**UNDERSTANDING TOURIST SPENDING ON CULTURE AND ENTERTAINMENT**

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***ABSTRACT***

*The aim of this study is to find out what are the determinants of tourist expenditure on culture and entertainment in two urban destinations (Rijeka and Opatija, Croatia). Tourists in these destinations spent most of their budget on accommodation (47%) and on food and beverages (21%). However, due to the fact that expenditure on culture and entertainment accounts for only 10% of their total daily tourist expenditure per person, it was deemed important to find ways to enhance that level of spending. Considering that both towns, despite being urban destinations, have strong seasonality issues, it is necessary to make some changes in their tourism offerings in terms of innovations and attractiveness. As a result, tourists would not be motivated to travel there just for the sun and sea, but also for a wide range of cultural and entertainment opportunities. If the latter elements are enhanced and better presented, tourists would be more satisfied and, consequently, would spend more on these attributes of the offering.*

*To achieve the main objective of this study, a tourist on-site survey was conducted from January to December 2016. The assessment was carried out on a sample of 824 tourists who visited and spent at least one night in these towns. The methodology included descriptive statistics, paired sample t-test, principal components analysis (PCA) and regression analysis. To obtain the frequencies, descriptive statistical analysis was performed on the socioeconomic, demographic and travel-related variables. The t-test was performed to find out whether there are any significant differences between importance and satisfaction levels on attributes referring to culture and entertainment. The PCA was applied to identify the dimensions of tourist satisfaction and a regression analysis was carried out for the purpose of identifying the factors that influence expenditure on culture and entertainment.*

*T-test results confirmed that all attributes of the destination offering referring to culture and entertainment have statistically significant negative gap scores, indicating that satisfaction with those attributes is less than their importance to the respondents. The PCA resulted in a clear structure of five satisfaction components, which were labelled as follows: first component – ‘traffic and information availability’; second component - ‘environment’; third component - ’activity opportunities’; fourth component - ‘facilities quality’ and fifth component – ‘hospitality’. The third and fourth components encompassed elements that are related to cultural and entertainment opportunities. Nevertheless, all five components were used in the regression analysis. The findings indicate that age, length of stay, educational level, type of accommodation, transportation means, daily expenditure, and satisfaction with traffic and information availability significantly influence the expenditure on culture and entertainment in these urban destinations.*

*This study has practical implications since destination management can base their future decisions on its results. Results clearly indicate that the diversity of cultural events and the presentation of cultural and historic heritage as well as entertainment opportunities fail to meet the tourists’ expectations. Hence, further improvements are necessary to increase the tourists’ satisfaction and their expenditure level.*

***Keywords:*** *culture, entertainment, tourist expenditure, tourist satisfaction, tourist spending*

**1 INTRODUCTION**

This study focuses on tourist expenditure on culture and entertainment in Rijeka and Opatija, Croatia. Since this expenditure segment accounts for only 10% of total daily tourist expenditure per tourist, the main purpose was to investigate what factors affect its level. It is evident that expenditure on these tourism offering elements is very low and by obtaining information on expenditure determinants it would be possible to find ways to increase this level in order to enhance the economic impact of tourism for the whole destination. Opatija and Rijeka form a unique Adriatic Sea destination because of their close proximity to each other (just a 20 minutes’ drive apart), but their tourism settings are different. Opatija is a town with a long tourism tradition and a rich tourism infrastructure. Rijeka is more of an urban tourism destination that has just recently started focusing on tourism development. Due to the fact that the main motivation for coming to these destinations is the sea and sun, both destinations have high seasonal tourism traffic, with the majority of arrivals registered from June to September. Hence, to prolong the tourism season, strategic planning documents foresee the development of different forms of special-interest tourism (e.g. cultural tourism, MICE, health tourism). Therefore, it is evident that the offerings of these towns need to be upgraded and modified. Doing so is expected to boost their tourist expenditure levels. In addition to enriching the offering elements that do not focus directly on the sun and sea offering, it is necessary to investigate the factors that influence the tourist expenditure level and structure. As Lin et al. (2015) underlined, understanding the tourists’ expenditure patterns will lead to the identification of profitable market segments and to the definition of adequate market segmentation strategies, that will, ultimately, lead to the greater economic impacts of tourism. The literature review shows there is still a need to conduct research on tourist expenditure since most of the research has been done on the macro level and less, on the micro level (Brida and Scuderi, 2013; Disegna and Osti, 2016; Fredman, 2008, Marrocu et al. 2015). Moreover, with regard to micro data, the majority of researchers have tested the relationship between total expenditure (per day, per trip or per person) and different types of variables. A smaller number of authors have focused on testing the relationship between tourist expenditure on culture and/or entertainment and different possible determinants. This study aims to fill that literature gap by providing evidence of a significant relationship between various characteristics and attitudes of tourists and their expenditure level on culture and entertainment.

