

**Bruno Grbac, PhD, Full Professor**

University of Rijeka, Faculty of Economics  
I. Filipovića 4, 51000 Rijeka, Croatia  
Phone: +385 51 355 145, Fax: +385 51 212 268  
E-mail address: grbac@efri.hr

**Ana Težak, M.Econ.**

Institute of Agriculture and Tourism, Department of Tourism  
Karla Huguesa 8, 52440 Poreč, Croatia  
Phone: +385 52 408 300, Fax: +385 52 431 659  
E-mail address: tezak@iptpo.hr

**Ninoslav Luk, MSc**

Institute of Agriculture and Tourism  
Karla Huguesa 8, 52440 Poreč, Croatia  
Phone: +385 52 408 300, Fax: +385 52 431 659  
E-mail address: ninoslav@iptpo.hr

## **PROFILING TOURISTS BASED ON HEALTHY-LIVING ATTITUDES**

### ***ABSTRACT***

*Due to the increasingly competitive nature of the tourist market, tourist destinations need to design adequate and distinctive tourism offerings. In this process, the latest trends in tourism demand, such as health-care issues, are taken into consideration. Consumers' healthy-living attitudes are part of one's lifestyle, so it can be assumed that they influence the decision-making process related to travelling as a tourist. A healthy-living lifestyle has been incorporated into tourism as a new form of special interest tourism, that is, wellness tourism. The aim of this paper is to profile tourists based on the importance they place on healthy living. Results are based on primary and secondary sources. Based on the a priori segmentation mean, two groups of respondents (high and low level importance of healthy-living) were analysed. Country of origin, travel motivations, travelling party, information sources and life priorities were significant in distinguishing between the two groups.*

**Key words:** *market segmentation, tourism market, healthy-living attitude, logistic regression, Istria County*

## **1. INTRODUCTION**

In recent years, the tourist market has become very competitive, and the result is that many places, offering similar features, are becoming substitutable (Pike, 2005 in Pike, 2009). In an attempt to overcome this problem, tourist destinations are developing new marketing strategies to identify and exploit new opportunities that are attractive, economically rewarding and sustainable (Ibrahim and Gill, 2005), so different trends in tourism demand, such as health-care issues, are taken into consideration. A holistic approach to wellness incorporates healthy living, and since healthy living is considered a lifestyle, it influences tourist behaviour (Hallab et al., 2003; Kesić, 1999). This new trend on the demand side is implemented in tourism by forming a new kind of special interest tourism named wellness tourism.

The purpose of this paper was to analyse the relationship between the importance of healthy living and tourist characteristics using secondary and primary sources. The aim of this paper was to profile tourists based on the importance they place on healthy living in their everyday lives.

## **2. LITERATURE REVIEW**

Profiling is one of the phases in market segmentation. Market segmentation was first mentioned by Smith (1959) in an attempt to distinguish between two different strategies: product differentiation and market segmentation. Smith (1959, 6) defined market segmentation as “viewing a heterogeneous market (one characterized by divergent demand) as a number of smaller homogeneous markets in response to differing product preferences among important market segments”. The main purpose of market segmentation is to understand consumer behaviour and the benefit/quality they seek from different products (Datta, 1996, 798), so the goal of the analysis is to obtain homogeneity, to the greatest extent possible, within a segment, as well as greater heterogeneity between/among segments. Ever since it was created, market segmentation has been criticised and has been under development (Dolnicar, 2008; Kotler and Keller, 2008; Lee et al., 2004; Segal and Giacobbe, 1994; Sewall, 1978; Tkaczynski, 2009; Tsai and Chiu, 2004; Winter, 1979; Yankelovich, 1964).

The literature suggests that market segmentation consists of three phases: the selection of variables for segmenting the market, the profiling of segments and the validation of segments (Dibb, 1998, 395). Profiling segments consists

of identifying personal characteristics, which differ significantly between/among analysed groups (Dolnicar, 2008). Since the selection of variables for market segmentation has to be done before the profiling of segments, it is necessary to consider an adequate segmentation criterion/base. There are two approaches to segmentation: *a priori*, where respondents are grouped based on a segmentation criterion selected in advance, for example, gender, and *a posteriori*, where data is analysed in order to determine market structure (Dolnicar, 2008; Green, 1977). It is also possible to combine several different criteria (Dolnicar, 2008). *A priori* and *a posteriori* segmentation means affect the process of market segmentation in the phase of grouping versus assigning respondents to different segments, while the profiling of segments is the same in both cases.

In tourism studies, market segmentation is commonly used for determining the profiles of tourists (Tkaczynski, 2009). It can be applied to different units operating in the tourist industry, for example, hotels, travel agencies, restaurants, DMO<sup>1</sup>. According to Dolnicar (2008), market segmentation, from the perspective of a tourist destination, provides a variety of benefits. The main benefits are specialization based on the need of a particular group of tourists, achieving a competitive advantage by reducing competition due to specializing on a certain segment, focusing on developing effective messages using appropriate communication channels for the targeted segment, and increasing tourist satisfaction by more adequately meeting their needs.

