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Tell me who you think you are and I tell you how you travel : Exploring the viability of market segmentation by means of travelers' stated personality: Insights from a mature market (Switzerland)

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Abstract

People travel to different destinations for different reasons. In this study, we investigate the viability of market segmentation by personal traits (based on and exemplified by Jungian's MBTI variables) of travelers from Switzerland, by performing a data-driven a posteriori segmentation by means of k-means clustering. To identify the segmentation power of personal traits, this analysis is complemented with a multiple discriminant analysis as well as a number of contingency tests to identify differences between the segments. We identified four clearly definable segments, which differ in terms of the psychographic traits of the segment members but also in terms of some sociodemographic characteristics as well as travel profiles. Despite a growing body of work on classical market segmentation, there is a growing but still limited number of works on potentialities of psychographic approaches relating to a traveler's traits and/or peronality as a segmentation basis in tourism.

Keywords

means, travelers, stated, tell, personality, insights, me, who, you, think, mature, i, switzerland, travel, exploring, viability, market, segmentation

Disciplines

Business | Social and Behavioral Sciences

TELL ME WHO YOU THINK YOU ARE AND I TELL YOU HOW YOU TRAVEL. EXPLORING THE VIABILITY OF MARKET SEGMENTATION BY MEANS OF TRAVELERS' STATED PERSONALITY: INSIGHTS FROM A MATURE MARKET (SWITZERLAND)

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People travel to different destinations for different reasons. In this study, we investigate the viability of market segmentation by personal traits (based on and exemplified by Jungian's MBTI variables) of travelers from Switzerland, by performing a data-driven a posteriori segmentation by means of k-means clustering. To identify the segmentation power of personal traits, this analysis is complemented with a multiple discriminant analysis as well as a number of contingency tests to identify differences between the segments. We identified four clearly definable segments, which differ in terms of the psychographic traits of the segment members but also in terms of some sociodemographic characteristics as well as travel profiles. Despite a growing body of work on classical market segmentation, there is a growing but still limited number of works on potentialities of psychographic approaches relating to a traveler's traits and/or personality as a segmentation basis in tourism.

Key words: Market segmentation; Segmentation criteria; Personal traits; Self-stated personality; Tourism marketing

Introduction

Marketing theory agrees that market segmentation is critical in terms of achieving marketing effectiveness and efficiency. Segmentation is a methodological process of dividing a market into distinct groups that might require separate experiences or marketing service mixes (Bigne, Gnoth, & Andreu, 2008; Bloom, 2005; Chen, 2003a, 2003b; Chen & Hsu, 1999; Venugopal & Baets, 1994). The segments should be distinctive from one another, so that group membership of an individual segment is clearly based on key variables. The main benefits of segmentation in travel

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and tourism are destination development, product positioning, destination positioning, support services, advertising and promotion, packaging, and long-term master planning (Plog, 1991, 1994).

There are numerous common means to segment tourism markets, ranging from geographical or demographic to psychographic and behavioral approaches (Bieger & Laesser, 2002; Dolnicar, 2002, 2008; Hsu & Lee, 2002; Mazanec, 2000; Moscardo, Pearce, & Morrison, 2001). Marketers have to choose those variables that are relevant for segmenting the market for a particular product. The basic rule is to focus on a limited number of important variables. To segment the market into too many small, slightly distinct segments would require splitting up the marketing budget into too many ineffective chunks. Such varied marketing activities in the diverse segments could confuse customers and would lead to cannibalization effects. Kotler (2002) mentions five criteria for an effective segmentation: measurability, relevance, accessibility, distinguishability, and feasibility.

However, as various studies in tourism on the choice of segmentation criteria demonstrate: no ideal solution can be found (Sung, Morrison, & O'Leary, 2000). Moreover, geographical or demographic approaches—due to lack in homogeneity in behavior—increasingly fail to provide marketable clusters. Hence, the quest for improving segmentation approaches continues.

Gountas in 2003 brought forward, that the segmentation of tourists based on their personality (i.e., a psychographic approach) might provide a viable means of alternative segmentation. So far, and as a scan of the existing literature on tourist market segmentation reveals, there is growing but limited knowledge about approaches and potentialities of a traveler's traits and/or personality as a segmentation basis (Gountas, Dolnicar, & Gountas, 2011). As a recent article by Murphy, Benckendorff, and Moscardo (2007) reveals for the case of inbound tourists to Queensland, there seems to be an association between travel motivation, tourist's self image (hence his/her personality) and destination brand personality and thus links between psychographic and behavioral criteria of potential market segments (Gountas & Gountas, 2007; Gountas et al., 2011). The latter association (i.e., tourists' self image and destination brand personality) was

supported by a recent article from Boksberger, Dolnicar, Laesser, and Randle (2011), who illustrated for the Swiss outbound market that in about 50% of the cases there is mid to high degree of self congruence (i.e., congruence between of brand personality and self-stated personality of the travelers). As travel motivation serves well as a segmentation basis (Bieger & Laesser, 2002; Boksberger & Laesser, 2008) and travel motivations are closely linked to travelers' traits (Murphy et al., 2007), we bring forward the assumption, according to which personality traits serve as a segmentation basis as well. Hence, the aim of this article is to investigate market segmentation by personal traits of the traveler (i.e., self-stated personality; based on and exemplified by Jungian's MBTI variables), and to derive implications for tourism marketers. The hypothesis underlying the article could thus be framed as follows: travelers can be segmented according to their personality.

