Modelling perceived value as a driver of tourism development

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Abstract

This study investigates visitors' perceived value in little known small areas, at the early stage of tourism development, participating in a European regional development project, for improving the local tourism supply and marketing initiatives, with limited investments. We suggest to employ an Ordinal Structural Equation Model with Pairwise Likelihood estimator to deal with non-normal and missing data. We detect which destinations' aspects convey the greatest value to tourists, identify market segmentation variables, test the relations of perceived value with satisfaction, intention to recommend and destination image. Results are relevant for policy-makers and destination managers, even more in the post-COVID-19 tourism recovery.

1. Introduction

The perceived value is recognized as a crucial driver of competitiveness, that should be pivotal for devising client-oriented business strategies (Bajs, 2015), since it outranks even satisfaction and product quality as the consumer's reference measure to confront and select market alternatives (Petrick, 2002). With reference to tourism destinations, until the last decade this important construct was little investigated, definitions tend to diverge and there is no standard measurement model yet. Possibly, this is due to the greater complexity of tourism destinations compared to single products, as the components of the tourism offer characterizing each destination are, to a great extent, specific to that single area and different from others (Um & Yoon, 2020), so it might be expected that components of perceived values vary between destinations. Nowadays, the perceived value might attract renewed interest after the COVID-19 pandemics. The restrictions to travel, the decline in demand, the fall of GDPs, but also the fear of contagion may hinder tourism recovery for long and make competition between destinations fiercer. Whence the importance of analyzing and reshaping destinations' perceived value, especially in areas where the tourism system is at an early stage of development and decision-makers need to understand which aspects should be improved to convey more value to visitors, increase their satisfaction and loyalty (De Oliveira Santini et al, 2018; Ahn & Kwon, 2019).

We try to answer these needs, in the context of EXCOVER: a European Union Regional Development Fund Project, aimed at building an attractive and sustainable tourism supply in very little known towns of the Adriatic, endowed with valuable cultural and natural heritage, but with tourist inflows well below their potentials. We examine visitors' perceived value in four Italian small areas involved in the Project, homogeneous with reference to the typology of the local natural and cultural attractions, and to the starting stage of tourism development. Our purpose is to analyze the dimensions of destinations perceived value, as well as its relations with satisfaction, intention to recommend and destination image. Moreover, we aim to detect socio-demographic characteristics and trip-related factors affecting the visitors' perceptions, a very

useful information for market segmentation and for designing new and more effective marketing initiatives.

The paper contributes to the methodological debate about the meaning and techniques for modelling perceived value as either a formative or a reflective construct (see subsection 2.2), adding hints useful to interpret the results of the extant literature based on Structural Equation Models, as well as to design new researches on this topic. The distributional characteristics of the available data are analyzed in detail and the consequent modelling problems are addressed through the Pairwise Likelihood estimator for ordinal data (Katsikatsou et al, 2012), a powerful tool in presence of markedly non-normally distributed variables, even with many missing values deriving from partial non responses. Although to the best of our knowledge never used before in tourism studies, this estimator can be fruitfully employed in future researches facing the same distributional issues, that are indeed quite common in customer survey data (Magal et al., 2009). A further original contribution brought by this paper lies in presentation of empirical evidence about both multiple small areas, and many trip and visitors' characteristics. In fact, most of the extant literature either considers the effects of socio-demographic variables but focuses on a single, already mature, destination (e.g. Cheng & Lu, 2013; Song et al., 2013), or analyzes different areas without reckoning the variability of perceptions between different groups of visitors (e.g. Moliner et al. 2007; Gallarza & Gil, 2008).

The implications of the measurement method employed in this study are particularly important for the implementation of tourism development and recovery projects, especially where tourism can be the main sustainable lever to increase the local community's income and fight depopulation (Rodriguez et. al. 2015; De Sousa & Kastenholz, 2015). In fact, the set of indicators, that we developed based on the information provided by local policy makers and destination managers, allows to identify strengths and weaknesses of the local tourism system viewed from the eyes of visitors. As we expect the tourists' perception of some aspects to change after the COVID-19 crisis, our research method is flexible enough to provide results that will help designing tourism products able to convey more value to tourists, and devising an effective positioning strategy capable of attracting increasingly contended demand.

2. Background and research model
2.1. Theoretical framework and working hypotheses

The perceived value reflects the consumer's appraisal of the cost-benefits trade-off implied by a consumption experience (Oliver, 1999). Functional benefits depend on the cognitive evaluation of the overall quality (Oviedo-García et al, 2017; Sharma et al, 2019). In many consumption contexts, emotional and social benefits are at least as important as the functional ones in determining the perceived value (Sánchez et al, 2006; Frías-Jamilena et al, 2018). On the cost side, besides monetary price, perceived costs can include time, energy, physical and mental efforts, perceived risk and possible learning process (Rzepka et al, 2020). The perceived value of destinations has been measured in different ways (see table 1).

