002; Kozak & Rimmington, 1999). Moore & Taplin (2014) define internal, external, sector, and strategic benchmarking. This benchmarking typology focuses more on the subject of benchmarking than on the methodology of calculation. Xiang et al. (2007) divide benchmarking types into two groups according to the literature. Firstly, benchmarking focused on performance measurement issues (i.e., what to benchmark) and secondly, methodological issues (i.e., how to benchmark).

Customer satisfaction is one of the most important elements of destination performance and, thus, one of the greatest sources of a competitive advantage. The concepts of *performance and satisfaction* (gap analysis) can be used to benchmark the strengths and weaknesses of different destinations by considering actual tourist experiences (Kozak, 2002).

There are also various factors of visitor satisfaction that can be benchmarked from the tourism destination point of view. It is possible to measure satisfaction with hospitality and tourism services, such as accommodation services, facilities and activities, local transport services, destination airport facilities and services, etc. (Kozak, 2002). However, satisfaction with a stay at a destination does not depend only on the experience with tourism services, but is also influenced by many other endogenous factors such as: security; hospitality; the friendliness of local inhabitants; the cleanliness of the destination; transportation infrastructure; foreign language communication ability, and the level of visitor management (Ashworth & Page, 2011; D'Urso et al., 2020; Kozak, 2002). Some of these factors are considered fully controllable (such as transportation infrastructure and the level of visitor management); some of them semi-controllable (such as cleanliness; security; hospitality; the friendliness of local inhabitants) from the viewpoint of destination managers.

However, visitor satisfaction is also affected by exogenous factors, which are totally beyond destination managers' control, such as weather conditions (Vojtko et al., 2022; Wu, 2020), or climate in general. As Kozak (2002) states, if we want to benchmark tourism destinations, it is necessary to measure, analyze and evaluate more factors and variables.

For such benchmarking, both qualitative and quantitative methods can be used, but it is extremely complicated to gather data for benchmarking on a national or higher level. That is why recent studies have focused more on benchmarking only in a few Asian countries (George Assaf, 2012) or regions (Blancas et al., 2017; Khazai et al., 2017; Kozak, 2002) with the aim to find differences among the researched destinations, compare them also from the viewpoint of satisfaction, find the best one and learn from the results. There is a lack of comparative research studies focusing destination satisfaction levels, especially in the rural areas. Previous studies typically focuses "sun and sea" coastal destinations, such as Mallorca, Mugla, Philippines's islands, or Andalusian coastal regions (Blancas et al., 2017; Khazai et al., 2017; Kozak, 2002). It is believed that the comparison of a destination with others offering similar types of holidays enables the comparison of their performance with the competition reflecting how others are performing (Kozak, 2002).

Based on the benchmarking approach and recent research studies, we formulate the following hypothesis:

*H3: Overall visitor satisfaction with a stay differs in researched tourism areas.*

Summarizing the above mentioned, this situation deserves deeper analysis of how to measure, compare, and evaluate the level of satisfaction at tourism destinations.

## 3. Methodology

We used primary data from a survey to test the hypotheses. The data was collected between June and September 2018. We carried out face-to-face interviews with visitors using the TAPI/CAPI method for data collection. We interviewed at least 300 respondents in each tourism area with respect to the period of time (June – July – August – September), when we set the quotas according to the number of guests in collective accommodation establishments in South Bohemia (2017). Several responses were removed due to missing data or incorrectness. The final dataset consists of 3,752 responses. Such a big dataset enables us to statistically compare and analyse several satisfaction indicators of visitors in tourism areas of the Tourism Region of South Bohemia and benchmark the tourism areas. We used two benchmarking approaches (Kozak, 2004b; Krishnamoorthy et al., 2014): (1) benchmarking against the best; and (2) benchmarking against the average.

*Tab 1. Number of responses in tourism areas. Source: own research*

| Tourism area | Tourism area code | Number of responses |
|---|---|---|
| Česká Kanada | CKAN | 303 |
| Budějovicko | CBHL | 735 |
| Český Krumlov Region | CK | 279 |
| Lipensko | LIP | 301 |
| Novohradsko-Doudlebsko | NH | 299 |
| Písecko | PI | 373 |
| PodKletí | PK | 295 |
| Prácheňsko | PP | 298 |
| Šumavsko | SU | 268 |
| Toulava | TO | 302 |
| Třeboňsko | TR | 299 |
| **Total** | | **3752** |

* Note: Original names of tourism areas as marketing units, which do not respect the geographical terminology.

The dataset is quite unique within the tourism regions in the Czech Republic because of its size and the breadth of the analysed factors. The tourism areas (in original names) and the number of valid responses in each tourism area are shown in Table 1. Table 2 shows the demographic profile of respondents.

*Tab 2. Respondents' profile. Source: own research*

| Variable | % | N |
|---|---|---|
| Gender | | |
| Male | 46.24 | 1735 |
| Female | 53.76 | 2017 |
| Age | | |
| ≤ 18 | 2.03 | 76 |
| 19 – 26 | 18.02 | 676 |
| 27 – 40 | 32.54 | 1221 |
| 41 – 55 | 28.41 | 1066 |
| 56 – 65 | 11.46 | 430 |
| ≥ 66 | 7.54 | 283 |
| Education level | | |
| Primary | 3.46 | 130 |
| Secondary | 61.65 | 2313 |
| Higher | 34.89 | 1309 |
| Household income | | |
| Below average | 10.87 | 408 |
| Average | 77.35 | 2902 |
| Above average | 11.78 | 442 |
| Origin | | |
| Czech Republic | 90.91 | 3411 |
| Foreign country | 9.09 | 341 |
| Social status | | |
| Employee | 59.01 | 2214 |
| Self-employed | 10.42 | 391 |
| On maternity/paternity leave | 5.38 | 202 |
| Student | 12.02 | 451 |
| Retired | 12.10 | 454 |
| Unemployed/in a household | 1.07 | 40 |
| Main travel reason | | |
| Holiday, relaxation and leisure | 44.51 | 1670 |
| Tourist attractions, sightseeing | 19.14 | 718 |
| Active holiday (sport, hiking) | 12.21 | 458 |
| Visiting relatives and friends (VRF) | 7.14 | 268 |
| Nature | 5.25 | 197 |
| Cultural event, festival | 4.16 | 156 |
| Business trip | 1.95 | 73 |
| Health stay, stay at a spa | 1.20 | 45 |
| Other reasons | 4.45 | 167 |

