

# The Behaviour of Repeat Visitors to Museums:

## Review and Empirical Findings

Juan Gabriel Brida · Marta Disegna · Raffaele Scuderi

**Abstract** This study presents a theoretical and operational framework for analyzing repeat visit to museums. Starting from the literature on repeat visit in tourism, the specificities of these cultural attractions are made explicit through a review of theoretical and applied works. Consistently with previous contributors, the paper suggests that the analysis of actual past behaviours has to be preferred to the one of attitudes. The application of proper econometric models is also remarked in order to put into account individual profiles. Information coming from three techniques is then used in an integrated way in order to provide a more comprehensive view of the phenomenon. Evidence from an ad hoc survey suggests the necessity to give a greater attention to perceived cultural value during the visit, promoting cultural events during the week and addressed to children, and taking care of those visitors that come from far places also through an integrated tourist supply.

**Keywords** Repeat visit · Museum · Behavioural approach · Econometric modelling

J. G. Brida · M. Disegna · R. Scuderi (corresponding author)

School of Economics and Management, Free University of Bolzano, Piazza Università 1, 39100 Bolzano, Italy

e-mail: [raffaele.scuderi@unibz.it](mailto:raffaele.scuderi@unibz.it)

## 1. INTRODUCTION

Repeat visit is one of the main targets of tourist attractions and destinations managers. After all motivating visitors to return is more cost-effective than attracting new ones (Ennew and Binks, 1996). Beyond contingent factors such as price promotion, motivation related to the features of the visited place remains the key factor that operators try to influence for the sake of stimulating the return to the destination. In recent years a growing literature has widely discussed about loyalty and its determinants. In particular many works focused on providing a description of the characteristics that are likely to cause the return of tourists to a destination. But meaning the loyalty as an indication of the adequacy of supply in satisfying the demand for leisure might be misleading in some cases.

In this sense, despite the progress in academic studies, the seminal work of Oppermann (1999) and many of the critical aspects highlighted therein still remain of living importance. In particular, trying to describe loyalty and its determinants, and provide a representative profile of the loyal tourist and her motivations, are not easy tasks. Phenomena such as situational or 'spurious' loyalty and the influence of multi-purpose trips may intervene as confounding factors. This concerns especially those studies that try to infer the likely elements that caused tourists to return to a place. These might be biased by sets of tourists who repeat the visit due to convenience factors or habit, or simply did not make any selection of the place as it happens for business trips. In addition a tourist might be in search for change, and thus have a holiday in different places despite she enjoyed a certain destination.

The literature has showed no particular attention in investigating the determinants of the loyalty to cultural attractions such as museums. Beyond the demand for leisure, the visit

to museums has a particular value for the enhancement of cultural capital of tourists (Bourdeau, 1973; Fyfe, 2004). But analysing the repeat visit to the same museum might be a meaningful indication not only at the level of the attraction's managers. It might be a symptom of interest of a certain type of tourist towards the stimulus in increasing her knowledge and culture through the 'messages that are sent' by exhibitions. This kind of knowledge might have deep implications also on the most receptive policymakers and the quality of their cultural and educational policies. In a broader sense, this is made explicit by the recent contribution by Rodríguez-Santos et al. (2013), who showed that previous visits were among the factors that enhance the positioning of a cultural destination with a weak image.

For what concerns the 'strict' analysis of the phenomenon, to a certain extent the segment of cultural tourism is exempt from certain misinterpretation of the loyalty. Cultural tourists are highly motivated ones who are in search of 'serious leisure' experience (Stebbins, 1997, 2007) that could increase their knowledge and skills (Burton et al., 2009; Rojek, 1995, 2000; Silberberg, 1995). This applies in particular to museums. The repeat visitors of these attractions can be reasonably thought to be actively interested in the cultural value of exhibitions. Of course price policies and other 'contingent' factors can facilitate the access to it. However motivation, especially when driven by 'cultural' elements, appears to be essential to make visitors decide to return. Moreover, analysing specific niches of the tourist market avoids the confounding effects of analysing a set of 'generalist' tourists whose trip's purposes are heterogeneous.

To the best knowledge of who writes, in the tourism literature only the work by Brida et al. (2012b) has been presented for the sake of investigating the loyalty to museums. The present paper provides a systematic analysis of the repeat visit to museums. The

purpose is to outline the behaviour of loyal visitors and its determinants. The phenomenon is first defined in the light of earlier works, within the broader field of the repeat visit in tourism. Empirical evidence deriving from econometric data analysis techniques constitutes a further and complementary step in order to define the likely characteristics influencing the repeat visit behaviour.

Regarding this latter aspect, McKercher and Tse (2012) recently argued that applied literature produced poor results, due to little innovation and the application of similar conceptual and methodological frameworks that produce similar results. We take this claim as a stimulus in order to provide results that would be both functional to the description of the topic, and innovate in terms of approach and methods. The approach we follow is based on an integrated analysis of the results from different econometric models. Each of them interprets a specific way of operationalizing the concept of the repeat visit.

## 2. BACKGROUND

The study of repeat purchase is a traditional topic for brand and consumer behaviour studies (Engel et al., 1978). Jacoby and Chestnut (1978) date the earliest approach back to Copeland's (1923) 'brand insistence'. Kozak et al. (2002) report that studies on loyalty have evolved from being associated with the consistent behaviour in doing transactions concerning the same product or brand (Cunningham, 1956; Farley, 1964; Pessemier, 1959), to enhancing the latter's value for the sake of maintaining costumers rather than attracting new ones (Fornell and Wernerfelt, 1987; Reichheld, 1996). McKercher et al. (2012) cite a more recent definition of loyalty to a product by Oliver (1997), which is said to be 'a deeply held commitment to re-buy or re-patronize a

preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour’.

The attention towards loyalty in tourism is instead more recent. The early work by Gitelson and Crompton (1984) introduced repeat visitation as important dimension to focus on while studying tourists’ behaviour. They analyse whether individual characteristics differentiate between repeat and non-repeat vacationers. Authors outline the main differences between repeated purchase in retail stores and the choice of a tourist to return to a place on holiday. They stress that a pleasure vacation is a relatively expensive product, and as such the consumer dedicates more time in searching and deliberating. Furthermore, the high psychological involvement and financial commitment make this process as not driven by spontaneity or caprices. Finally, the set of information the choice to consume relies on is limited by the presence of the intangible characteristics of the holiday. In the authors’ opinion, tourism as a product is in fact selected only on the basis of symbolic communication alone, rather than physical characteristics.

Gitelson and Crompton (1984) give a broad definition of repeat tourism, which is said to be ‘a trip to a primary destination which previously had been visited for any purpose by the respondent’. The definition is left intentionally generic for the sake of not excluding dimensions of interest for scholars. No time limits are given, which implies that repeat visitation may concern either, say, lifetime or previous week. Moreover, the respondent determines the definition of the ‘primary destination’, which is also related to the specificity of the case study. Oppermann (1999) claims that the definition of such phenomenon requires addressing of four aspects. These concern fixing appropriate time

intervals, and putting into account the increasing probability to find repeaters the longer the time investigated, changes in attitudes and their effects on actual behaviour, the possibility that other people than the final user can purchase the product.

Despite this, Oppermann (1999) argues that the evaluation of loyalty to a destination can be misleading due to reasons related to time, space and motivation of subjects. Even when a time horizon is fixed, there might be tourists who used to repeat the vacation in a longer frequency than the one that was fixed. This happens when, for instance, one is in search of a yearly loyalty, but instead there might be tourists who go on holiday once every three years though to the same destination. Also the reference to one single destination may lead to ambiguous indications about loyalty. In case of multi-destination trips difficulties could arise in distinguishing the 'primary' destination from 'secondary' ones. Moreover, loyalty to a place can be in contrast with the change of resorts at every holiday (Goodall, 1988).

Still in Oppermann's (1999) opinion, trips that do not imply any choice of the destination should not be put into account. This happens for instance with business trips. Such topic recalls a broader one concerning the measurement of loyalty in presence of multi-purpose trips where leisure and business combine. In this case surveying the extent to which the decision to return implies an active involvement of the tourist may become complex. With the exception of these peculiar cases, the subjective dimension of satisfaction is the most important factor to stimulate the repeat vacation (see among others, Mazursky, 1989; Court and Lupton, 1997; Oh, 1999; Kozak, 2001; Assaker et al., 2011; Lin and Hsu, 2011; Gómez et al., 2012). This may have such degree of significance for tourists that in some cases they express a sense of identification with the destination (Ryan, 1995).

Still about the awareness in repeating because of satisfaction, further complexities arise when other elements of 'spurious loyalty' are involved. In some cases an active process of decision-making does not drive repeating a holiday. This is the case where loyalty coincides with 'habit'. Perhaps an active choice of going to 'that' place there might have been in the first times (Backman and Crompton, 1991a; Beatty and Kahle, 1988; Oppermann, 1999). But often it could be very arguable the fact that satisfaction has remained a main factor. Satisfaction and the motivation towards revisiting a place fade also when some situational factors become significant in the decision to repeat. The choice of repeating can be driven by contingent elements such as time, money and lack of opportunity (Backman and Crompton, 1991a; Oppermann, 1999).

For reasons such as the ones we mentioned, the set of repeat visitors appears to be very heterogeneous. Undoubtedly, those who have never been to a place constitute a more homogeneous group (Oppermann, 1999, 2000a). Instead, elements related to time, place and motivation concur in drawing a wide range of subcategories within the repeat tourists. Loyal tourists may be those who return both year after year and several times every year. In addition, 'repeaters' can be those who did several visits both recently and a long time ago. Moreover, even if the tourist is satisfied with the holiday, for the next vacation she can either return or choose a different destination. These latter two decisions concur to form two end points of a spectrum with a number of other types in between (Oppermann, 1999; Woodside and MacDonald, 1994).

The traditional destination-based and single-dimensioned analysis of loyalty is questioned by the recent work of McKercher et al. (2012). They invert the traditional perspective of focusing on the repeat visitation to a single enterprise or destination. Rather they adopt a consumer approach. Accordingly three different views of the

concept are proposed. They concern different tiers of the tourist systems (vertical loyalty), more than one provider at the same tier of the tourism system (horizontal loyalty) and related to experience such as the typology of vacation (experiential loyalty). The authors explore their theory through a qualitative research in a small sample. Opportune ways to operationalize it for quantitative studies to large samples may constitute future interesting directions of research also in authors' opinion.