<< Table 1. approximately here >>

In light of the state of the art, we hypothesize that the perceived value is a second-order formative latent construct (as in Frías-Jamilena et al, 2018; Moon & Han, 2019) and test:

H1: the perceived value is composed by functional benefits, socio-emotional benefits and perceived costs.

According to the multidimensional approach, overall quality is a function of the perceived quality of tangible and intangible attributes (Rodrigo & Turnbull, 2019). Time, money and effort required to reach the destination, besides the perceived price, are the main perceived cost (Bajas, 2015). So, in line with Frías-Jamilena et al. (2018) and Moon and Han (2019), we assume that the components of perceived value are first-order reflective latent constructs. The evaluations of the dimensions of perceived values can vary based on the characteristics of the visitors (Eid & El-Gohary, 2015; Li et al, 2020). Then, from the distinction of the objective from the subjective side of perception (Hatfield & Allred, 2012) and the attribution of the former to the destination's aspects and of the latter to the idiosyncratic characteristics of tourists, we test:

H2: The visitors' ratings of destinations' attributes quality, experienced feelings and incurred costs are influenced by the socio-demographic characteristics of the visitors.

H3: Trip-related factors (including the specific destination visited) influence visitors' perceived value and its components.

The positive influence of perceived value on tourist satisfaction has been robustly confirmed by a plethora of studies (e.g. Bajas, 2015; Lin et al, 2017; Oviedo-García et al, 2017; Wu & Li, 2017). A large body of literature found a direct positive effect of perceived value on tourist's behavioral intentions (e.g. Bradley & Sparks, 2012; Cheng & Lu, 2013; De Oliveira Santini et al, 2018), also as a mediator of other factors (e.g. tourist satisfaction: Gill et al, 2007; Williams & Soutar, 2009). Conversely, Chang et al. (2014) detected no evidence of such a direct relationship.
        In light of the above, we formulate four hypotheses:

H4: The perceived value of a destination affects satisfaction positively, and satisfaction influences the perceived value positively.

H5: The perceived value affects the intention to recommend the destination positively.

H6: Tourist satisfaction is positively related to the intention to recommend.

H7: The destination image is positively related to the intention to recommend.

Some extant works assume destination image to be a dimension of the perceived value (Cheng & Lu, 2013; Bajas, 2015). Others consider image as a construct of its own (e.g. Ramseook-Munhurrun et al, 2015). Following the latter approach, we model image unidimensionally (Moon & Han, 2020) and test:

H8: The destination image impacts perceived value positively and the perceived value exerts a positive effect on image.

Since the effectiveness of destination marketing actions depends on the capability to reach relevant demand segments with specific stimulus, detecting segmentation variables is of paramount importance (Song et al., 2013; Rodrigo & Turnbull, 2019). Therefore, our last hypothesis is not least:

H9: The endogenous observed variables are influenced by both socio-demographic and trip-related characteristics.

The research model is drafted in figure 1.

<< Figure 1. approximately here >>

3. Methodology

We examine the distributional properties of indicators and observable endogenous variables through the Shapiro-Wilk's test for normality (1965), the D'Agostino's (1970) test of skewness and the Geary's (1936) measure of kurtosis. As data result markedly non-normally distributed, we recur to an ordinal SEM (Katsikatsou, 2013) of the following general form:

$$y_m \sim \mathcal{N}(0,1) \tag{2}$$
$$Y = \eta \Lambda + \varepsilon; \quad \varepsilon \sim \mathcal{N}_M(0, \Sigma_\varepsilon) \tag{3}$$
$$P\left[\tau_{m_l} \leq I_m \leq \tau_{m_{l+1}} | \eta_{<m>}\right] = \Phi(\tau_{m_{l+1}} + \eta_{<m>}\lambda_m) \tag{4}$$
$$\xi = \eta \Pi + \partial; \quad \partial \sim \mathcal{N}_M(0,1) \tag{5}$$
$$\Xi = WB + \zeta; \quad \zeta \sim \mathcal{N}_M(0, \psi) \tag{6}$$

where y_m (m=1, ..., M), is the latent standard normal variable assumed to underlie the *m*-th indicator I_m of the measurement model, as in the common Probit model, but with *l* > 2 ordered categories. Y is a NxM matrix constituted by all the y_m and N (n= 1, ..., N) is the number of respondents. Assuming a standard normal distribution $\mathcal{N}$, with cumulative function, Φ for y_m implies that it is scaled by constraining the mean and variance (to 0 and 1 respectively), so that the thresholds τ_{m_l}, delimiting the intervals of the normal variable corresponding to the levels *l* of the observed indicators, are to be estimated. η is the $Nx3$ matrix of first-order latent variables. Λ is the $3xM$ matrix of loadings λ_m, to be estimated (except for those set to zero because the corresponding indicator is not hypothesized to load on that latent factor), quantifying the extent to which the correspondent first-order latent construct $\eta_{<m>}$ manifests through I_m, or, in other words, how informative the indicator is about the unobservable