The satisfaction was quantified by questions that focused on the following topics and components:

- Satisfaction with services (catering, accommodation, tourist information points, electronic services, museums, active sport options)
- Satisfaction with transport (transport in general, parking, tourist marking/orientation system, bicycle trails)
- Satisfaction with residents' behaviour (willingness to help and friendliness, the overall atmosphere)
- Satisfaction with the tourism offer (number of cultural and natural sights, information about cultural and natural sights, condition of cultural and natural sights, prices of tickets)
- Overall satisfaction with the stay
- Weather perception

Each of these options used the scale from 1 to 5 for possible answers, where 1 = the best, 5 = the worst and “don’t know/cannot answer“ (missing value, except overall satisfaction and weather perception).

The next step was then to calculate the mean values, standard deviations and 95% confidence intervals of all satisfaction indices for each tourism area. These were then used for comparison and benchmarking. Differences were statistically tested by Welch’s ANOVA because unequal variances were present in the data.

To identify the differences between the overall satisfaction and average of satisfaction components, we worked with the average of satisfaction components as a dummy variable. We used Paired T-test as the parametric test and Wilcoxon signed rank test with continuity correction as the non-parametric test to identify the difference between the overall satisfaction and the dummy variable.

As the last step, Pearson’s correlation coefficients between overall satisfaction and the partial components were calculated. By using them, it is possible to identify components that have the biggest effect on overall satisfaction. All the calculations and charts were made using the R statistical package (R Core Team, 2016) and MS Excel.

## 4. Results

We compared the tourism areas of South Bohemia not only from the point of view of overall satisfaction with the stay, but also with the partial components of visitor satisfaction. Table 3 shows that there are statistically significant differences among tourism areas from the viewpoint of overall satisfaction as well as the satisfaction components.

The highest overall satisfaction was identified in Toulava, Prácheňsko, PodKletí and Šumavsko. There are statistically significant differences from the other destinations. The worst results were identified in Třeboňsko and Novohradsko-Doudlebsko with statistically significant differences (see Figure 2).

*Tab 3. Welch’s ANOVA Results. Source: own calculation using the R statistical package*

| Satisfaction component | Variable | Df | Mean Sq | F value | Pr(>F) |
|---|---|---|---|---|---|
| Overall satisfaction | Tourism area | 10 | 6.190 | 26.12 | 0.000 *** |
| Transport in general | Tourism area | 10 | 14.353 | 21.16 | 0.000 *** |
| Bicycle trails | Tourism area | 10 | 13.127 | 27.43 | 0.000 *** |
| Parking | Tourism area | 10 | 24.283 | 32.84 | 0.000 *** |
| Tourist marking/orientation system | Tourism area | 10 | 11.318 | 26.36 | 0.000 *** |
| Electronic services | Tourism area | 10 | 11.23 | 10.7 | 0.000 *** |
| Museums | Tourism area | 10 | 9.167 | 15.3 | 0.000 *** |
| Weather perception | Tourism area | 10 | 9.555 | 16.12 | 0.000 *** |
| Active sport options | Tourism area | 10 | 10.612 | 24.2 | 0.000 *** |
| Catering | Tourism area | 10 | 10.668 | 16.73 | 0.000 *** |
| Tourist information points | Tourism area | 10 | 6.052 | 13.07 | 0.000 *** |
| Accommodation | Tourism area | 10 | 5.970 | 8.376 | 0.000 *** |
| Willingness to help and friendliness | Tourism area | 10 | 3.331 | 11.95 | 0.000 *** |
| Number of cultural and natural sights | Tourism area | 10 | 17.025 | 30.65 | 0.000 *** |
| Information about sights | Tourism area | 10 | 11.009 | 23.56 | 0.000 *** |
| Condition of sights | Tourism area | 10 | 5.572 | 13.47 | 0.000 *** |
| Prices of tickets | Tourism area | 10 | 26.778 | 43.96 | 0.000 *** |
| The overall atmosphere | Tourism area | 10 | 5.432 | 23.35 | 0.000 *** |

Note: Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1.