The procedure of market segmentation in tourism does not differ compared to other industries, but there are certain peculiarities of the tourist market that impact on market segmentation. This impact is apparent in the first phase of market segmentation, that is, the selection of segmentation variables. Swarbrooke and Horner (2007) have proposed two segmentation criteria: “classical” segmentation criteria, which include geographic, socioeconomic, demographic, psychographic and behavioural factors, and criteria specific to tourism, for example, travel purpose, needs, motivations, benefits. According to Tkaczynski (2009), there are many different segmentation variables that are used in tourism studies, but the most commonly used are age, gender, education level and income, despite the fact that demographic factors are highly criticised (Heung et al., 2001; Johns and Gyimóthy, 2002; Jönsson and Devonish, 2008). Region/country of origin is also widely used as a

---

<sup>1</sup> DMO refers to a destination management organisation which implies both governmental/decisional and functional competences (planning, organization and control of business activities), which should be generally performed by the public sector (Manente and Minghetti, 2006). On the other hand, some authors view DMO as destination marketing organization (Pike, 2002, 2009).

segmentation criterion (Dolnicar, 2008). From the perspective of criteria specific to tourism, travel motivation is very often studied as a segmentation criterion (Bieger and Laesser, 2002; Boksberger and Laesser, 2008; Heung et al., 2001; Jönsson and Devonish, 2008; Kozak, 2002; Sangpikul, 2008).

Since socioeconomic and demographic factors are often criticised as segmentation criteria, other factors have been proposed. However, socioeconomic and demographic factors are still used in profiling segments (Grbac and Lončarić, 2010). It is argued that one's lifestyle influences consumer behaviour (Kesić, 1999). This concept was first introduced as a psychographic factor by Lazer (1963, in Vyncke, 2002). Lifestyle refers to the different elements or peculiarities, which describe the way of life of a cultural or economic group, allowing it to be distinguished from other groups (González-Fernández et al.). Although it influences consumer behaviour, that is, tourist behaviour (Kesić, 1999), lifestyle is very difficult to measure. Healthy living is considered a certain lifestyle, so it influences tourist behaviour and travelling patterns (Hallab et al., 2003).

The concept of "wellness", together with its relating philosophy, was developed by Dunn (1959; Mueller and Lanz Kaufmann, 2001), and it involved "a special state of health comprising an overall sense of well-being which sees Man as consisting of body, spirit and mind and being dependent on his environment". This term was later developed, modified and elaborated more precisely (Myers and Sweeney, 2005; Puczuk and Bachvarov, 2006; Witmer and Sweeney, 1992) so that wellness is now defined and accepted as a way of life (Myers and Sweeney, 2005; Puczuk and Bachvarov, 2006). Wellness as a way of life creates harmony in various aspects of one's health (Puczuk and Bachvarov, 2006). Since lifestyle influences consumer behaviour, including travel and tourism (Kesić, 1999), wellness, as a lifestyle, impacts on tourist behaviour (Hallab et al., 2003).

Health as a travel motivation is one of the oldest motivators in tourism (Swarbrooke and Horner, 2007). Accordingly, health tourism<sup>2</sup> is based on the prevalence of this motive among others. Wellness tourism is regarded as a subcategory of health tourism (Kim and Batra, 2009; Mueller and Lanz Kaufmann, 2001). It is pursued solely by "healthy" people, whose prime aim is preserving or promoting their health, although they may use a

---

<sup>2</sup> According to Kaspar (1996 in Mueller and Lanz Kaufmann, 2001) health tourism is "the sum of all the relationships and phenomena resulting from a change of location and residence by people in order to promote, stabilize and, as appropriate, restore physical, mental and social well-being while using health services, and for whom the place where they are staying is neither their principle nor permanent place of residence or work".

comprehensive service package<sup>3</sup> that may consist of services that are used by “normal cure guests” (Mueller and Lanz Kaufmann, 2001). Although it is a kind of market niche, this market segment is quite heterogenic. Different variables were used for segmenting this market niche: the importance of wellness services (Koh et al., 2010; Mueller and Lanz Kaufmann, 2001), benefits from wellness (Koh et al., 2010; Voigt, 2008), travel motivations (Kim and Batra, 2009; Mak et al., 2009), healthy-living attitude and behaviour (Hallab et al., 2003), AIO (Konu, 2010), and the intention of taking a wellness vacation (Konu and Laukkanen, 2009). Accordingly, different profiles of tourists were created. Some profiles were constructed by taking into account a narrow definition of wellness that included only wellness services (Kim and Batra, 2009; Koh et al., 2010; Mak et al., 2009; Mueller and Lanz Kaufmann, 2001; Voigt, 2008), while other profiles considered wellness as a lifestyle (Hallab et al., 2003; Konu, 2010; Konu and Laukkanen, 2009). Hallab et al. (2003) profiled two identified segments based on a healthy-living attitude scale. They found that High and Low Healthy-Living Conscious segments differ on all health-oriented destination attributes, concerning the importance of travel information sources and certain sociodemographic characteristics. Koh et al. (2010) determined the differences among three clusters based on gender and education level. Konu (2010) identified six clusters and found that they differed significantly based on sociodemographic characteristics, travel characteristics and activities. Konu and Laukkanen (2009) established the relationship between travel motivation and the intention of taking a well-being trip. Mak et al. (2009) identified the differences among five segments based on education level, previous experience, income and profession.