construct it contributes to measure. ε is the NxM matrix of first-order measurement errors, with MxM variance-covariance matrix Σ_ε to be estimated (except for the diagonal elements, set to 1). ξ is the second-order latent construct (perceived value), Π the vector of coefficients to be estimated, each one evaluating the contribution of the corresponding first-order latent factor to the formation of ξ. ∂ is the second-order measurement error, with variance constrained to 1 to identify the model. Ξ is the NxH matrix of all the H endogenous variables, including perceived value, functional benefits, socio-emotional benefits and perceived costs. B is the KxH matrix of regression coefficients, with K the number of explanatory variables, to be estimated to assess the effect of each regressor on the dependent variable. W is the NxK matrix of explanatory variables (both observable and unobservable). ζ is the NxH matrix of regression errors with variance-covariance matrix ψ to be estimated. It is assumed that the latent variables η are not correlated with measurement and regression errors.

As the asymptotic normal approximation does not hold, we calculate the matrix of observed correlations through polychoric coefficients in case of 2 ordinal variables and to the tetrachoric correlations for ordinal-binary variables (Mangal, 2010). In order to exploit the maximum information available, we apply the pairwise likelihood (PL) approach (Katsikatsou, 2013), that allows to include also non-completed questionnaires. It consists in specifying the likelihood function by multiplying the joint probability density f of any 2 variables (e.g. y_m and y_v) at a time (instead of all variables jointly), for each response, so that all the observations for those 2 variables can be exploited to obtain estimates more robust than in the 'complete' method (making use of complete questionnaires only):

$$PL = \prod_{n=1}^{N}\prod_{m=1}^{M-1}\prod_{v=m+1}^{M} f(y_{m,n}, y_{v,n}; \Theta)$$

Where Θ is the matrix of all the model parameters and $p_{k,j}$ is a weight that can be used to attribute different importance to certain observations. The whole analysis is conducted with R statistics (lavaan package).

4. Results and discussion

4.1 Empirical setting and data

The four Italian areas under investigation are: the municipalities of Alfonsine, Ostellato and the interregional Park of Sasso Simone and Simoncello, in the center of the peninsula, and the Carnic area, composed by the towns of Ovaro, Paularo and Prato Carnico, at the Austrian border. They all suffer from lack of opportunities for young people, aging and depopulation, problems to which tourism can be the privileged sustainable solution to increase residents' income levels and fight depopulation.

The survey questionnaire, with the abbreviations used in the estimation output, is reported in the appendix. Like in most of the extant literature (e.g. Bajs, 2015; Moon & Han, 2019), answers are expressed through a Likert-type scale ranging from 1 to 7. We measure the perceived costs of transportation (variable TRANSPORTS) asking the level of agreement with the

sentence: "It is very easy/comfortable to reach this destination and move around". Then, we quantify from 1 (very little efforts) to 7 (very great efforts) the economic, physical and time efforts born to reach the destination and move around. Similarly for the perception of prices, safety and security. 527 visitors were surveyed through face-to-face interviews by professional interviewers, appropriately trained. We check the presence of non-response bias (Berg, 2010) through a chi-square test for difference in proportions. As the test-statistics is 0.694, the null hypothesis of absence of non-response bias cannot be rejected.

The frequency histograms of endogenous observed variables and indicators (see figure 3 in the appendix), show markedly non-normal distributions, confirmed by the Shapiro-Wilk's test statistics, ranging between 0.71 for relax and 0.93 for entertainment and shopping. In fact, the variables' skew ranges between -1.8382 and 0.04, and D'Agostino's test shows that most of the considered variables are highly (negatively) skewed, whereas Geary's test did not detect concerning values of kurtosis, ranging between 0.72 and 0.86. Overall, the marked non-normality of data, due to excessive skews, motivates the use of a SEM model for ordinal data.

<< Table 2. approximately here >>

Table 2 shows some descriptive statistics. Based on the median answers, the destination image of Alfonsine is the weakest one. Given the proximity to the Austrian Border, a fourth of respondents in Carnia are inbound visitors, while in the other areas visitors are mainly domestic, as can be expected in areas at early stage of tourism development. Sasso Simone and Simoncello displays a remarkable average stay length of 15 days, because many visitors own a second home and spend the whole summer there.