### *2.1 Operationalization*

The approaches the data collection on brand loyalty is based on are used to be classified into behavioural, attitudinal, and composite (Bowen and Chen, 2001; Jacoby and Chestnut, 1978; McKercher et al., 2012; Oppermann, 1999, 2000b; Zins, 2001). Behavioural approaches are based on actual or reported purchasing behaviour, such as brand purchase sequence recording, proportion, probability, synthesis measures, or miscellaneous measures (Oppermann, 1999). In all these cases, the past repetition of a holiday to a destination is assumed to be an indication of the intention to repurchase, although it may mean different things (Kozak et al., 2002). The main fallacy of these measures is in fact the difficulty to discriminate between loyal and habitual or spurious behaviour (Henry, 2000; McKercher et al., 2012; Shoemaker and Bowen, 2003; Weber, 2001).

Attitudinal approaches (Day, 1969) are addressed at asking the respondents about their intention to continue buying the same product, and/or willingness to recommend the product to others (Hepworth and Mateus, 1994). They are based on the theories of planned behaviour and reasoned action, which postulate that a relationship exists between service quality, satisfaction, and future behavioural intentions (Ajzen, 1991;



Ajzen and Fishbein, 1980; Chi and Qu, 2008; McKercher and Tse, 2012; Yoon and Uysal, 2005). These approaches affirm that behavioural measures are not able to distinguish between intentionally loyalty and spurious loyalty (Backman and Crompton, 1991a), where the latter characterizes those that are interested in being loyal because of convenience factors. This implies that these buyers can be easily attracted by another brand that, for instance, adopts a policy of price discounts or special offers (Kozak et al., 2002.)

The main limit of this second approach is the fact that attitudinal loyalty is better captured when it persists over the time. Longitudinal datasets of tourists can be appropriate to this, but they are rare in tourism and indeed difficult to collect. Similarly to asking the number of past trips, one might be tempted to find a solution by asking tourists to recall past attitudes. Indeed the latter is a very hard task to deal with. In addition, the measurement of attitudes at a given time has no predictive value. Several authors indicated that they are not positively related to actual behaviour (McKercher et al., 2012). They are ‘conscious decisions’ that may not be transformed into an actual one (Oppermann, 1999). This is stressed by the recent work of McKercher and Tse (2012), who found little evidence of the correlation between the willingness to return and the actual behaviour.

Composite approaches constitute the third category. They are motivated by the fact that a loyal consumer is supposed to both purchase the brand and have a positive attitude towards it. Their application has also been questioned for the incompatibility of the two dimensions of willingness and actual behaviour (McKercher et al., 2012). A set of contributors instead offers a different and complementary approach to the already mentioned ones. They propose to find categories to classify repeat tourists into.

Backman and Crompton (1991b) divide tourists according to their psychological involvement and frequency of the visit into high, spurious, latent and low loyal. Heung et al. (1996) adopt Kotler's (1991) categories for loyalty to brands (hard-core, soft-core, shifting loyal, and switchers). Oppermann (1999) distinguishes seven types of repeat tourists according to the number of previous visits, people's attitude toward holiday, and the probability to visit the destination in the future. Oppermann (2000b) classifies loyalty from cutoffs in the empirical distribution of the number of past visits. Kozak et al. (2002) resume the behaviours of repeat and non-repeat tourists through a schema of the possible actions of the tourist that relates repetition, loyalty and satisfaction. The already mentioned approach of McKercher et al. (2012), and their distinction of loyalty into vertical, horizontal and experiential loyalty, constitutes, instead, a different attempt that tries to provide a different qualification of the loyalty dimension.

### *2.1.1 Attitudes or behaviours? Choosing the response variable.*

Different limitations arise in using the attitudinal approach. McKercher and Tse (2012) support this by showing the unreliability of such measures. The sample of those who will actually repeat is in fact much smaller than those who declare they will repeat. On the other side, behavioural measures do not allow discriminating between those who do it as a habit or spuriously, and others who show a strictly loyal behaviour. Nevertheless the behavioural approach can be considered as more reliable than the first one for quantitative research. One of the reasons is the already mentioned 'over inclusion' in attitudinal approaches of a set of people that will not repeat the visit. Over inclusion of seemingly loyal people may arise also when reporting past behaviours.

Nevertheless, opportune quantitative models can incorporate elements for controlling for these characteristics, although indirectly, whereas on the contrary it can be hard to state whether one will return back to a place for real. Moreover, investigating particular contexts such as museums limits the bias of the behavioural approach, inasmuch as the audience who repeats is often motivated and thus 'authentically loyal'. This can be related to a process of self-selection that is due to education level and of high motivation in returning.

In general the use of binary variables is very frequent in the literature using behavioural approaches. Different authors instead (Backman and Crompton, 1991b; Dick and Basu, 1994; Oppermann, 1999; McKercher et al., 2012) encourage the utilization of measures of loyalty that would range on a continuum (Blattberg and Sen, 1976; Day, 1969). This attempt is partially pursued by those who use Likert scales in measuring the attitude towards returning (Jang and Feng, 2007; Lee, 2009; Li et al., 2010; Oom do Valle et al., 2006; Petrick, 2004; Um et al., 2006). However such a way allows obtaining only ordinal variables.

A partial solution would be to treat loyalty as a discrete quantitative variable through the number of past visitations. This alternative way was considered by a very reduced part of the literature (Brida et al., 2012b, 2012c). This measure is an imperfect proxy of the propensity of a tourist to return to a destination. In fact it does not put into account the fact that different tourists have known for different times about the existence of an attraction, or more in general may have had starting to have access to it at different moments. A solution would come from comparing the frequency of past visits and a measure of the 'possibilities' each tourist had to do the visit. Of course, the reasons for differences in such 'possibilities' within the set of tourists might be different. These

might be related to subjective elements (e.g., different tastes and preferences; change in tastes and preferences over time), objective (e.g., knowledge about the existence of the destination was not obtained at the same time for all; age of the destinations may differ – see Wall and Nuryanti, 1997 – as well as the age of tourists), budgetary (limitation in financial resources), logistic and contextual (easiness in reaching the destination; presence of a new condition that allows accessing it), time-related, etc. Synthesizing and imploding all these aspects into one single measure is not an easy task. In addition, asking the tourist how long she has been knowing about the possibility to visit the place (what the answer if the destination was, say, USA?), or rather if and when eventual difficulties had in the past to visit the place were removed, might not provide trustworthy results.

Oppermann (1999; 2000b) suggests to fix a time horizon in the past in order to limit the open-endedness of asking the number of past holidays in the same destination. Limits in time might solve mostly only the issues that are related to the destination or respondent age. A solution that will be adopted in what follows is to consider the number of past visits as function of individual and place-related characteristics. This is not a direct standardisation across tourists, nor it puts a limit in time of the past experience of the respondents. However it conditions the ‘number of times’ to the different individual profiles of the tourists. These explanatory individual variables are supposed to be indirect measures of past experiences. The final outcome will be the estimation via an econometric model of the significance of each characteristic in being related to the number of repeat visitations, conditionally to the other ones.

### *2.1.2 The visit to museums*

Museums are indeed the most popular cultural attractions (McKercher, 2004). Despite their heterogeneity, all museums are products of particular cultural and historical experiences (MacDonald and Alford, 1995) that create new understandings of the past and the reaffirmation of an identity in time and space (Brida et al., 2012a; McIntosh and Prentice, 1999). This makes them means to disseminate knowledge and experience (Herreman, 1998). But only a part of their audience is able to be involved in the experience at a ‘cultural level (Bennett et al., 1999). Knowing the needs and the profiles of their customers appears crucial in order to better address market policies. This is also functional to reaffirm their authenticity and reinforce their role of means for the culture that goes beyond being mere agents of conservation (Brida et al., 2012a).

Only recently the literature has started to treat museums visitors as a heterogeneous mass of people characterized by different needs and profiles (Correia et al., 2011; Hughes, 2002; Schouten, 2007; Schuster, 1991; Stylianou-Lambert, 2011). Burton et al. (2009) stress that museums have had an ambivalent attitude in placing themselves within the field of leisure. After all ‘museums and heritage sites have had to meet the challenge of being open to entrepreneurial approaches while continuing to meet their heritage preservation and educational mandates’, because ‘challenging economic times have compelled museums and heritages sites to explore ways and means to increase attendance levels and self generated revenues and to control operating expenditures’ (Silberberg, 1995).

Their kind of entertainment can be classified within Stebbins’ (1997, 2007) ‘serious leisure’. It consists of the systematic pursuit of a core activity where typically participants can acquire and express a combination of skills, knowledge, and

experience. In Stebbins' categorization it is distinct from other forms of leisure that require less involvement and/or training, such as 'casual' and 'project-based' leisure. Museums attract visitors in search of serious leisure inasmuch as they are occasions to enhance the cultural capital of attendants (Bourdieu, 1973; Fyfe, 2004), which has effects also on the social capital of a community.

Burton et al. (2009) qualify the modern involvement of a part of the audience as Rojek's (1995, 2000) 'fast leisure', which is the condition of a post-modernist visitor who is distracted, fragmented in gaining knowledge, not committed, linked to contingent occasions and fast in pursuing information through new technologies. Fast leisure also implies that emotionality is seen at the same level as rationality. As an effect, citing Bennet et al. (1999), Burton et al. (2009) claim the fast leisure effect may involve also highly educated visitors.

### 3. DATA AND METHODOLOGY

A sample of visitors was selected at the two most important museums of Trentino-South Tyrol. It is a region in the North-East of Italy that is well known for the mountain tourism both in summer and winter. The museums are of two different typologies. This choice was taken in order to control for the influence of the typology of the museum on loyalty. Both museums are located in two cities that are reachable by the same highway and railway. One is located in Bolzano, a city in the North of the region that still preserves its cultural and linguistic identity of former part of Austria by adopting bilingualism (Italian and German). Rovereto hosts the second one. Together with Bolzano, the province of Trento where Rovereto is has been part of Austria until 1919, but like the entire Trentino region it is a city with an Italian culture.