Literature Review

Following this introduction, there are three areas of the literature that serve as a foundation of this study: (1) market segmentation, (2) market segmentation by personal traits/personalities, and (3) marketing segmentation by personal traits/personalities in tourism. We will briefly discuss those in this forthcoming section.

Market Segmentation: Concepts and Approaches

Segmentation as the strategic tool to account for heterogeneity of buyers is a well-established field in research. It refers to the process of classifying customers into groups based on different behavior, needs, or characteristics (McDonald & Dunbar, 1995; Sarigöllü & Huang, 2005). Segmentation not only provides marketers with information on which to develop marketing strategies and tactics, it also has the potential to provide insights into relationships between a destination and its potential visitors (Bloom, 2004), which help to develop marketing strategies (Bloom, 2004; Bieger & Laesser, 2002; Engel, Blackwell, & Miniard, 1993; Lee, Lee, Bernhard, & Yoon, 2006). However, no single best way exists for segmenting a market; a marketer has to try different segmentation variables.

The most common segmentation approaches are geographic, demographic, psychographic, and behavioral variables used in segmenting customer markets (Decrop & Snelders, 2005; Gittelson & Kerstetter, 1990; Kotler, Bowen, & Makens, 2006; Mackellar, 2009; Sarigöllü & Huang, 2005; Sirakaya, Uysal, & Yoshioka, 2003). "Geographic segmentation" calls for dividing the market into different geographic units, such as population density, nations, states, regions, counties, cities, or neighborhoods (Gittelson & Kerstetter, 1990). "Demographic segmentation" consists of dividing the marketing into groups based on demographic variables such as age, life cycle, gender, income, occupation, education, religion, family size, race, and nationality (Gittelson & Kerstetter, 1990). "Psychographic segmentation" assigns buyers into different groups based on social class, lifestyle, self-image, opinion, and personality characteristics (Gountas & Gountas, 2007; Pizam et al., 2004). In "behavioral segmentation," buyers are divided into groups based on their knowledge, attitude, and use or response to a product, their loyalty status, their user status (potential user, regular user, ex-user, nonuser), and their user rate (Alvarez & Asugman, 2006; Andreu, Kozak, Avci, & Cifter, 2005; Becken & Gnoth, 2004; Becken, Simmons, & Frampton, 2003; Bieger & Laesser, 2002; Legohérel & Wong, 2006; Mackellar, 2009; Petrick, 2004; Weaver & Lawton, 2002).

Traditionally, marketers have been using geographic and demographic criteria to describe their markets, but psychographic and behavioral criteria are now increasingly used to provide detailed customer profiles, identify motivations, needs and determinants, and offer an appropriate marketing mix and service delivery strategy (Cooper, Fletcher, Fyall, Gilbert, & Wanhill, 2008). Within psychographic segmentation buyers are assigned into different groups based on social class, lifestyle, and personality characteristics (Pizam et al., 2004).

The concept of "social class" implies a hierarchy in which individuals in the same class generally have the same degree of status, whereas members of other classes have either a higher or lower status. Studies show that consumers in different social classes vary in terms of values, product preferences, and buying behavior (Schiffmann, Kanuk, & Hansen, 2008).

The origins of "lifestyle concepts' can be traced back to the work of naturalists and philosophers in the 16th century, who stressed the uniqueness of the individual and suggested lifestyle typologies (Anderson & Golden, 1984; Michman, 1991). At the end of the 1950s, the lifestyle concept was implemented into consumer behavior due to its potential significance in understanding, explaining, and predicting consumer behavior. Since then, the approach has received considerable attention among tourism researchers (Cohen, 1972; Mazanec, Zins, & Dolničar, 1998). An early method of operationalizing lifestyles is by means of activities, interests, and opinions (AIO) (Wells & Tigert, 1971). Today, lifestyle segmentation is not only important in the producing industry, but also in the tourism industry.

Segmentation by "personality" was developed extensively by marketers in the 1960s in response to the need for a more likewise picture of customers and a better understanding of their motivations. Personality is the total of many personal and individual traits, attitudes, and interests (Gretzel, Mitsche, Hwang, & Fesenmaier, 2004, 2005). Many theories have been developed to explain the personality and its influence on the behavior of people, although it is difficult to measure (McKinlay, O'Connor, & Ross, 2007).

Market Segmentation by Personal Traits/Personality

Much of the personality research has followed the trait approach and based its research on identifying specific personality traits that explain differences in customer buying behavior (McCrae & John, 1992; Tupes & Christal, 1992). Trait theorists accordingly propose that personality is composed of characteristics that describe and differentiate individuals.