**2 LITERATURE BACKGROUND**

A substantial body of research on tourist expenditure has been devoted to investigating the relationship between its level and different variables (Brida and Scuderi, 2013; Disegna and Osti, 2016; Marcussen, 2011; Marrocu et al. 2015; Thrane, 2014, 2016). However, the majority of previous studies have used macro-level data (Brida & Scuderi, 2013; Craggs & Schofield, 2009; Fredman, 2008). As Belenkiy and Riker (2013) point out, the advantage of using micro data is that these data report information on the tourism expenditures of individual tourists, together with their different characteristics. Such data are usually obtained through different surveys as they are not available from official statistics. According to the recent extensive reviews on tourist expenditure determinants (e.g. Brida and Scuderi, 2013; Marcussen, 2011; Mayer and Vogt, 2016), tourist expenditure research can be divided into a) on-site studies (where the tourists’ total trip expenditure is used as a dependent variable in the regression models) and b) household studies (that are focused on a household’s total trip expenditure) (Thrane, 2016). This research fits into the first group of studies since it uses the results of an on-site survey, with respondents being tourists visiting Rijeka and Opatija who reported on the level and structure of their expenditure in the destinations.

Tourist expenditure levels in previous studies are usually expressed either as total expenditure for the whole trip (that could also be expressed per party, per household or per person), or as daily expenditure (again, per person or per party) (Brida and Scuderi, 2013). This study uses daily tourist expenditure per person and follows the econometric practice, using the natural logarithm of expenditure just as it was used by other authors, such as García-Sánchez et al. (2013), Marrocu et al., (2015) or Thrane, (2014, 2016). In terms of methodology, most tourism expenditure studies (e.g. Fredman, 2008; Legohérel and Wong, 2006; Marcussen, 2011 and others) have employed ordinary least squares regression analysis (OLS), as does this study.

In the literature, possible tourist expenditure determinants usually fall into three broad groups (Brida and Scuderi, 2013; Marcussen, 2011; Marrocu et al., 2015; Thrane, 2016). The first group refers to variables related to economic and sociodemographic characteristics (age, gender, income, educational level, occupation, origin, etc.); the second, to trip-related characteristics (length of stay, accommodation type, transportation mode, type of trip organisation, etc.) and the third, to psychographic characteristics (attitudes, satisfaction levels, etc.). The first two groups of variables are the most commonly employed in previous studies that focus on investigating tourist expenditure determinants, while the psychographic variables are rarely used in the models (Brida and Scuderi, 2013).

Income is one of the most often used economic and sociodemographic characteristics, and the majority of studies have proved it to be a statistically positive predictor of tourist expenditure (e.g. Fredman, 2008; García-Sánchez et al., 2013; Marrocu et al., 2015; Thrane, 2014; 2016). When sociodemographic characteristics are concerned, age is used the most in the models. The results of those models, however, are often in conflict. Namely, the results of certain studies confirm age as a significant predictor of tourist expenditure. For example, Jang et al. (2004) and Jones et al. (2009) have found a positive relationship, while Chhabra (2006) and Wang et al. (2006) have confirmed an inverse relationship. The situation is similar in the case of educational level as well: Aguilo and Juaneda Sampol (2000) and Jang et al. (2004) found a positive relationship between educational level and tourist expenditure, while Nicolau and Más (2005) did not find a statistically significant relationship.

When it comes to trip-related variables, length of stay is one of the most widely used variables. With regard to daily expenditure, the results of many studies show the negative effect of length of stay on daily expenditure (Disegna and Osti, 2016; Kastenholz, 2005; Mayer and Vogt, 2016; Svensson et al., 2011). Further, in case of trip organisation, Chen and Chang (2012) and Mayer and Vogt (2015) confirmed that tourists, who individually organise their trips and stay, tend to spend more in comparison with those who use travel agency services. The type of accommodation is another variable that has very often been included in models as a possible predictor of tourist expenditure. Many studies have confirmed, for instance, that tourists staying in hotels spend more than those staying in other types of accommodation (Agarwal and Yochum, 1999; García-Sánchez et al., 2013; Svensson et al., 2011). Additionally, some authors reported a significant relationship between transportation mode and tourist expenditure as well (Fredman, 2008; Marcussen, 2011; Svensson et al., 2011).

Finally, the last group refers to psychographic variables, which are the least included in studies on tourist expenditure determinants (Brida and Scuderi, 2013). Among them, motivation is the most employed variable, while others, like satisfaction with an offering or taste, are rarely employed. Hence, more research needs to be conducted in order to made sound conclusions in this regard. Therefore, this study includes satisfaction variables and tests their relationship with tourist expenditure on culture and entertainment.

It is evident that different studies have reported ambiguous results, since certain variables turned out to be significant predictors of tourist expenditure in some studies, but not in others. In addition, certain variables in some studies were found to be statistically positively related to expenditure, although a negative relationship was found in other studies (Wang and Davidson, 2010). Moreover, the majority of studies focus on overall expenditure determinants, while few studies focus on tourist expenditure on specific cost components. This study belongs to latter group, since it focuses on identifying the determinants of tourist expenditure on culture and entertainment.

**3 DATA COLLECTION AND METHODOLOGY**

Data for this study were collected between January and December 2016. In total, 1467 respondents were randomly selected, aged 18 years and older. Among them, 1249 respondents, who spent at least one night in Rijeka or Opatija, agreed to participate as respondents in this study. Since the main purpose of this paper is to identify the determinants of tourist expenditure on culture and entertainment, only those respondents who spent a certain amount of money on those elements were included in the analyses. Hence, due to the fact that some of the respondents reported zero expenditure on culture and entertainment, a total of 824 questionnaires were used for the analysis.

The questionnaires were available to the respondents in Croatian, English, German and Italian. The goal of the questionnaire was to explore the tourists’ profile in terms of their sociodemographic and travel characteristics, and their level of satisfaction with towns’ tourism offerings during different seasons. The main part of the questionnaire refers to the structure and level of the respondents’ expenditure in the destination.

