DIFFERENCES BETWEEN RESIDENTS' AND TOURISTS' PERCEPTIONS OF MOUNTAIN DESTINATIONS

Silva, C; Abrantes, J.L. & Kastenholz, E.

Carla Silva*
Professor of Sociology of Tourism
Polytechnic Institute of Viseu, Portugal
Campus Politécnico de Repeses, 3504-510 Viseu, Portugal.
Phone: + 351.232.480598, Fax: + 351.232.424651
csilva@estv.ipv.pt

Elisabeth Kastenholz**
Professor of Marketing
University of Aveiro, Portugal
Campus Universitário de Santiago, 3810-193 Aveiro, Portugal.
Phone: +351.234.370200, Fax: +351.234.370985
elisabethk@ua.pt

José Luis Abrantes***
Professor of Marketing
Polytechnic Institute of Viseu, Portugal
Campus Politécnico de Repeses, 3504-510 Viseu, Portugal.
Phone: + 351.232.480598, Fax: + 351.232.424651
jlabrantes@dgest.estv.ipv.pt

*Carla Silva has a PhD in Tourism Studies. Her research interests include culture of consumption, mountain and nature-based tourism with special interest in tourism motivations and tourism imagery.

**Elisabeth Kastenholz has a PhD in Tourism Studies. Her research focuses on consumer behavior in tourism, rural tourism, and destination marketing and sustainable destination development.

***José Luís Abrantes holds a PhD in Economic and Management Science. His research interests are in the fields of Marketing, Tourism Marketing and Pedagogy.

ABSTRACT

Mountain regions have become one of the most attractive tourism destination areas as demonstrated by the fact that mountain tourism constitutes at least 20% of global tourism, with mountain destinations being second in global popularity and the choice of 500 million tourists annually.

Since destination image is the most important factor in destination attractiveness, the aim is to develop the MDI Scale - Mountain Destination Image Scale – in order to assess a wide set of tourism mountain destination image parameters. Within the MDI scale, images are related to cognitive and affective factors. The study aimed at understanding particularly the differences between local residents and tourists in respect to this mountain image.

Insights from an empirical study of 315 tourists and 315 residents in European Mountains Destinations – the Serra da Estrela (Portugal), the Alps (France, Austria and Switzerland) and the Peaks of Europe (Spain) - indicate that this multi- dimension scale incorporates five mountain image dimensions held by tourists: (1) historic-cultural, (2) natural/ecological, (3) social and prestige, (4) sport and leisure, and (5) affective; and three images dimensions held by residents: 1) mystique/sacred, (2) historic-cultural and (3) affective.

Discussion is focused on theoretical and practical implications of these findings for tourism destination planning, marketing and management. Study limitations and directions for future research are also presented.

Introduction

Some tourism destinations have powerful symbolic features that exert a strong influence on destination image formation, such as mountain places. Mountains are one of humankind's most profound archetypal symbols and have long been revered, held in awe, and viewed as symbols of strength, freedom, and eternity (Smethurst, 2000, p.36). Therefore, mountain regions have become one of the most attractive tourism destination areas as demonstrated by the fact that mountain tourism constitutes at least 20% of global tourism, with mountain destinations being second in global popularity and the choice of 500 million tourists annually (Thomas, Gill & Hartmann, 2006; UNEP, 2006).

Until very recently, tourism researches concerned with mountain places mainly focused on physical, ecological and environmental perspectives (Smethurst, 2000). A perspective of mountain tourism within the corresponding image context is therefore most interesting. Tourism development is an obvious means of achieving sustainable mountain development, particularly where other economic resources necessary for development are scarce. Mountain tourism can capitalize on the diverse ecological and cultural characteristics of mountains. Therefore the development of tourism in mountains can be a key factor in the focal concern for overall improvement in peoples' quality of life through sustainable development initiatives (Nepal & Chipeniuk, 2005).

It is in this context that the present research project seeks to analyse, in a holistic and multi-disciplinary approach, residents' and tourists' image of mountain destinations, and the respective gap. The aim is to develop the MDI Scale - Mountain Destination Image Scale – in order to measure a wider set of tourism mountain destination image

parameters. Within the MDI scale, images are related to cognitive and affective factors.