Within personality traits, the concept of emotions as a segmentation variable has received considerable theoretical support. Many researchers agree that a link exists between personality and emotions. Personality according to Hjelle and Ziegler (1992) is the overarching construct that includes emotion, affect, and other personality characteristics. Pervin (1993) suggests that affect is part of all major personality theories in varying

degrees. Affect or emotional predispositions are extensions of, or closely related to, a range of personality traits (Watson, Clark, & Tellegen, 1988).

The Myers-Briggs Type Indicator (MBTI), currently the most widely used personality assessment instrument in the world (Myers, McCaulley, Quenk, & Hammer, 1998), is based upon C. G. Jung's theory of psychological types. Jung conceptualized the theory of psychological types by proposing that we each have inborn preferences for the way we gather information, make decisions, and gain energy. These personality preferences are organized into pairs of opposing constructs, called psychological types. One of the key theory points of psychological type is Jung's proposal that each individual has an inborn preference, which may be strong or weak, for one side of each of the identified preference pairs. The MBTI ultimately results in a four-letter psychological type, reflecting the respondent's self-reported preferences on each of the four scales. There are 16 different types, each representing a unique combination of the four preferences. There are also several preference pairs and hierarchies useful in anticipating and understanding a person's behavioral style, communication, and leadership preferences. The original Jung (1971) conceptualization has been adapted by Gountas and Gountas (2001) and Gountas (2003) to form only four core personality orientations: the thinking or logical, the feeling or emotional, the material or physical, and the intuitive or imaginative. The MBTI variables serve as a basis for this empirical study.

Market Segmentation by Personal Traits/Personality in Tourism

Tourists receive various messages sent by destinations, and build a representation of the "behavior" of the destination. Within a destination, personality traits can be associated with a destination in a direct way through citizens of the country, hotel employees, restaurants, tourist attractions, or tourist's imagery, or in an indirect manner through marketing programs such as cooperative advertising, value pricing, celebrities of the country, and media construction of destinations (Cai, 2002; Ekinci & Hosany, 2006).

A number of tourism researchers have indicated that the segmentation of markets in terms of both psychological, as well as sociodemographic variables potentially enables a better discrimination between market members than does analysis in terms of only the latter (Gladwell, 1990; Luzar, Diagne, Gan, & Henning, 1998; Silverberg, Backman, & Backman, 1996). Hence, there is growing evidence from a variety of tourism studies that market analysis in terms of psychological variables (psychographic analysis) is useful. In a recent study, Murphy et al. (2007) aimed at exploring the links among four key constructs proposed for the destination branding and choice process for the case of inbound tourists to Queensland: tourist needs, destination brand personality, self-congruity, intentions to visit, and satisfaction with a visit. According to their findings, tourists who can make an association between a destination and a destination brand personality, and where this association is consistent with their expected holiday experience, a high level of congruity exists between the tourists' self-image and their perceptions of the destination. Boksberger et al. (2011) also illustrate some degree of congruence between brand personality and self-stated personality of travelers for the Swiss outbound market.

Altogether, a number of researchers examine the potential of personality traits as a segmentation basis in the field of tourism (Dolnicar; 2004; Dolnicar & Leisch, 2003; Galloway, 2002; Gountas et al., 2011; Gretzel et al., 2004, 2005; Horneman, Carter, Wei, & Ruys, 2002; Plog, 2002; Prebensen, Larsen, & Abelesen, 2003). The study at hand aims to investigate market segmentation by personal traits of travelers (i.e., self-stated personality).

Methodological Approach (Data and Analysis)

Overview

This study is based on data from a representative survey of travel behavior of the Swiss population (citizens, naturalized, and foreign citizens; Laesser & Bieger, 2008; this report on the travel market of Switzerland also includes the abstracts of all previous publications based on that data). The measurement of personality was based on Jungian MBTI variables, as brought forward by Gountas and Gountas (2001) and Gountas (2003).

Two groups of analysis have been performed. (1) Firstly, *k*-means cluster analysis (cluster center

analysis) was used to (a posteriori) segment the data according to personality types; additionally, we applied discriminant analysis determining the power of each item with regard to the group formation. The unit for this analysis was "person 20 years of age and older." (2) Secondly, contingency analyses were performed to profile those segments according to their sociodemographics and travel behavior by means of cross-tabulations and means comparisons between the clusters and travel descriptors. The calculation of chi square and ANOVA statistics as well as measures of association allowed determining whether distribution differences were significant. The unit for these analyses was trip cases (one person, one trip). Trips were regarded as leisure journeys by private persons, with at least one overnight outside of their residence community, away from everyday life.

Data Measurement With Regard to Personality Segments

To measure personality traits, we used the Jungian MBTI variables. Respondents were asked to evaluate, on a semantic scale of 1–5 (ranging from "is absolutely not the case" to "is definitely the case"), a number of statements with regard to their personality. These statements are presented in the appendix.

Field Work Administration

The data were collected as part of a larger study on Swiss private travel behavior (Laesser & Bieger, 2008). In this study, private trips were defined as all trips for nonbusiness reasons with at least one overnight stay outside the traveler's home and usual living and working environment: for example, vacations, holidays, fun and leisure trips, visiting friends and relatives, weekend getaways, and study tours.