*Table 1: Sociodemographic characteristics of the sample (N=824)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Characteristic***  | ***%*** |  | ***Characteristic***  | ***%*** |
| ***Country of Origin*** |  |  | ***Gender***  |  |
|  *Croatia* | *22.6* |  |  *Male*  | *45.3* |
|  *Germany* | *14.1* |  |  *Female*  | *54.7* |
|  *Italy* | *14.1* |  | ***Educational level*** |  |
|  *Austria*  | *12.1* |  |  *Elementary school* | *0.6* |
|  *Other* | *8.3* |  |  *High school* | *34.1* |
|  *Slovenia* | *7.3* |  |  *College* | *33.0* |
|  *UK* | *3.6* |  |  *University degree* | *31.7* |
|  *Hungary* | *3.5* |  |  *Other* | *0.6* |
|  *Bosnia and Herzegovina* | *2.2* |  | ***Average monthly income*** |  |
|  *Poland* | *2.2* |  |  *up to 500€* | *3.5* |
|  *France* | *1.9* |  |  *501-1000€* | *10.8* |
|  *Holland* | *1.5* |  |  *1001-1500€* | *20.1* |
|  *Czech Republic* | *1.3* |  |  *1501-2000€* | *20.8* |
|  *Slovakia* | *1.3* |  |  *2001-2500€* | *16.1* |
|  *Sweden* | *1.3* |  |  *2501-3000€* | *12.7* |
|  *USA* | *1.0* |  |  *3001-3500€* | *8.7* |
|  *Belgium* | *0.6* |  |  *3500€ or more* | *7.2* |
|  *Switzerland* | *0.6* |  | ***Age*** *(mean) 40.2* |  |
|  *Norway* | *0.5* |  |  |  |

As seen in Table 1, domestic and foreign tourists make up 22.6% and 77.4% of the sample, respectively, which stands to reason since foreign tourists account for more than 80% of overall arrivals in Opatija and Rijeka (Croatian Bureau of Statistics, 2017). Among foreign respondents, the most numerous are those from Germany and Italy (14.1% of the sample, each) and those from Austria (12.1% of the sample). The majority of the sample comprises respondents who hold high school or college degrees (34.1% and 33.0%, respectively). The majority of respondents (40.9%) have an average monthly household income between 1001 and 2000€. Table 1 also shows that more than half (54.7%) of the respondents were females and that the average age of respondents was 40.

*Table 2: Respondents’ trip-related characteristics (N=824)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Characteristic***  | ***%*** |  | ***Characteristic***  | ***%*** |
| ***Trip organisation***  |  |  | ***Motives (multiple answers possible)*** |  |
|  *Individually* | *73.7* |  | *Rest and relaxation* | *22.3* |
|  *Organized* | *26.3* |  | *Fun* | *14.7* |
| ***Transportation mode*** |  |  | *New experiences* | *13.0* |
|  *Car* | *55.5* |  | *Gastronomy* | *8.8* |
|  *Bus* | *31.2* |  | *The beauty of nature and landscapes* | *11.9* |
|  *Train* | *4.1* |  | *Visiting relatives/ friends* | *4.7* |
|  *Boat* | *0.4* |  | *Sports and recreation* | *4.2* |
|  *Plane* | *8.1* |  | *Health reasons* | *2.6* |
|  *Motorbike* | *0.7* |  | *Cultural offering* | *6.7* |
| ***Travelling***  |  |  | *Shopping* | *4.3* |
|  *Alone* | *14.6* |  | *Wellness* | *4.4* |
|  *With partner* | *35.9* |  | *Business* | *1.7* |
|  *With family members* | *29.1* |  | *Other* | *0.8* |
|  *With friends/acquaintances* | *18.4* |  | ***Season of visit*** |  |
|  *With associates* | *1.9* |  |  *Season (June – September)* | *41.5* |
| ***Accommodation***  |  |  |  *Off-season* | *58.5* |
|  *Hotel*  | *50.5* |  | ***Intention to return*** |  |
|  *Tourist resort* | *1.9* |  |  *No* | *7.6* |
|  *Campsite* | *2.8* |  |  *Yes* | *92.4* |
|  *Private accommodation* | *25.6* |  | ***Intention to recommend*** |  |
|  *Friends/relatives* | *10.6* |  |  *No* | *2.8* |
|  *Hostel* | *8.6* |  |  *Yes* | *97.2* |
| ***Accommodation service*** |  |  | ***Town*** |  |
|  *Full board* | *14.0* |  |  *Opatija* | *66.0* |
|  *Half board* | *29.4* |  |  *Rijeka* | *34.0* |
|  *Bed and breakfast* | *20.6* |  |  |  |
|  *Only overnight stay* | *36.0* |  |  |  |