Methodology

The here present study combines quantitative and qualitative survey techniques. The cognitive variables of tourism destination image considered for the construction of the survey instrument – the questionnaire – were chosen based on pre-established scales and a literature review related to destination image and mountain constructs. The original scales were adjusted to the reality of users of tourism services and local residents and the specificity of the tourism destination - mountain regions. Respondents were asked to rate the mountain place as a tourism destination on each of a list of 49 attributes on a five-point Likert-type scale: offers very little, offers little, neither little nor much, offers much, and offers very much (1 to 5, respectively). The affective variables of tourism destination image were measured by semantic differential scales based on related literature. Both scales – *Likert* and semantic differentials – were also discussed with experts in the field of destination image measurement. Additionally, respondents were asked to answer open-ended questions and suggest adjectives related to their subjective mountain perceptions in order to include other holistic or unique characteristics.

The validation of the proposed model was achieved through four procedures of analysis. Firstly, a descriptive data analysis is undertaken with univariate and bivariate analysis, taking into account statistical indicators. The second procedure corresponds to exploratory factor analysis (EFA), aiming at determining the relationship between the observed variables and latent variables. Thirdly, once defined the variables that represent each factor and the number of factors, a

confirmatory factor analysis (CFA) was applied using full-information maximum likelihood (FIML) estimation procedures in LISREL (Jöreskog & Sörbom, 1993). Finally, in order to assess nomological validity, measures were tested with respect to some other constructs to which destination image constructs are theoretically related (cf. Churchill, 1995), such as the perception of tourism impacts. In this sense, the analysis and data processing were performed using the programs SPSS and LISREL, in their latest versions.

Data Analyses

Confirmatory Factor Analysis

For analysing the validity of the proposed scale, the items measuring the impact perceptions were subject to an exploratory factor analysis and later to a confirmatory factor analysis. For this purpose, the proceedings used for estimating the *full-information maximum likelihood* (FIML) in the LISREL 8.54 program (Joreskog & Sorbom, 1993) were applied.

The qui squared for the tourists' perceptions of mountain destinations model is significant (X^2=662.56, 180 df, p<.00). Since the Qui squared statistic is sensitive to sample size, we further analysed additional fit indices: the *Normed Fit Index* (NFI), the *Comparative Fit Index* (CFI), the *Incremental Fit Index* (IFI), and the *Non-Normed Fit Index* (NNFI). The NFI for this model was 0.95, the CFI, NNFI and IFI showed a value of 0.96. Given that the fit indices may be strengthened permitting the existence of more terms to be freely estimated, also the *Root Mean Square Error of Approximation* (RMSEA) were considered, which presents the mean and incorporates a penalization for lack of parsimony. A value of RMSEA above .10 indicates an

inacceptable value (Steiger, 1980). The RMSEA of this measurement model is of 0.092.

Convergent validity is revealed by the significant and high standardized weights of each item in respect to the measured construct (the mean weight is of .78).

Table 1 – The TMDI Scale – Constructs, Measurement Scales and Reliability \Indices