4.2 PL-SEM Estimation Results
Measurement model
Preliminarily, we checked the scale reliability of the 3 sets of indicators for the first-order latent constructs. The Cronbach's alpha is 0.84 for functional benefits, 0.73 for socio-emotional benefits and 0.71 for perceived costs, thus indicating that the measurement instruments are adequate (De Vellis, 2012). Indicators do not show multicollinearity problems, as Variance Inflation Factors range between 1.41 and 2.4. We verified also the robustness of the scales employed to measure latent variables, selecting randomly a 70% of the data – in each municipality - and estimating the same model on this subset; results are very stable. The measurement model is also robust to changes in the structural equations. The estimated measurement model is shown in table 3. All the factor loadings are significant at the usual 5% significance level.

<< Table 3. approximately here >>

The first panel of table 3 reports results for the construct of interest. The loadings' signs confirm the conception of perceived value as cost-benefit trade-off (Oliver, 1999). The estimated

coefficients Π show that emotional benefits contribute the most to its formation, consistently with some extant studies (e.g. Sánchez et al, 2006; Frías-Jamilena et al, 2018) and as expected, in view of the lack tourism facilities and infrastructures in the areas considered.

The second section of table 3 displays the estimated loadings Λ for the three first-order reflective latent constructs. Functional benefits are indicated to the greatest extent by tourists' evaluations of entertainment and shopping, as suggested by sector-specific studies (e.g. Albayrak et al, 2016). Thus, destination managers should focus on improving shopping of traditional productsand entertainment occasions, to make the destinations more competitive. The loading size for the level of feeling welcome by the local community confirms the prominence of the social character of tourism and the quality of the resident-tourist interaction in co-creating a valuable tourist experience (Wu & Li, 2017). The time, energy and efforts spent to reach the destination and move around are the least indicative of perceived costs, because travelling is an essential aspect of tourism (Larsen & Guiver, 2013). Together, the low weight of the cost of transport and the high loadings of shopping and feeling well accepted by the locals indicate that, in the areas under investigation, tourists seek an experience far from their everyday life, through contact with locals, typical food and traditional lifestyle. Thus, residents may transform a seemingly weakness - being poorly equipped with tourist services and facilities - into an opportunity to diversify the tourism offer based on genuine rural life.

Structural Model

The overall model significance is verified through the Wald test, with robust Huber-White estimates of standard errors, that are heteroskedasticity-consistent and suitable for ordinal indicators. The model is significant at a level lower than 5%; the Partial Likelihood Ratio Test results in a chi-squared statistics of 658, indicating a very good fit.

<< Table 4. approximately here >>

Based on the estimated path coefficients, the presence of observable heterogeneity in the perception of destinations' value due to socio-demographic differences (H2) is verified, although not all the variables are significantly related to all the indicators. Results do not support a direct effect of trip-related variables on functional benefits, socio-emotional benefits and perceived costs, but only on perceived value (H3), consistently with some previous studies (e.g. Li et al, 2020). The longer the stay, the highest the value perceived by tourists, that is the largest in Alfonsine and Ostellato, both represented by single dummy, as separate effects were not significant.

We find no evidence of a bi-directional relationship between satisfaction and perceived value (H4), but a unilateral positive influence of the latter on the former, as in some recent studies (e.g. Oviedo-García et al, 2017; Suhartanto et al, 2019). The perceived value affects positively also the intention to recommend and the destination image, confirming to be a key factor of competitiveness (Bajs, 2015). Thus, H5 is confirmed, while H8 is rejected in its original bi-directional formulation. Contrary to literature-based expectations (e.g. Iordanova & Stylidis, 2017; Chen, 2019), trip-related variables are not significantly related to the destination image

(H9 is only partially verified), which depends rather on marketing initiatives and socio-demographic characteristics. Elder visitors perceive a more attractive image than young ones, confirming the policy-makers' remark that a major problem in these areas is the lack of attractions and entertainment for young people and families.

In consideration of the cultural treasures hidden in the four areas, the negative relation between education and image (as in Beerli & Martín, 2004) could point to a scarce visibility of the local historical heritage, as these towns are often identified with (and visited for) their natural attractions only. This intuition looks strengthened by the positive coefficient for female visitors, which have been shown to have significant preferences for natural landscape and rural scenery, while male visitors are more often interested in historic sites (Wang & Hao, 2018). In fact, male and highly educated respondents, preferring cultural attractions, tend to find these destinations' image less attractive than female and less educated interviewees, which appreciate rather the natural environment. Thus, policy-makers and marketing managers should valorize and communicate the historical value of the cultural heritage more effectively, because it owns the potential to make the destinations' image attractive to new market segments. Overall, destination image is influenced by socio-demographic characteristics, while satisfaction and intention to recommend are rather related to the destination itself (the objective side of perception, see: Hatfield & Allred, 2012) and length of stay. The result is expected for our empirical setting characterized by small areas, offering limited attractions and tourist activities. However, *ceteris paribus*, there is no significant difference between the four areas with reference to the intention to recommend. Carnia looks more capable to satisfy tourists, compared to the other destinations, a result that could depend also on the different composition of the tourist demand by origin (many Austrian visitors).