Table 2 reports descriptive statistics on the characteristics of the respondents’ trip and stay in Rijeka and Opatija. The results indicate that most (73.7%) of the respondents organised the trips by themselves whereas 26.3% made use of travel intermediaries. The majority (55.5%) came to the destination by car and by bus (31.2%). Most of the respondents (35.9%) travelled with a partner and 14.6% travelled alone. The majority (50.5%) were found to be staying in hotels, while 25.6% chose private accommodation. In addition, most of them decided on a single overnight stay (36.0%) and 26.4% of the respondents opted for half board within the accommodation premises. As to the motivation for travelling to Opatija and Rijeka, 22.3% were in the destination for rest and relaxation, 14.7% for fun, 13.0% for new experiences, and 11.9% for the beauty of nature and landscapes. However, only 6.7% of the respondents visited these towns because of their cultural offerings. A larger number of respondents stayed in Opatija (66.0%) since this town accommodates more tourists than Rijeka. An interesting finding is related to the season of visit. Opatija and Rijeka are hosts to the majority of tourists during the high season (from June to September). Accordingly, based on the data obtained from the Croatian Bureau of Statistics and in order to obtain a representative sample, more tourists were interviewed during the high season. However, for the purpose of this paper only those respondents who reported expenditure on culture and entertainment were taken into account, and it was found that the majority of respondents spending on these offering elements stayed in Rijeka and Opatija in the off-season (58.5%). On the contrary, when the whole sample was analysed (1249 respondents), it showed that the majority of respondents (51.6%) stayed during the high season. This is a very important finding for these towns, considering that they are up against heavy seasonality issues and see cultural tourism as one of the ways of prolonging the tourism season.

Survey participants were asked to estimate their spending across seven categories including accommodation, food and beverages outside the accommodation facilities, culture and entertainment, sport and recreation, shopping, excursions, and other services. Table 3 reports on the respondents’ expenditure level and structure. It has to be noted that, in this study, the expenditure on the way to the destination and back was excluded from the tourists’ expenditure since the focus of the analysis was only on the expenditure that is realised in the destination.

*Table 3: Respondents’ daily expenditure in € (N=824)*

|  |  |  |
| --- | --- | --- |
| **Category** | **Mean** | **%** |
| *Accommodation*  | *38.7* | *47.5* |
| *Food and beverages* | *16.9* | *20.8* |
| *Culture and entertainment*  | *8.5* | *10.4* |
| *Sport and recreation* | *1.6* | *2.0* |
| *Shopping* | *9.7* | *12.0* |
| *Excursions* | *3.2* | *3.9* |
| *Other products and services* | *2.7* | *3.3* |
| *Daily expenditure/person* | *81.4* | *100.0* |

As seen in Table 3, respondents spend on average 81.4€ per day per person in the destination. A large portion of their daily expenditure refers to expenditure on accommodation (47.5%) and on food and beverages (20.8%). They spend the least on excursions, only 3.9% of their budget. The main focus of this paper is the respondents who spend on culture and entertainment, and the results show that this expenditure accounts for only 10.4% of the tourists’ daily budget. From this expenditure structure it is evident that the offerings of Rijeka and Opatija are still weak when it comes to different entertainment, cultural, excursion-related, and sport and recreational opportunities. Therefore, it is necessary to upgrade and innovate this part of their tourism offerings and make them more appealing in order to attract tourists to experience these elements more often.

**4 ANALYSIS AND FINDINGS**

In addition to reporting their sociodemographic and trip-related characteristics, respondents were asked to rate the importance of, and satisfaction with, 22 different elements. Table 4 presents the importance and satisfaction mean scores, gap scores, as well as the results of the paired sample t-test that was performed on the five elements of the offering that are related to entertainment and culture and to the information provided on them. Respondents rated their importance and satisfaction level on a 5-point Likert scale, with 1 being ‘strongly dissatisfied’ and 5 being ‘strongly satisfied’.

*Table 4: Difference between importance and satisfaction (N=824)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attributes** | Mean | Gap score | t | df | Sig.(2-tailed) |
| Satisf. | Import. |
| *Quality of information on the destination’s website* | *3.92* | *4.27* | *-0,35* | *10.711* | *823* | *0.000* |
| *Clearly signposted tourist directions in the destination* | *3.94* | *4.23* | *-0,29* | *8.566* | *823* | *0.000* |
| *Presentation of the cultural and historical heritage* | *4.07* | *4.26* | *-0,19* | *5.980* | *823* | *0.000* |
| *Diversity of cultural events* | *3.77* | *4.16* | *-0,39* | *10.865* | *823* | *0.000* |
| *Entertainment opportunities* | *3.75* | *4.19* | *-0,44* | *12.007* | *823* | *0.000* |

Note: Mean values range from 1 (extremely unsatisfied/ unimportant) to 5 (extremely satisfied/ important). Gap score - the mean importance score for each attribute is subtracted from the respective mean satisfaction score.

Results indicate that, of the analysed offering attributes, the respondents are the most satisfied with “presentation of the cultural and historical heritage” (average satisfaction rate is 4.07) and the least satisfied with “diversity of cultural events” (3.75) and “entertainment opportunities” (3.75). Furthermore, according to the results, respondents consider “quality of information on the destination’s website” and “presentation of the cultural and historical heritage” to be the most important elements for them, since their mean importance ratings are 4.27 and 4.26, respectively (Table 4). Gap scores were calculated by subtracting the mean importance score for each attribute from the respective mean satisfaction score. Unfortunately, a negative gap score was calculated for all elements. As Levenburg and Magal (2004) pointed out, a negative gap score indicates that satisfaction with a certain attribute is less than its importance. In addition to that, the results of the paired-sample t-test reveal that the gap differences are statistically significant, meaning that differences between the respondents’ perceived importance and satisfaction with all five analysed elements are significant. These results indicate that elements relating to the cultural and entertainment offering are very important to tourists but need to be improved since they are not performing well.