Constructs, measurement scales and reliability indices	Standardized Coefficients	T-values
TMDI – HİSTORİC-CULTURAL (α=0.88; $\rho_{vc(n)}$=0.71; ρ=0.88)		
V.1 – Cultural attractions	0.84	17.78
V.2 – Historic attractions	0.85	17.88
V.3 – Cultural experience	0.84	17.69
TMDI – SOCİAL AND PRESTİGE (α=0.79; $\rho_{vc(n)}$=0.58; ρ=0.80)		
V.4 – Opportunities for social interactions	0.79	15.54
V.5 – Fashion idea	0.76	14.92
V.6 – Opportunities for education and new learnings	0.73	13.97
TMDI – NATURAL/ECOLOGİCAL(α=0.86; $\rho_{vc(n)}$=0.58; ρ=0.87)		
V.7 – Ecological diversity	0.75	14.94
V.8 – Water presence	0.79	16.23
V.9 – Contact and proximity with Nature	0.76	15.22
V.10 – Natural Park	0.78	15.74
V.11 – Autenthicity	0.73	14.34
TMDI – SPORT AND LEİSURE (α=0.79; $\rho_{vc(n)}$=0.72; ρ=0.83)		
V.12 – Opportunities for leisure and entertainment activities	0.66	15.71
V.13 – Sport and recreation activities	1	
TMDI – AFFECTİVE (α=0.92; $\rho_{vc(n)}$=0.62; ρ=0.93)		
V.14 – Unpleasant/Pleasant	0.78	16.35
V.15 – Gloomy/Exciting	0.68	13.40
V.16 – Sleepy/Arousing	0.70	13.87
V.17 – Distressing/Relaxing	0.72	14.44
V.18 – Uninteresting/Interesting	0.85	18.42
V.19 – Sad/Happy	0.83	17.90
V.20 – Unimportant/Important	0.82	17.45
V.21 – Bad/Good	0.89	20.08

Notes:

α= Internal reliability (Cronbach, 1951) $\rho_{vc(n)}$ = Variance extracted (Fornell & Larcker 1981); ρ= Composite reliability (Bagozzi, 1980).

Likewise, the qui squared for residents' model is also significant (X^2=244.35, df=62, p=.00). The NFI and NNFI for this model were .96, the CFI and IFI both .97. Given

that the fit indices may be strengthened permitting the existence of more terms to be freely estimated, also the *Root Mean Square Error of Approximation* (RMSEA) were considered, which presents the mean and incorporates a penalization for lack of parsimony. RMSEA of this measurement model is of 0.097.

Convergent validity is revealed by the significant and high-standardized weights of each item in respect to the measured construct (the mean weight is of .81).

Table 2 – The RMDI Scale – Constructs, Measurement Scales and Reliability \Indices

Constructs, measurement scales and reliability indices	Standardized Coefficients	T-values
RMDI – MYSTİQUE-SACRED (α=0.87; $\rho_{vc(n)}$=0.71; ρ=0.88)		
V.1 – Spiritual experiences	0.81	18.24
V.2 – Different customs and ways of life	0.77	15.72
V.3 – Mystic or sacred atmosphere	0.90	19.60
RMDI – HİSTORİC-CULTURAL (α=0.86; $\rho_{vc(n)}$=0.64; ρ=0.87)		
V.4 – Cultural attractions	0,86	18.53
V.5 – Historical attractions	0,84	17.70
V.6 – Cultural experience	0,84	17.72
V.7 – Variety of attractions to visit	0,63	11.94
RMDI – AFFECTİVE (α=0.92; $\rho_{vc(n)}$=0.69; ρ=0.93)		
V.8 – Unpleasant/Pleasant	0.61	11.68
V.9 – Distressing/Relaxing	0.77	15.85
V.10 – Uninteresting/Interesting	0.91	20.97
V.11 – Sad/Happy	0.90	20.38
V.12 – Unimportant/Important	0.91	20.71
V.13 – Bad/Good	0.86	18.80

Notes:

α= Internal reliability (Cronbach, 1951) $\rho_{vc(n)}$ = Variance extracted (Fornell & Larcker 1981); ρ= Composite reliability (Bagozzi, 1980).

Nomological Validity

In order to assess nomological validity, measures were tested with respect to some other constructs to which perceptions of the effects of tourism development constructs are theoretically related (cf. Churchill, 1979, 1995). In fact, perceptions of tourism impacts are highly associated with destination image because the perceptions of the

effects of tourism development on a destination influence the perception that tourists and residents globally hold of it (Zamani-Farahani and Musa, 2008; Diedrich and García-Buades, 2009). For our purposes, nomological validity is demonstrated if the scores of all destination image dimensions are significantly correlated with tourism impacts factors.

The perception of tourism impacts by tourists is assessed, with the same samples, through thirty-nine impacts items, anchored by 1) strongly disagree; to 5) strongly agree and divided in three dimensions: (1) Positive Social-Cultural Impacts, (2) Positive Economic Impacts, and (3) Negative Social Impacts. The results indicate a significant correlation (see Table 3).