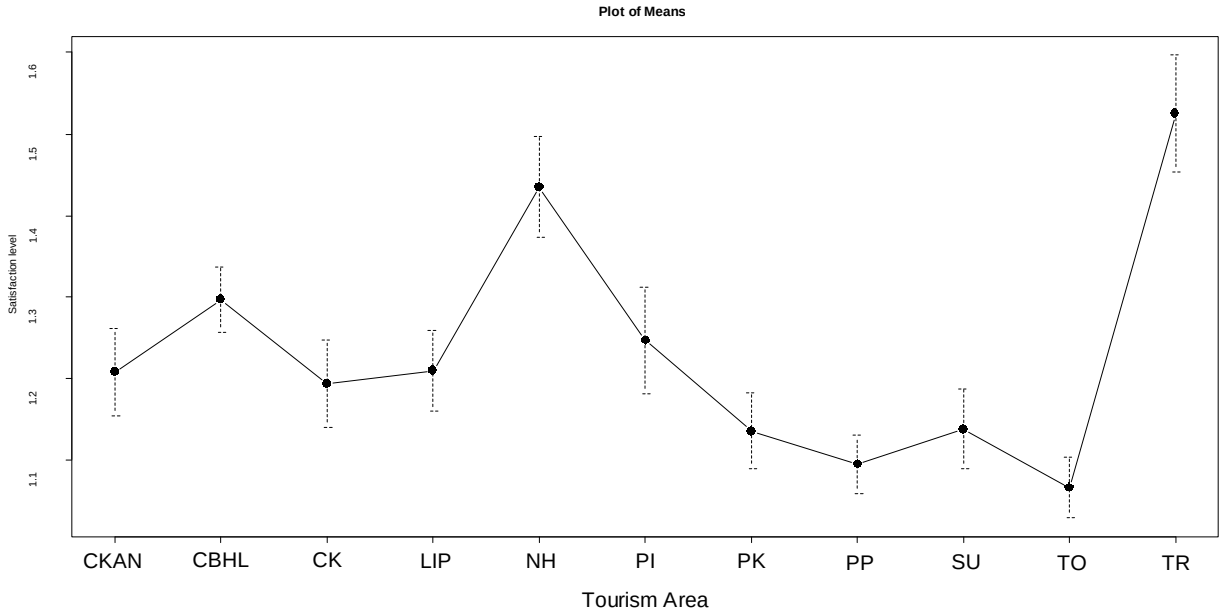



*Fig 2. Overall satisfaction with the stay in tourism areas. Source: own processing using the R statistical package*

Nevertheless, except these two areas, all the others achieved a mean value of 1.3 (Budějovicko) or lower. We can consider a mean value of 1.3 on the scale 1–5 (the lower, the better) as a very good result. At least, it seems to be positive. However, in comparison with other tourism areas, can we really consider this value as "very good"? In fact, eight of eleven other destinations achieved better results, as Table 3 shows.

We also identified the differences among the tourism areas within the South Bohemia region from the viewpoint of the partial components of satisfaction. The important contribution of this research is the possible benchmarking of the tourism areas.

The results shown in Table 4 enable *benchmarking against the best* in each partial satisfaction. The highest satisfaction (best performance) of each satisfaction component is highlighted (the lower the value, the better). Moreover, we can use *benchmarking against the average* to evaluate the tourism areas' performance. Based on the first approach, we can identify the "high level" of overall satisfaction as the best value (the lower, the better). The lowest value, which means the highest satisfaction, was identified in the Toulava Tourism Area (1.07). If we use the second approach, *benchmarking against the average*, a "high level" of satisfaction will be represented by an average value of 1.23. In this case, seven tourism areas achieved a value better than the average, and four tourism areas were evaluated worse.

We can make a similar evaluation for each satisfaction component. Only after the destination manager is able to compare his/her own destination with the others, to find which components of the destination offer are ranked higher or lower among the others, it is possible to recognize the strengths and weaknesses of a particular destination.

Without comparable competitive units, it is very complicated for destination managers to make efficient decisions. For example, if we look at satisfaction with the atmosphere at the destination, without any context, the result of the tourism area of Třeboňsko (with a mean value of 1.5) can be considered quite positive in the scale 1–5 (the lower, the better). Nevertheless, in comparison with other areas, we ascertain that it is the worst result and the difference from the others is statistically significant, as Figure 3 shows.

*Tab 4. Visitor satisfaction in tourism areas (The South Bohemia Region). Source: own calculation*

| Satisfaction component | CKAN | CBHL | CK | LIP | NH | PI | PK | PP | SU | TO | TR | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Satisfaction with services*** | | | | | | | | | | | | |
| Catering | 1.71 | 1.58 | 2.10 | 1.70 | 1.90 | 1.72 | 1.41 | 1.55 | 1.39 | 1.29 | 1.67 | **1.64** |
| Accommodation | 1.52 | 1.66 | 1.71 | 1.28 | 1.65 | 1.59 | 1.41 | 2.71 | 1.38 | 1.23 | 1.77 | **1.63** |
| Tourist information | 1.34 | 1.41 | 1.90 | 1.56 | 1.58 | 1.65 | 1.34 | 1.25 | 1.17 | 1.06 | 1.74 | **1.45** |
| Electronic services | 2.09 | 1.68 | 1.77 | 1.85 | 2.92 | 1.96 | 1.86 | 2.19 | 1.45 | 2.20 | 2.47 | **2.04** |
| Museums | 1.61 | 1.57 | 1.37 | 1.69 | 2.55 | 1.48 | 1.24 | 1.70 | 1.33 | 1.16 | 2.08 | **1.62** |
| Active sport options | 1.42 | 1.36 | 1.28 | 1.17 | 2.16 | 1.82 | 1.28 | 1.27 | 1.07 | 1.48 | 1.86 | **1.47** |
| ***Satisfaction with transport*** | | | | | | | | | | | | |
| Transport in general | 1.73 | 1.83 | 1.57 | 1.55 | 2.17 | 1.94 | 1.57 | 1.61 | 1.67 | 1.46 | 2.05 | **1.74** |
| Parking | 1.79 | 2.01 | 1.46 | 1.35 | 1.93 | 1.85 | 1.30 | 1.38 | 1.26 | 1.39 | 1.92 | **1.60** |
| Tourist marking /orientation | 1.37 | 1.55 | 1.25 | 1.35 | 1.58 | 1.74 | 1.32 | 1.17 | 1.34 | 1.14 | 1.69 | **1.41** |
| Bicycle trails | 1.42 | 1.47 | 1.63 | 1.17 | 2.44 | 1.81 | 1.35 | 1.21 | 1.17 | 1.56 | 1.82 | **1.55** |
| ***Satisfaction with residents' behaviour*** | | | | | | | | | | | | |
| Willingness to help and friendliness | 1.32 | 1.32 | 1.35 | 1.20 | 1.28 | 1.35 | 1.13 | 1.05 | 1.11 | 1.16 | 1.36 | **1.24** |
| The overall atmosphere | 1.19 | 1.32 | 1.24 | 1.14 | 1.35 | 1.29 | 1.12 | 1.08 | 1.15 | 1.09 | 1.49 | **1.22** |
| ***Satisfaction with thetourism offer*** | | | | | | | | | | | | |
| Number of sights | 1.58 | 1.53 | 1.28 | 1.40 | 2.06 | 1.56 | 1.60 | 1.31 | 1.34 | 1.28 | 1.85 | **1.53** |
| Information about sights | 1.45 | 1.56 | 1.31 | 1.30 | 1.69 | 1.57 | 1.47 | 1.20 | 1.47 | 1.13 | 1.84 | **1.45** |
| Condition of sights | 1.42 | 1.47 | 1.34 | 1.34 | 1.51 | 1.37 | 1.32 | 1.22 | 1.43 | 1.65 | 1.70 | **1.43** |
| Prices of tickets | 1.82 | 1.97 | 1.84 | 1.84 | 1.85 | 1.80 | 1.45 | 1.19 | 1.36 | 1.71 | 2.43 | **1.75** |
| **Satisfaction components average** | **1.55** | **1.58** | **1.52** | **1.43** | **1.91** | **1.66** | **1.39** | **1.44** | **1.32** | **1.37** | **1.86** | **1.55** |
| ***Overall satisfaction*** | ***1.21*** | ***1.30*** | ***1.19*** | ***1.21*** | ***1.43*** | ***1.25*** | ***1.14*** | ***1.09*** | ***1.14*** | ***1.07*** | ***1.53*** | ***1.23*** |