Considering that respondents rated their satisfaction with 22 different destination attributes, principal component analysis (PCA) was performed based on the satisfaction scores of all attributes to identify the underlying dimensions of the destination attributes. The PCA, using Oblimin rotation with Kaiser normalisation, identified for the satisfaction scale, produced a five-component solution, explaining 61.9% of the variance. The Bartlett test of sphericity was significant (p<0.000), and the Kaiser-Meyer-Olkin value was 0.910, indicating that the sample is such that it would yield distinct and reliable factors (Field 2009, Hair et al. 2005).

*Table 5: Results of principal component analysis (PCA) of satisfaction with the tourism offering*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Items and principal components*** | ***Loadings*** | ***Communality*** | ***Variance explained (%)*** | ***Cumulative******(%)*** | ***Cronbach’s Alpha*** | ***Mean*** |
| ***Traffic and information availability*** | ***35.025*** | ***35.025*** | ***0.811*** | ***3.92*** |
| *Transportation links* | *0.776* | *0.581* |  |  |  |  |
| *Clearly signposted tourist directions in the destination* | *0.757* | *0.664* |  |  |  |  |
| *Availability of information in the destination* | *0.707* | *0.626* |  |  |  |  |
| *Quality of local transport* | *0.671* | *0.603* |  |  |  |  |
| *Quality of information on the destination’s website* | *0.634* | *0.551* |  |  |  |  |
| ***Environment***  | ***9.477*** | ***44.502*** | ***0.828*** | ***4.16*** |
| *Preserved environment* | *0.889* | *0.763* |  |  |  |  |
| *Cleanliness of the destination* | *0.835* | *0.700* |  |  |  |  |
| *The beauty of nature and landscapes* | *0.770* | *0.611* |  |  |  |  |
| *Equipment and maintenance of the beaches* | *0.672* | *0.592* |  |  |  |  |
| ***Activity opportunities*** | ***7.088*** | ***51.590*** | ***0.855*** | ***3.80*** |
| *Sports facilities* | *0.866* | *0.722* |  |  |  |  |
| *Excursion offering* | *0.810* | *0.644* |  |  |  |  |
| *Entertainment opportunities* | *0.796* | *0.641* |  |  |  |  |
| *Facilities for children* | *0.688* | *0.578* |  |  |  |  |
| *Shopping opportunities* | *0.681* | *0.480* |  |  |  |  |
| *Diversity of cultural events* | *0.454* | *0.576* |  |  |  |  |
| *Value for money* | *0.402* | *0.373* |  |  |  |  |
| ***Quality*** | ***5.476*** | ***57.066*** | ***0.731*** | ***4.12*** |
| *Quality of accommodation facilities* | *0.832* | *0.726* |  |  |  |  |
| *Quality of catering facilities* | *0.788* | *0.668* |  |  |  |  |
| *Quality of cultural and historical heritage presentation* | *0.608* | *0.577* |  |  |  |  |
| ***Hospitability***  | ***4.873*** | ***61.939*** | ***0.760*** | ***4.29*** |
| *Cordiality of employees in tourism* | *-0.731* | *0.711* |  |  |  |  |
| *Feeling of personal safety and security* | *-0.728* | *0.649* |  |  |  |  |
| *Friendly and hospitable residents* | *-0.566* | *0.591* |  |  |  |  |

Note: Rotation method: Oblimin with Kaiser normalization. Mean values range from 1 (strongly unsatisfied) to 5 (strongly satisfied).

As seen in Table 5, most of the factor loadings were greater than 0.60, indicating good correlations between the items and the factor groupings to which they belong (Kozak and Rimmington, 2000). Further, the first component (explaining 35.0% of the variance in the model) encompassed attributes related to transportation, traffic and information availability and was labelled ‘Traffic and information availability’. The second component, labelled ‘Environment’, explained 9.5% of the variance and was composed of four items (environment preservation, cleanliness, beauty of nature, and maintenance). Aspects related to the different facilities in the destination were labelled ‘Activity opportunities’ and explained 7.1% of the variance in the model. The forth component, labelled ‘Quality’, explained 5.5% of the variance and was loaded with three items. The last component was labelled ‘Hospitability’ and was loaded with three items related to a feeling of personal safety and security, and the residents and employees’ cordiality and hospitability (Table 5). Furthermore, the results showed that the α coefficients of the five components ranged from 0.731 to 0.855, thus exceeding the value of 0.70, suggesting good levels of reliability (Baggio and Klobas, 2011). Table 5 also reports the mean satisfaction ratings of the five components. The results indicate that the most satisfactory component for the respondents is ‘Hospitability’, since its mean satisfaction rating is 4.29, followed by ‘Environment’ (mean score 4.17) and ‘Quality’ (mean score 4.12). The results show that the least satisfactory components are those referring to the ‘Activity opportunities’ (mean score 3.8) and to ‘Traffic and information availability’ (mean score 3.92), again indicating that these are the attributes that need the destination management’s attention and improvements in the future. In line with the presented results, the five components can be considered reliable dimensions of satisfaction with the tourism offering and can be used in the following regression analysis.

Based on the results of the PCA, a regression analysis was performed using the five components as independent variables in addition to age, educational level, average household income, season of visit, trip organisation, length of stay, transportation mode, accommodation type, and average daily expenditure as the independent variables. Following the econometric practice and use of the natural logarithm of expenditure rather than level values (e.g. García-Sánchez et al., 2013; Marrocu et. al., 2015; Thrane, 2014; 2016), the natural logarithm of average daily expenditure on culture and entertainment per person was used as the dependent variable.