According to the estimated coefficients, effective marketing actions exert a positive influence on the visitors' assessments of all the considered attributes of tourism destinations, confirming that marketing is a powerful driver not only to attract demand, but also to satisfy customers and trigger favorable behaviors (Yeh et al, 2019). Moreover, no exogenous variable influences the perceived effectiveness of marketing, suggesting that the local strategies and initiatives are generic, not able to target specific market segments, nor to emphasize the specific strengths of each destination. Also the perceived quality of entertainment and shopping has no significant socio-demographic nor trip-related determinants, confirming that the (poor) local supply lacks variety, attractions for children and young people, events and shops.

The dimensions of perceived costs and benefits appear more valuable to low-income, non-self-employed and old visitors, with the exception of tourism workers' professionalism, that tends to be rated lower by self-employed, elder and low-income tourists. This result was expected, because relaxing in contact with nature, socializing and eating healthy food, are the main drivers of the silver market (e.g. Zawadka, 2015; Güler et al, 2017). However, the highest coefficient value highlights a greater appreciation of tourism workers' professionalism by visitors working in the tourism sector themselves, that may represent a feeling of empathy for 'colleagues'.

Since we found no significant relationship between satisfaction, image and intention to recommend, which all appear to be determined by the perceived value, H6 and H7 are not accepted. The direct relation perceived value-behavioral intention is consistent with most of the

literature's results (e.g. Bradley & Sparks, 2012; Cheng & Lu, 2013; De Oliveira Santini et al, 2018). Overall, our models estimate is summarized in figure 2.

<< Figure 2. approximately here>>

5. Concluding remarks

We analyzed visitors' perceived value in four Italian small areas, little known and still to be fully developed into attractive tourism destinations. They participate in the EXCOVER Project, with the objective of developing sustainable tourism, through innovation of the local tourism offer and new effective marketing initiatives, with minimum investments: a situation that may become quite common all over the world, trying to recover the tourism system from the COVID-19 crisis. To this aim, it is crucial to detect which supply aspects convey the greatest value to tourists and identify useful market segmentation variables. We accomplished these tasks, by investigating socio-demographic and trip-related factors influencing the visitors' perceptions, and by testing the dimensions of destinations perceived value and its relations with satisfaction, intention to recommend and destination image. The main original contribution brought by this work lies in the consideration of multiple destinations and multiple characteristics of both the travelers and the trip, through a new methodology that can be employed also in future researches, as it is flexible and robust to both non-normality of the collected data and partial non-response (Katsikatsou et al, 2012). Moreover, this covariance-based method allows to model both reflective and formative constructs, accounting for the measurement error.

Results show that the perceived value of the areas under investigation depends mainly on the occasion to live an unusual experience, through contact with the locals, typical food and traditional lifestyle. Although, in view of the fear of contagion, there is room to wonder whether the welcoming attitude of residents will survive the COVID-19 crisis, the rural lifestyle typical of these destinations, where people live isolated in wide spaces surrounded by unpolluted nature, far from mass tourism and overcrowded cities or beaches, might become a strong competitive advantage. Overall, the local community may transform the seemingly weakness of being scarcely equipped with tourist services and facilities into an opportunity of diversification based on rural life and new (COVID-19-related) motives of safety and security. Whether effectively communicated, this competitive advantage could widen these destinations' share of the silver tourism market with minimum investment. While organizing captivating events and providing more shopping opportunities could not only attract new market segments, increase satisfaction and willingness to recommend, but also augment the areas' capability of retaining young residents, who could work at the further development of the local tourism economy, in a virtuous cycle. However, since 'traditional' events imply people gatherings, they will be viable only after the end of the COVID-19 pandemic. Meanwhile, a new concept of shopping and entertainment could be developed by leveraging on the local availability of wide green spaces, healthy air and food, the safety and security of which should be greatly emphasized in communication campaigns. In fact, based on our findings, the current marketing strategies look generic and should be re-designed to target specific market segments and valorise the specific strengths of these destinations.

The main limitations of this work regard the consideration of homogeneous destinations, that allows to provide common practical indications to local policy-makers and destination managers, but reduces the possibility to generalize the structural relations tested. Thus, we welcome future research continuing to test the structural relations between satisfaction, image and intention to recommend in different kind of destinations, with different market compositions with reference to inbound-domestic segments, and at different stages of development. Future works are also invited to try different indicators, as they may be destination-specific, and include more situational variables.

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TABLES

Table 1. Examples of perceived value measurement models in recent literature.