The South Tyrol Museum of Archaeology (ÖTZI henceforth) is the main cultural attraction of Bolzano, the main city of South Tyrol. It is worldwide known for the exhibition of Ötzi ‘the iceman’ and its belongings. Ötzi is a well-preserved mummy from the Neolithic period of a man living in the region more than 5,000 years ago. The museum periodically hosts also exhibitions of particular aspects of the mummy and the life in ancient times. The Museum of Modern and Contemporary Art (MART henceforth) is instead placed in the Southern area of the region between the cities of Trento and Rovereto. The main building is in Rovereto, and it is an attraction itself for its particular design by the architect Mario Botta. The museum’s belongings of the permanent collection are shown to the public on a rotating basis. It hosts temporary exhibitions of world famous modern and contemporary artists.

Table 1. Structure of the questionnaire.

Sections	Description	Categories of variables
I	Museum information	Repeat visiting; number of museums visited in the last year; factors that stimulated the visit <sup>a</sup> ; rating of attributes of the visit <sup>b</sup> ; shopping expenditure at the museum; authenticity perception <sup>a</sup> .
II	Trip information	Motives of the trip; number of nights, total expenditure per person per night.
III	Interviewees’ profile	Some socio-demographic and economic characteristics of interviewees and their families.

Notes: <sup>a</sup> dichotomous variables; <sup>b</sup> 5-points Likert scale.

The survey was conducted from June to September 2011. A total of 1,288 interviews were successfully collected in almost equal proportions (47% at MART, 53% at ÖTZI). A convenience sampling strategy was followed due to the lack of available *a priori* information. The 603 surveyed units at MART were part of the 280,371 visitors in 2011, and specifically of the 78,349 (27.9% of the total) that attended the visit between June and September. For what concerns ÖTZI, the 685 interviewed visitors come from an universe of 265,459 people that visited it in 2011, and specifically 137,011 between June and September (51.6% of the total). It can be deduced that the two museums faced

a different seasonality, with ÖTZI summer visitors constituting a significant part of the total more than MART.

The questionnaire consisted of three sections (Table 1) and reported questions about the visit to the museum, the trip, and socio-demographic variables. It was tested through a pilot survey in order to correct biases related to its structure and wording. Interviewers informed visitors about its scientific aims for the sake of encouraging their cooperation. Interviews were held to people after their visit, in selected working and weekend days and during different times of the day. Only one person per travel party was selected. The questionnaires were anonymous and self-administrated in three languages (Italian, German and English). A research team member was present to respond if questions or doubts emerged.

Tables 2 and 3 report the sample statistics. Interviewees are mainly women (52.08%), with a high level of education (75.10% with at least University degree), and an average age of about 44 years. The majority come from the Northeast regions of Italy (25.27%) and Germany (20.27%) and are employed (53.59%). They visit the museum in couple (36.61%), in groups (29.82%) or with children (26.54%). Many of them reported a medium average household income (between €25,000-€50,000), with 28.26% not declaring their income. They are quite frequent visitors of museums with an average number of visited museums in the last 12 months that equals 4.44. About 54% took the visit in other days than the weekend, and the majority decided to visit both permanent and temporary collections (50.59%) rather than only the permanent (22.47%) or temporary (27.41%). Only a few of them (6.22) attended other cultural activities while visiting the city.



Table 2. Socio-demographic and economic characteristics.

	Overall	MART	ÖTZI	p-value
Male (%)	47.92	44.05	51.33	***
Age (mean)	44.31	44.29	44.32	
University (%)	75.10	82.58	68.45	***
Distance (km)	714.33	257.99	1118.97	***
Origin of visitors (%)				***
Abroad	11.50	3.19	18.74	
Germany	20.27	3.70	34.70	
Centre/South of Italy	12.44	9.58	14.93	
North-East of Italy	25.27	40.34	12.15	
North-West of Italy	14.08	13.78	14.35	
Local resident	16.43	29.41	5.12	
Occupation (%)				***
Autonomous worker	19.10	17.76	20.30	
Employed	53.59	47.40	59.10	
Retired	9.94	12.73	7.46	
Other occupations	17.36	22.11	13.14	
Visiting party (%)				***
Alone	7.03	8.04	6.14	
Couple	36.61	34.51	38.45	
Children	26.54	13.90	37.57	
Group	29.82	43.55	17.84	
Household annual income, €, (%)				***
0 - 25,000	14.05	19.57	9.28	
25,000 - 50,000	32.38	39.13	26.52	
50,000 - 75,000	13.66	11.71	15.36	
> 75,000	11.65	7.36	15.36	
Missing income	28.26	22.24	33.48	
Number of museums visited in the last 12 months (mean)	4.44	4.33	4.53	

Notes: *p*-value is the significance of the Chi-square test (qualitative variables), *z*-test (dichotomous variables), and *t*-test (quantitative variables).

All test results are not significant unless indicated otherwise: \*\*\* Significant at  $p \leq 0.01$ , \*\* Significant at  $p \leq 0.05$ , \* Significant at  $p \leq 0.1$

Table 3. Characteristics of the visit.

	Overall	MART	ÖTZI	<i>p</i> -value
Weekend (%)	44.64	50.84	39.28	***
Permanent collections (%)	22.47	6.89	36.07	***
Temporary showroom (%)	27.41	34.29	21.41	***
Both permanent and temporary collections (%)	50.59	62.18	40.47	***
Other cultural activities (%)	6.22	8.77	3.99	***
Expenditure at the shop of the museum				
Positive expenditure (mean)	10.33	11.40	8.97	
Visit to the shop of the museum (%)	30.02	35.91	24.89	***
First time visiting the museum (%)	65.34	45.15	82.46	***

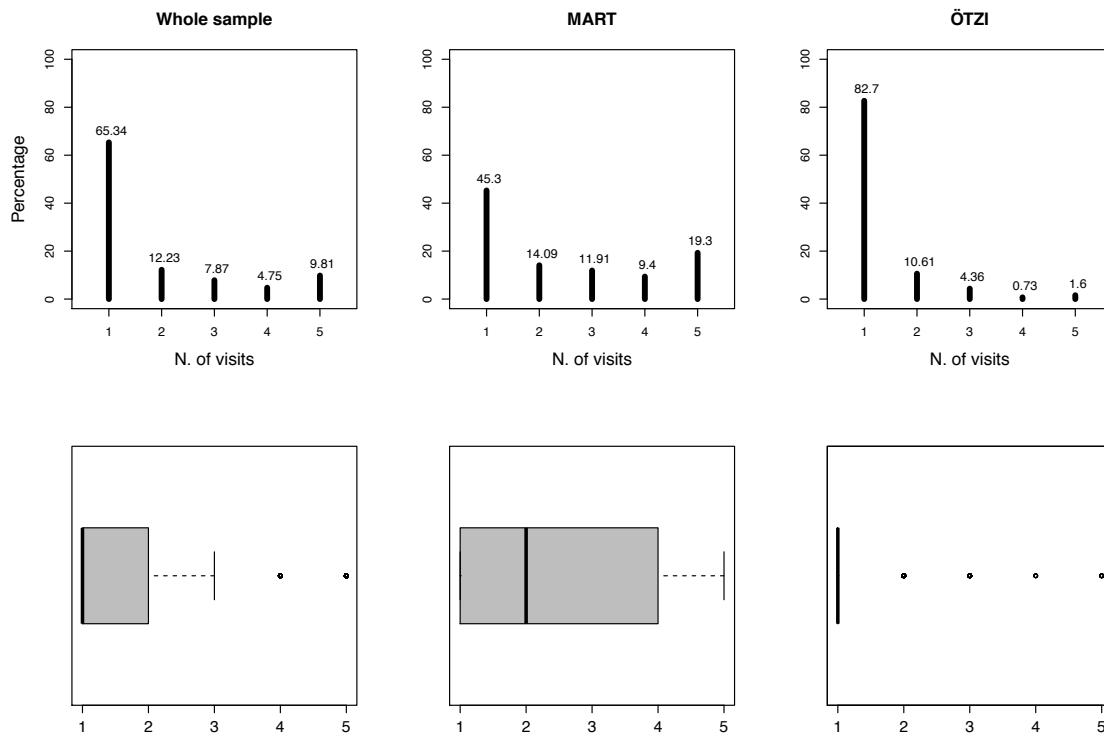
Notes: *p*-value is the significance of the *z*-test (dichotomous variables) and *t*-test (quantitative variables).

All test results are not significant unless indicated otherwise: \*\*\* Significant at  $p \leq 0.01$ , \*\* Significant at  $p \leq 0.05$ , \* Significant at  $p \leq 0.1$

From the point of view of the cultural supply the two museums are indeed heterogeneous, as the two samples testify. ÖTZI resulted to be more attractive for men, visitors with higher income and from abroad – Germany in particular, – and couples

also with children. MART museum instead was more frequently visited by people with a higher educational level, more often organized in groups, retired or in other occupation (student, housewife, teacher, etc.), coming from Italy and in particular from neighbour areas of the North-East, and often visiting during weekends. Museums did not differ significantly in terms of the average age of the interviewees.

Figure 1. Number of past visits to the museum including the current.



Visitors of the archaeological museum came more frequently for the permanent showroom and visited the shop of the museum less frequently, although there does not appear a significant difference in the mean expenditure. It is interesting to note that the number of visited museums in the last 12 months did not differ significantly between MART and ÖTZI. This could indicate a similar propensity of the average visitor to attend, apart from their personal characteristics. Figure 1 and Table 3 report the distribution of repeat visits to the museums, including the time of the interview. There can be noted that overall a high percentage of visitors (34.66%) decided to repeat. But

there can be found evident difference between the two distributions. Loyal visitors are in fact more frequent at MART where the distribution reports a higher variability. First timers were instead slightly more than 80% of ÖTZI visitors.

Table 4. Reasons for the visit the city and the museum.

<i>What were the reasons for visiting this city? (%)</i>	Whole sample	MART	ÖTZI	<i>p</i> -value
To visit this museum	64.67	81.27	50.59	***
To visit/know the city	24.07	7.53	38.41	***
To accompany/visit friends or relatives	5.05	5.69	4.49	
<i>Why have you visited the museum today? (%)</i>				
To satisfy curiosity	39.29	25.59	51.16	***
Rest/Relax	11.34	14.88	8.26	***
A specific interest in such an attraction	58.93	70.07	49.28	***
To accompany a friend/family member	12.89	14.05	11.88	
To learn something new	32.30	20.90	42.17	***
Something which one ought to do	11.88	13.21	10.72	
Doing something worthwhile	17.86	17.89	17.83	
To occupy some leisure time	11.96	10.87	12.90	
<i>Do you agree with the following statements? (%)</i>				
Just a tourist attraction	15.17	10.44	19.40	***
Unique in the world	51.15	28.69	71.21	***
A place that makes you think	83.93	92.11	76.61	***
A way to describe a historical era	90.35	87.23	93.08	***
A fascinating attraction	89.27	90.10	88.54	
An authentic attraction	83.82	81.68	85.74	*

Notes: *p*-value is the significance of the *z*-test (dichotomous variables).