### **3. METHODOLOGY AND SAMPLE**

A study focused on tourist behaviour was conducted from July through September 2009. In this study, the target population included tourists visiting five tourist towns in Istria County: Medulin, Pula, Rovinj, Poreč and Vrsar. These sites were visited by more than 50% of tourists visiting Istria County in 2008 (Istria Tourist Board, 2008). The survey was carried out in 17 hotels through a self-completed questionnaire. Tourists were approached by a trained researcher and asked to participate in the survey. The researcher explained the purpose of the survey, said that it was anonymous and handed out a questionnaire in the appropriate language. In this process, a

---

<sup>3</sup> This package may include aspects such as physical fitness/beauty care, healthy nutrition/diet, relaxation/meditation and mental activity/ education (Mueller and Lanz Kaufmann, 2001).

convenience sample was used. Hotels were preselected based on location and capacity.

For gathering data, a questionnaire was designed. It consisted of 22 questions divided into four sections. The first section was designed to gather respondents' sociodemographic characteristics (country of origin, age, gender, income level, occupation, size of settlement, family members) and travel characteristics (first or repeat visit, length of stay and sources of information). This set of questions is usually used for profiling segments (Bieger and Laesser, 2002; Johns and Gyimóthy, 2002; Heung et al., 2001; Jönsson and Devonish, 2008; Molera and Pilar Albaladejo, 2007). The second section involved questions relating to tourists' perception of services offered and used during their vacation (Augiló et al., 2005; Marušić et al., 2005, 2008; Prasnikar et al., 2010). In the third section, respondents were asked to rate certain life priorities (Maslow, 1943; Kesić, 1999) and to choose which motivations (Augiló et al., 2005; Bieger and Laesser, 2002; Heung et al., 2001; Jönsson and Devonish, 2008; Marušić et al., 2005, 2008) were important in selecting Istria County. The last section focused on determining the extent of current crises on tourist behaviour (Glaesser, 2006). The questionnaire was originally designed in Croatian and then translated into the following languages: English, German, Italian, Russian and Slovenian.

To profile tourist based on healthy-living common sense, *a priori* segmentation was used. When doing common sense segmentation, different techniques are available for determining significant differences between/among groups, for example, analysis of variance, t-test, chi-square test or binary logistic regression (Dolnicar, 2008). According to Dolnicar (2008: 5), when bivariate analysis is used, an overestimation of significance can occur if many characteristics are available in the data set. To avoid this problem, a binary regression was used. Prior to using logistic regression, bivariate analysis (t-test and chi square test) on independent variables was conducted at 95% significance level.

The respondents were *a priori* grouped based on the importance they placed on healthy living: high, moderate and low level of importance. For the purpose of this analysis, two groups were extracted and analysed: high (healthy living is very important) and low (healthy living is rather unimportant) level of importance. The criterion, that is the dependent variable, was binary recoded (high-level importance/low level importance) so that logistic regression could be applied (Gujarati, 1988; Field, 2005).

Independent variables were settlement size (village, small town, medium size town, large town/city), travelling party (children, partner, other family members, friends), information sources (brochures, previous stay, travel agencies, Internet, radio, television, articles in newspapers, recommendations and tourism fairs), life priorities (the importance of owning a house/flat, a car/cars, clothes, the importance of taking a vacation and participating in entertainment activity), travel motivations (sun and sea, entertainment, natural sights, gastronomy, sports and recreation and cultural heritage and events), length of stay, sociodemographic characteristics (age, gender, education level, profession, and country of origin) and first/repeat visitation. A total of 28 variables were preselected based on the relevant literature. The education level variable was recoded into two groups: basic and secondary level of education and higher level of education due to the small number of respondents in certain categories. The following independent variables were significantly related to healthy-living criteria, so they were entered into the logistic regression analysis to account for the systematic overestimation of significance (Dolnicar, 2008): settlement size, travelling party (children and partner), usage of brochures, travel motivations (sun and sea, natural sights and cultural heritage and events), gender, profession, first/repeat visitation, education level, country of origin, the importance of owning a house/flat, a car/cars, clothes, the importance of taking a vacation and participating in entertainment activity. Descriptive statistics are presented in Tables 2 and 3.