Respondents had a choice of completing a paper-and-pencil or online version of the questionnaire. Sixty-nine percent chose the online version. Respondents had to complete one questionnaire for each private trip they took in 2007. Trips to second homes were not recorded because they were considered to be part of the respondent's usual environment. To ensure that respondents did not forget to complete trip-related questionnaires, they were

contacted four times during 2007, reminding them to either submit their completed questionnaires or indicate that they had not traveled within a given trimester. In early 2008, each participant received the final questionnaire recording personal as well as household characteristics. This process ensured that the collection of trip-related information was completely decoupled from the collection of personal data, including the self assessment of the respondent's own personality.

Sample

We employed a quota sampling procedure, with quotas defined for region, size of household, and type of household. Respondents were recruited in two ways: by phone and through an online panel. The response rate was 70%, leading to a final usable sample of 1,898 households who participated in the study in all four trimesters of 2007 (either by completing questionnaires or by indicating that they had not traveled). Responses were provided by 4,387 people living in these households, and they provided information on a total of 10,903 trips.

The data are representative of the Swiss population living in the German- and French-speaking parts of Switzerland (not the Italian-speaking part). However, this approach had some limitations: for survey technical reasons, persons in collective households were not registered. Also, small children and persons older than 80 were underrepresented. Most foreign citizens in the survey came from countries neighboring Switzerland. As mentioned earlier, trips with a regular and homogeneous repetition rate (e.g., to their own holiday homes) were underrepresented.

Data Analysis

Data analysis followed a two-step method. First, k-means cluster analysis (centroid method) was performed on the basis of the items describing traits of personalities (cf. to previous chapters). To overcome one-sided marking tendencies (i.e., systematically marking 4 or 5 and 1 or 2), we calculated a magnitude, by putting the absolute answers of each case in a relative position ranging from 0 (minimum) to 2 (maximum), with a case-wise mean of 1. The cluster analysis was complemented

by a discriminant analysis to determine the power of each item with regard to the group formation.

Secondly, cross-tabs and contingency analyses, as well as means comparisons, were performed to profile each of the groups described. Four sociodemographic variables and a number of trip-specific variables were included in the analysis.

The sociodemographic variables were:

- gender (2 nominal categories);
- age (6 nominal categories);
- highest completed education (10 nominal categories); and
- occupation/professional position (16 nominal categories).

The trip-specific variables (and their scales) were:

- motivation (25 types, with 1–4 on an importance scale)
- sources of information (19 types, with 1–4 on a value of cognition scale)
- type of trip (19 types, with 1–4 on an importance scale);
- major destination (17 nominal categories);
- type of accommodation (16 nominal categories);
- number of previous trips to destination (5 nominal categories);
- duration of trip in number of overnights (6 nominal categories);
- type of organization of trip (5 nominal categories); and
- expenses per trip case (metric in CHF; per person and trip surveyed).

For more details with regard to the above variables, please refer to the technical report of this survey (Laesser & Bieger, 2008).

Chi-square statistics, contingency coefficients (in the case of nominal variables), ANOVA, and etas (in the case of mean comparisons with metric and Likert scaled variables) were utilized to determine if distribution differences were significant or due to chance variations. Given that multiple tests were computed based on the same data sets and therefore potential interaction effects would not be reflected in the p-values of the respective tests, p-values were Bonferroni corrected. This correction increased the p-value, taking into consideration the number of independent tests computed, and

provided a conservative estimate of the significance of the results. All results presented in this article are significant in terms of the rejection of the zero hypothesis ($p < 0.001$), according to which there are no differences between specific groups observed. Nonsignificant results are mentioned in the text, but are omitted in the tables.

Results and Discussion

The results of the analyses are presented using the structure outlined in the previous section.

Cluster Analysis

The clustering of the personality items was conducted by a k-means cluster analysis (i.e., cluster center analysis) with SPSS 12.0. Trials with three and four clusters were executed. Based on the results of the cluster formation, as well as preliminary discriminant analyses assessing the discriminating power of each item, the four-cluster structure proved to be the most meaningful in both groups (Table 1). The cluster analyses led to the following results:

Cluster 1 incorporates 32.3% of all cases, cluster 2, 24.6% of all cases, cluster 3, 21.1% of all cases, and cluster 4, 22.1% of all cases. Based on the predominant items per cluster, the following descriptions and names (in parentheses) have been assigned:

- Cluster 1: The realistic, pragmatic and self sufficient doer (Doer)
- Cluster 2: The imaginative, sensitive dreamer (Dreamer)
- Cluster 3: The physical and emotional feel good (Hedonist)
- Cluster 4: The down-to-earth materialist (Materialist)

From Table 1 we can draw the conclusion that traits do not differ very much between the clusters. If that type of segmentation thus failed altogether (and the underlying hypothesis of this article needed to be rejected) remains to be seen from the rest of the results.