All test results are not significant unless indicated otherwise: \*\*\* Significant at  $p \leq 0.01$ , \*\* Significant at  $p \leq 0.05$ , \* Significant at  $p \leq 0.1$

The survey investigated also the motivations of the visitors (Table 4). Visiting the museum rather than the city was the main reasons for the holiday (64.67%). This behaviour differs significantly between the two museums. The percentage of the museum as attractor for visitors becomes bigger for those who have been to MART (81.27%), whereas the city of Bolzano is mentioned as a reason for the visit by 38.41% of interviewees at ÖTZI. The main motivations for visitors to both museums are a specific interest in the attraction (58.93%), curiosity (39.29%) and the willingness to learn something new (32.30%).

Significant differences arise in the motivations aspects between the two museums. In particular curiosity and the willingness to learn something new affects ÖTZI visitors

more frequently than MART, whereas the contrary happens for those who declare to have a specific interest in such an attraction and to visit the museum in order to rest or relax. Museums are frequently described as places that describe a historical era (90.35%), that make the visitor think (83.93%), fascinating (89.27%) and authentic (83.82%) attractions. Significant differences arise also in almost all the items measuring the way museums are perceived. ÖTZI visitors declare more frequently to see it as a tourist attraction, but also as a unique place in the world, authentic, and a way to describe a historical era. MART visitors instead perceive more frequently the museum as place that makes the visitor think.

### 3.1 Methods

A basic theoretical framework of reference for the study of the determinants of revisiting comes from Hellström and Nordström (2008) and it was reprised Brida et al. (2012b) and Brida et al. (2012c). Such classic approaches are common also in other fields of tourism studies, such as the ones on the determinants of tourist expenditure (see Brida and Scuderi, 2013). The model supposes that a museum's visitor  $i$  from a set of  $n$  agents maximizes her utility by choosing to visit a tourist site  $j = 1, \dots, J$  in a number of  $y_{ij}$  times, and consuming a set  $\mathbf{g} = (g_{i1}, \dots, g_{ir})$  of quantities of other  $r$  goods. Consumer's choice is done conditionally to a set of individual characteristics  $k_i$  and long-run labour supply. The consumed quantities  $\mathbf{g}$  of the other goods are not surveyed in the dataset. As in Hellström and Nordström (2008), this means to refer to an incomplete demand system, where the quasi-utility function can be expressed as:

$$u_i = u_i(y_{i1}, \dots, y_{ij}, \dots, y_{iJ}, m_i, \mathbf{q} | k_i, l). \quad (1)$$

In Equation (1),  $m_i$  is total spending on  $\mathbf{g}$ ,  $\mathbf{q}$  is the vector of the prices of  $\mathbf{g}$ . Suppose that  $u_i$  has the usual properties of a utility function for fixed  $\mathbf{q}$ . Omitting the consumer index, the maximization is subject to the budget constraint  $\mathbf{p}'\mathbf{y} + \mathbf{q}'\mathbf{g} \leq I$ , where  $I$  is the income,  $\mathbf{y}$  is the vector of all  $y_j$ ,  $\mathbf{p}$  and  $\mathbf{q}$  are the vectors of the prices of, respectively, visits to the tourist sites and other goods. Corner solutions can be possible in case the visitor did not visit at least one site. However, the extreme corner solution is never possible since the consumer visited at least the museum in which she was interviewed. For the same reason, if we restrict the choice to the site where the visitor was surveyed, an interior solution can be plausible. The number of visits to the site  $j$  can be expressed as:

$$y_j = f(\mathbf{p}, \mathbf{q}, I | k, l) \quad (2)$$

As Hellström and Nordström (2008) report, the consumption prices are generally assumed fixed for each household. However, in practice they will differ between households because of trip-related characteristics, such as distance to sites, transportation modes, accommodation choice, etc.

Behavioural approaches typically make use of two types of dependent variables to proxy  $y_j$ . The first one classifies tourists into first timers and repeaters, whereas the second one is the number of past visits. The first category comprises descriptive techniques and the use of tests on frequencies (Anwar and Sohail, 2004; Hong et al., 2009; Li et al., 2008; Niininen et al., 2004; Opperman, 1996, 1997). Other authors utilized explorative techniques in order to synthesize different aspects of tourists' behaviour emerging from multivariate analysis, such as CHAID analysis (Assaker and

Hallack 2012), factor analysis (Lau and McKercher, 2004), discriminant analysis (Tiefenbacher et al., 2000), LISREL models (Chi, 2012).

Contributions falling in the second category are instead less frequent. Also here merely descriptive approaches are utilized (Meis et al., 1995; Opperman, 2000b), as well as explorative techniques (Gitelson and Crompton, 1984). Econometric models were introduced more recently and model the number of past trips through count data regressions, such as Poisson (Brida et al., 2012b) and Count Quantile (Brida et al., 2012c). These models are used in analogy with the travel cost analysis literature, a set of contributions that aims to estimate the demand for tourism by modelling the number of trips as function of the travel costs (Bestard and Font, 2010; Englin and Shonkwiler, 1995; Hellerstein, 1991; Hynes et al., 2009).

Attitudinal approaches focus on the willingness to return either as 'binary' variable (repeat/recommend the vacation or not), or Likert scale. Explorative and descriptive works include Assaker et al. (2011), Brida et al. (2012) and Huang and Hsu (2009). Econometric models are instead more frequent than behavioural analyses. These comprise logistic regression (Alegre and Cladera 2006; Brida and Coletti, 2012; Campo-Martínez et al., 2010; Correia et al., 2007; Moniz, 2012; Oom do Valle et al., 2008; Osti et al., 2012; Pestana Barros and Assaf, 2012; Rittichainuwat et al., 2008). Instead papers using a response variable in Likert scale utilize structural equation models (Jang and Feng, 2007; Lee, 2009; Li et al., 2010; Petrick, 2004; Oom do Valle et al., 2006), linear regressions (Kozak, 2001), or other techniques such as path analysis (Um et al., 2006).

Econometric techniques will be used in this paper. These present several advantages. The first is the quantification of the likely impact of each independent variable on the

repeat visitation. The second is the conditioning, which allows estimating these effects *ceteris paribus*, that is as we fix the other characteristics under consideration. This is an advantage when dealing with this sample that derives from two different typologies museums, where estimates can be calculated after controlling for such heterogeneities. In addition, as mentioned above this allows controlling for individual characteristics that proxy past experiences. Three complementary approaches will be used, for the sake of testing how a given set of socioeconomic and trip-related variables influences particular aspects of repeating the holiday.

The first approach assesses the role of the set of explanatory variables in influencing the probability to repeat or not. The basic framework of reference is McFadden's (1974) binary discrete choice random utility model. This analysis is performed through Logit regression, which compares first timers and repeaters as two distinct groups. This may provide indications on the specific needs of potential first-time visitors and repeat visitors, which may suggest *ad hoc* marketing and promotional activities (Meis et al. 1995). It has been widely used by attitudinal approaches. Let  $\mathbf{W}$  be the matrix of independent variables with  $I$  observations and  $K + 1$  variables, whose row  $\mathbf{w}_i$  reports proxies of right-side variables in Equation (2) per each visitor  $i$ . The vector of parameters is  $\mathbf{b}$ . The dichotomous dependent variable  $z_i$  is constructed upon  $y_i$ , which is the number of past visits excluding the time of the interview, such that  $z_i = 1$  when  $y_i > 0$  (repeater), and  $z_i = 0$  when  $y_i = 0$  (first timer). The probability that  $z_i = 1$ , conditionally to the set of regressors, can be modelled as:

$$P(z_i = 1 | \mathbf{w}_i) = \frac{\exp(\mathbf{b}'\mathbf{w}_i)}{1 + \exp(\mathbf{b}'\mathbf{w}_i)} \quad (3)$$

The second one considers the number of past visitations in the museums as dependent variable. This aims to estimate the likely effect of each independent variable the average number of visits. The model of reference is the Zero-Inflated Poisson regression. Only the work by Brida et al. (2012b) makes use of it in the literature. Poisson regression is a largely used approach for data deriving from a count such as the number of past visits. In case data report a high amount of zero, as it emerges from our descriptive statistics, it is preferable to use the Zero-Inflated Probability Poisson (ZIP henceforth) model, which has the form

$$P(Y_i = y_i | \mathbf{w}_i) = \begin{cases} p_i + (1 - p_i)\exp(-\lambda) & \text{when } y_i = 0 \\ \frac{(1 - p_i)\exp(-\lambda)\lambda^{y_i}}{y!} & \text{when } y_i > 0 \end{cases} \quad (4)$$

where  $\lambda$  corresponds to both mean and variance. Its use is appropriate when  $E(y_i | \mathbf{w}_i) = \text{Var}(y_i | \mathbf{w}_i)$ . In case overdispersion is found via a test, that is  $E(y_i | \mathbf{w}_i) < \text{Var}(y_i | \mathbf{w}_i)$ , alternative models such as the Negative binomial should be used.

The third technique recalls the second one inasmuch as it uses the number of past visits as dependent variable. Nevertheless it provides details on the behaviour of visitors at different parts of the empirical distribution, that is how independent variable influence different ‘degrees of loyalty’. The model that is used is the Count Quantile regression by Machado and Santos Silva (2005) – CQ henceforth. It is based on robust position indices like quantiles, which are low sensitive to outliers. It implements the linear Quantile Regression for continuous data (Koenker and Bassett, 1978) to the case of count data. The computation of parameters starts by first producing the ‘jittering’ of



data (Stevens, 1950) for artificial smoothing. This creates a new continuous variable  $\Psi$  by summing the original values of the count variable  $Y$  and a set of values from a continuous uniform distribution  $U$  ranging in  $[0,1[$ . The values of  $U$  are independent from both  $Y$  and the set of independent variables. Then the procedure estimates the parameters from the  $\alpha$ -th quantile ( $0 \leq \alpha < 1$ ) of the conditional distribution of the new variable  $\Psi$  given the regressors matrix  $\mathbf{W}$ :

$$Q_z(\alpha | \mathbf{W}) = \mathbf{a} + \exp(\mathbf{W}'\mathbf{b}(\alpha)) \quad (5)$$

with the quantiles of  $\Psi$  being in one-to-one relationship with the ones of  $Y$ . The latter is justified by  $Q_y(\alpha | \mathbf{W}) = [Q_\Psi(\alpha | \mathbf{W}) - 1]$ . The method reiterates the procedure for other  $n-1$  jittered samples. Finally the  $K+1$  parameters of the regression are computed from the set of the  $nK$  estimated parameters from each of the single  $n$  regressions. The only paper on repeat visit in tourism that has applied this technique is by Brida et al. (2012c).