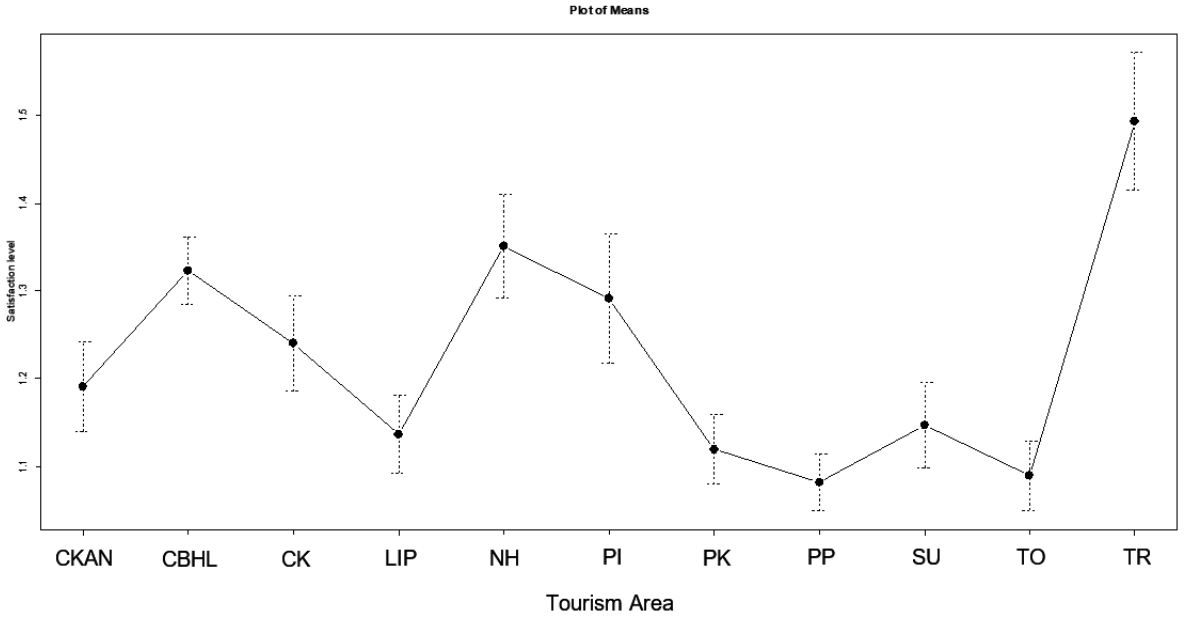



*Fig 3. Satisfaction with atmosphere at the destination. Source: own processing using the R statistical package*

We also calculated the average of satisfaction components for each destination. Based on the Paired T- test and Wilcoxon signed rank test, we can state the evaluation of the components on average is statistically different than the reported overall satisfaction with the stay as a whole. The T-Test results show the statistical differences where true difference in means is not equal to 0 (t = -36.187; df = 3751; p-value = 0.000). The results of the Wilcoxon signed rank test confirm the findings where true location shift is not equal to 0 (V = 577808, p-value = 0.000).

We can confirm that the overall satisfaction is systematically evaluated better than the average of satisfaction components in all researched tourism areas, as Table 4 shows. The differences between reported overall satisfaction and the calculated average of satisfaction components varies from 0.18 (Šumavsko) to 0.48 (Novohradsko-Doudlebsko). This might suggest that overall satisfaction is influenced by other factors that are unknown, uncontrollable, intangible, or unrecognizable for visitors.

As the next step, we calculated Pearson's correlation coefficients between overall satisfaction and satisfaction components. All correlation coefficients are statistically different from "0" with p<0.0001. The strongest correlations of overall satisfaction can be identified with satisfaction with the atmosphere at the destination (0.5795) and with satisfaction with willingness to help and friendliness of locals (0.4694). This indicates that overall visitor satisfaction might be influenced by "intangible" irrational factors, such as mood or feelings more than rational ones, such as quality of services, transport, or price level. However, cultural and natural attractiveness (number of cultural and natural sights as well as museums) plays a significant role, too (see Table 5).