The regression results are summarized in Table 6. Due to the fact that no VIF values exceeded 10.0, and the values of tolerance indicated that in no case did collinearity explain more than 10% of any predictor variable’s variance, it can be concluded that there was no evidence of multi-collinearity in the model (Zhang et al., 2010). The R2 was 0.340, which showed that 34% of the variance in the respondents’ expenditure on culture and entertainment was explained by the selected independent variables.

*Table 6: Regression model*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Model* |  |  | *Unstandardized Coefficients* | *t* | *Sig.* | *Collinearity Statistics* |
| *B* | *Std. Error* | *Tolerance* | *VIF* |
| *(Constant)* | *-1.342* | *0.350* | *-3.833* | *0.000* |  |  |
| *Age* | *-0.006* | *0.002* | *-2.790* | *0.005* | *0.839* | *1.191* |
| *Educational level* | *0.080* | *0.034* | *2.395* | *0.017* | *0.859* | *1.164* |
| *Average monthly household income* | *-0.003* | *0.017* | *-.195* | *0.845* | *0.744* | *1.344* |
| *Season vs. off-season* | *0.030* | *0.059* | *.513* | *0.608* | *0.801* | *1.248* |
| *Trip organisation* | *-0.095* | *0.069* | *-1.386* | *0.166* | *0.744* | *1.345* |
| *Length of stay* | *-0.035* | *0.005* | *-7.067* | *0.000* | *0.934* | *1.071* |
| *Transportation mode* | *0.123* | *0.058* | *2.129* | *0.034* | *0.825* | *1.212* |
| *Accommodation*  | *0.480* | *0.061* | *7.903* | *0.000* | *0.743* | *1.346* |
| *Traffic and information availability* | *0.176* | *0.057* | *3.102* | *0.002* | *0.546* | *1.831* |
| *Environment* | *-0.092* | *0.049* | *-1.883* | *0.060* | *0.673* | *1.487* |
| *Activity opportunities* | *-0.091* | *0.051* | *-1.763* | *0.078* | *0.561* | *1.783* |
| *Quality* | *0.015* | *0.052* | *0.287* | *0.774* | *0.619* | *1.615* |
| *Hospitality* | *-0.082* | *0.048* | *-1.711* | *0.087* | *0.673* | *1.486* |
| *Average daily expenditure (log)* | *0.793* | *0.052* | *15.293* | *0.000* | *0.778* | *1.285* |

Note: R2 = 0.340; F(14, 808) = 29.772; p < 0.001; dependent variable: log daily expenditure on culture and entertainment per person; VIF - variance inflation factors.

Out of fourteen dependent variables, seven turned out to be significant predictors of the expenditure on culture and entertainment. The findings show that there is a negative relationship between age and the dependent variable, indicating that younger respondents tend to spend less on culture and entertainment that older ones. Marrocu et al. (2015) also found a negative effect of age but only in the case of food expenditure. Furthermore, findings of this study confirm previous evidence on the relevance of educational level as one of the predictors of tourist expenditure. For example, Legohérel and Wong (2006) found a negative relationship, while Rao (2001) found a positive relationship, between educational level and tourist expenditure. In this study, it was found that respondents with a higher educational level tend to spend more on culture and entertainment in the destination in comparison with those with a lower educational level. As expected, a statistically significant negative relationship was determined between the length of stay of respondents and their daily expenditure on culture and entertainment (Table 6). This result is in line with those obtained by Alegre et al. (2011), Disegna and Osti (2016) and Mehmetoglu (2007), who also found a negative relationship between length of stay and daily expenditure

Furthermore, the findings indicate that respondents who travelled to the destination by car tended to spend more on culture and entertainment than those who arrived by some other mode of transportation. The results also indicate that those staying in a hotel tended to spend less on culture and entertainment than those staying in other types of accommodation. These results are the opposite of those obtained by García-Sánchez et al. (2013) and Svensson et al. (2011). It was also found, as expected, that respondents with higher total daily expenditure tend to spend more on culture and entertainment.

Out of the five components of satisfaction, only the one referring to traffic and information availability has been proved to be a statistically significant predictor of daily expenditure on culture and entertainment. Hence, it is very important to provide quality transportation links and local transport, as well as to ensure more clearly signposted tourist directions in the destination, better availability of information in the destination and higher quality of information on the destination’s website. By doing so, tourists will obtain better information on the destination’s cultural and entertainment offering and, in turn, should be more attracted to consume those offering elements.

The findings also indicate that household income was not a significant predictor of the expenditure on culture and entertainment. Similarly, in their studies, Akca et al. (2016) as well as Mustika et al. (2016) found that income is not a significant factor of expenditure. In addition to income, season of visit, trip organisation, and satisfaction with the other four components (Environment, Activity opportunities, Quality, and Hospitality) turned out not to be significant predictors of expenditure on culture and entertainment.

All the results indicate that, to be able to reach a conclusion about what factors affect the level of expenditure on culture and entertainment, additional research still needs to be carried out in different settings and different destinations. The results of this study confirm that the level of this type of expenditure is still very low, indicating the need for destination management to enrich and innovate the attributes relating to the entertainment and cultural offering and to provide better information about them.