### 3.2 Variables

The analysis considers the set of visitors to the two museums as one single sample. Sets from different types of attractions may in fact concur to better define the typology of repeat visitor. In our framework this happens apart from the biases related to the specificity of a visited place, which anyway is controlled for. As already stressed, the three models require two different dependent variables. In Logit model the variable assumes the value of one if the interviewee already attended the visit, and 0 otherwise. In both ZIP and CQ the number of past visits excluding the one of the interview is instead considered. Table 5 reports a list of the independent variables.

Table 5. Description of the independent variables.

<b>Independent variable</b>	<b>Description</b>
MART ( <i>ref. OTZI</i> )	1= The interview was held at MART; 0 = interview held at OTZI
<b>Socioeconomic variables</b>	
Male ( <i>ref. female</i> )	1 = Yes; 0 = No
Married ( <i>ref. other</i> )	1 = Yes; 0 = No
Age	Age of the respondent
Age2	Age squared of the respondent
Income	The central values of the following income categories in € were considered: 0 - 25,000; 25,000 - 50,000; 50,000 - 75,000; > 75,000. A value of 0 was put if income was not declared
Missing Income	1 = the income was not declared; 0 = otherwise
Km	Distance between the city of residence and the city of the museum
Italy ( <i>ref. resident abroad</i> )	1 = resident in Italy; 0 = otherwise
University degree ( <i>ref. other</i> )	1 = University degree or more; 0 = otherwise
Number of museums visited	Number of museums visited in the last 12 months
<b>Occupation (<i>ref. other</i>)</b>	
Autonomous worker	1 = Yes; 0 = No
Employed	1 = Yes; 0 = No
Retired	1 = Yes; 0 = No
<b>Visit</b>	
<b>Visiting party</b>	
Children ( <i>ref. visit with no children</i> )	1 = visited with children up to 12 years old; 0 = otherwise
Household size	Number of members of the family doing the visit of the museum with the interviewee
Group ( <i>ref. visit with no group</i> )	1 = the visit at the museum was made with an organized group and/or with friends/colleagues; 0 = otherwise
<b>Features of the visit (<i>ref. both permanent and temporary</i>)</b>	
Permanent collections	1= the respondent visited one or more permanent collection; 0=otherwise
Temporary showroom	1= the respondent visited the temporary showroom; 0=otherwise
Week end ( <i>ref. other days of the week</i> )	1= the interview was made on Friday, Saturday or Sunday; 0= otherwise
<b>Reasons for visiting the city of the museum (<i>multiple response was possible</i>)</b>	
To visit this museum	1 = Yes; 0 = No
To visit/know the city	1 = Yes; 0 = No
To accompany/visit friends or relatives	1 = Yes; 0 = No
Other cultural activities	1= the respondent attended other cultural activities while in the city; 0 = otherwise
<b>Motivation of the visit (<i>multiple response was possible</i>)</b>	
Curiosity	1 = Yes; 0 = No
Rest/Relax	1 = Yes; 0 = No
A specific interest in such an attraction	1 = Yes; 0 = No
To accompany a friend/family member with a specific interest in such an attraction	1 = Yes; 0 = No
To learn something new	1 = Yes; 0 = No
It is something one ought to do	1 = Yes; 0 = No
Doing something worthwhile	1 = Yes; 0 = No
To occupy some leisure time	1 = Yes; 0 = No
<b>Do you agree with the following statements about the museum? (<i>multiple response was possible</i>)</b>	
Just a tourist attraction	1 = Yes; 0 = No
Unique in the world	1 = Yes; 0 = No
A place that makes you think	1 = Yes; 0 = No
A way to describe a historical era	1 = Yes; 0 = No
A fascinating attraction	1 = Yes; 0 = No
An authentic attraction	1 = Yes; 0 = No

As premised in the previous paragraphs, a control variable (MART) for the two museums was used. It captures the differences between the two museums, such as the ones about their typologies, age, place, etc.

Socioeconomic variables are quite standard for the literature, and concern gender, age, marital status, income, place of residence, education, and occupation. A quadratic term for age was included to test for nonlinear effects. A variable ‘missing income’ was introduced to indicate those who did not declare their income. This procedure has the aim to avoid an excessive reduction of the sample size, which would have decreased by 28.26% (see Table 2). Two different aspects of the place of residence were caught. Besides the distance in kilometres from the place of living, we isolated those who resided in Italy from the rest. As seen from Table 2, in fact, the percentage of those who live abroad was not small especially among those who visited ÖTZI.

The typology of the visiting party enters also in the model. The constant and significant presence of a certain typology of accompanying person may in fact provide interesting indications to market operators. Both the inclusion of the travel distance and the presence of friends or family recall Tiefenbacher et al. (2000), who report that they are strongly related to repeat visitation. Other features related to the visit concern the typology of showroom attended (temporary, permanent, or both) and if the visit was done during weekends. In addition, further regressors were included to test the relationship between the museum and the city as explanatory factor of the repeat visit. Knowing if the museum was an important element for the sake of deciding whether to visit the city could stimulate local policymakers to make appropriate policies in order to integrate local cultural attractions with tourism.

Furthermore, we included a measure of whether other cultural activities were attended while in the city for that visit. A set of regressors instead assessed the role of the motivation to the visit in determining the repeat visit. Eight items measured whether the visit was done for curiosity, rest or relax, a specific interest in that attraction, accompanying a friend or family member, learning something new, doing something worthwhile, occupying leisure time, or if the visit is thought as something ‘one ought to do’. Another set of variables measured the opinion of repeat visitors about the way the visited museum is perceived. Proposed items indicated if the visitor agreed that the museum was an attraction for visitors, unique in the world, a place that makes the visitor think, a way to describe a historical era, a fascinating attraction, an authentic attraction.

#### 4. EMPIRICAL EVIDENCE

All estimates are provided in terms of marginal effects (ME), which allow comparison across models. They express the effect on the conditional mean of the dependent variable of a change in one of a regressor (see Cameron and Trivedi, 2005). As it emerges from Figure 1, most of the information on the dependent variable comes from MART, where 54.7% (330 people) attended the visit to the museum for at least a second time. Instead, only 17.3% of the interviewees at ÖTZI (199 people) were repeaters. In this sense the analysis might appear rather ‘unbalanced’ towards the MART. But as already mentioned, such a difference in the attitude of visitors to repeat between the two museums is another reason for inserting the control variable for the two museums.

Tables 6 and 7 report the significant MEs in at least one model. The choice to visit MART (with respect to ÖTZI) is positive and reports the highest ME in all models. In

particular, CQ shows an increase in the coefficient, which decreases slightly in the quantile that is related to three or more repeated visits. This latter result suggests that, in comparison to ÖTZI, the more one revisits MART the more she is likely to return. This tendency decreases a bit in the most loyal visitors. In general, this may indeed appear as an expected result that emerges also from the statistics shown in Table 3 and Figure 1.

Table 6. Marginal effects of the Logit and Zero-inflated Poisson models.

Independent Variables	Logit <sup>A</sup>	ZIP <sup>B</sup>
MART	0.285 (0.05)***	1.264 (0.26)***
Other cultural activities	0.02 (0.06)	0.217 (0.12)*
Number of museums visited	0.007 (0)*	0.028 (0.01)***
Week end	-0.079 (0.03)**	-0.212 (0.07)***
Household size	0.015 (0.01)	0.047 (0.01)***
<i>What were the reasons for visiting this city?</i>		
To visit this museum	-0.106 (0.05)**	-0.3 (0.11)***
To visit/know the city	-0.119 (0.05)**	-0.295 (0.13)**
<i>Why have you visited the museum today?</i>		
To satisfy curiosity	-0.17 (0.03)***	-0.399 (0.09)***
To learn something new	-0.111 (0.04)***	-0.257 (0.09)***
Something which one ought to do	-0.08 (0.05)	-0.231 (0.1)**
<i>Do you agree with the following statements?</i>		
Unique in the world	0.064 (0.03)*	0.109 (0.07)
<i>Socio-demographic and economic characteristics</i>		
Married	-0.091 (0.04)**	-0.173 (0.08)**
Km	-0.001 (>0.01)	-0.001 (>0.01)**

Notes: Robust standard errors in brackets. All test results are not significant unless indicated otherwise: \*\*\* Significant at  $p \leq 0.01$ , \*\* Significant at  $p \leq 0.05$ , \* Significant at  $p \leq 0.1$

<sup>A</sup> N=1191; Wald  $\chi^2(40)=189.15$ ; Prob >  $\chi^2 = 0$ ; Log pseudolikelihood= -599.47758; McKelvey and Zavoina's  $R^2=0.708$

<sup>B</sup> N=1189; Wald  $\chi^2(40)=414.59$ ; Prob >  $\chi^2 = 0$ ; Log pseudolikelihood= -1246.5067; McFadden's Adj  $R^2=0.233$

Factors that may explain this might be both a changing supply of temporary exhibitions, and the periodic rotation of the permanent collection. This seems to be confirmed by the non-significance of neither the visit to the temporary collection, or to the permanent one. ÖTZI museum instead is less attractive for repeaters. As suggested by Table 4, this can be ascribed to its way to be perceived as mere part of the tourist supply of Bolzano. Therefore it is seen, though partially, as a 'place for everyone' including families with children, which attracts more frequently visitors coming from further places. Although it contains very interesting items of the prehistoric age, the mummy is still its main attraction. After all it is a central figure for promotion and communication policies of

the museum. Jointly with the significance of ‘curiosity’, this might represent a lower attitude towards the ‘cultural value’ of the museum.

Table 7. Marginal effects of the Count Quantile model.