Destination/Object of investigation	Items	Reference
Green Island (Taiwan)	Quality, Emotional response, Monetary value, Behavioral price, Reputation, Image natural resources, Image ocean leisure, Image customs, Novelty thrilling, Novelty change from routine, Novelty boredom alleviation, Novelty surprise, Hedonics, Revisiting behavioral intention.	Cheng et al. (2013)
Tourism packages	Quality, Value for money, Emotional value, Social value, Islamic values, Satisfaction, Loyalty, Retention.	Eid, Riyad (2013)
Orlando (USA) Hainan Island (China	Economic Value, Overall Value, satisfaction, revisit intentions, word-of-mouth referral, image Cognitive destination image, Affect destination image, Satisfaction, Loyalty.	Kim et al. (2013) Song et al. (2013)
Meinong, Shuili and Yingge (Taiwan)	Quality, Value for money (price), Emotional value, Social value, Revisit intention, Motivation external, Motivation introjection, Motivationi dentification, Motivation intrinsic, Experience education, Experience esthetics, Experience entertainment, Experience escapism.	Chang et al. (2014)
Dubrovnik	Quality of tourist services, Destination appearance, Emotional experience, Reputation, Monetary costs, Nonmonetary costs, Satisfaction, Behavioral intentions.	Bajs (2015)
Tourism package	Quality, Value for money, Emotional value, Social value, Islamic physical attributes value, Islamic non-physical attributes value.	Eid & El-Gohary (2015)
Taiwan	Functional value, Value for money, Emotional value, Social value, Novelty value, Image.	Yen and Teng (2015)
Mauritius	Satisfaction, Loyalty, Image Travel environment, Image attractions, Image events, Image infrastructure, Image sport.	Ramseook-Munhurrun et al. (2015)
Lenggong Valley (Malaysia)	Functional value, Emotional value, Social value.	Rasoolimanesh et al. (2016)
Beijing, Tianjin, Hangzhou, Xi'an (China)	Co-creation, Social-cultural benefits, Economic benefits, Costs, Life satisfaction.	Lin et al. (2017)
Natural Park Saltos de la Damajagua (Dominican Republic)	The visit was great (money, time, effort). The visit offers more value than expected. Visiting this protected area offers more value than other protected areas.	Oviedo-García et al. (2017)
Adventure tourism - 4 companies offering winter experiences in northern Norway	Quality, Value for money (price), Emotional value, Social value, Novelty value, Knowledge value, Satisfaction, Self-perceived mastering.	Prebensen and Xie (2017)
Historic Center of Macau	Image, Interaction quality, Experiential quality, Satisfaction, Behavioral intentions,	Wu and Li (2017)
British tourists visiting Spain	Travel motivation and Self-congruity compose Perceived Value, that is reflected in Functional Value and Emotional Value.	Frías-Jamilena et al. (2018)
Integrated resort destinations in Malaysia	Economic value, Hedonic value, Social value, Altruistic value.	Ahn& Kwon (2019)
Jeju Island (South Korea)	This destination provides a good deal compared to others. This place offers good value for the price.	Moon & Heesup (2019)
Halal tourism	Functional value, Emotional value, Social value, Epistemic value, Conditional value, Islamic value.	Rodrigo and Turnbull (2019)
4 creative tourism attractions in Bandung (Indonesia)	Maintenance, Social improvement, Sense of well-being, Motivation, Involvement, Risk probability, Self-identify.	Suhartanto et al. (2019)
North East Thailand	Functional value, Emotional value, Social value, Epistemic value, Conditional value.	Ashton et al. (2020)

Rural tourism in China	Rating of rural tour quality given invested travel costs. Acceptability of travel costs given benefits and experience quality provided by the rural trip. Overall, rural trips deliver me good value.	Chi et al. (2020)
Macau	Perceived value (for money)	Li et al. (2020)
Seo-chon, Hongik University area, Jeju Island (South Korea)	Residents' quality of life protected from tourists, Clear separation between the tourist area and resident area, Cafes or restaurants invade residential areas, Development taking residents into consideration, Residents friendliness, Residents' interest toward tourists, Definite attractiveness, Evident identity as a destination, Uniqueness, Distinctness of a destination due to the absence of franchise cafes belonging to major companies, Enough public toilets, Enough parking lots, Reasonable prices.	Um & Yoon (2020)

Table 2. Descriptive Statistics

AREA	N Obs.	Median			Proportion		Median
		IMAGE	SATISFACTION	RECOMMEND	INBOUND	FEMALES	STAY LENGHT
Carnia	241	6	6	6	25%	50%	5
Alfonsine	75	4	6	5	11%	45%	1
Ostellato	94	5	6	7	1%	54%	1
Sasso Simone	117	6	7	7	1.7%	57%	15