*Tab 5. Correlation analysis. Source: own calculation using the R statistical package*

| | *Pearson's correlation* | |
|---|---|---|
| *Variables (satisfaction components)* | *Overall satisfaction* | *Number of observations* |
| Overall satisfaction | 1.0000 | 3752 |
| The overall atmosphere | 0.5795 | 3702 |
| Willingness to help and friendliness | 0.4694 | 2811 |
| Museums | 0.4524 | 804 |
| Number of cultural and natural sights | 0.4177 | 3355 |
| Information about cultural and natural sights | 0.3943 | 3037 |
| Active sport options | 0.3551 | 1215 |
| Accommodation | 0.3480 | 841 |
| Tourist information points | 0.3478 | 985 |
| Bicycle trails | 0.3475 | 1062 |
| Tourist marking/orientation system | 0.3416 | 3055 |
| Catering | 0.3176 | 2496 |
| Condition of cultural and natural sights | 0.3048 | 3289 |
| Weather perception | 0.2671 | 3752 |
| Electronic services | 0.2653 | 941 |
| Transport in general | 0.2584 | 3253 |
| Prices of tickets | 0.2492 | 2687 |
| Parking | 0.2188 | 2809 |

Finally, an important factor which is fully beyond the control of destination managers is weather perception. We asked the respondents to rate their impression of the weather at the venue of the interview. The results are shown in Figure 4. The weather can influence the experience and, thus, satisfaction with the stay at a destination.

The weather was evaluated worst in the Třeboňsko tourism area and the difference from the other destinations is statistically significant. Weather perception as an uncontrollable factor can be one of the reasons why this tourism area is evaluated as the worst in the overall satisfaction ranking. However, we have to point out other satisfaction components which indicate other problems in this tourism area.

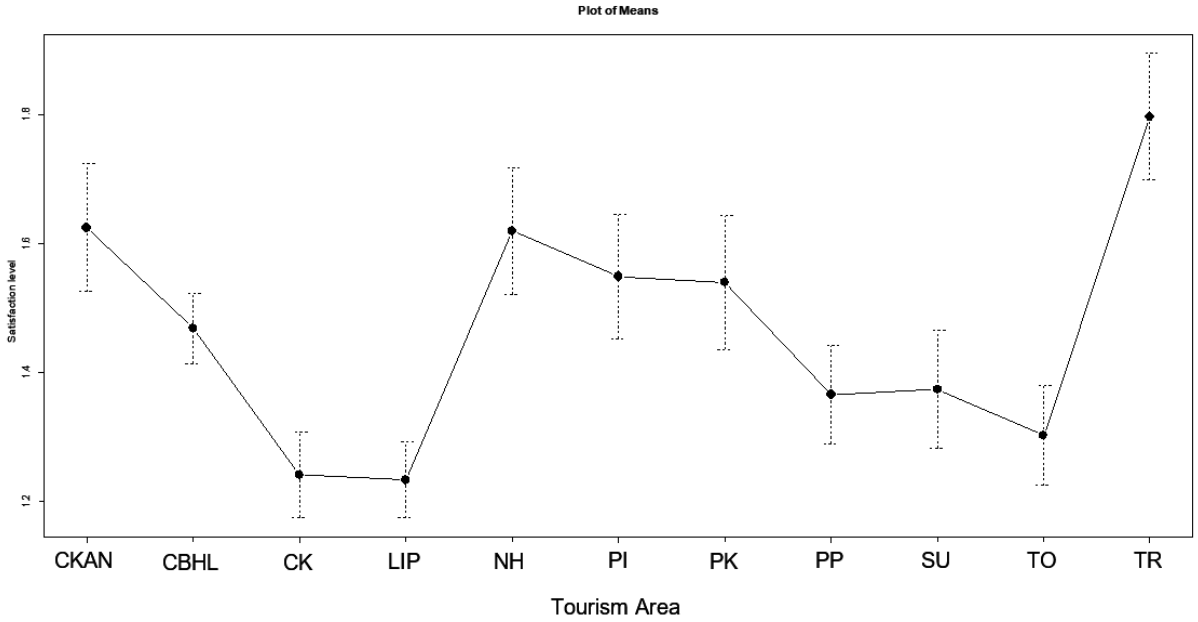



*Fig 4. Weather perception. Source: own processing using the R statistical package*

## 5. Discussion and conclusion

Our research study brings two perspectives of evaluating destination satisfaction performance using benchmarking as a conceptual approach. First, detail analysis for how to benchmark destination satisfaction was established. There are statistically significant differences between evaluated tourism areas within one region. Therefore, we can confirm the hypothesis H3 (*Overall visitor satisfaction with a stay differs in researched tourism areas.*). For example, the overall satisfaction value of 1.3 reported in the tourism area of Budějovicko indicates that things go well in satisfying visitors. However, if we compare the results with other regions (competitors), we can see the competitors are in a better condition and, consequently, the results of this tourism area are not so good as they seemed to be at first glance. Therefore, it is crucial for destination managers to benchmark smaller geographical units in their destinations, or to be compared with competitors to manage quality and visitor satisfaction. This is in line with Kozak (2002), who confirms that the comparison of a destination with other similar destinations enables the comparison of their performance with the competition reflecting how others are performing. While the recent studies presented destination benchmarking results especially from sun & sea coastal destinations (Blancas et al., 2017; Khazai et al., 2017; Kozak, 2002), our study brings the evidence from the typical Czech rural region, South Bohemia.