Independent Variables	Q1 (0.65) 1 visit	Q2 (0.75) 2 visits	Q3 (0.85) 3 visits	Q>3 (0.90) > 3 visits
MART	1.199 (0.17)***	1.665 (0.23)***	1.918 (0.22)***	1.825 (0.25)***
Other cultural activities	0.433 (0.25)*	0.402 (0.17)**	0.223 (0.18)	0.191 (0.21)
Number of museums visited	0.011 (0.01)	0.019 (0.01)	0.031 (0.01)**	0.038 (0.01)***
Week end	-0.236 (0.07)***	-0.231 (0.09)***	-0.209 (0.1)**	-0.205 (0.12)*
Household size	0.047 (0.03)	0.048 (0.02)**	0.049 (0.01)***	0.051 (0.02)**
<i>What were the reasons for visiting this city?</i>				
To visit this museum	-0.262 (0.09)***	-0.215 (0.11)**	-0.194 (0.13)	-0.252 (0.16)
To visit/know the city	-0.252 (0.08)***	-0.257 (0.11)**	-0.303 (0.16)*	-0.315 (0.19)*
To accompany/visit friends or relatives	-0.031 (0.23)	0.14 (0.32)	0.553 (0.44)	0.711 (0.4)*
<i>Why have you visited the museum today?</i>				
To satisfy curiosity	-0.373 (0.08)***	-0.429 (0.1)***	-0.618 (0.15)***	-0.676 (0.16)***
To accompany a friend/family member	0.279 (0.14)**	0.277 (0.14)**	0.227 (0.15)	0.264 (0.19)
To learn something new	-0.243 (0.08)***	-0.283 (0.1)***	-0.372 (0.13)***	-0.467 (0.14)***
Something which one ought to do	-0.213 (0.12)*	-0.242 (0.13)*	-0.243 (0.15)	-0.242 (0.16)
<i>Socio-demographic and economic characteristics</i>				
Male	-0.154 (0.08)**	-0.114 (0.09)	-0.028 (0.11)	0.031 (0.12)
Married	-0.206 (0.12)*	-0.223 (0.11)**	-0.145 (0.12)	-0.14 (0.14)
Autonomous worker	0.07 (0.26)	-0.171 (0.34)	-0.512 (0.33)	-0.667 (0.34)**
Km	-0.001 (>0.01)	-0.001 (>0.01)	-0.001 (>0.01)***	-0.001 (>0.01)***
Italy	0.116 (0.08)	0.166 (0.11)	0.313 (0.15)**	0.445 (0.19)**

Notes: Robust standard errors in brackets. All test results are not significant unless indicated otherwise: \*\*\* Significant at  $p \leq 0.01$ , \*\* Significant at  $p \leq 0.05$ , \* Significant at  $p \leq 0.1$

#### 4.1 Characteristics of the visit

Repeat visit is likely to not take place during weekends, as confirmed by all models. In addition, having attended other cultural activities in the city of the museum is not a

feature that discriminates between first timers and repeaters. Nevertheless it influences the average number of the visits, and in particular it characterizes first and second time visitors. Those coming from near places and living in Italy are more likely to repeat. Less loyal visitors appear to culturally ‘omnivore’ inasmuch as, if they come to visit the museum for the first or second time, they take the chance to be in that city to ‘consume other items’ of the cultural supply of that place. This is confirmed also by the negative sign in all models of the ME of the visit to the city as motivation to be in the museum, which also decreases with the number of repeat visits.

Also the ME of the interest towards the museum as reason to be in the city presents also a negative sign. Although it may appear as unexpected, this is explained by the structure of the questionnaire that allowed the respondent to indicate both the museum and the city as motives. Thus, tourists might have indicated both elements as being equally attractors for their visits. Who instead resides in nearby areas, or anyway in Italy, is more likely to repeat (Tiefenbacher et al., 2000), and of course if she is a habitual cultural consumer she does not do it the same time she visits the museum. For what concerns the latter aspect, the repeat visitor attends museums more frequently than first timers (Logit). In particular the more museums per year she visits the more she is likely to repeat (ZIP), and this concerns especially those who repeat more frequently (Q3, Q>3).

#### *4.2 The visiting group*

The number of household members attending the visit does predict the probability to repeat or not (Logit), but rather it influences the average number of visits and the highest quantiles (Q2, Q3, Q>3). In addition, the motivation of the visit for the sake of accompanying a friend or a family member is significant and affects all the quantiles.

We also highlight that the visit both with children and/or in groups did not result as significant. All this can suggest the idea of the fact that the attention towards cultural attractions is a matter that may involve the entire household. Having other family members that care of culture can generate more chances in being engaged in the ‘consumption of cultural goods’.

This reciprocal involvement that regards the household dimension does not necessarily concern children, the ones with low maturity in sharing cultural aspects with adults. The importance of the dimension of the household seems to be enforced by the lack of significance of the visit with organized groups, friends or colleagues, and the significance of accompanying friends or relatives in the highest quantile among the motives for which the city was visited. These indications, though very suggestive and supported by the data, need to be investigated further by future analysis, which has also to discriminate if this behaviour has to be related to a concrete interest, or rather only to the willingness to accompany someone to visit the museum.

#### *4.3 Motivations, opinions, and socio-demographic characteristics*

‘Curiosity’ and ‘learning something new’ are other two motivations in a significant relationship with repeating. Their coefficient is negative and significant in all models and decreased with the quantile. It may indicate that visitors do not use to repeat for the sake to learn or know at a superficial level (i.e., curiosity). If the repeat visit to museums can be thought as having a cultural value, the latter consists of something more ‘pervasive’ than the mere learning. This is consistent with the revisit to the museum as ‘something one ought to do’ affecting negatively the average number of visits and the first two quantiles. The latter seems to indicate the cultural visit as not



being one of the ‘mandatory’ steps of a ‘sightseeing tour’ around a city, which ‘has to be done’ in order to be inserted in the file of the set of the ‘things done in lifetime’.

Another interesting significant element is the opinion about the uniqueness of the museum. It concerns only those who visited it for the first time, and it discriminates them from repeat visitors. Among the proposed ones, such feeling of uniqueness is the only significant opinion about the museum among the proposed ones that is related to the repeat visit. Only a limited number of socio–demographic characteristics is significantly related to the repeat visit. Among these, women visiting it for the first time (Q1) are more likely to repeat than men. Non-married visitors are significantly related to being a repeater (Logit), the number of visits (ZIP), and first and second time visit (Q1 and Q2). Autonomous workers are less likely to be high frequency visitors ( $Q > 3$ ). Other variables such as age, income, and other occupations did not report significant estimates.

## 5 CONCLUSIONS

This paper examined the literature on loyalty in tourism. The scope was to discuss and introduce an opportune framework for analysing the repeat visit to museums. Stimulating the repeat visit is one of the main aims of destination and tourist attractions’ managers. Literature considers satisfaction as the main element for inducing repeat visitation. But in some cases, habit and convenience of not changing place due to contingent reasons can be the main factors. These constitute confounding factors of nontrivial importance if one wants to analyse the most likely factor influencing the repeat visit behaviour. Instead repeat visitors to museums can be thought of having particular and common motivations in visiting and revisiting. In Stebbins’ (1997, 2007)

word, they are in search of ‘serious’ leisure, which involves them in improving their cultural capital in a significant way. But also here a distinction can be done between first timers and repeaters.

Undoubtedly, first timers can be attracted by museums by factors such as the willingness to enjoy its cultural supply. But this category might be composed also of people who are driven by mere curiosity, or rather attracted by an experience that ‘must be done’ with the same involvement as visiting any other tourist attraction in a place. Repeat visitors to museums are instead a more homogeneous set. The evidence of this paper, jointly with what emerges from the literature, seems to confirm their high interest towards the content of the cultural supply, rather than the mere attraction towards the tourist supply of a place. This happens independently of whether they are in search of temporary or permanent exhibitions, which enforces the ideas of the repeat visitation as a process of enculturation that is not necessarily based on the novelty of the cultural supply.

The paper also provided an analysis of the different ways to operationalize the concept of repeat visit. We found that studying the number of past visits has to be preferred to the mere willingness to return to the place. The latter has been proven to be an unreliable predictor of the actual visit. Accordingly, the number of past visit was taken as dependent variable for studying a sample of visitors of two museums. Three econometric techniques were used, for the sake of studying different aspects of the phenomenon. Integrating the information coming from the models provides a more detailed overview of the profiles of repeat visitors. In particular we studied the influence of a set of covariates to the probability of repeating (Logit), the average number of visits (ZIP), and different parts of the empirical distribution of the number of past visits (CQ).

All models detected the significance and verse of certain variables, whereas some others resulted to be significant only for specific models. The regressors that resulted as significant in explaining the repeat visit were the typology of the museum, visit during weekdays, having visited the museum as not a mere tourist attractions of the city, and the motivation of doing it for something different than curiosity or learning something new. The study of the differences between the two groups of first timers and repeaters through logistic regression highlighted the perception of uniqueness by first time visitors. Instead a part of all other regressors that resulted to have an influence on the average number of visits (ZIP) were also found to affect only certain quantiles (CQ). This highlights the importance to integrate the information coming from different techniques for the sake of better describing a complex phenomenon such as the repeat visit.

Different indications to museum operators emerged from the study of the significant coefficients. The first concerns the promotion strategies. In principle, a modern and contemporary art museum like MART can attract visitors for the novelty of its temporary showrooms, or of the way the permanent collection is proposed to visitors. Similarly, a particular archaeological museum such as ÖTZI has a unique attraction such as the Neolithic mummy, and offers visitors very interesting information about the life in that period. But repeat visitation can be promoted by ad-hoc promotion policies that enhance the cultural value of the belongings, and present showrooms as novel chances to enhance the cultural capital. Another indication came about the timing of the repeat visit, which is likely to happen during days that are supposed to be less frequented by 'mass visitors'.

Timing of the repeat visit, jointly with the high propensity of loyal visitor to attend other cultural events, suggests the need for an adequate promotion of collateral events to the showrooms. An attempt has been made by the two museums in organizing cultural events during evenings. This can raise the attention towards the museum as places of ‘cultural production’, and consequently stimulate the repeat visit of a place where cultural capital can be enhanced. This can be interpreted jointly with the most likely group composition of repeat visitors that emerged from the empirical evidence. All events should be addressed in involving entire households properly. In particular, the propensity to involve family members but not children should induce operators to reflect about the possibility of ad-hoc services for children of the visitors.