#### **4. RESEARCH RESULTS**

A total of 1,130 usable questionnaires were collected. Since only two groups were analysed, 518 respondents were included in the analysis. There were slightly more respondents in the high-level importance group (58.2%) compared to those respondents in the low-level importance group (41.8%).

The share of male respondents (52%) was higher than that of female respondents (48%) (Table 1). Almost half of the respondents were between 35 and 54 years of age, while the average age was 46 years. The majority of respondents held some kind of higher education qualification (54%). Regarding the number of visits to Istria County, most respondents (50.3%) have already visited Istria County, but there is large share of first-time visitors in comparison to the number of repeat visitors, which is consistent with the results of the Tomas Summer Research (Marušić et. al, 2005, 2008). The respondents were of different backgrounds and occupations; most of the respondents stated they were employees (51%), while about 17% were managers and about 13%, entrepreneurs/owners. Most of the respondents

were from Germany (26%), 17% from Austria, 12% from Italy, more than 16% from the UK, and almost 10% from Russia. Almost half of the respondents said that their personal net monthly income was between 1,000 € and 3,000 €.

**Table 1**  
Socio-demographic indicators of tourists

Socio-demographic variables	Per cent (%)	Socio-demographic variables	Per cent (%)
Gender		Profession	
Female	48.2	Owner/Entrepreneur	13.0
Male	51.8	Manager	17.0
Age (mean 46.1, S.D. 14.1)		Employee	51.6
16-24	8.1	Other	18.4
25-34	13.9	Country of origin	
35-44	24.0	Austria	17.6
45-54	23.5	Germany	26.2
55+	30.5	Italy	12.4
Education		Russia	9.7
Basic education	8.8	UK	16.5
Secondary education	37.1	Other*	17.6
College	24.0	Personal net monthly income	
University	21.1	0 – 500 €	5.9
Masters	5.6	500 – 1,000 €	8.7
Ph.D.	3.4	1,000 – 2,000 €	22.9
Visitation of Istria County		2,000 – 3,000 €	20.1
First time visitor	49.7	Over 3,000 €	18.6
Repeat visitor	50.3	Private (n/a)	23.8

Note: \* less than 5% in total sample

Source: data processed by authors

Prior to using logistic regression for segmentation purposes, bivariate analysis on preselected variables was done. Presented are only those results of t-test and related descriptive statistics (Table 2), and chi square test and related descriptive statistics chi (Table 3), where a statistically significant difference was determined.

The high-level group scored lower concerning the importance of owning a house/flat, a car/cars, clothes, going on vacation and participating in entertainment activities (Table 2). Respondents in the low-level group stayed a day longer than those in the high-level group.



**Table 2**

Descriptive statistics and results of t- test

Variable	High level		Low level		t-value
	M	SD	M	SD	
Importance of owning a house/flat	3.9	1.41	4.5	0.90	6.84*
Importance of owning a car/cars	3.8	1.29	4.1	1.11	2.78**
Importance of owning clothes	3.4	1.08	3.8	1.03	5.60*
Importance of taking vacation	3.4	1.11	4.1	0.90	9.34*
Importance of entertainment	2.9	0.91	3.5	1.06	8.75*
Length of stay	8.3	3.27	9.1	3.81	3.17**

\*  $\alpha$  significant at 0.001, \*\*  $\alpha$  significant at 0.01

Source: Data processed by authors

Respondents in both groups mostly lived in larger towns (Table 3). People in both groups were not likely to travel with children, thus they were more likely to travel with their partner. Brochures as a source of information about the tourism destination were not commonly used by both groups, although the low-level group used brochures less than was to be expected. Most of the respondents chose the sun and sea as an important travel motivation, although the high-level group was more likely to choose this motivation as being important. Natural sights as a travel motivation was chosen as important by both groups, although it was more important to the low-level than the high-level group. Cultural heritage and events were not chosen as an important motivation, regardless which group the respondent belonged to, and this is consistent with the Tomas Research (Marušić et. al, 2005, 2008). The share of female respondents (30%) was higher than the share of male respondents (27%) in the high-level importance group, while in the case of the low-level importance group, the proportion was reversed. Most of the respondents in both groups stated that they were employees. When considering visitation, there were more first-time visitors (31%) in the high-level importance group than repeat visitors (27%). In general, there were slightly more repeat visitors than first-time visitors, but the share of first-time visitors is almost as equal to that of repeat visitors. Respondents coming mostly from Germany and Italy stated low-level importance concerning healthy living, while respondents from Russia and the UK were more concerned with healthy living. In the high-level importance group, there were more respondents with higher education qualifications.