Second, there is a difference between overall satisfaction and satisfaction with particular components on average. Thus, we can confirm the hypothesis H1 (*The overall satisfaction differs from the average of satisfaction components*.) In our case, visitors evaluated overall satisfaction better than a particular component of satisfaction on average, which confirms the results of previous studies (Vajčnerová et al., 2014). Moreover, we identified the overall atmosphere, willingness to help and friendliness, museums, and number of cultural and natural sights as highly correlated factors with overall satisfaction. Based on these results, we can confirm the hypothesis H2 (*Perceived atmosphere as a destination satisfaction component, correlates most with the overall satisfaction*). These results correspond with Atiq et al. (2018) who identified environment, atmosphere, tourist attractions, and safety and security as the most important factors that influence tourists when selecting their destination. Our research study has shown similar results in a rural region of South Bohemia where satisfaction with the perceived atmosphere in the destination (0.5795) and satisfaction with willingness to help and friendliness of locals correlate strongest with the overall satisfaction.

Practically, we can divide satisfaction components into three groups, controllable, semi-controllable, and uncontrollable. On the one hand, overall visitor satisfaction might be influenced by “intangible” irrational

factors, such as mood or feelings more than rational ones, such as services, transport, or price level. On the other hand, we also have to take into account cultural and natural attractiveness, which play significant roles, too. This means that the evaluation can be based on three groups of indicators as well: (1) intangible satisfiers (atmosphere, willingness to help), (2) tangible primary satisfiers (cultural and natural sights, cultural attractions), and (3) tangible secondary satisfiers (catering, accommodation, traffic, etc.). Xiang et al. (2007) concluded that learning through benchmarking aims at bridging the gap between an organization's vision, existing capabilities, and providing insights for adaptation. Respecting Cernat & Gourdon (2012) and their cross-country evaluation of sustainable tourism, we can summarize that benchmarking represents a tool for evaluating visitor satisfaction from a cross-destination point of view.

The objective of this study was to benchmark overall satisfaction and satisfaction components in particular tourism areas in the South Bohemia region, Czech Republic, to identify the level of satisfaction. Based on the results, we identified the high level of overall satisfaction as follows: (1) Following the against-the-best benchmarking approach, the highest performance was identified as 1.07 (using a scale from 1 to 5, where 1 = the best, 5 = the worst); (2) According to the against-the-industry average approach, the high level of satisfaction was identified as 1.23 on the same scale.

### 5.1 Managerial implications

The findings indicate that destination managers should measure, analyse, and evaluate controllable as well as uncontrollable components of satisfaction. The system of regular surveying of satisfaction at destinations with a common methodological framework should be developed for proper destination satisfaction management in rural regions. Traditional questions on satisfaction with particular tourism services (catering, accommodation, tourist information points, electronic services, etc.) or attractiveness of the tourist offer (number of cultural and natural sights, information about cultural and natural sights, condition of cultural and natural sights, etc.), should be implemented, on the one hand. On the other hand, questions on "intangible" satisfiers such as atmosphere, perceived safety and security, willingness to help and friendliness, and uncontrollable factors of satisfaction could be even more important. Only after that can managers make a complex evaluation and benchmarking of a destination with the best competitors or with the industry average. This system of evaluation should be developed on the national, regional, and local level of destination management to improve the competitiveness of the country, as well as the regions as tourism destinations with respect to the destination type.

### 5.2 Limitations and future research

We must take some limitations of this research into consideration. Despite the big dataset we used, the results are not sufficient in some cases of particular satisfaction components in several tourism areas and therefore, the confidence intervals are too wide in several cases. These results should be taken with caution. Some limitations can also be seen in correlation analysis. This was calculated from the whole dataset, which means we do not distinguish the particular destinations. Nevertheless, the partial satisfaction components are related to the tourism areas in the responses of visitors, not to South Bohemia as the whole region.

In our research study, we defined the "high level" of visitor satisfaction and compared the reported overall visitor satisfaction with the average of the partial satisfaction components. However, for a more complex evaluation of visitor satisfaction, a comparison with other destinations should be provided to make the results more precise in the future. A better understanding of the exogenous effects as well as their elimination in destination satisfaction measuring and benchmarking represents another avenue for future research.

## Acknowledgment

This work was supported by the University of West Bohemia under Grant SGS-2021-020.

## Academic references


[1] Agyeiwaah, E., Adongo, R., Dimache, A. & Wondirad, A. (2016). Make a customer, not a sale: Tourist satisfaction in Hong Kong. *Tourism Management*, *57*, 68–79. DOI: 10.1016/j.tourman.2016.05.014.

[2] Antošová, G., Wokoun, R. & Arias Gomez, H. Y. (2017). Projects Impact to Regional Development: Case Study of Destinations in the South Bohemian Region. In Klímová, V. & Zitek, V., eds., *20th International Colloquium on Regional Sciences* (pp. 91–98). Brno: Masaryk University. DOI: 10.5817/CZ.MUNI.P210-8587-2017-10.

[3] Ashworth, G. & Page, S. J. (2011). Urban tourism research: Recent progress and current paradoxes. *Tourism Management*, *32*(1), 1–15. DOI: 10.1016/j.tourman.2010.02.002.

[4] Atiq, A. G., Sharif, Z. B. M. & Sarwar, A. (2018). Measuring Arab tourists' satisfaction and loyalty towards Malaysia. *International Journal of Business and Management Science*, *8*(3), 597–613.

[5] Bernini, C. & Guizzardi, A. (2015). Improving performance measurement and benchmarking in the accommodation sector. *International Journal of Contemporary Hospitality Management*, *27*(5), 980–1002. DOI: 10.1108/IJCHM-12-2013-0549.

[6] Blancas, F. J., Oyola, M. L., González, M. & Caballero, R. (2017). A dynamic sustainable tourism evaluation using multiple benchmarks. *Journal of Cleaner Production*, 174, 1190–1203. DOI: 10.1016/j.jclepro.2017.10.295.

[7] Boccia, F., Di Gennaro, R., Sarnacchiaro, P. & Sarno, V. (2020). Tourism satisfaction and perspectives: An exploratory study in Italy. *Quality & Quantity*, *54*(5–6), 1565–1576. DOI: 10.1007/s11135-019-00907-4.