A further emerging suggestion concerns the involvement of overnight stayers. As expected, loyal museums visitors are likely to reside in near places to their cities. Therefore a challenge might be how to increase the loyalty of those who reside far. The overnight tourist can be thought as being an omnivore that tries to ‘consume’ as much as possible while away from home. A varying and integrated supply of cultural, naturalistic and leisure activities can promote the revisiting. Of course this would require local institutions and private operators to interact properly in a synergic way for the promotion of territories and their integration in networks (D’Agata et al., 2012). All this deals with a broader and delicate question that intersects cultural policies, sustainable tourism, and interests of private firm owners. And of course, the compatibility between cultural tourism and mass tourism is another aspect to deal with for both future promotion of events, and actual audience of museums.

Finally, some methodological remarks are necessary. This study is an attempt to bring into the literature an integrated approach of interpreting three econometric models.

Complementary and not frequently applied techniques in the field of tourism loyalty analysis were then used. In addition, the homogeneity of the sample with respect to the one from ‘generalist’ loyal visitors attempted to be a limitation to the biases of ‘spurious’ loyalty. Future research could involve a wider sample from other different typologies of museums, as well as the use of a probabilistic sample that in this case was not possible due to the lack of *apriori* information on the population. However this study constitutes a first attempt in defining a particular aspect of the loyalty for cultural attractions, which goes beyond the description of a specific museum or event.

**Acknowledgements** This research was supported by the Autonomous Province of Bolzano project ‘Le attrazioni culturali e naturali come motore dello sviluppo turistico. Un’analisi del loro impatto economico, sociale e culturale’, and by the Free University of Bolzano projects ‘Determinants of tourist expenditure: theory and microeconomic models’ and ‘The museums’ visitors: a comparative socio-economic analysis’. A preliminary version of this paper was presented at the conferences ‘Il turismo culturale europeo – Prospettive verso il 2020’ (Cultural Tourism in Europe – Perspectives towards 2020), organized by CESTIT and SISTUR (Italian Society for Tourism) in Bergamo (Italy), 15-16 November 2012, and CBTS 2012, Consumer Behaviour in Tourism Symposium, held in Brunico (Italy), 10-13 December 2012.

## REFERENCES

- Ajzen, I.: The theory of planned behavior. *Organ. Behav. Hum. Decis. Process.* 50, 179–211 (1991)
- Ajzen, I., Fishbein, M.: *Understanding attitudes and predicting social behavior.* Prentice-Hall, Englewood Cliffs (1980)
- Alegre, J., Cladera, M.: Repeat Visitation in Mature Sun and Sand Holiday Destinations. *J. Travel Res.* 44(3), 288–297 (2006)
- Anwar, S. A., Sohail, M. S.: Festival tourism in the United Arab Emirates: First-time versus repeat visitor perceptions. *J. Vacat. Mark.* 10(2), 161–170 (2004)
- Assaker, G., Esposito Vinzi V., O'Connor, P.: Examining the effect of novelty seeking, satisfaction, and destination image on tourists' return pattern: A two factors, non-linear latent growth model. *Tour. Manag.* 32(4), 890–901 (2011)
- Assaker, G., Hallak, R.: European travelers' return likelihood and satisfaction with Mediterranean sun-and-sand destinations: A Chi-square Automatic Identification Detector-based segmentation approach. *J. Vacat. Mark.* 18(2), 105–120 (2012)
- Backman, S. J., Crompton, J. L.: The Usefulness of Selected Variables for Predicting Activity Loyalty. *Leis. Sci.* 13(3), 205–220 (1991a)
- Backman, S. J., Crompton, J. L.: Differentiating Between High, Spurious, Latent, and Low Loyalty Participants in Two Leisure Activities. *J. Park Recreat. Adm.* 9(2), 1–17 (1991b)
- Beatty, S. E., Kahle, L. R.: Alternative Hierarchies of the Attitude-Behavior Relationship: The Impact of Brand Commitment and Habit. *J. Acad. Mark. Sci.*, 16(2), 1–10 (1988)

- Bennett, T., Emison, M., Frow, J.: *Accounting for Tastes: Australian Everyday Cultures*. Cambridge University Press, Cambridge (1999)
- Bestard, A. B., Font, E. R.: Estimating the aggregate value of forest recreation in a regional context. *J. For. Econ.* 16(3), 205–216 (2010)
- Blattberg, R. C., Sen, S. K.: Market Segments and Stochastic Brand Choice Models. *J. Mark. Res.* 13(1), 34–45 (1976)
- Bourdeau, P.: Cultural Reproduction and Social Reproduction. In R. Brown (ed.) *Knowledge, Education and Social Change: Papers in the Sociology of Education*, pp. 71–112. Tavistock Publications, Tavistock (1973)
- Bowen, J., Chen, S.: The relationship between customer loyalty and customer satisfaction. *Int. J. Contemp. Hosp. Manag.* 13(5), 213–217 (2001)
- Brida, J. G., Coletti P.: Tourist's intention of returning to a visited destination: cruise ship passengers in Cartagena de Indias, Colombia. *Tour. Mar. Environ.* 8(3), 127–143 (2012)
- Brida, J.G., Disegna, M., Scuderi, R.: The visitors' perception of authenticity at the museums: Archaeology versus Modern Art. *Curr. Issues Tour.* (2012a). doi:10.1080/13683500.2012.742042
- Brida, J. G., Meleddu M., Pulina M.: Factors influencing the intention to revisit a cultural attraction: The case study of the Museum of Modern and Contemporary Art in Rovereto. *J. Cult. Herit.* 13(2), 167–174 (2012b)
- Brida, J. G., Pereyra, J. S., Scuderi R.: Repeat tourism in Uruguay: modelling truncated distributions of count data. *Qual. Quant.* (2012c). doi:10.1007/s11135-012-9782-4
- Brida, J. G., Pulina M., Riaño E., Zapata Aguirre, S.: Cruise visitors' intention to return as land tourists and to recommend a visited destination. *Anatolia* 23(3), 395–412 (2012)

- Brida, J. G., Scuderi, R.: Determinants of tourist expenditure: a review of microeconomic models, *Tour. Manag. Perspectiv.*, 6, 28–40 (2013)
- Burton, C., Louviere J., Young L.: Retaining the visitor, enhancing the experience: identifying attributes of choice in repeat museum visitation. *Int. J. Nonprofit Volunt. Sect. Mark.* 14(1), 21–34 (2009)
- Cameron, A. C., Trivedi, P. K.: *Microeconometrics: Methods and Applications*. Cambridge University Press, Cambridge (2005)
- Campo-Martínez, S., Garau-Vadell J. B., Martínez-Ruiz M. P.: Factors influencing repeat visits to a destination: The influence of group composition. *Tour. Manag.* 31(6), 862–870 (2010)
- Chi, C.: An examination of destination loyalty: Differences between first-time and repeat visitors. *J. Hosp. Tour. Res.* 36(1), 3–24 (2012)
- Chi, C., Qu, H.: Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tour. Manag.* 29(4), 624–636 (2008)
- Copeland, M. T.: Relation of Consumer's Buying Habits to Marketing Methods. *Harv. Bus. Rev.* 1(3), 282–289 (1923)
- Correia, A., Pestana Barros, C., Silvestre, A. L.: Golf tourism repeat choice behaviour in the Algarve: a mixed logit approach. *Tour. Econ.* 13(1), 111–127 (2007)
- Correia, A., Kozak, M., Ferradeira, J.: Impact of Culture on Tourist Decision-making Styles. *Int. J. Tour. Res.* 13(5), 433–446 (2011)
- Court, B., Lupton, D.: Customer portfolio development: modeling destination adopters, inactives, and rejecters. *J. Travel Res.* 36, 35–43 (1997)
- Cunningham, R. M.: Brand loyalty—what, where, how much? *Harv. Bus. Rev.* 34 (January-February), 116-128 (1956)



- D'Agata, R., Gozzo, S., Tomaselli, V.: Network analysis approach to map tourism mobility. *Qual. Quant.* (2012). doi:10.1007/s11135-012-9710-7
- Day, G. S.: A Two-Dimensional Concept of Brand Loyalty. *J. Advert. Res.* 9(3), 29–35 (1969)
- Dick, A. S., Basu, K.: Customer loyalty: Toward an integrated conceptual framework. *J. Acad. Mark. Sci.* 22(2), 99–113 (1994)
- Engel, J. F., Blackwell, R. D., Kollat, D. T.: *Consumer behavior*. Dryden Press, Hinsdale (1978)
- Englin, J., Shonkwiler, J. S.: Modelling Recreation Demand in the Presence of Unobservable Travel Costs: Toward a Travel Price Model. *J. Environ. Econ. Manag.* 29(3), 368–377 (1995)
- Ennew, C., Binks, M. R.: The impact of service quality and service characteristics on customer retention: small business and their banks in UK. *Br. J. Manag.* 7(3), 219–230 (1996)
- Farley, J. U.: Why does “brand loyalty” vary over products? *J. Mark. Res.* 1(4), 9–14 (1964)
- Fornell, C., Wernerfelt, B.: Defensive marketing strategy by customer complaint management: A theoretical analysis. *J. Mark. Res.* 24 (November), 337–346 (1987)
- Fyfe, G.: Reproductions, cultural capital and museums: aspects of the culture of copies. *Mus. Soc.* 2(1), 47-67 (2004)
- Gitelson, R. J., Crompton, J. L.: Insights into the repeat vacation phenomenon. *Ann. Tour. Res.* 11, 199–217 (1984)
- Gómez, M., Molina, A., Esteban, Á.: What are the main factors attracting visitors to wineries? A PLS multi-group comparison. *Qual. Quant.* (2012). doi:10.1007/s11135-012-9676-5