In addition, the personality types identified in the analysis vary from the original ones identified in the Gountas (2003) study. However, this is most likely due to the type of analysis (we segment test

Table 1
Results of the Cluster Analysis

	Cluster Number			
	1	2	3	4
Number of cases	675	514	442	461
Share of market	32.3%	24.6%	21.1%	22.1%
Items				
I describe myself as a "down to earth person"	1.08	0.93	1.13	**1.15**
I am a very practical person	1.17	0.99	**1.19**	1.10
The pleasures of gastronomy are very important in my life	1.06	1.01	**1.14**	**1.14**
I value strongly material possessions/things	0.88	0.86	0.83	**1.01**
I like very much the tangible things in my life	**1.17**	1.00	1.09	1.15
Physical comforts/pleasures are very important	1.05	1.05	**1.19**	1.08
I am very good at organising my work and time	**1.15**	0.96	1.11	1.04
I am very realistic/pragmatic person	**1.16**	0.94	1.06	1.07
I am a very self-sufficient person	**1.05**	0.92	0.93	0.99
I am very much a doer/action person	**1.06**	0.91	0.88	0.89
I am very able/good with my feelings/emotions	0.99	0.99	**1.18**	0.89
I am good in producing emotions and feelings	0.95	1.05	**1.16**	0.90
Experience is more valuable than ideas/theory	1.13	1.04	**1.18**	1.15
I am very logical type of thinking person	**1.18**	0.99	1.01	1.06
Understanding the reasons why things happen is very important	**1.14**	1.07	1.02	1.06
I am a very objective person in my thinking	**1.12**	0.98	1.02	0.99
New ideas and innovations fascinate me	**1.12**	1.09	1.01	1.00
I am too much of a thinker and too little of a doer	0.61	0.87	0.74	0.97
I am very good at thinking/coming up with new ideas	0.95	**1.04**	0.81	0.91
I am very sensitive to atmosphere	0.84	**1.14**	1.10	1.03
I have a very lively/active imagination	0.98	**1.13**	0.99	0.87
I am generally very perceptive person	1.10	1.10	**1.11**	0.98
My imagination sometimes makes me sick	0.41	0.83	0.48	0.84
I enjoy daydreaming	0.57	**1.00**	0.66	0.81
I am very good at visualising things	1.07	**1.10**	0.96	0.91

Values in bold indicate highest values per item and above mean within cluster.

persons whereas the original personality types emerged from a construct validation approach).

Discriminant Analysis

Overall, three discriminant functions were generated, where

- function 1 explained 57.1% of the variation (eigenvalue: 1.577)
- function 2 explained 23.5% of the variation (eigenvalue: 0.650)
- function 3 explained 19.4% of the variation (eigenvalue: 0.535)

The test of equality of group means (see Table 2) and the standardized canonical discriminant function coefficients revealed that the following items/ traits have comparably greater discriminating power between all clusters (Wilks lambda in descending order):

- My imagination sometimes makes me sick
- I enjoy daydreaming
- I am too much of a thinker and too little of a doer
- I am very sensitive to atmosphere
- I am very able/good with my feelings/emotions
- I am good in producing emotions and feelings
- I am very realistic/pragmatic person

The classification matrix revealed that 94.1% of all trip cases could be classified correctly.

However, as none of the Wilks lambdas computed is smaller than 0.620 ("My imagination sometimes makes me sick"), we have to conclude that none of the items really provides great discriminating power between the clusters. Or to put it differently: None of the items provides a very good foundation to assign any case (test person) to any of the above four clusters. Again, and in preliminary conclusion, it remains to be

Table 2
Test of Equality of Group Means

Item	Wilks' Lambda	F	df 1	df 2	Sig.
I describe myself as a "down to earth person"	0.893	83.505	3.000	2088.000	0.000
I am a very practical person	0.883	92.432	3.000	2088.000	0.000
The pleasures of gastronomy . . .	0.959	30.112	3.000	2088.000	0.000
I value strongly material possessions/things	0.942	43.100	3.000	2088.000	0.000
I like very much the tangible things in my life	0.896	81.166	3.000	2088.000	0.000
Physical comforts/pleasures are very important	0.937	46.505	3.000	2088.000	0.000
I am very good at organising my work and time	0.899	78.292	3.000	2088.000	0.000
I am very realistic/pragmatic person	0.839	133.331	3.000	2088.000	0.000
I am a very self-sufficient person	0.948	37.912	3.000	2088.000	0.000
I am very much a doer/action person	0.909	69.545	3.000	2088.000	0.000
I am very able/good with my feelings/emotions	0.824	148.942	3.000	2088.000	0.000
I am good in producing emotions and feelings	0.834	138.099	3.000	2088.000	0.000
Experience is more valuable than ideas/theory	0.947	39.195	3.000	2088.000	0.000
I am very logical type of thinking person	0.871	103.038	3.000	2088.000	0.000
Understanding the reasons why things . . .	0.950	36.289	3.000	2088.000	0.000
I am a very objective person in my thinking	0.907	71.716	3.000	2088.000	0.000
New ideas and innovations fascinate me	0.936	47.487	3.000	2088.000	0.000
I am too much of a thinker and too little . . .	0.774	203.402	3.000	2088.000	0.000
I am very good at thinking/coming up with . . .	0.888	87.721	3.000	2088.000	0.000
I am very sensitive to atmosphere	0.795	179.236	3.000	2088.000	0.000
I have a very lively/active imagination	0.853	120.389	3.000	2088.000	0.000
I am generally very perceptive person	0.928	53.938	3.000	2088.000	0.000
My imagination sometimes makes me sick	0.620	425.771	3.000	2088.000	0.000
I enjoy daydreaming	0.702	295.672	3.000	2088.000	0.000
I am very good at visualising things	0.890	86.172	3.000	2088.000	0.000

seen if personality provides a suitable segmentation approach.