Table 3. Estimated measurement model

Latent variables:	Indicators:	Estimated Loadings	
Perceived Value		(Π)	
	Functional Benefits	0,332	*
	Emotional Benefits	0,531	**
	Perceived Costs	-0,500	**
		(Λ)	
Functional Benefits			
	ACCOMMODATIONS	0,577	***
	ENTR_SHOP	0,900	***
	RESTAURATION	0,540	***
	PROFESSIONALIS	0,434	***
	CLIMATE	0,409	***
	CULTURE	0,474	***
	NATURE	0,332	***
Emotional Benefits			
	WELCOMED	0,609	***
	EXCITEMENT	0,548	***
	RELAX	0,517	***
Perceived Costs			
	PRICES	0,619	***
	TRANSPORTS	0,409	***
	SEC_SAFETY	0,581	***

***: significance level ≤ 0.01; **: 0.01≤ significance level<0.05; *: 0.05≤ significance level<0.1.

Table 4. Estimated structural model

	Estimated Path Coefficients			Estimated Path Coefficients			Estimated Path Coefficients	
PERCEIVED VALUE			**PROFESSIONALISM**			**EXCITEMENT**		
Carnia	-1,973	***	Age	-0,388	***	Income	-0,141	*
Sasso	-1,254	***	Income	0,865	***	Education	0,135	*
Days	1,400	***	Education	-0,52	***	Inbound	-0,522	***
SATISFACTION			TourismSector	1,417	***	TourismSector	-0,526	**
PerceivedValue	0,523	***	Self.employed	-0,561	***	Self.employed	0,402	***
Carnia	0,387	**	Female	0,349	*	Marketing	0,513	***
Days	-0,491	***	Marketing	0,795	***	**RELAX**		
Self.employed	0,223	*	**CLIMATE**			Age	0,299	***
Marketing	0,613	***	Age	0,484	***	Income	-0,438	***
RECOMMEND			Income	-0,724	***	Education	0,318	***
PerceivedValue	0,365	***	Education	0,518	***	Inbound	-0,543	***
Days	-0,365	***	Female	-0,418	**	TourismSector	-0,432	*
Inbound	-0,584	***	Marketing	0,229	*	Self.employed	0,293	*
Self.employed	0,297	***	**CULTURE**			Marketing	0,270	***
Marketing	0,575	***	Age	0,266	***	**WELCOMED**		
IMAGE			Income	-0,269	***	Marketing	0,494	***
PerceivedValue	0,301	***	Inbound	0,38	**	**PRICES**		
Age	-0,443	***	Self.employed	0,351	**	Self.employed	-0,440	***
Income	0,663	***	Marketing	0,22	**	MARKETING	-0,398	***
Education	-0,463	***	**NATURE**			**TRANSPORTS**		
Female	0,332	**	Age	0,468	***	Income	-0,179	**
Marketing	0,915	***	Income	-0,849	***	Marketing	-0,359	***
ACCOMMODATIONS			Education	0,69	***	**SEC_SAFETY**		
Age	0,161	***	Inbound	-0,647	***	Age	-0,095	**
Income	-0,205	***	TourismSector	-0,608	**	Inbound	-0,613	***
Self.employed	0,409	***	Self.employed	0,361	*	Marketing	-0,269	***
Marketing	0,449	***	Female	-0,313	*			
RESTAURATION			Marketing	0,329	**			
Age	0,086	**						
Marketing	0,453	***						

***: significance level ≤ 0.01; **: 0.01≤ significance level<0.05; *: 0.05≤ significance level<0.1.

APPENDIX

Table 5. Variables' names and corresponding survey question

Variable Name	QUESTION
ACCOMMODATIONS	Rate the accommodations of this destination (1-7)
CLIMATE	Rate the climate in this destination (1-7)
CULTURE	Rate the cultural heritage of this destination (1-7)
ENTR_SHOP	Rate the entertainments and shopping offered by this destination (1-7)
EXCITEMENT	To be in this destination makes me feel excited (1= it makes me feel very bored, 7= it makes me feel very excited)
IMAGE	The image of this destination is very attractive (1= completely disagree, 7= completely agree)
MARKETING	The marketing and communication initiatives regarding this destination are very effective (1= completely disagree, 7= completely agree)
NATURE	Rate the natural environment of this destination (1-7)
PRICES	Rate the prices in this destination (1=very high prices, 7=very low prices)
PROFESSIONALISM	The people employed in tourism-related businesses are very professional in this destination (1= completely disagree, 7= completely agree)
RECOMMEND	I would recommend to visit this destination (1= completely disagree, 7= completely agree)
RELAX	To be in this destination makes me feel relaxed (1= it makes me feel very distressed, 7= it makes me feel very relaxed)
RESTAURATION	Rate the restauration services of this destination (1-7)
SATISFACTION	Rate your overall satisfaction with this destination (1-7)
SEC_SAFETY	Rate the safety and security level of this destination (1-7)
TRANSPORTS	It is very easy/comfortable to reach this destination and move around (1= completely disagree, 7= completely agree)
WELCOMED	The residents' attitude towards tourists makes me feel very welcomed in this destination (1= completely disagree, 7= completely agree)