- Goodall, B.: How Tourists Choose Their Holidays: An Analytical Framework, in B. Goodall, G. Ashworth (eds.) *Marketing in the Tourism Industry*, pp.1–17. Croom Helm: London (1988)
- Hellerstein, D. M.: Using Count Data Models in Travel Cost Analysis with Aggregate Data. *Am. J. Agric. Econ.* 73(3), 860–866 (1991)
- Hellström, J., Nordström, J.: A count data model with endogenous household specific censoring: the number of nights to stay. *Empir. Econ.* 35(1), 179–192 (2008)
- Henry, C. D.: Is customer loyalty a pernicious myth?. *Bus. Horiz.* 43(4), 13–16 (2000)
- Hepworth, M., Mateus, P.: Connecting customer loyalty to the bottom line. *Can. Bus. Rev.* 21(4), 40–43 (1994)
- Herreman, Y.: Museums and tourism: Culture and consumption. *Mus. Int.* 50(3), 4–12 (1998)
- Heung, V. C. S., Mok, C., Kwan, A.: Brand Loyalty in Hotels: An Exploratory Study of Overseas Visitors to Hong Kong. *Aust. J. Hosp. Manag.* 3(1), 1–11 (1996)
- Hong, S.K., Lee S.W., Lee K. S., Jang, H.: Selecting revisited destinations. *Ann. Tour. Res.* 36(2), 268–294 (2009)
- Huang, S., Hsu, C. H. C.: Effects of Travel Motivation, Past Experience, Perceived Constraint, and Attitude on Revisit Intention. *J. Travel Res.* 48(1), 29–44 (2009)
- Hughes, H. L.: Culture and tourism: A framework for further analysis. *Manag. Leis.* 7(3), 164–175 (2002)
- Hynes, S., Hanley, N., O'Donoghue, C.: Alternative treatments of the cost of time in recreational demand models: an application to whitewater kayaking in Ireland. *J. Environ. Manag.* 90(2), 1014–1021 (2009)
- Jacoby, J., Chestnut, R. W.: *Brand Loyalty: Measurement and Management*. John Wiley & Sons, New York (1978)

- Jang, S. C., Feng R.: Temporal destination revisit intention: The effects of novelty seeking and satisfaction. *Tour. Manag.* 28(2), 580–590 (2007)
- Koenker, R., Bassett, G. S., Jr.: Regression Quantiles. *Econom.* 46(1), 33–50 (1978)
- Kotler, P.: *Marketing Management*. Prentice Hall, New Jersey (1991)
- Kozak, M.: Repeaters' Behavior at two Distinct Destinations. *Ann. Tour. Res.* 28(3), 784–807 (2001)
- Kozak, M., Huan T. C., Beaman, J.: A Systematic Approach to Non-Repeat and Repeat Travel. *J. Travel Tour. Mark.* 12(4), 19–38 (2002)
- Lau, A. L. S., McKercher, B.: Exploration versus Acquisition: A Comparison of First-Time and Repeat Visitors. *J. Travel Res.* 42(3), 279–285 (2004)
- Lee, T. H.: A Structural Model to Examine How Destination Image, Attitude, and Motivation Affect the Future Behavior of Tourists. *Leis. Sci.* 31(3), 215–236 (2009)
- Li, M., Cai, L. A., Lehto, X. Y., Huang J.: A Missing Link in Understanding Revisit Intention – The Role of Motivation and Image. *J. Travel Tour. Mark.* 27(4), 335–348 (2010)
- Li, X., Cheng, C. K., Kim, H., Petrick, J. F.: A systematic comparison of first-time and repeat visitors via a two-phase online survey. *Tour. Manag.* 29(2), 278–293 (2008)
- Lin, L.Z., Hsu, T.H.: The analysis of risk perception with fuzzy means-end approach. *Qual. Quant.* 47(2), 713–734 (2011).
- MacDonald, G., Alsford, S.: Canadian Museums and the Representation of Culture in a Multicultural Museum. *Cult. Dyn.* 7(1), 15–36 (1995)
- Machado, J. A. F., Santos Silva, J. M. C.: Quantiles for Counts. *J. Am. Stat. Assoc.* 100(472), 1226–1237 (2005)
- Mazursky, D.: Past experience and future tourism decisions. *Ann. Tour. Res.* 16(3), 333–344 (1989)

- McFadden, D.: Conditional logit analysis of qualitative choice behavior. In P. Zarembka (ed.), *Frontiers in econometrics*, pp. 105–142. Academic Press, New York (1974)
- McIntosh, A. J., C. Prentice, R.: Affirming authenticity: Consuming cultural heritage. *Ann. Tour. Res.* 26(3), 589–612 (1999)
- McKercher, B.: A comparative study of international cultural tourists. *J. Hosp. Tour. Manag.* 11(2), 95–107 (2004)
- McKercher, B., Tse, T. S. M.: Is Intention to Return a Valid Proxy for Actual Repeat Visitation? *J. Travel Res.* 51(6), 671–686 (2012)
- McKercher, B., Denizci-Guillet B., Ng E.: Rethinking loyalty. *Ann. Tour. Res.* 39(2), 708–734 (2012)
- Meis, S., Joyal, S., Trites, A.: The U.S. Repeat and VFR Visitor to Canada: Come Again, Eh! *J. Tour. Studi.* 6(1), 27–37 (1995)
- Moniz, A. I.: A dynamic analysis of repeat visitors. *Tour. Econ.* 18(3), 505–517 (2012)
- Niininen, O., Szivas, E., Riley, M.: Destination Loyalty and Repeat Behaviour: An Application of Optimum Stimulation Measurement. *Int. J. Tour. Res.* 6(6), 439–447 (2004)
- Oh, H.: Service quality, customer satisfaction, and customer value: a holistic perspective. *Int. J. Hosp. Manag.* 18, 67–82 (1999)
- Oliver, R.: *Satisfaction: A behavioral perspective on the consumer*. McGraw-Hill Companies, Inc., New York (1997)
- Oom do Valle, P., Correia, A., Rebelo, E.: Determinants of tourism return behaviour. *Tour. Hosp. Res.* 8(3), 205–219 (2008)
- Oom do Valle, P., Silva, J. A., Mendes, J., Guerreiro, M.: Tourist Satisfaction and Destination Loyalty intention: A Structural and Categorical Analysis. *Int. J. Bus. Sci. Appl. Manag.* 1(1), 25–44 (2006)

- Oppermann, M.: Visitation of tourism attractions and tourist expenditure patterns - repeat versus first-time visitors. *Asia Pac. J. Tour. Res.* 1(1), 61–68 (1996)
- Opperman, M.: First-time and repeat visitors to New Zealand. *Tour. Manag.* 18(3), 177–181 (1997)
- Oppermann, M.: Predicting destination choice - A discussion of destination loyalty. *J. Vacat. Mark.* 5(1), 51–65 (1999)
- Oppermann, M.: Where psychology and geography interface in tourism research and theory. In A. G. Woodside, G. I. Crouch, J. A. Mazanec, M. Oppermann, M. Y. Sakai (Eds.) *Consumer psychology of tourism, hospitality and leisure*, pp. 19–38. Cabi, Oxon (2000a)
- Opperman, M.: Tourism Destination Loyalty. *J. Travel Res.* 39(1), 78–84 (2000b)
- Osti, L., Disegna, M., Brida, J. G.: Repeat visits and intentions to revisit a sporting event and its nearby destinations. *J. Vacat. Mark.* 18(1), 31–42 (2012)
- Pessemier, E. A.: A new way to determine buying decisions. *J. Mark.* 24(2), 41–46 (1959)
- Pestana Barros, C., Assaf, A. G.: Analyzing Tourism Return Intention to an Urban Destination. *J. Hosp. Tour. Res.* 36(2), 216–231 (2012)
- Petrick, J. F.: First Timers' and Repeaters' Perceived Value. *J. Travel Res.* 43(1), 29–38 (2004)
- Reichheld, F. F.: *The loyalty effect: The hidden force behind growth, profits, and lasting value.* Harvard Business School Press, Boston (1996)
- Rittichainuwat, B. N., Qu, H., Mongkhonvanit, C.: Understanding the motivation of travelers on repeat visits to Thailand. *J. Vacat. Mark.* 14(1), 5–21 (2008)
- Rodríguez-Santos, M. C., González-Fernández, A. M., Cervantes-Blanco, M.: Weak cognitive image of cultural tourism destinations. *Qual. Quant.* 47(2), 881–895 (2013)

- Rojek, C.: *Decentring Leisure*. Sage, London (1995)
- Rojek, C.: *Leisure and Culture*. Macmillan Press, London (2000)
- Ryan, C.: Learning about tourists from conversations: the over-55s in Majorca. *Tour. Manag.* 16(3), 207–216 (1995)
- Schouten, F.: Cultural tourism: between authenticity and globalization. In Richards G. (ed.) *Cultural tourism: Global and Local Perspectives*, pp. 25–37. Haworth Hospitality Press, Binghamton, New York (2007)
- Schuster, M. D.: The audience for American art museums. National endowment for the arts research division report #23. NEA, Washington (1991)
- Shoemaker, S., Bowen, J. T.: Commentary on loyalty: A strategic commitment. *Cornell Hotel Restaur. Adm. Q.* 44(5-6), 47–52 (2003)
- Silberberg, T.: Cultural Tourism and Business Opportunities for Museums and Heritage Sites. *Tour. Manag.* 16(5), 361–365 (1995)
- Stebbins, R. A.: Casual leisure: A conceptual statement. *Leis. Studi.* 16(1), 17–25 (1997)
- Stebbins, R. A.: *Serious leisure: A perspective for our time*. Transaction: New Brunswick (2007)
- Stevens, W. L.: Fiducial Limits of the Parameter of a Discontinuous Distribution. *Biom.* 37(1-2), 117–129 (1950)
- Stylianou-Lambert, T.: Gazing from home: cultural tourism and art museums. *Ann. Tour. Res.* 38(2), 403–421 (2011)
- Tiefenbacher, J. P., Day, F. A., Walton, J. A.: Attributes of Repeat Visitors to Small Tourist-Oriented Communities. *Soc. Sci. J.* 37(2), 299–308 (2000)
- Um, S., Chon, K., Ro, Y.: Antecedents of Revisit Intention. *Ann. Tour. Res.* 33(4), 1141–1158 (2006)

- Wall, G., Nuryanti, W.: Marketing Challenges and Opportunities Facing Indonesian Tourism. *J. of Travel & Tour. Mark.* 6(1), 69–84 (1997)
- Weber, K.: Association meeting planners' loyalty to hotel chains. *Int. J. Hosp. Manag.* 20(3), 259–275 (2001)
- Woodside, A. G., MacDonald, R.: General Systems Framework of Customer Choice Processes for Tourism Services. In R. V. Gasser, K. Weiermair (eds.) *Spoilt for Choice. Decision Making Processes and Preference Changes of Tourists - Intertemporal and Intercountry Perspectives*, pp. 30–59. Kulturverlag, Thaur (1994)
- Yoon, Y., Uysal, M.: An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tour. Manag.* 26(1), 45–56 (2005)
- Zins, A.: Relative attitudes and commitment in customer loyalty models: Some experiences from the commercial airline industry. *Int. J. Serv. Ind. Manag.* 12(3), 269–294 (2001)