[8] Cernat, L., & Gourdon, J. (2012). Paths to success: Benchmarking cross-country sustainable tourism. *Tourism Management*, *33*(5), 1044–1056. DOI: 10.1016/j.tourman.2011.12.007.

[9] Chen, S.-C. (2015). Customer value and customer loyalty: Is competition a missing link? *Journal of Retailing and Consumer Services*, *22*, 107–116. DOI: 10.1016/j.jretconser.2014.10.007.

[10] Cong, L. C. (2016). A formative model of the relationship between destination quality, tourist satisfaction and intentional loyalty: An empirical test in Vietnam. *Journal of Hospitality and Tourism Management*, *26*, 50–62. DOI: 10.1016/j.jhtm.2015.12.002.

[11] del Río, J. A. J., Agüera, F. O., Cuadra, S. M. & Morales, P. C. (2017). Satisfaction in border tourism: An analysis with structural equations. *European Research on Management and Business Economics*, *23*(2), 103–112. DOI: 10.1016/j.iedeen.2017.02.001.

[12] D'Urso, P., Disegna, M. & Massari, R. (2020). Satisfaction and Tourism Expenditure Behaviour. *Social Indicators Research*, *149*(3), 1081–1106. DOI: 10.1007/s11205-020-02272-4.

[13] George Assaf, A. (2012). Benchmarking the Asia Pacific tourism industry: A Bayesian combination of DEA and stochastic frontier. *Tourism Management*, *33*(5), 1122–1127. DOI: 10.1016/j.tourman.2011.11.021.

[14] Gretzel, U. (2018). From smart destinations to smart tourism regions. *Investigaciones Regionales*, *2018*(42), 171–184.

[15] Iamkovaia, M., Arcila, M., Cardoso Martins, F., Izquierdo, A. & Vallejo, I. (2020). Analysis and comparison of tourism competitiveness in Spanish coastal areas. *Investigaciones Regionales – Journal of Regional Reserach*, *47*(47), 161–178. DOI: 10.38191/iirr-jorr.20.015.

[16] Iniesta-Bonillo, M. A., Sánchez-Fernández, R. & Jiménez-Castillo, D. (2016). Sustainability, value, and satisfaction: Model testing and cross-validation in tourist destinations. *Journal of Business Research*, *69*(11), 5002–5007. DOI: 10.1016/j.jbusres.2016.04.071.

[17] Jarvis, D., Stoeckl, N. & Liu, H.-B. (2016). The impact of economic, social and environmental factors on trip satisfaction and the likelihood of visitors returning. *Tourism Management*, *52*, 1–18. DOI: 10.1016/j.tourman.2015.06.003.

[18] Jensen, Ø., Li, Y. & Uysal, M. (2017). Visitors' satisfaction at managed tourist attractions in Northern Norway: Do on-site factors matter? *Tourism Management*, *63*, 277–286. DOI: 10.1016/j.tourman.2017.06.025.

[19] Khazai, B., Mahdavian, F. & Platt, S. (2017). Tourism Recovery Scorecard (TOURS) – Benchmarking and monitoring progress on disaster recovery in tourism destinations. *International Journal of Disaster Risk Reduction*, 27, 75–84. DOI: 10.1016/j.ijdrr.2017.09.039.

[20] Kozak, M. (2002). Destination benchmarking. *Annals of Tourism Research*, *29*(2), 497–519. DOI: 10.1016/S0160-7383(01)00072-X.

[21] Kozak, M. (2004a). *Destination benchmarking: Concepts, practices, and operations*. Wallingford: CABI.

[22] Kozak, M. (2004b). Introducing Destination Benchmarking: A Conceptual Approach. *Journal of Hospitality & Tourism Research*, *28*(3), 281–297. DOI: 10.1177/1096348003256603.

[23] Kozak, M. & Nield, K. (2004). The Role of Quality and Eco-Labelling Systems in Destination Benchmarking. *Journal of Sustainable Tourism*, *12*(2), 138–148. DOI: 10.1080/09669580408667229.

[24] Kozak, M. & Rimmington, M. (1998). Benchmarking: Destination attractiveness and small hospitality business performance. *International Journal of Contemporary Hospitality Management*, *10*(5), 184–188. DOI: 10.1108/09596119810227767.

[25] Kozak, M. & Rimmington, M. (1999). Measuring tourist destination competitiveness: Conceptual considerations and empirical findings. *International Journal of Hospitality Management*, *18*(3), 273–283. DOI: 10.1016/S0278-4319(99)00034-1.

[26] Krishnamoorthy, B. D. C. & Lima, N. A. (2014). Benchmarking as a measure of competitiveness. *International Journal of Process Management and Benchmarking*, *4*(3), 342. DOI: 10.1504/IJPMB.2014.063240.

[27] Lee, C.-W. & Li, C. (2019). The Process of Constructing a Health Tourism Destination Index. *International Journal of Environmental Research and Public Health*, *16*(22), 4579. DOI: 10.3390/ijerph16224579.

[28] Li, X. & Petrick, J. F. (2007). Benchmarking Destinations via DMO Websites: A Methodological Process. *Tourism Analysis*, *12*(4), 271–285. DOI: 10.3727/108354207782212422.

[29] Luštický, M. & Bína, V. (2014). Application of Fuzzy Benchmarking Approach for Strategic Planning of Tourism Destination. *Journal of Quality Assurance in Hospitality & Tourism*, *15*(4), 327–355. DOI: 10.1080/1528008X.2014.921779.

[30] Matzler, K., Füller, J. & Faullant, R. (2007). Customer satisfaction and loyalty to Alpine ski resorts: The moderating effect of lifestyle, spending and customers' skiing skills. *International Journal of Tourism Research*, *9*(6), 409–421. DOI: 10.1002/jtr.613.