<< Figure 3. approximately here>>

Figure 1. Research model
(MARKETING is placed next to both socio-demographic and trip-related variables, to avoid too many arrows overlap).
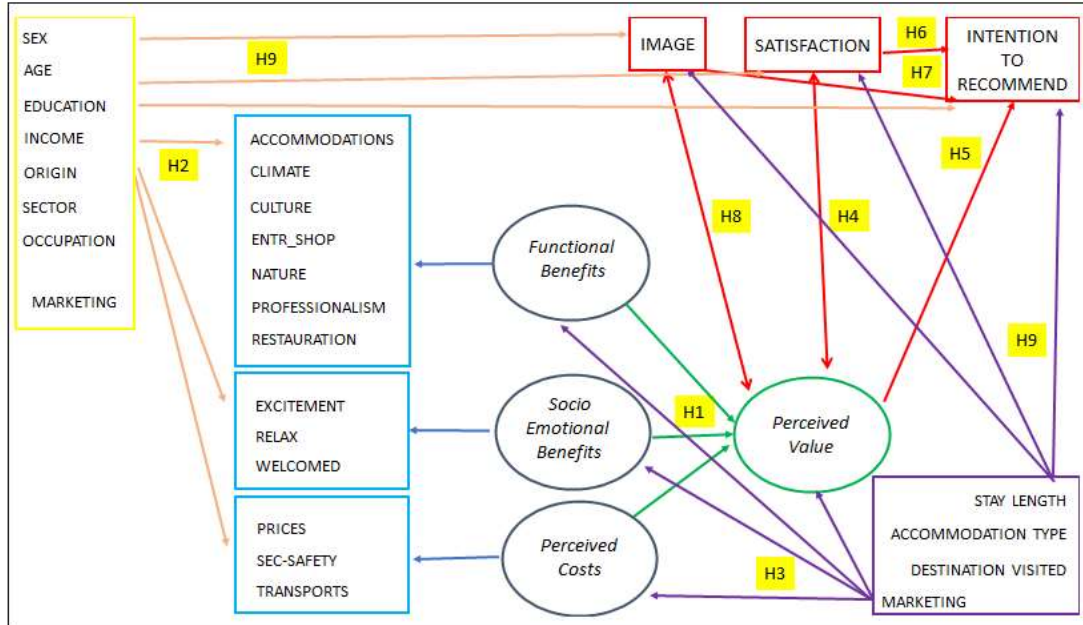

Figure 2. Estimated model
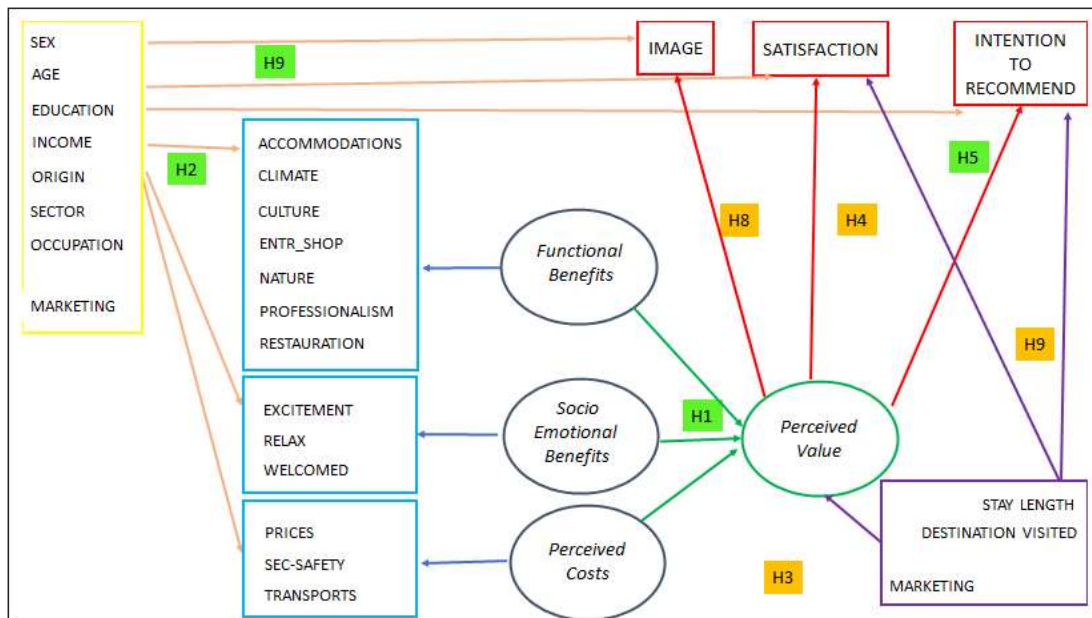(MARKETING is placed next to both socio-demographic and trip-related variables, to avoid too many arrows overlap).

Figure 3. Histograms of endogenous observed variables and indicators