Cross-Tabs and Contingency Analyses

Among the four *sociodemographic variables* tested, differences with regard to age turned out to be nonsignificant; they were just due to chance variation ($\chi^2 = 21.908$; $p = 0.110$). This comes to our surprise, as one would assume from the literature that stated personality is somewhat related to age (Boksberger et al., 2011).

In contrast, other results reveal significant differences between the clusters in terms of gender ($\chi^2 = 162.888$; $p = 0.000$), highest completed education ($\chi^2 = 115.298$; $p = 0.000$), and profession ($\chi^2 = 189.291$; $p = 0.000$) (Table 3). While males rather tend to belong to the groups Doer and Materialist, females can be predominately found in the groups Dreamer and Hedonist. This clear gender-specific assignment of test persons to the clusters is somewhat unusual, as it could not be observed to such an extent in this market before (Bieger & Laesser, 2002, 2004; Boksberger & Laesser, 2008). Apart

from that, the Doers incorporate high shares of well-educated people as well as medium and high professional positions. In contrast, the profile of the Hedonist and Materialist is dominated by high shares of medium educated people and corresponding professional positions. Finally, the Dreamers educational as well as professional profile is rather mixed.

With regard to the *travel profiles*, the results are mixed. Only six types of motivation (out of 25, i.e., 24%; including Liberation from obligations, Rest and relaxation, Experience of exotic, Make contact with new people, Experience of nativeness, Time for oneself), four types of sources of information (out of 19, i.e., 21%; including Destination brochures, Tourist information at destination, Travel guides, books, journals, TV Text), and two types of trips (out of 19, i.e., 11%; including Theme park vacation/trip, Study tour) revealed to have significant ($p < 0.01$) different mean entries between the clusters (Table 4). Doers tend to be motivated below average; the role of information in their holiday decisions is below average as well. Dreamers—more than any other cluster—seek liberation from

obligation as well as time for oneself, whereas Materialists look for rest and relaxation. They definitely are not keen on making contact with new people, a trait that can be observed with Hedonists. Dreamers moreover have a higher need for information than members of any of the other groups. In addition, the above-average entry of brochures of the destination as well as travel guidebooks and journals indicate a possible affinity for picture-based travel preparation of that group.

There are significant differences between the clusters with regard to the choice of destination and type of accommodation (Table 5). While Doers have significant higher entries with regard to the destination of Switzerland, Europe in general (except neighboring countries), and overseas (except Oceania), Dreamers preferably go to Germany, France, Italy, the Americas, and Oceania. The preferred destinations of Hedonists are Switzerland, Austria, Germany, Italy, and Asia as well as Oceania. Finally, the Materialists are likely encountered in France and African destinations. Overall, there is a lack of a geographic systematization in destination choice.

In terms of accommodation, there are higher than above entries of Dreamers, Hedonists, and Materialists, with regard to hotels, of Doers with regard to friends and relatives, of Hedonists with regard to B&Bs, and of Doers and Materialists with regard to holiday residences (mostly owned by them).

However, no significant differences could be identified with regard to all other travel profile variables tested, including number of previous trips to a chosen destination, duration of trip, type of organization (package tours vs. individual), and expenditure. This again comes rather unexpected, as most of these variables would signify differences in travel behavior.

Limitations to This Study

Before summarizing the results, it is important to reiterate the study's limitations. First, the results

Table 3
Sociodemographic Profile

	Doer	Dreamer	Hedonist	Materialist	Total
Gender (χ^2 = 162.888; CC = 0.269; p < 0.001)					
Male	**64.5%**	41.1%	27.2%	**52.4%**	48.2%
Female	35.5%	**58.9%**	**72.8%**	47.6%	51.8%
Highest completed education (χ^2 = 115.298; CC = 0.229; p < 0.001)					
Compulsory schooling	5.78%	**10.51%**	**11.54%**	**11.71%**	9.46%
Apprenticeship/vocational school	32.59%	35.41%	**51.36%**	**41.00%**	39.10%
Vocational graduation	0.89%	**1.36%**	0.45%	**1.08%**	0.96%
Middle school/high school	9.33%	**11.48%**	8.60%	7.59%	9.32%
Vocational master diploma	**9.78%**	5.84%	5.43%	**9.11%**	7.74%
Technical school	7.56%	**9.14%**	5.43%	6.94%	7.36%
Higher technical school	**10.96%**	7.00%	5.66%	6.29%	7.84%
University of applied sciences	**12.44%**	6.42%	4.30%	6.29%	7.89%
University	**9.63%**	**10.51%**	5.43%	7.81%	8.56%
Other	1.04%	**2.33%**	**1.81%**	**2.17%**	1.77%
Profession (χ^2 = 189.291; CC = 0.288; p < 0.001)					
CEO/ Top Mgmt/ Chief publ. serv.	**6.52%**	2.14%	1.13%	2.39%	3.39%
SME director/ owner	**6.07%**	3.50%	2.94%	2.82%	4.06%
Farmer	0.15%	**0.58%**	0.00%	**0.87%**	0.38%
Free profession (lawyer, MD, etc.)	2.52%	**4.86%**	0.90%	2.82%	2.82%
Middle management	**20.30%**	12.45%	9.50%	**16.27%**	15.20%
Commercial/technical employee	25.93%	**27.63%**	27.15%	26.03%	26.63%
Worker	5.33%	4.47%	**7.24%**	**10.41%**	6.64%
Pensioner	**16.15%**	13.62%	14.48%	13.88%	14.67%
Housework	12.30%	21.40%	**32.35%**	**21.26%**	20.75%
Unemployed, looking for a job	1.04%	**2.92%**	0.68%	0.65%	1.34%
In training: Apprenticeship	0.30%	**0.58%**	0.23%	0.43%	0.38%
In training: Middle school	0.00%	0.19%	**0.23%**	0.00%	0.10%
In training: Student at university	2.22%	**4.09%**	1.81%	1.08%	2.34%
Other	1.19%	**1.56%**	**1.36%**	1.08%	1.29%