**5 CONCLUSION**

Given the importance of tourism in Croatia, in addition to knowing the main information on tourist arrivals and overnight stays, understanding tourism expenditure patterns is vital for tourism destination management and planning. This study sought to explore the determinants of tourist expenditure on culture and entertainment. The results confirmed that the level of the overall expenditure is low, and that its structure is not optimal since the bulk of the tourists’ budget goes towards accommodation and food and beverages. Moreover, findings revealed that the level of expenditure on culture and entertainment is very modest (representing only 10% of overall tourist budget) and that some changes are necessary in order to enhance tourist spending in the destination. An interesting finding was that the majority of tourists, who spend on culture and entertainment, visit Rijeka and Opatija in the off-season (58.5%). This implies that the elements of the offering relating to culture and entertainment are of great importance for smoothing tourism seasonality. However, results also indicate that tourist satisfaction with the destination offering’s attributes relating to culture and entertainment is less than the attributes’ importance, indicating low tourist satisfaction. These results also confirm the necessity of innovating and enriching the cultural and entertainment offering. So, tourists would not be motivated to come to Opatija and Rijeka only by the sun and sea, but also by a wide range of cultural and entertainment opportunities. If these elements were enhanced and better presented, tourists would be more satisfied and, consequently, would spend more on them.

Additionally, the findings indicate that younger respondents tend to spend less on culture and entertainment that older ones. Furthermore, respondents with a higher educational level and those who came to the destination by car tend to spend more on the mentioned elements. It was also found that respondents staying in a hotel tend to spend less on culture and entertainment than those staying in other accommodation types, although many studies researching the determinants of overall expenditure found just the opposite (for example, García-Sánchez et al., 2013; Svensson et al., 2011). Another important finding was that satisfaction with transportation links, availability of information in the destination, quality of information on the destination’s website and clearly signposted directions in the destination have also been proven to be statistically significant predictors of daily expenditure on culture and entertainment.

This study has practical implications since destination management can base their future decisions on its results. Results clearly indicate that the diversity of cultural events, the presentation of cultural and historical heritage, and entertainment opportunities do not meet the tourists’ expectations. Hence, further improvements are necessary to enhance the tourists’ satisfaction and raise their expenditure level. Therefore, the results could serve as guidelines to future destination-management activities that should focus on the enrichment of the destination’s cultural and entertainment offering as well as on improving its promotion. Furthermore, a better understanding of tourist expenditure on culture and entertainment can provide a more accurate assessment of the economic impact of tourism, which in turn should help in the design and implementation of effective policies/measures for increasing the overall economic benefits of tourism (Wu et al. 2013).

The main limitation of this study refers to the fact that the research was conducted in a restricted specific geographic area (Rijeka and Opatija). Hence, it would be useful if similar surveys were conducted in other towns in order to compare results and gain a more objective understanding of expenditure on culture and entertainment. In addition, as the presented regression model does not take account of all possible variables, models that take certain other variables into consideration (for example, motivations, type of trip organisation, being first or repeat visitors) might lead to an even better understanding of tourist expenditure.