[31] Mazanec, J. A., Wober, K. & Zins, A. H. (2007). Tourism Destination Competitiveness: From Definition to Explanation? *Journal of Travel Research*, *46*(1), 86–95. DOI: 10.1177/0047287507302389.

[32] Min, H., Min, H. & Chung, K. (2002). Dynamic benchmarking of hotel service quality. *Journal of Services Marketing*, *16*(4), 302–321. DOI: 10.1108/08876040210433211.

[33] Moore, S. A. & Taplin, R. (2014). A Benchmarking Method for Visitor Management by National Park Agencies. *Visitor Studies*, *17*(1), 107–127. DOI: 10.1080/10645578.2014.885364.

[34] Moreno-Izquierdo, L., Ramón-Rodríguez, A. & Such-Devesa, M. J. (2018). The challenge of long-term tourism competitiveness in the age of innovation: Spain as a case study. *Investigaciones Regionales*, *2018*(42), 13–24.

[35] Narayan, B., Rajendran, C. & Sai, L. P. (2008). Scales to measure and benchmark service quality in tourism industry: A second-order factor approach. *Benchmarking: An International Journal*, *15*(4), 469–493. DOI: 10.1108/14635770810887258.

[36] Parola, F., Satta, G., Penco, L. & Persico, L. (2014). Destination satisfaction and cruiser behaviour: The moderating effect of excursion package. *Research in Transportation Business & Management*, *13*, 53–64. DOI: 10.1016/j.rtbm.2014.11.001.

[37] Pártlová, P., Líšková, Z. D., Felcan, M., Straková, J., Váchal, J. & Polomský, J. (2020). New Approach to determining the economic potential of rural area on the example of the South Bohemian region of the Czech Republic. *Entrepreneurship and Sustainability Issues*, *8*(2), 914–931. DOI: 10.9770/jesi.2020.8.2(55).

[38] Ramseook-Munhurrun, P., Seebaluck, V. N. & Naidoo, P. (2015). Examining the Structural Relationships of Destination Image, Perceived Value, Tourist Satisfaction and Loyalty: Case of Mauritius. *Procedia – Social and Behavioral Sciences*, *175*, 252–259. DOI: 10.1016/j.sbspro.2015.01.1198.

[39] Romão, J., Neuts, B., Nijkamp, P. & Shikida, A. (2014). Determinants of trip choice, satisfaction and loyalty in an eco-tourism destination: A modelling study on the Shiretoko Peninsula, Japan. *Ecological Economics*, *107*, 195–205. DOI: 10.1016/j.ecolecon.2014.07.019.

[40] Štumpf, P. & Vojtko, V. (2016). The System Dynamics Model for Support of the Destination Management in South Bohemia. *Business Trends*, *6*(4), 43–61.

[41] Štumpf, P., Vojtko, V., McGrath, R., Rašovská, I., Ryglová, K. & Šácha, J. (2021). Destination satisfaction comparison excluding the weather effect. *Current Issues in Tourism*, ahead of print. DOI: 10.1080/13683500.2021.1968802.

[42] Sukiman, M. F., Omar, S. I., Muhibudin, M., Yussof, I. & Mohamed, B. (2013). Tourist Satisfaction as the Key to Destination Survival in Pahang. *Procedia – Social and Behavioral Sciences*, *91*, 78–87. DOI: 10.1016/j.sbspro.2013.08.404.

[43] Truțescu, M.-N. (2020). Satisfaction of Generations X and Baby Boomers with tourist services in resorts from the Subcarpathians of Oltenia, in line with sustainable tourism destination development. *Balneo Research Journal*, *11*(1), 64–73. DOI: 10.12680/balneo.2020.318.

[44] Uçar, T. & Karahoca, A. (2021). Benchmarking data mining approaches for traveler segmentation. *International Journal of Electrical and Computer Engineering (IJECE)*, *11*(1), 409–415. DOI: 10.11591/ijece.v11i1.pp409-415.

[45] Vajčnerová, I., Žiaran, P., Ryglová, K. & Andráško, I. (2014). Quality Management of the Tourist Destination in the Context of Visitors' Satisfaction. *Procedia Economics and Finance*, *12*, 718–724. DOI: 10.1016/S2212-5671(14)00398-0.

[46] Vojtko, V., Štumpf, P., Rašovská, I., McGrath, R. & Ryglová, K. (2022). Removing Uncontrollable Factors in Benchmarking Tourism Destination Satisfaction. *Journal of Travel Research*, 61(1), 136–149. DOI: 10.1177/0047287520971047.

[47] Wöber, K. W. & Fesenmaier, D. R. (2004). A Multi-Criteria Approach to Destination Benchmarking. *Journal of Travel & Tourism Marketing*, *16*(2–3), 1–18. DOI: 10.1300/J073v16n02_01.

[48] Wu, G. (2020). The Impact of Tourists' Environmental and Climate Satisfaction on Environmental Restoring Awareness in Seashore Tourist Resort. *Journal of Coastal Research*, *115*(sp1), 208–210. DOI: 10.2112/JCR-SI115-065.1.

[49] Xiang, Z., Kothari, T., Hu, C. & Fesenmaier, D. R. (2007). Benchmarking as a Strategic Tool for Destination Management Organizations: A Proposed Framework. *Journal of Travel & Tourism Marketing*, *22*(1), 81–93. DOI: 10.1300/J073v22n01_06.

[50] Zhang, H. Q., Ren, L., Shen, H. & Xiao, Q. (2013). What contributes to the success of Home Inns in China? *International Journal of Hospitality Management*, *33*, 425–434. DOI: 10.1016/j.ijhm.2012.11.002.

## Other sources

[51] *JCCR*. (n.d.). Retrieved 22 October 2021, from https://www.jccr.cz/jizni-cechy/turisticke-oblasti.