**Table 3**

Descriptive statistics and result of chi square test

Variable	High level (%)	Low level (%)	X <sup>2</sup>	df
Settlement size			10.805***	3
Village	5.3	6.2		
Small town	11.4	10.9		
Medium size town	15.8	10.2		
Large town	25.7	14.4		
Travelling party				
Travelling with children	15.6	16.2	11.652**	1
Not travelling with children	42.6	25.6		
Travelling with partner	37.7	32.5	14.735*	1
Not travelling with partner	20.5	9.3		
Usage of information sources				
Brochures used	11.6	4.8	9.364**	1
Brochures not used	46.7	37.0		
Travel motivations				
Sun and sea important	48.8	38.1	8.451**	1
Sun and sea unimportant	9.4	3.7		
Natural sights important	29,5	24,5	4.527***	1
Natural sights unimportant	28,7	17,3		
Cultural heritage/events important	16.1	8.7	4.337***	
Cultural heritage/events unimportant	42.2	33.1		
Gender			8.960**	1
Male	27.4	24.4		
Female	30.8	17.3		
Profession			11.872**	3
Owner/entrepreneur	7.1	5.9		
Manager	12.0	5.3		
Employee	27.5	23.9		
Other	11.6	6.7		
Visitation			6.151***	1
First time visitor	31.2	18.4		
Repeat visitor	27.0	23.4		
Country of origin			95.056*	5
Austria	8.6	8.9		
Germany	10.6	15.6		
Italy	4.9	7.5		
Russia	8.2	1.6		
UK	13.7	2.8		
Other	12.2	5.4		
Education			7.469**	1
Basic and secondary level	24.1	21.9		
Higher level	34.1	19.9		

\*  $\alpha$  significant at 0.001, \*\*  $\alpha$  significant at 0.01, \*\*\*  $\alpha$  significant at 0.05

Source: Data processed by authors

Result details of logistic regression are displayed in Table 4. Six predictors were significant in predicting the odds of belonging to the high-level importance group. The model explained between 31% and 43% of variance.

**Table 4**  
Results of logistic regression

Variables	EXP( $\beta$ )	95% C.I.for EXP( $\beta$ )	
		Lower	Upper
Village	0.71	0.33	1.51
Small town	1.08	0.59	2.00
Medium size town	1.08	0.61	1.92
Travelling party - children	0.70	0.42	1.15
Travelling party - partner	0.64	0.37	1.11
Usage of brochures	2.61**	1.36	4.98
Importance of owning a house/flat	1.84*	1.39	2.43
Importance of owning a car/cars	0.79	0.59	1.04
Importance of owning clothes	1.06	0.82	1.37
Importance of vacation	1.45**	1.11	1.90
Importance of entertainment	2.03*	1.55	2.66
Sun and sea as travel motivation	0.35*	0.16	0.75
Natural sights as travel motivation	1.25	0.76	2.05
Cultural heritage and events as travel motivation	0.61	0.35	1.06
Length of stay	0.99	0.92	1.06
Gender	1.11	0.70	1.75
Visitation of Istria County	0.88	0.55	1.42
Austria	0.92	0.42	2.04
Germany	0.49	0.24	1.01
Italy	0.29**	0.12	0.67
Russia	2.47	0.84	7.26
UK	2.00	0.82	4.85
Education	0.96	0.57	1.60
Owner/entrepreneur	0.94	0.39	2.25
Manager	1.20	0.54	2.68
Employee	0.74	0.38	1.45

Cox & Snell R Square = 0.317, Nagelkerke R Square = 0.428, \*  $\alpha$  significant at 0.001, \*\*  $\alpha$  significant at 0.01

Reference values were Settlement size = large town; Travelling party = travelling without children, travelling without partner; Usage of information sources = not used/not visited; Travel motivations = unimportant; gender = male; Visitation of Istria County = first visit; Country of origin = others; Education level = lower education; Occupation = other professions

Source: Data processed by authors

Predictors that were significant in predicating the high-level importance group were the usage of brochures, the importance of owning a house/flat, taking vacations and participating in entertainment activity, the sun and sea

as a travel motivation, and county of origin. The usage of brochures, the importance of owning a house/flat, taking vacations and participating in entertainment activity increased the odds of being in the high-level group by 161%, 84%, 45% and 103%, respectively. The sun and sea as a travel motivation (65%) and coming from Italy (71%) decreased the odds of being in the high-level group.

## **5. DISCUSSION AND MANAGERIAL IMPLICATIONS**

The results showed that important predictors related to healthy living are brochures as information sources, the importance of owning a house/flat, taking vacations and participating in entertainment activities, the sun and sea as a travel motivation and the country of origin. The significance of using brochures as an information source, and the sun and sea as a travel motivation<sup>4</sup>, confirmed the results of Hallab et al. (2003), who found a significant difference in the usage of information sources and destination attributes between High and Low Healthy-Living Conscious segments. The importance of owning a house/flat, taking vacations and participating in entertainment activities, as significant predictors, confirmed the results of Konu (2010), who found six different clusters using lifestyle as a segmentation base. The importance of the country of origin has been well established as a very important factor in tourist market segmentation (Dolnicar, 2008; Kozak, 2002; Tkaczynski, 2009), which was also confirmed by this study.