On the other hand, the residents' perceptions of tourism impacts is assessed also through thirty-nine items, which result in four consistent impacts dimensions: (1) Positive Social-Cultural Impacts, (2) Positive Economic Impacts, (3) Negative Economic Impacts and (4) Negative Social Impacts. All items are also anchored by 1) strongly disagree; to 5) strongly agree. Likewise the results indicate a significant correlation (see Table 4).

Table 3 – Correlations between Tourists' Tourism Impact Perception Dimensions and Destination Image

	TDI1 Historic-Cultural	TDI2 Social and Prestige	TDI3 Natural / Ecological	TDI4 Leisure and Sport	TDI5 Affective
PSCI – Positive Social-Cultural Impacts	0,584**	0,639**	0,600**	0,344**	0,451**
PEI – Positive Economic Impacts	0,344**	0,451**	0,413**	0,204**	0,280**
NSI – Negative Social Impacts	-0,212**	-0,330**	-0,308**	-0,261**	-0,206**

Note: **All correlations are significant at the 0.01 level (2-tailed).

Table 4 – Correlations between Residents' Tourism Impact Perception Dimensions and Destination Image

	TDI1 Mystique / Sacred	TDI2 Historic-Cultural	TDI53 Affective
PSCI – Positive Social-Cultural Impacts	0,613**	0,569**	0,548**
PEI – Positive Economic Impacts	0,444**	0,517**	0,456**
NEI – Negative Economic Impacts	0,309**	0,347**	0,178**
NSI – Negative Social Impacts	-0,201**	-0,234**-	-0,230**

Note: **All correlations are significant at the 0.01 level (2-tailed).

Conclusions

The study is intends to increase social, cultural and scientific knowledge of mountains and their meaning for society. This allows a deeper understanding of the mountains' social and cultural value and may contribute to increase concern about the need of mountain preservation, and to transforming them into sustainable tourist attractions (Rhodes, 2002). The understanding of mountain perceptions, ideas and beliefs can thereby be used to help promote conservation, restore damaged environments and strengthen mountain communities and cultures (Bernbaum, 2002).

Furthermore, the results of this study should contribute to tourism marketing practice and literature by providing further understanding about tourists' consumer behaviour, new socially determined forms of tourism consumption and the role of residents in enhancing alternative destinations' value.

Since the tourism destinations should promote their own differentiating and unique features, the final discussion focused on theoretical and practical implications of the MDI scale for tourism destination planning, marketing and management. The MDI

scale could allow tourism mountain destinations to implement effective positioning strategies, increase market segmentation options, enhance product development and communication strategies, and generally improve marketing-mix strategies, particularly concerning the development of an effective mountain brand. It is important for mountain destination marketers and managers to understand and analyze different mountain image perspectives and adjust positioning strategies for greater effectiveness, considering both tourists and their host community.

The study may also be a useful tool for governmental and official tourism institutions that regulate the tourism activity. Whole national economies can be greatly dependent on tourism and therefore on residents' and tourists' behaviours, directly linked to their perceptions, which makes tourism a highly social activity (Saarinen, 2004).

While the interests of residents, tourists, tourism-related businesses, and political leaders may seem contradictory, all these stakeholders share some common objectives, which could be integrated into a collaborative tourism planning process and result in a strategic, shared and all inclusive vision for mountain destinations.

There is however some limitations that must be acknowledged in this research project. From a theoretical standpoint, despite the extensive literature review, the study might omit and therefore not consider other relevant mountain image dimensions. From a methodological perspective, this study, like any empirical research work, has certain limitations which could affect the evaluation and generalization of its results. The ideal would be the application of this conceptual model as an image measurement instrument to all mountain destinations, which is not possible. So, the replication of this study and corresponding extension of the model to other mountain destinations, for example outside of Europe, would be more interesting for a more general validation.

On the other hand, tourism destination image is a dynamic concept because images are not static but change overtime (Gartner & Hunt, 1987; Gallarza, Saura & García, 2002). Therefore it would seem desirable to carry out longitudinal studies that deal with the process of the formation and changes in image.

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