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**6 BIBLIOGRAPHY**

1. Agarwal, V. B., and Yochum, G. R. (1999). Tourist spending and race of visitors. *Journal of Travel Research,* Vol. 38, No. 2, pp. 173–176.
2. Aguilo Perez, E. and Juaneda Sampol, C. (2000). Tourist expenditure determinants for mass tourism markets. *Annals of Tourism Research*, Vol. 27, No. 3, pp. 624–637.
3. Akca, H., Sayili, M. and Cafri R. (2016). Analysing expenditure of same-day visitors in cave tourism: the case of Turkey. *Tourism Economics*, Vol. 22, No. 1, pp. 47–55.
4. Alegre, J., Cladera, M., and Sard, M. (2011). Analysing the influence of tourist motivations on tourist expenditure at a sun-and-sand destination. *Tourism Economics*, Vol. 17, No. 4, pp. 813–832.
5. Baggio, R. and Klobas, J. (2011). *Quantitative methods in tourism: A handbook*. Bristol: Channel View Publications.
6. Belenkiy, M., and Riker, D. (2013). Modeling the international tourism expenditures of individual travellers*. Journal of Travel Research*, Vol. 52, No. 2, pp. 202–211.
7. Brida, J. G., and Scuderi, R. (2013). Determinants of tourist expenditure: A review of microeconometric models. *Tourism Management Perspectives*, Vol. 6, pp. 28–40.
8. Chen, C.-M. and Chang, K-L. (2012). The influence of travel agents on travel expenditures. *Annals of Tourism Research*, Vol. 39, No. 2, pp. 1258-1263.
9. Chhabra, D., Sills, E., and Rea, P. (2002). Tourist expenditures at heritage festivals. *Event Management*, Vol 7, No 4, pp 221–230.
10. Craggs, R., and Schofield, P. (2009). Expenditure-based segmentation and visitor profiling at the quays in Salford, UK. *Tourism Economics*, Vol. 15, No. 1, pp. 243–260.
11. Croatian Bureau of Statistics (2018). Retrieved 02.01.2018. from <http://www.dzs.hr/default_e.htm>
12. Disegna, M. and Osti, L. (2016). Tourists’ expenditure behaviour: the influence of satisfaction and the dependence of spending categories. *Tourism Economics*, Vol. 22, No. 1, pp. 5–30.
13. Field, A. (2009). *Discovering Statistics using SPSS* (Third Edition). London: Sage Publications.
14. Fredman, P. (2008). Determinants of visitor expenditure in mountain tourism. *Tourism Economics*, Vol. 14, No. 2, pp. 297–311.
15. García-Sánchez, A., Fernández-Rubio, E. and Collado, M. D. (2013). Daily expenses of foreign tourists, length of stay and activities: Evidence from Spain. *Tourism Economics*, Vol. 19, No. 3, pp. 613–630.
16. García-Sánchez, A., Fernández-Rubio, E. and Collado, M. D. (2013). Daily expenses of foreign tourists, length of stay and activities: Evidence from Spain. *Tourism Economics*, Vol. 19, No. 3, pp. 613–630.
17. Hair, J. F., Black, B., Babin, B., Anderson, R. E., and Tatham, R. L. (2005). *Multivariate Data Analysis* (6th edition). Upper Saddle River, NJ: Prentice Hall.
18. Jang, S. C., Bai, B., Hong, G-S. and O'Leary, J. T. (2004). Understanding travel expenditure patterns: A study of Japanese pleasure travellers to the United States by income level. *Tourism Management*, Vol. 25, No. 3, pp. 331-341.
19. Jones, T., Wood, D., Catlin, J., and Norman, B. (2009). Expenditure and ecotourism: predictors of expenditure for whale shark tour participants. *Journal of Ecotourism*, Vol. 8, No. 1, 32-50.
20. Kastenholz, E. (2005). Analysing determinants of visitor spending for the rural tourist market in North Portugal. *Tourism economics*, Vol. 11, 4, pp. 555-569.
21. Kozak, M. and Rimmington, M. (2000). Tourist Satisfaction with Mallorca, Spain, as an Off-Season Holiday Destination. *Journal of Travel Research*, Vol. 38, pp. 260-269.
22. Legohérel, P., and Wong, K. K. F. (2006). Market segmentation in the tourism industry and consumers’ spending: What about direct expenditures? *Journal of Travel and Tourism Marketing,* Vol. 20, No. 2, pp. 15–30.
23. Levenburg, N. M. and Magal, S. R. (2004). Applying importance-performance analysis to evaluate e-Business strategies among small firms. *E-Service Journal*, Vol. 3, No. 3, pp. 29-48.
24. Lin, V.S., Mao, R., and Song, H. (2015). Tourism expenditure patterns in China. *Annals of Tourism Research*, Vol. 54, pp. 100-117.
25. Marcussen, C. H. (2011). Determinants of spending by Danish travellers. *Anatolia,* Vol. 22, No. 1, pp. 47-55.
26. Marrocu, E., Paci, R. and Zara, A. (2015). Micro-economic determinants of tourist expenditure: A quantile regression approach. *Tourism Management*, Vol. 50, pp. 13–30.
27. Mayer, M., and Voght, L. (2016). Economic eff ects of tourism and its influencing factors: An overview focusing on the spending determinants of visitors. *Zeitschrift fuer Tourismuswissenschaft,* Vol. 8, No. 2, pp. 169-198.
28. Mehmetoglu, M. (2007). Nature-based tourists: The relationship between their trip expenditures and activities. *Journal of Sustainable Tourism*, Vol. 15, No. 2, pp. 200–215.
29. Mustika, P. L. K., Stoeckl, N., and Farr, M. (2016). The potential implications of environmental deterioration on business and non-business visitor expenditures in a natural setting: A case study of Australia’s Great Barrier Reef. *Tourism Economics*, Vol. 22, No. 3, pp. 484–504.
30. Nicolau, J.L. and Más, F.J., (2005). Heckit modeling of tourist expenditure: Evidence from Spain. *International Journal of Service Industry Management*, Vol.16, No.3, pp. 271-293.
31. Rao, V. (2001). Celebrations as social investments: Festival expenditures, unit price variation and social status in rural India. *The Journal of Development Studies*, Vol. 38, No. 1, pp. 71–97.
32. Svensson, B., Moreno, P. and Martín, D. (2011). Understanding travel expenditure by means of market segmentation. *Service Industries Journal*, Vol. 31, No. 10, pp. 1683–1698.
33. Thrane, C. (2014). Modelling micro-level tourism expenditure: Recommendations on the choice of independent variables, functional form and estimation technique. Tourism Economics, Vol. 20, No. 1, pp. 51–60.
34. Thrane, C. (2016). The determinants of Norwegians’ summer tourism expenditure: foreign and domestic trips. *Tourism Economics*, Vol. 22, No. 1, pp. 31–46.
35. Wang, Y., and Davidson, M. C. G. (2010). A review of micro analyses of tourist expenditure. *Current Issues in Tourism*, Vol. 13, No. 6, pp. 507-524.
36. Wang, Y., Rompf, P., Severt, D. and Peerapatdit, N. (2006). Examining and identifying the determinants of travel expenditure patterns. *International Journal of Tourism Research*, Vol. 8, No. 5, pp. 333–346.
37. Wu L., Zhang, J. and Fujiwara, A. (2013). Tourism Participation and Expenditure Behaviour: Analysis Using a Scobit Based Discrete–Continuous Choice Model. *Annals of Tourism Research*, Vol. 40, pp. 1–17.
38. Zhang, L., Qu, H., and Ma, J. E. (2010). Examining the relationship of exhibition attendees’ satisfaction and expenditure: The case of two major exhibitions in China. *Journal of Convention & Event Tourism*, Vol. 11, No. 2, pp. 100–118.