When all variables that were significantly different in bivariate analysis were analysed together, a profile of the high-level group was created. Respondents who stated that healthy living is a very important part of their lives were more likely to use brochures to obtain information about a tourism destination; they find that owning a house/flat, taking vacations and participating in entertainment activities are important things in life. On the other hand, this group does not find the sun and sea as a very important travel motivation, and it is not likely that they arrive from Italy.

---

<sup>4</sup> There are many theories that tried to explain travel motivation (Maslow, 1943; Dunn et al, 2007) but the most commonly used is the one of push and pull motivations (Dunn et al., 2007). The concept of this theory distinguishes two important factors: push factors, which refer to internal forces that motivate or create a desire to satisfy a need to travel, and pull factors, which are recognized as destination attributes that respond to and reinforce inherent push motivation factors like beaches, recreation, natural and cultural attractions etc. (Heung et al., 2001; Sangpikul, 2008). Hallab et al. (2003) used pull factors as destination attributes, so the sun and sea as a travel motivation is regarded here as destination attribute.

Based on the results, certain managerial implications can be drawn. Brochures are advisable in promoting a healthy-living lifestyle as part of the tourism offering, since they increased the odds of tourists being in the high healthy-living level group. The importance of owning a house/flat increased the odds of being in the high healthy-living level group, suggesting that this group desires a certain level of safety (Maslow, 1943). It is also possible that those respondents, who found owning a house/flat as being important, were actually upper middle class, consisting of well-educated professionals with a higher life standard. If the importance of owning a house/flat is related to a higher life standard, then it can be concluded that a higher life standard predicts belonging to a high healthy-living level group and that a higher life standard better enables healthy living as a life-style. The high healthy-living level group found vacation to be important, but entertainment was even more important, suggesting that an offering comprising the sun and sea is not enough. A suggestion for managers would be to place emphasis on security, entertainment and the relaxation aspect of a tourist destination, which may be done using brochures.

There are some limitations to this study. Since these results are based on a convenience sample of tourists who stayed in selected hotels and resorts, the results may not be generalized to the overall tourist market of Istria County. Data were collected during the high season and the respondents were already in Istria County, so the importance they placed on healthy living may differ compared to those respondents who visit Istria County in other times of the year. The sample included commercial accommodation users only, so tourists not staying in commercial accommodation were omitted from the study.

In this analysis, *a priori* segmentation mean was used, so respondents were assigned to groups based on their opinion of how important healthy living is in their everyday life. Future research relating to healthy living can be done by applying *a posteriori* segmentation mean, by including tourists from other parts of Croatia and those tourists who visit the tourism destination in the low season. Since the results of bivariate analysis were overestimated due to many characteristics available in the data set, it is advisable to use the same kind of multivariate analysis.

## 6. CONCLUSION

Healthy living is a specific life style and, as such, it influences tourist behaviour. It is implemented in tourism as a holistic wellness approach, although most of the present research relating to wellness tourism is done by applying a narrower concept of wellness. Since this kind of special interest tourism is quite new on the tourist market, profiling this kind of tourist is quite challenging.

Using *a priori* segmentation mean, a relationship between the importance of healthy living and sociodemographic characteristics, travel characteristics and life priorities was determined, and a profile of tourists based on the importance of healthy living in their everyday life was established. Since the results of bivariate analysis are usually overestimated, a multivariate analysis was used, so only six predictors significantly predicted a tourist profile. Tourists who stated that healthy living is a very important part of their everyday life were more likely to use brochures as a source of information, to find certain life priorities important, not to think of sun and sea as very important and their sole travel motivation, and would probably not arrive from Italy.

## REFERENCES

- Aguiló, E., Alegre, J., Sard, M. (2005): *The persistence of the sun and sand tourism model*, Tourism Management, vol. 26, no. 2, pp. 219-231.
- Bieger, T., Laesser, C. (2002): *Market Segmentation by Motivation: The Case of Switzerland*, Journal of Travel Research, vol. 41, no. 1, pp. 68-76.
- Boksberger, P., Laesser, C. (2008): *Segmenting the Senior Travel Market by Means of Travel Motivation – Insights from a Mature Market – Switzerland*, in CAUTHE 2008 Conference proceedings: [http://www.griffith.edu.au/conference/cauthe2008/content\\_refereed-papers.html](http://www.griffith.edu.au/conference/cauthe2008/content_refereed-papers.html) (accessed 4th March 2010)
- Datta, Y. (1996): *Market Segmentation: an Integrated Framework*, Long Range Planning, vol. 29, no. 6, pp. 797-811.
- Dibb, S. (1998): *Market segmentation: strategies for success*, Marketing Intelligence & Planning, vol. 16, no. 7, pp. 394-406.