Values in bold indicate percentages within group higher than total.

Table 4

Motivation, Sources of Information, and Type of Trip

	Doer	Dreamer	Hedonist	Materialist	Total
Motivation					
Liberation from obligations	−0.08	0.15	−0.07	0.04	1.78
Rest and relaxation	−0.10	0.09	0.01	0.06	2.51
Experience of exotic	−0.04	0.07	−0.05	0.04	1.34
Make contact with new people	0.00	0.09	−0.02	−0.07	1.59
Experience of nativeness	−0.02	0.08	0.00	−0.04	1.40
Time for oneself	−0.06	0.13	−0.04	0.01	2.12
Sources of information					
Brochures of destination	−0.08	0.08	0.04	−0.01	1.75
Tourist information at destination	−0.05	0.04	0.02	0.02	1.33
Travel guides, books, journals	−0.01	0.08	−0.01	−0.05	1.49
TV—text	−0.02	0.03	0.00	0.00	1.08
Type of trip					
Theme park trip	−0.01	0.06	−0.03	−0.01	1.26
Study tour (predominantly private)	−0.01	0.05	−0.02	−0.02	1.19

Values indicate differences from overall mean per item. Only significant results ($p<0.01$) are presented in the table.

are based upon a sample of the Swiss population, which limits both the generalizability of the results and the degree to which subanalysis could be performed on the dataset. Secondly, the survey instrument was quantitative in nature, which limits the depth of insights that could be gained with a qualitative study design. Third, the data are representative of the Swiss population living in the German- and French-speaking parts of Switzerland (not the Italian-speaking part). However, this approach had some limitations: for survey technical reasons, persons in collective households were not registered. Also, small children and persons older than 80 were underrepresented. Most foreign citizens in the survey came from countries neighboring Switzerland. As mentioned earlier, trips with a regular and homogeneous repetition rate (e.g., to their own holiday homes) were underrepresented. From

Table 5

Travel Profile

	Doer	Dreamer	Hedonist	Materialist	Total
Destination ($\chi^2 = 58.285$; CC = 0.103; $p < 0.001$)					
Switzerland	**42.78%**	39.33%	**42.02%**	41.34%	41.52%
Austria	6.68%	5.68%	**8.66%**	6.44%	6.83%
Germany	8.69%	**9.98%**	**10.44%**	7.11%	9.01%
France	9.39%	**11.35%**	7.22%	**12.13%**	9.97%
Italy	8.47%	**9.81%**	**10.53%**	9.46%	9.43%
Europe	**14.77%**	**15.82%**	13.07%	14.31%	14.54%
Americas	**2.50%**	**3.00%**	1.95%	2.43%	2.48%
Africa	**2.93%**	2.51%	1.95%	**3.26%**	2.70%
Asia	**3.47%**	2.03%	**3.65%**	3.10%	3.10%
Oceania	0.33%	**0.49%**	**0.51%**	0.42%	0.42%
Type of accommodation ($\chi^2 = 78.653$; CC = 0.125; $p < 0.001$)					
Hotel, resort	49.46%	**54.48%**	**53.91%**	**56.42%**	53.10%
Friends and relatives	**18.12%**	15.45%	14.63%	14.47%	15.95%
B&B	3.69%	3.11%	**5.15%**	3.05%	3.74%
Holiday residence	**17.76%**	16.00%	15.36%	**17.07%**	16.69%
Other	**10.97%**	**10.97%**	**10.95%**	8.98%	10.52%

Values in bold indicate percentages within group higher than total.

previous studies (Weinert, Laesser, & Beritelli., 2007) we know that second home ownership and usage is highly associated with the personality of the owner, which, if included in this study, might have produced a different outcome.