Dolnicar, S. (2008): *Market segmentation in tourism*, in Woodside, A.G. and Martin, D., ed.: *Tourism Management: Analysis, Behaviour and Strategy*, CAB International, Cambridge, pp. 129-150.

Dunn, G., Buckley, J., Flanagan, S. (2007): *City Break Travel Motivation – The Case of Dublin*. *Journal of Travel and Tourism Research*, vol. 22, no. 3 & 4, pp. 95-107.

Dunn, H. L. (1959): *High-level Wellness for man and society*, *American Journal of Public Health*, vol. 49, no. 6, pp.786-792.

Field, A. (2005): *Discovering Statistics Using SPSS*. 2nd edition, Sage Publication, London

Glaesser, D. (2006): *Crisis Management in the Tourism Industry*, 2<sup>nd</sup> edition, Butterworth-Heinemann, Oxford

Grbac, B., Lončarić, D. (2010): *Ponašanje potrošača na tržištu krajnje i poslovne potrošnje – osobitosti, reakcije, izazovi, ograničenja*, Ekonomski fakultet Rijeka, Promarket Rijeka, Rijeka

Green, P. E. (1977): *A New Approach to Market Segmentation*, *Business Horizons*, vol. 20, no. 1, pp. 61-73.

Gujarati, D.N. (1988): *Basic econometrics*, 2nd edition, McGraw-Hill Inc, New York

González-Fernández, A. M., Cervantes Blanco, M., Rodríguez Santos, C. (2006): *Motivations and Lifestyle: Segmentation Using the Construct A.I.O.*, in Kozak, M. I Andreu, L., ed.: *Progress in Tourism Marketing*, Elsevier Ltd. Oxford, pp. 147-160.

Hallab, Z. A. A., Yoon Y., Uysal, M. (2003): *An Identification of Market Segments Based on Healthy-Living Attitude*, *Journal of Hospitality and Leisure Marketing*, vol. 10, no. 3/4, pp. 185-198.

Heung, V. C. S., Qu, H., Chu, R. (2001): *The relationship between vacation factors and socio-demographic and travelling characteristics: the case of Japanese leisure travelers*, *Tourism Management*, vol. 22, no. 3, pp. 259-269.

Ibrahim, E. E., Gill, J. (2005): *A positioning strategy for a tourism destination, based on analysis of consumers' perceptions and satisfactions*, Marketing Intelligence & Planning, vol. 23, no. 2, pp. 172-188.

Istria Tourists Board (2009). *Tourist arrivals and nights by tourist offices 2008*, Istria Tourists Board, available at: <http://www.istra.hr/hr/pr/statistika> (accessed 17th May 2009)

Johns, N.; Gyimóthy, S. (2002): *Market Segmentation and the Prediction of Tourist Behavior: The Case of Bornholm*, Denmark, Journal of Travel Research, vol. 40, no.3, pp. 316-327.

Jönsson, C., Devonish, D. (2008): *Does nationality, gender, and age affect travel motivations? A Case of Visitors to the Caribbean Island of Barbados*, Journal of Travel and Tourism Marketing, vol. 25, no. 3-4, pp. 398-408.

Kesić, T. (1999): *Ponašanje potrošača*, ADECO, Zagreb

Kim, B. H., Batra, A. (2009): *Healthy-living Behaviour Status and Motivational Characteristics of Foreign Tourists to Visit Wellness Facilities in Bangkok*, in: The 2nd Annual PSU Phuket Research Conference Proceedings, Phuket, Prince of Songkla University, pp.1-8, [http://www.conference.phuket.psu.ac.th/PSU\\_OPEN\\_WEEK\\_2009/data/Hospitality/Paper6.pdf](http://www.conference.phuket.psu.ac.th/PSU_OPEN_WEEK_2009/data/Hospitality/Paper6.pdf) (accessed 4th March 2010)

Koh, S. Yoo, J. J. E., Jr, C. A. (2010): *Importance-performance analysis with benefit segmentation of spa goers*, International Journal of Contemporary Hospitality Management, vol. 22 no. 5, pp.718 – 735.

Konu, H. (2010): *Identifying potential wellbeing tourism segments in Finland*, Tourism Review, vol. 65, no. 2, pp. 41-51.

Konu, H., Laukkanen, T. (2009): *Roles of Motivation Factors in Predicting Tourists' Intentions to Make Wellbeing Holidays – A Finnish Case*, ANZMAC 2009, <http://www.duplication.net.au/ANZMAC09/papers/ANZMAC2009-376.pdf> (accessed 4th March 2010)

Kotler, P., Keller, K. L. (2008): *Upravljanje marketingom*, 12<sup>th</sup> edition, Mate d.o.o., Zagreb



Kozak, M. (2002): *Comparative analysis of tourist motivations by nationality and destination*, Tourism Management, vol. 23, no. 3, pp. 221-232.

Lee, S. C., et al. (2004): *A cross-national market segmentation of online game industry using SOM*, Expert systems with applications, vol. 27, no. 4, pp. 559-570.

Mak A. H. N., Wong K. K. F., Chang R. C. Y. (2009): *Health or Self-indulgence? The Motivations and Characteristics of Spa-goers*, International Journal of Tourism Research, vol. 11, no. 2, pp. 185-199.

Manente, M., Minghetti, V. (2006): *Destination management organizations and actors*, U: Buhalis D. and Costa C., ed.: Tourism Business Frontiers, Elsevier Butterworth-Heinemann, Oxford, pp. 228-237.

Marušić, Z., et al. (2008): *Stavovi i potrošnja turista u Hrvatskoj: TOMAS 2007*, Institut za turizam, Zagreb.

Marušić, Z., et al. (2005): *Stavovi i potrošnja turista u Hrvatskoj: TOMAS 2004.*, Institut za turizam, Zagreb.

Maslow, A. H. (1943): *A Theory of Human Motivation*, Psychological Review, vol. 50, pp. 370-396, <http://www.altruists.org/f62> (accessed 6th February 2009)

Molar, L., Pilar Albaladejo, I. (2007): *Profiling segments of tourists in rural areas of South-Eastern Spain*, Tourism Management, vol. 28, no. 3, pp. 757-767.

Mueller, H., Lanz Kaufmann, E. (2001): *Wellness Tourism: Market analysis of a special health tourism segment and implications for the hotel industry*, Journal of Vacation Marketing, vol. 7, no. 1, pp. 5-17.

Myers, J.E., Sweeney, T.J. (2005): *Counselling for wellness: theory, research and practice*, American Counselling Association, Alexandria.

Pike, S. (2002): *Destination Image Analysis—A Review of 142 Papers From 1973 To 2000*, Tourism Management, vol. 23, no. 5, pp. 541-549.

Pike, S. (2009): *Destination brand positions of a competitive set of near-home destination*, Tourism Management, vol. 30, no. 6, pp. 857-866.

Prasnikar, J., Rajkovic, T., Zabkar, V. (2010): *Summer Tourist Perception of Service Quality*, Annals of Tourism Research, vol. 37, no. 4, pp. 1181–1185.

Puczko, L.; Bachvarov, M. (2006): *Spa, Bath, Thermae: What's Behind the Labels?*, Tourism Recreation Research, Vol. 31, No. 1, pp. 83-91.

Sangpikul, A. (2008): *A factor-cluster analysis of tourist motivations: A case of U.S. senior travelers*, Tourism, vol. 56, no. 1, pp. 23-40.

Segal, M. N., Giacobbe, R. W. (1994): *Marketing Segmentation and Competitive Analysis for Supermarket Retailing*, International Journal of Retail & Distribution Management, vol. 22, no. 1, pp. 959-552.

Sewall, M. A. (1978): *Market Segmentation Based on Consumer Ratings of Proposed Product Designs*, Journal of Marketing Research, vol. 15, no. 4, pp. 557-564.

Smith, W. R. (1956): *Product differentiation and market segmentation as alternative marketing strategies*, The Journal of Marketing, vol. 21, no. 1, pp. 3-8.

Swarbrooke, J., Horner, S. (2007): *Consumer Behaviour in Tourism*, 2<sup>nd</sup> edition, Butterworth-Heinemann, Oxford

Tkaczynski, A. (2009): *Destination segmentation: a recommended two-step approach*, [http://eprints.usq.edu.au/6255/2/Tkaczynski\\_2009](http://eprints.usq.edu.au/6255/2/Tkaczynski_2009) (accessed 10th March 2010)

Tsai, C. Y., Chiu, C. C. (2004): *A purchase based market segmentation methodology*, Expert Systems with Applications, vol. 27, no. 2, pp. 265-276.

Voigt, C. (2008): *Insights into wellness tourists: segmentation by benefits*, Recreating tourism, New Zealand Tourism and Hospitality Research Conference, Lincoln University, Canterbury, New Zealand, <http://www.lincoln.ac.nz/PageFiles/7235/Voigt.pdf> (accessed 10th March 2010)

Vyncke, P. (2002): *Lifestyle Segmentation: From Attitudes, Interests and Opinions, to Values, Aesthetic Styles, Life Visions and Media Preferences*, European Journal of Communication, vol. 17, no. 4, pp. 445-463.

Winter, F. W. (1979): *A Cost-Benefit Approach to Market Segmentation*, Journal of Marketing, vol. 43, pp. 103-111.

Witmer, J. M.; Sweeney, T.J. (1992): *A Holistic Model for Wellness and Prevention Over the Life Span*, Journal of Counseling & Development, Vol. 71, no. 2, pp.140-148.

Yankelovich, D. (1964): *New Criteria for Market Segmentation*, Harvard Business Review, <http://www.danyankelovich.com/newcriteria.pdf> (accessed 10th March 2010)