Comparisons with federal census data based on gross travel intensity show that approximately 20% of all trips taken are not recorded in the survey (Bieger & Laesser, 2008). Among those are trips to people's own holiday homes. Many tourists consider their second homes to be part of their usual residential environment, and therefore do not perceive visits there to be leisure trips. Since travel to second homes does not usually involve complex external information-seeking activities, this limitation does not hamper the study.

Conclusions

Market segmentation is one of the most crucial long-term strategic marketing decisions to understand types of customers and to develop marketing strategies. Despite the limitations of market segmentation techniques, it is important for those associated with the planning, management, and marketing of tourism destinations that they attempt to gain an improved understanding of the origin of their visitors, their travel patterns, and travel motivations. There are numerous means to segment markets: geographical, demographic, psychographic, and behavioral approaches. However, there still is limited knowledge about potentialities of psychographic approaches relating to a traveler's traits and/or personality as a segmentation basis in tourism. The present study tries to overcome this research gap.

The results of our study are somewhat sobering as they show that stated personality is of limited suitability as a base for segmenting a market. Despite the fact that segments can be formed based on stated personality (hence, there is some degree of homogeneity within the groups), the discriminating power of the personality scale used is rather small (and thus the heterogeneity between the groups rather small as well).

In addition, the number of differences in observable travel behavior as well as some sociodemographic dimensions is rather small as well. Nevertheless, and with regard to the latter, the perception of personality is associated to some differences in gender, education, and professional position, but not age. Moreover, and depending on their personality, people travel to different places for different reasons and stay at different modes of accommodation. However, their sources of information hardly vary; neither do the types of trip. In addition, the role of the number of previous trips is extraneous, which explains the lack of heterogeneity in information sourcing.

Hence, the hypothesis brought forward at the beginning of the article ("travelers can be segmented according to their personality") is only conditionally supported by the results. There are differences between the generated segments. However, and compared to other studies in this market (Bieger & Laesser, 2008), those differences are less significant and relevant. Results of previous segmentation studies (e.g., based on travel motivations or information sources; Bieger & Laesser, 2002, 2004) proof to be much more relevant (segments derived from motivation or information sources are much more homogenous within and heterogeneous between themselves).

Nevertheless, for *marketing theory and practice*, a number of tentative implications can be drawn from the results of our study.

Doers are somewhat lost for marketing measures, as their trips mostly "end" with noncommercial types of accommodation [i.e., friends and relatives and (mostly own) holiday residences]. The high share of Swiss destinations moreover indicates a high degree of familiarity with the places they go to, which is why they are less susceptible to general promotional measures.

In contrast to that are the Dreamers, who tend to travel because they want to experience the exotic while resting and relaxing. They rely on picture-oriented "traditional" information outlets such as destination brochures as well as travel guides and journals, which make them prone for corresponding promotional measures. A large majority of them also stays at commercial types of accommodation, which from an added value perspective make them ideal subjects of specific destinations as well as services promotion. Finally, their social needs make them prone to brand community building.

Another group of interest is the Materialists (more than the Hedonists). Basically, their explicit

need for rest and relaxation combined with high shares of commercial types of accommodation and low levels of information sourcing leaves room and potential rather for product and services development than for promotional measures or even community building as regards the Dreamers.

In general, destinations can use the resulting typology in relation to their management and marketing efforts. From a marketing perspective, destinations can easily tailor their product and promotion according to specific target markets, as different service settings produce different responses from each personality orientation due to customers' differing inherent preferences, wants, and needs for various types of products and service experiences. This means that this knowledge can enable tourism marketing managers to use personality as a useful basis for developing their marketing mix and identifying predictor variables of service satisfaction and intentions to repurchase.

From a *theoretical perspective* the study adds to the growing literature in the field of psychographic segmentation in tourism (Dolnicar; 2004; Dolnicar & Leisch, 2003; Galloway, 2002; Gretzel et al., 2004, 2005; Horneman et al., 2002; Plog, 2002; Prebensen et al., 2003) and shows evidence that market analysis in terms of psychological variables (psychographic analysis) is useful.

Future research needs to extend the efforts made by this study so as to replicate the study in representative samples of other countries than Switzerland. This could enable accurate identification, measurement and comparison of relevant psychographic segments, also in terms of a cross cultural study.

Appendix 1: Measurement Construct

- I describe myself as a "down to earth person"
- I am a very practical person
- The pleasures of food/eating (gastronomy) are very important in my life
- I value strongly material possessions/things
- I like very much the tangible/concrete things in my life
- Physical comforts/pleasures are very important
- I am very good at organizing my work and time
- I am very realistic/pragmatic person
- I am a very self-sufficient person
- I am very much a doer/action person
- I am very able/good with my feelings/emotions
- I am good in producing emotions and feelings
- Experience is more valuable than ideas/theory

- I am very logical type of thinking person
- Understanding the reasons why things happen is very important
- I am a very objective person in my thinking
- New ideas and innovations fascinate me
- I am too much of a thinker and too little of a doer
- I am very good at thinking/coming up with new ideas
- I am very sensitive to atmosphere
- I have a very lively/active imagination
- I am generally very perceptive person
- My imagination sometimes makes me sick
- I enjoy daydreaming
- I am very good at visualizing things

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